PUBLIC COMMENT #1 (Blatman 1)
Blatman, Rich

Guideline Change: None Proposed

Discussion:

I have been in the glass and ornamental metal business for over 40 year and have owned glass and ornamental metal companies.

The biggest problem I have seen and I still see is when existing building are rehabbed or repurposed the codes are not stringent enough with life safety items.

We are working on a job now which is going to be open to the public and they are leaving a glass floor in place which was installed in the early 1900's and is "grandfathered" in and they also say this balcony area will not be open to the public. They are asking us to just replace the broken pieces, about 5 out of about 100 pieces, and they aren't even using the glass flooring code, just the safety glass code. The railings at the edge of this glass walkway are also only 33" high with 6" spacing on the balusters, this is also grandfathered in. Can something be done about this? I don't know if they just don't realize how dangerous this is or if they just don't care and it's all about the budget. I have already submitted an RFI concerning this but they are not happy to bring this up to the Architect and owner at this point in the project.

This is also done by the owner due to budget constraints. It just amazes me that where there is a real danger to people if this glass breaks either by something falling from above by accident or by someone walking on it who should not be it does not matter. The owner may also not be actually aware of this if the Architect is in charge. Life safety issues like this should not be grandfathered in. Someone could actually be killed by one of these pieces of glass breaking and going into someone below this area.

I also see when they repurpose a lot of buildings they only have to comply with the building code which was in effect when the original building was built which always seems to be the 1964 codes. Is there a code in place now that makes the owner bring the other panels up to code if we change some of them? I know if someone gets injured everyone involved with the project will be listed on the lawsuit. I am telling the GC we do not want to do this work if all of the panels are not brought up to code. We will see how that goes.

Let me know if this is being brought up at all when you revise these codes.

Committee Action: Considered, No Action.

PUBLIC COMMENT #2 (Bixby 1)
Proponent: Bixby, David

Guideline Change: None

Discussion:

My first thought about this is the maintenance schedule and inspection for HVAC equipment and systems. There are two existing ANSI standards covering this area that you should be aware of.

ANSI/ASHRAE/ACCA Standard 180 - 2018R, *Standard Practice for Inspection and Maintenance of Commercial Building HVAC Systems*

ANSI/ACCA 4 QM - 2019, *Maintenance of Residential HVAC Systems*

Both of the above standards are either being updated or pending update.

It may be prudent to consider referencing the above ANSI standards in the proposed Guidelines under the HVAC maintenance section.

Committee Action: Approved as Modified, place these standards with the other references in the new Annex of resource.

PUBLIC COMMENT #3 (Searer 1)
Proponent: Searer, Gwenyth

Guideline Change: See document below; for detailed public comments.

Discussion: Public comments that directly recommended specific language changes have been extracted for the document for consideration by the committee. Other general comments exist that should be considered, as determined by the committee.

2024-04-29
Gwenyth Searer Cor

Committee Action: Considered No Further Action Needed, need to be correlate the whole document for additional items:

1. Compliance to adequate condition, permitted construction
2. Correlating committee needs to check for reinserting terms that were intended to be removed, such as unsafe and stayed true to the intent.
3. Need to look at overall PC and the document to address the questions regarding identified.

PUBLIC COMMENT #4 (Bonowitz 1)
Proponent: Bonowitz, David

Guideline Change: None specific.

Discussion: I would summarize my partial comments with four general points:

1. The Guide calls for periodic structural assessment, which I advise against. Some of my comments give reasons for this, but I am happy to discuss this basic idea further, at your request (see also the 2021 SEAOC recommendations). In brief: periodic or milestone inspection simply does no work.

2. The Guide is not coordinated with the IPMC. It refers to the IPMC in places, but it never states a clear relationship, and at times it supersedes the code.

3. The Guide is unclear about whether it is intended primarily as the basis for a mandatory program to be implemented by the AHJ or as a guide for voluntary use in complying with existing requirements (such as the IPMC). The Guide's recommendations for minimum scope, documentation, qualifications, etc. all have different implications depending on the context in which the Guide is used.

4. Regardless of the context, the Guide gives no attention to the many logistical, professional practice, and other issues that engineers would face when using it.

Committee Action: Considered, No Action. Need to consider IPMC coordination with the document ruing correlation.

PUBLIC COMMENT #5 (Schinske 1)
Proponent: Schinske, Don

Guideline Change:

Discussion: Overall comments on the guideline and 2021 document regarding mandatory engineering assessments.

240412 SEAOC Re ICC Assessment Gui

211206 SEAOC Re. Mandatory Enginee

Committee Action: Approved as Modified, concepts addressed by committee.

PUBLIC COMMENT #6 (Cook 1)
Proponent: Cook, Allison

Guideline Change:

~~Existing Building Condition Assessment Guide~~ Assessment of Existing Building Conditions Guide

Discussion:

First, the title of "Existing Building Condition Assessment Guide" is somewhat confusing with the International Existing Building Code (IEBC). It is possible that "Assessment of Existing Building Conditions Guide" might be less like to be confusing with the code requirements for renovating or altering an existing building. Thank you for specifically calling out that the provisions and application of the IEBC

are specifically not in scope and for referencing people back to the IEBC when repairs are mentioned throughout the document!

Thank you for the opportunity to provide comments as well as for all of the hard work you and the committee have put into creating a much-needed guide for code officials!

Committee Action: Considered, no action taken.

PUBLIC COMMENT #7 (Herrera 1)
Proponent: Herrera, Ricardo

Guideline Change:

~~Existing~~ Building Condition Assessment Guide

Discussion: None

Committee Action: Considered, no action taken.

PUBLIC COMMENT #8 (Kersting 1)
Proponent: Kersting, Ryan

Guideline Change:

Guideline for Existing Building Visual Condition Assessment ~~Guide~~Program

Discussion: This document seems focused on a program for conducting (and reporting the results of) condition assessments and consideration should be given to renaming the title. (See first sentence of section 1.2 that states the scope of this document is to establish the framework for a program.)

Committee Action: Considered, no action taken.

PUBLIC COMMENT #9 (Herrera 2)
Proponent: Herrera, Ricardo

Guideline Change:

Preface

This Guide~~line defines~~ addresses ~~the minimum timeframe and schedule for~~when ~~building maintenance and~~ periodic condition assessments and regular building maintenance ~~to~~should occur in order for an interested party (Owner, Manager, AHJ) to identify if any visible current building conditions are in need of attention by the Code Official, a Qualified Professional, and/or a Registered Design Professional for action, supplemental assessment, or evaluation for repair. ~~Such building maintenance and professional assessments and their associated recommended timeframes are outlined herein~~. It defines This Guide~~line presents~~ three types of assessment activities~~s~~: Regular or deferred m~~M~~aintenance, a s~~S~~upplemental, and a ~~P~~eriodic Condition Assessment~~s~~, ~~which are recommended~~ to be performed as described ~~herein~~, at a minimum. ~~This Guideline is not intended to be used for any other purpose.~~ This Guide~~line~~ and its recommended timeframes ~~for the assessments~~ are intended to provide ~~an interested party with~~ a clear path from "item~~-~~ observed" during an ~~maintenance~~ assessment; to "item need~~s~~ing attention" ~~during a~~

~~visual assessment~~; to "item resolved" after the item is made compliant ~~with an evaluation~~ (~~which is~~ not within scope of the Guide~~line,~~) ~~rather is the~~ but may be the purview of International Existing Building Code~~)~~. This Guide~~line~~ ~~also~~ provides several appendices that include additional resources for ~~the user~~ anyone who is required to perform the assessment.

To transition ~~accommodate the standardization of~~ this guide~~line~~ into local law, the ~~text passages of the~~ guide~~line~~ may need to be interpreted in a specific manner. Where definitive procedures are needed, mandatory language will be~~come~~ necessary and the following substitutions, definitions and rules can be applied to conform to ~~definitive~~ procedures into ~~with~~ mandatory language.

☑The words "may," "should," "could" and "can" are permissive in nature. Where definitive procedures must be followed, ~~the mandatory words of~~ "must," "shall" and "will" should ~~be interpreted or~~ substituted for the permissive words ~~found in the guideline as follows:~~

~~Permissive Words Mandatory Words~~
~~may must~~

~~should shall~~

~~could will~~

☑The use of "and" in a provision means that "all" ~~elements in the provision~~ the stated conditions must be complied with~~, or must exist to make the provisions applicable.~~ ☑Where compliance with one or more ~~elements~~ condition suffices, or where ~~existing~~ the existence of one or ~~more elements make the provision applicable,~~ "or, (rather than "and") applies.

Discussion: None

Committee Action: Out of Scope.

PUBLIC COMMENT #10 (Manley 1)
Proponent: Manley, Bonnie

Guideline Change:

Preface

This Guideline defines the minimum timeframe and schedule for building maintenance and periodic assessments to occur, in order for an interested party (*Owner*, Manager, AHJ) to identify if any visible current building conditions are in need of attention by the *Code Official*, a *Qualified Professional*, and/or a *Registered Design Professional* for action, supplemental assessment, or evaluation for repair. Such building maintenance and professional assessments and their associated recommended timeframes are outlined herein. This Guideline presents three types of assessments: Maintenance, Supplemental, and Periodic *Condition Assessments*, which are recommended to be performed as described herein, at a minimum. This Guideline is not intended to be used for any other purpose. This Guideline and its recommended timeframes for the assessments are intended to provide an interested party with a clear path from "item observed" during a maintenance assessment; to "item needing attention" during a visual assessment; to "item resolved" with an evaluation (which is not within scope of the Guideline,

Commented [KM1]: A number of terms are italizied throughout. What does this mean? Perhaps put a pointer early on in the document inidicating that defined terms are in Section 3.

rather is the purview of International Existing Building Code). This Guideline also provides several appendices that include additional resources for the user.

(remaining language unchanged)

Discussion: See comment in margin.

Committee Action: Approved as Modified. Work Group proposed additional language to provide guidance as noted below:

> To accommodate the standardization of this guideline into local law, the text passages of the guideline may need to be interpreted in a specific manner. Terms italicized in guideline text, other than document titles, are defined in Section 3. The terms selected to be italicized have definitions that the user should read carefully to better understand the guideline. Where italicized, the Section 3 definition applies. If not italicized, common-use definitions apply. Where definitive procedures are needed, mandatory language will become necessary and the following substitutions, definitions and rules can be applied to conform to definitive procedures with mandatory language.
>
> ☑The words "may," "should," "could" and "can" are permissive in nature. Where definitive procedures must be followed, the mandatory words of "must," "shall" and "will" should be interpreted or substituted for the permissive words found in the guideline as follows:

PUBLIC COMMENT #11 (Bonowitz 2)
Proponent: Bonowitz, David

Guideline Change:

Preface

Discussion:

1. Why does the Guide reference the IEBC but not the IPMC? Is the suggestion that "item observed" and "item needing attention" are within the IPMC, but resolution is an IEBC subject? If so, that is incorrect. The IPMC (e.g. Sec 304.1.1) correctly points the user the IEBC only in cases of relatively severe conditions.
2. The section on permissive v. mandatory wording is out of place. It is not needed for readers who know what they're doing with respect to code-writing, and it is not nearly enough for those who don't.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #12 (Kersting 2)
Proponent: Kersting, Ryan

Formatted: Highlight

Guideline Change:

Preface

This Guideline defines the minimum timeframe and schedule for ~~building maintenance and periodic~~ visual condition assessments to occur, in order for an interested party (*Owner*, Manager, AHJ) to identify

if any visible current building conditions are in need of attention by the *Code Official*, a *Qualified Professional*, and/or a *Registered Design Professional* for action, supplemental assessment, or evaluation for repair. Such ~~building maintenance and professional~~ visual condition assessments and their associated recommended timeframes are outlined herein. This Guideline presents three types of condition assessments: Maintenance, Supplemental, and Periodic ~~*Condition Assessments*~~, which are recommended to be performed as described herein, at a minimum. This Guideline is not intended to be used for any other purpose. This Guideline and its recommended timeframes for the assessments are intended to provide an interested party with a clear path from "item observed" during a maintenance assessment; to "item needing attention" during a visual assessment; to "item resolved" with an evaluation (which is not within scope of the Guideline, rather is the purview of International Existing Building Code). This Guideline also provides several appendices that include additional resources for the user.

(remaining language unchanged)

Discussion: Deleting the word "maintenance" here is important because the wording could be read as this document defining requirements for building maintenance (separately from maintenance inspections) and we want building maintenance to continue to be governed by IPMC, not somehow relaxed or changed by this document.

Committee Action: Approved as Modified. Editorial changes noted in track changes, above.

PUBLIC COMMENT #13 (Herrera 3)
Proponent: Herrera, Ricardo

Guideline Change:

1.1 Introduction

Maintaining the integrity of the structural components, the building envelope, fire and life safety~~, envelope~~, plumbing, mechanical, electric, and fuel gas systems and their components ~~and systems of a building~~ throughout the building's ~~its life~~ is of paramount importance to maintain the health, safety and welfare of the occupants, residents and general public. ~~Because building systems work together, it is not enough to just consider one system while overlooking others.~~ The fundamental purpose of ~~an Existing~~ Building Safety Condition Assessment program is to establish the minimum timeframes for visual condition assessments, that should ~~therefore enabling~~permit the building's responsible parties ~~owners~~ to reasonably maintain their buildings, before ~~such that~~ any ~~potential or~~ current or potential unsafe conditions can develop ~~have been noted and remedied.~~ Compliance with t~~T~~his Guide ~~document is intended to be a guide and~~ under no circumstances ~~are these minimum recommendations~~ is intended to relieve the building's responsible parties ~~building~~ ~~owners~~ of their responsibilities under applicable codes, laws, ordinances, or regulations nor supplant the proper professional judgment of those performing the condition assessments.

This guide provides the framework for a~~n~~ ~~Existing~~ Building Condition Assessment program that can be used by jurisdictions interested in developing and implementing a program to complement ~~supplement~~ provisions in other codes (such as the International Existing Building Code (IEBC), the International Property Maintenance Code (IPMC), and the International Fire Code (IFC). While this guide is not written as a complete template for action nor in model ordinance language, it is meant to convey important concepts related to condition assessments of existing buildings that should be followed ~~considered by jurisdictions as well as building owners~~.

Formatted: Font: (Default) Calibri, Not Bold

Formatted: Font: Bold

In general, codes such as the IPMC and IFC require the building's responsible parties ~~owners~~ to continually maintain their buildings in good conditions ~~repair. including the structural components; the exterior building envelope (including the roof); the electrical, plumbing, mechanical, and fuel gas equipment and systems; and the operational capacity of life safety systems (such as means of egress and active and passive fire protection systems~~ so as to not pose a threat to safety, health, and welfare of residents. occupants and the general public. This Gguide recommends the minimum timelines, action, and assessment types that can be performed in order to promote timely and adequate building maintenance.

It is important to note that a CA~~condition assessment~~ inherently is limited to what can be readily seen and,thus ~~due to that fact,~~ may not sufficiently identify or capture all current unsafe conditions or conditions that might ~~lead to a~~ in the future progress into an unsafe condition. ~~In some cases, signs of an unsafe condition are hidden by finished surfaces and would not be noticed without removal of such finishes, which is beyond the scope of a visual condition assessment. Furthermore~~, a visual condition assessment does not necessarily consider other conditions that may contribute to potential unsafe conditions including but not limited to whether the original design complies with the applicable code at the time ~~of construction permit~~it was built, whether the original construction or the current or proposed use has deviated from what was used in the permitted design, whether any ~~there are~~ defects were already in the original construction, and whether there have been unpermitted changes or additions since ~~to~~ the original permitted design.

~~Depending on certain parameters affecting a particular building or any building in a particular region, including but not limited to~~ local climate conditions and exposure to natural hazards, occupancy type, materials, structural systems, era and age of construction, the local jurisdiction developing and implementing such a program may need to consider additional types of assessments or investigations beyond a visual condition assessment that may be appropriate or required to achieve a more thorough evaluation of the existing conditions. ~~Finally,~~ this guide is not intended to ~~serve as~~ be a replacement for ~~requirements outlined in the~~ IPMC ~~including requirements intended to maintain a minimum level of safety and sanitation for both the general public and the occupants of a structure.~~

Discussion: None

Committee Action: Considered, no action taken.

PUBLIC COMMENT #14 (Gries 1)
Proponent: Gries, Matt

Guideline Change:

1.1 Introduction

Maintaining the integrity of the structural, fire and life safety, envelope, plumbing, mechanical, electric, and fuel gas components and systems of a building throughout its life is of paramount importance to maintain the health, safety and welfare of the occupants and public. Because building systems work together, it is not enough to just consider one system while overlooking others. The fundamental purpose of an Existing Building Safety *Condition Assessment* program is to establish the minimum timeframes for visual condition assessments, therefore enabling the building *owners* to reasonably maintain their buildings, such that ~~any~~ identifiable potential or current *unsafe* conditions have been noted and remedied. This document is intended to be a guide and under no circumstances are these minimum recommendations intended to relieve

Commented [MG2]: This objective, assuring that any potential or current unsafe conditions are identified, is noted below as being unattainable due to concealed conditions. Rather, the objective should be revised to only that which can be seen.

building *owners* of their responsibilities under applicable codes, laws, ordinances, or regulations nor supplant proper professional judgment of those performing the *condition assessment*s.

This guide provides the framework for an Existing Building *Condition Assessment* program that can be used by jurisdictions interested in developing and implementing a program to supplement provisions in other codes (such as the International Existing Building Code (IEBC), the International Property Maintenance Code (IPMC), and the International Fire Code (IFC). While this guide is not written as a complete template nor in model ordinance language, it is meant to convey important concepts related to *condition assessment*s of existing buildings that should be considered by jurisdictions as well as building *owners*.

In general, codes such as the IPMC and IFC require *owners* to continually maintain their buildings in good repair- including the structural components; the exterior building envelope (including the roof); the electrical, plumbing, mechanical, and fuel gas equipment and systems; and the operational capacity of life safety systems (such as means of egress and active and passive fire protection systems- so as to not pose a threat to safety, health, and welfare of occupants and the general public. This guide recommends the minimum timelines, action, and assessment types that can be performed in order to promote adequate building maintenance.

It is important to note that a *condition assessment* inherently is limited to what can be readily seen and, due to that fact, may not sufficiently identify all current *unsafe* conditions or conditions that might lead to a future *unsafe* condition. In some cases, signs of an *unsafe* condition are hidden by finished surfaces and would not be noticed without removal of such finishes, which is beyond the scope of a visual *condition assessment*. Furthermore, a visual *condition assessment* does not consider other conditions that may contribute to potential *unsafe* conditions including but not limited to whether the original design complies with the applicable code at time of construction permit, whether the original construction or use has deviated from the permitted design, whether there are defects in the original construction, whether there have been unpermitted changes or additions to the original permitted design.

Commented [MG3]: Related to comment above, this acknowledgement (which is true), makes the objective, as originally stated, impossible to achieve.

Depending on certain parameters affecting a particular building or any building in a particular region, including but not limited to local climate conditions and exposure to natural hazards, occupancy type, materials, structural systems, era of construction, the local jurisdiction developing and implementing such a program may need to consider additional types of assessments or investigations beyond a visual *condition assessment* that may be appropriate or required to achieve a more thorough evaluation of the existing conditions. Finally, this guide is not intended to serve as a replacement for requirements outlined in the IPMC including requirements intended to maintain a minimum level of safety and sanitation for both the general public and the occupants of a structure.

Discussion: See comments in margin.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #15 (Munsterteiger 1)
Proponent: Calderone, Brian

Guideline Change: None specific.

1.1 Introduction

Maintaining the integrity of the structural, fire and life safety, envelope, plumbing, mechanical, electric, and fuel gas components and systems of a building throughout its life is of paramount importance to maintain the health, safety and welfare of the occupants and public. Because building systems work together, it is not enough to just consider one system while overlooking others. The fundamental purpose of an Existing Building Safety *Condition Assessment* program is

to establish the minimum timeframes for visual condition assessments, therefore enabling the building *owners* to reasonably maintain their buildings, such that any potential or current *unsafe* conditions have been noted and remedied. This document is intended to be a guide and under no circumstances are these minimum recommendations intended to relieve building *owners* of their responsibilities under applicable codes, laws, ordinances, or regulations nor supplant proper professional judgment of those performing the *condition assessment*s.

This guide provides the framework for an Existing Building *Condition Assessment* program that can be used by jurisdictions interested in developing and implementing a program to supplement provisions in other codes (such as the International Existing Building Code (IEBC), the International Property Maintenance Code (IPMC), and the International Fire Code (IFC). While this guide is not written as a complete template nor in model ordinance language, it is meant to convey important concepts related to *condition assessment*s of existing buildings that should be considered by jurisdictions as well as building *owners*.

In general, codes such as the IPMC and IFC require *owners* to continually maintain their buildings in good repair- including the structural components; the exterior building envelope (including the roof); the electrical, plumbing, mechanical, and fuel gas equipment and systems; and the operational capacity of life safety systems (such as means of egress and active and passive fire protection systems- so as to not pose a threat to safety, health, and welfare of occupants and the general public. This guide recommends the minimum timelines, action, and assessment types that can be performed in order to promote adequate building maintenance.

Commented [JM4]: Provide a single page listing all acronyms.

It is important to note that a *condition assessment* inherently is limited to what can be readily seen and, due to that fact, may not sufficiently identify all current *unsafe* conditions or conditions that might lead to a future *unsafe* condition. In some cases, signs of an *unsafe* condition are hidden by finished surfaces and would not be noticed without removal of such finishes, which is beyond the scope of a visual *condition assessment*.
Furthermore, a visual *condition assessment* does not consider other conditions that may contribute to potential *unsafe* conditions including but not limited to whether the original design complies with the applicable code at time of construction permit, whether the original construction or use has deviated from the permitted design, whether there are defects in the original construction, whether there have been unpermitted changes or additions to the original permitted design.

Depending on certain parameters affecting a particular building or any building in a particular region, including but not limited to local climate conditions and exposure to natural hazards, occupancy type, materials, structural systems, era of construction, the local jurisdiction developing and implementing such a program may need to consider additional types of assessments or investigations beyond a visual *condition assessment* that may be appropriate or required to achieve a more thorough evaluation of the existing conditions. Finally, this guide is not intended to serve as a replacement for requirements outlined in the IPMC including requirements intended to maintain a minimum level of safety and sanitation for both the general public and the occupants of a structure.

Discussion: See comment in margin.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #16 (Kesner 1)
Proponent: Kesner, Ketih

Guideline Change:

1.1 Introduction

It is important to note that a *condition assessment* inherently is limited to what can be readily seen and, due to that fact, may not sufficiently identify all current *unsafe* conditions or conditions that might lead to a future *unsafe* condition. In some cases, signs of an *unsafe* condition are hidden by finished surfaces and would not be noticed without removal of such finishes, which is beyond the scope of a visual *condition assessment*. Furthermore, a visual *condition assessment* does not consider other conditions that may contribute to potential *unsafe* conditions including but not limited to whether the original design complies with the applicable code at time of construction permit, whether the original construction or use has deviated from the permitted design, whether there are defects in the original construction, whether there have been unpermitted changes or additions to the original permitted design. why visual here?

Comment: Furthermore, a ~~visual~~ condition assessment…

Discussion: Suggest striking visual at the noted location. As defined a condition assessment does not consider the items noted. Adding visual add confusion in this location.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #17 (Searer 2)
Proponent: Searer, Gwenyth

Guideline Change:

1.1 Introduction.

Maintaining the integrity of the structural, fire and life safety, envelope, plumbing, mechanical, electric, and fuel gas components and systems of a building throughout its life is of paramount importance to maintain the health, safety and welfare of the occupants and public. Because building systems work together, it is not enough to just consider one system while overlooking others. The fundamental purpose of an Existing Building Safety *Condition Assessment* program is to establish the minimum timeframes for visual condition assessments, therefore enabling the building *owners* to reasonably maintain their buildings, such that any potential or current *unsafe* conditions have been noted and remedied. This document is intended to be a guide and under no circumstances are these minimum recommendations intended to relieve building *owners* of their responsibilities under applicable codes, laws, ordinances, or regulations nor supplant proper professional judgment of those performing the *condition assessment*s.

This guide provides the framework for an Existing Building *Condition Assessment* program that can be used by jurisdictions interested in developing and implementing a program to supplement provisions in other codes (such as the International Existing Building Code (IEBC), the ~~International Property Maintenance Code (IPMC)~~, and the International Fire Code (IFC). While this guide is not written as a complete template nor in model ordinance language, it is meant to convey important concepts related to *condition assessment*s of existing buildings that should be considered by jurisdictions as well as building *owners*.

In general, codes such as the ~~IPMC and~~ IFC require *owners* to continually maintain their buildings in good repair- including the structural components; the exterior building envelope (including the roof); the electrical, plumbing, mechanical, and fuel gas equipment and systems; and the operational capacity of life safety systems (such as means of egress and active and passive fire protection systems- so as to not pose a threat to safety, health, and welfare of occupants and the general public. This guide recommends the minimum timelines, action, and assessment types that can be performed in order to promote adequate building maintenance.
It is important to note that a *condition assessment* inherently is limited to what can be readily seen and, due to that fact, may not sufficiently identify all current *unsafe* conditions or conditions that might lead to a future *unsafe* condition. In some cases, signs of an *unsafe* condition are hidden by finished surfaces and would not be noticed without removal of such finishes, which is beyond the scope of a visual

condition assessment. Furthermore, a visual *condition assessment* does not consider other conditions that may contribute to potential *unsafe* conditions including but not limited to whether the original design complies with the applicable code at time of construction permit, whether the original construction or use has deviated from the permitted design, whether there are defects in the original construction, whether there have been unpermitted changes or additions to the original permitted design. It is also not intended to identify as deficient components that do not meet current requirements of the code for new construction but complied with the original code under which the construction was permitted.

Depending on certain parameters affecting a particular building or any building in a particular region, including but not limited to local climate conditions and exposure to natural hazards, occupancy type, materials, structural systems, era of construction, the local jurisdiction developing and implementing such a program may need to consider additional types of assessments or investigations beyond a visual *condition assessment* that may be appropriate or required to achieve a more thorough evaluation of the existing conditions. Finally, this guide is not intended to serve as a replacement for ~~requirements outlined in the IPMC~~ including requirements intended to maintain a minimum level of safety and sanitation for both the general public and the occupants of a structure.

Discussion: Best to just delete all references to this code (*IPMC)*. If you have read it, you probably know how problematic it is.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #18 (Manley 2)
Proponent: Manley, Bonnie

Guideline Change:

1.1 Introduction

Maintaining the integrity of the structural, fire and life safety, envelope, plumbing, mechanical, electric, and fuel gas components and systems of a building throughout its life is of paramount importance to maintain the health, safety and welfare of the occupants and public. Because building systems work together, it is not enough to just consider one system while overlooking others. The fundamental purpose of an Existing Building Safety *Condition Assessment* program is to establish the minimum timeframes for visual condition assessments, therefore enabling the building *owners* to reasonably maintain their buildings, such that any potential or current *unsafe* conditions have been noted and remedied. This document is intended to be a guide and under no circumstances are these minimum recommendations intended to relieve building *owners* of their responsibilities under applicable codes, laws, ordinances, or regulations nor supplant proper professional judgment of those performing the *condition assessment*s.

This guide provides the framework for an Existing Building *Condition Assessment* program that can be used by jurisdictions interested in developing and implementing a program to supplement provisions in other codes (such as the International Existing Building Code (IEBC), the International Property Maintenance Code (IPMC), and the International Fire Code (IFC). While this guide is not written as a complete template nor in model ordinance language, it is meant to convey important concepts related to *condition assessment*s of existing buildings that should be considered by jurisdictions as well as building *owners*.

In general, codes such as the IPMC and IFC require *owners* to continually maintain their buildings in good repair- including the structural components; the exterior building envelope (including the roof); the electrical, plumbing, mechanical, and fuel gas equipment and systems; and the operational capacity of life safety systems (such as means of egress and active and passive fire protection systems- so as to not

pose a threat to safety, health, and welfare of occupants and the general public. This guide recommends the minimum timelines, action, and assessment types that can be performed in order to promote adequate building maintenance.

It is important to note that a *condition assessment* inherently is limited to what can be readily seen and, due to that fact, may not sufficiently identify all current *unsafe* conditions or conditions that might lead to a future *unsafe* condition. In some cases, signs of an *unsafe* condition are hidden by finished surfaces and would not be noticed without removal of such finishes, which is beyond the scope of a visual *condition assessment*. Furthermore, a visual *condition assessment* does not consider other conditions that may contribute to potential *unsafe* conditions including but not limited to whether the original design complies with the applicable code at time of construction permit, whether the original construction or use has deviated from the permitted design, whether there are defects in the original construction, whether there have been unpermitted changes or additions to the original permitted design.

Depending on certain parameters affecting a particular building or any building in a particular region, including but not limited to local climate conditions and exposure to natural hazards, occupancy type, materials, structural systems, era of construction, the local jurisdiction developing and implementing such a program may need to consider additional types of assessments or investigations beyond a visual *condition assessment* that may be appropriate or required to achieve a more thorough evaluation of the existing conditions. Finally, this guide is not intended to serve as a replacement for requirements outlined in the IPMC including requirements intended to maintain a minimum level of safety and sanitation for both the general public and the occupants of a structure.

Commented [KM5]: Run-on sentence.

Discussion: See comment in margin.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #19 (Bloch 1)
Proponent: Bloch, Tracy

Guideline Change:

1.1 Introduction

Maintaining the integrity of the structural, fire and life safety, envelope, plumbing, mechanical, electric, and fuel gas components and systems of a building throughout its life is of paramount importance to maintain the health, safety and welfare of the occupants and public. Because building systems work together, it is not enough to just consider one system while overlooking others. The fundamental purpose of an Existing Building Safety *Condition Assessment* program is to establish the minimum timeframes for visual condition assessments, therefore enabling the building *owners* to reasonably maintain their buildings, such that any potential or current *unsafe* conditions have been noted and remedied. This document is intended to be a guide and under no circumstances are these minimum recommendations intended to relieve building *owners* of their responsibilities under applicable codes, laws, ordinances, or regulations nor supplant proper professional judgment of those performing the *condition assessment*s.

This guide provides the framework for an Existing Building *Condition Assessment* program that can be used by jurisdictions interested in developing and implementing a program to supplement provisions in other codes (such as the International Existing Building Code (IEBC), the International Property Maintenance Code (IPMC), and the International Fire Code (IFC). While this guide is not written as a complete template nor in model ordinance language, it is meant to convey important concepts related to *condition assessment*s of existing buildings that should be considered by jurisdictions as well as building *owners*.

In general, codes such as the IPMC and IFC require *owners* to continually maintain their buildings in good repair- including the structural components; the exterior building envelope (including the roof); the

electrical, plumbing, mechanical, and fuel gas equipment and systems; and the operational capacity of life safety systems (such as means of egress and active and passive fire protection systems- so as to not pose a threat to safety, health, and welfare of occupants and the general public. This guide recommends the minimum timelines, action, and assessment types that can be performed in order to promote adequate building maintenance.

It is important to note that a *condition assessment* inherently is limited to what can be readily seen and, due to that fact, may not sufficiently identify all current *unsafe* conditions or conditions that might lead to a future *unsafe* condition. In some cases, signs of an *unsafe* condition are hidden by finished surfaces and would not be noticed without removal of such finishes, which is beyond the scope of a visual *condition assessment*. Furthermore, a visual *condition assessment* does not consider other conditions that may contribute to potential *unsafe* conditions including but not limited to whether the original design complies with the applicable code at time of construction permit, whether the original construction or use has deviated from the permitted design, whether there are defects in the original construction, whether there have been unpermitted changes or additions to the original permitted design.

~~Depending on certain~~ Consideration should be given to certain ~~Certain~~ parameters affecting a particular building or any building in a particular region~~,~~. These parameters include but are ~~including but~~ not limited to local climate conditions, ~~and~~ exposure to natural hazards, occupancy type, materials, structural systems, and era of construction~~,~~. The ~~the~~ local jurisdiction developing and implementing such a program may need to consider additional types of assessments or investigations beyond a visual *condition assessment* due to these additional considerations. ~~that may be~~ These may be appropriate or required to achieve a more thorough evaluation of the existing conditions. Finally, this guide is not intended to serve as a replacement for requirements outlined in the IPMC including requirements intended to maintain a minimum level of safety and sanitation for both the general public and the occupants of a structure.

Discussion: None provided.

Committee Action: Approved as Modified; see track changes, above.

PUBLIC COMMENT #20 (Kersting 3)
Proponent: Kersting, Ryan

Guideline Change:

1.1 Introduction

…

It is important to note that a *condition assessment* inherently is limited to what can be readily seen and, due to that fact, may not sufficiently identify all current *unsafe* conditions or conditions that might lead to a future *unsafe* condition. In some cases, signs of an *unsafe* condition are hidden by finished surfaces and would not be noticed without removal of such finishes, which is beyond the scope of a visual *condition assessment*.

Furthermore, a ~~visual~~ *condition assessment* required by this guide does not consider other conditions that may contribute to potential *unsafe* conditions including but not limited to:

- ~~-~~whether the original design complies with the applicable code at time of construction permit~~, or~~
- whether the Code and Standards on which the original design was performed have subsequently been ~~determined to be inadequate and subsequently~~ updated (e.g., special seismic detailing of structural systems in moderate- and high-seismic areas),

Formatted: Font: Not Italic

Formatted: Font: Not Italic

- whether the original construction or use has deviated from the permitted design, whether there are defects in the original construction,
- whether there have been unpermitted changes or additions to the original permitted design.

Such assessments are beyond the basic scope of this document but may be determined necessary by undertaking the process this document lays out for its users.

Formatted: Indent: Left: 0.74"

…

Discussion: None provided.

Committee Action: Approved as Modified, Minor editorial changes/corrections suggested by the work group, see track changes, above.

PUBLIC COMMENT #21 (Bonowitz 3)
Proponent: Bonowitz, David

Guideline Change:

1.1 Introduction

Discussion:

1. "Existing Building Safety Condition Assessment" does not match the title (also see Section 1.2).

2. In general, the draft needs substantial editing for clarity. I understand it's just a draft, but a number or mistakes – which I am confident will be fixed before publication – are significant enough to affect the reader's understanding and could skew the public comments. Examples include the misuse of "therefore" in Sec 1.1, the first two sentences of Sec 1.2.2, the first sentence of Sec 1.5.2.1, and the definition of structural distress in Sec 3.

3. Unclear, possibly misleading: Text speaks of a "program to supplement [existing code provisions." Is it saying those provisions, e.g. in the IPMC, by themselves are ineffective because they don't set a schedule? If so, why is the Guide not proposing that the schedule be added to the IPMC?

4. Purpose and context unclear: Text refers to steps needed "to accommodate the standardization of this guideline into local law." What does that mean? A standard is not the same as "local law." Related: The committee's webpage says the Guide is intended to be referenced from the IPMC, but the doc itself doesn't say that. The webpage also suggests the intent is to turn the Guide into a standard; is that still the intent?

5. Text refers to existing provisions in the IEBC, but the IEBC is not a maintenance code, and the timing of maintenance inspections – the purported purpose of the Guide – has nothing to do with the IEBC's scope, especially regarding structural elements.

6. Incorrect: A condition assessment is not necessarily "limited to what can be readily seen." I think what the Guide means is that a routine maintenance inspection is typically limited to non-destructive methods. But this same graf says there's such a thing as a "visual condition assessment" even as it says a plain "condition assessment" is inherently visual-only. So are these

two terms for the same thing, or two different things? (Only the latter is actually defined in Sec 3.) (Also see sections 1.2, 1.2.1, 3 (etc.?))

7. ("It is important") Text makes a good and necessary distinction between maintenance inspection and more thorough evaluation (including structural evaluation), but it leaves out the main issue: evaluation of existing non-conforming conditions that were considered acceptable when designed but are now recognized as deficient. This is the focus of essentially every structural assessment (seismic, wind, flood, etc.) we do, and every structural evaluation triggered by the IEBC.

8. ("Depending") Unclear. I suspect I know what the text means, but it should be a lot clearer about whether the "additional types of assessments" are needed to comply with the IPMC or with this Guide, or whether those would be for other purposes (as hinted at in the prior graf). If additional work is needed just to comply with this Guide, then this Guide is incomplete and likely cannot fulfill its purpose.

Committee Action: Considered, no action taken.

PUBLIC COMMENT # 22(Taecker 1)
Proponent: Taecker, John

Guideline Change:

1.1 Introduction

Discussion: Section 1.1, third paragraph – The IMC and IPC also includes "maintenance" within the scope of those codes.

Committee Action: Out of Scope.

PUBLIC COMMENT #23 (Calderone 1)
Proponent: Calderone, Brian

Guideline Change:

1.2 Condition Assessment.

A *condition assessment* is a tool used to identify ~~neglect~~ distress, damage, or ~~dilapidation, deterioration, or disrepair~~. Unusual conditions and/activities that significantly reduce the ~~service life~~ performance of a building component or signify the end of the service life of a building component may warrant shorter timeframes for the assessments, and more diligent attention than routine maintenance. AHJ's should closely consider local conditions and adjust the recommended time frames accordingly.

1.2.2 ~~Items that~~ Evaluation and repair are not in Scope of this Document.

Evaluation and repair existing building condition(s) are governed by existing building codes such as the International Existing Building Code (IEBC) and such evaluations and repairs are not within the scope of this document. Evaluations include detailed to determine code compliance and/or adequate demand- capacity ratios, the results of such contribute to the determination of necessary repairs or remediations. These guidelines do not cover any intent

Commented [BC6]: An assessment can only identify conditions not the reason for the condition; neglect is a reason not a condition. Dilapidation and disrepair are less technical terms or describe a degree of damage, distress, or deterioration, and thus can be deleted.

Commented [BC7]: This qualifier is needed. There are enormous number of mechanisms and events that can result in visual evidence of a condition that represents a extremely minor reduction in capacity, everything from very minor surface corrosion on interior steel framing, to cementitious paste wind scour on exterior concrete surfaces. Further many structures intolerate large amounts of damaged distress or deterioration before they become significant. Corners spalls or delaminations on large concrete mat slab foundations, reduce their capacity but to a degree that repair or maintenance may not be required for centuries. Accordingly the use of the word significantly is important to not overly burden the assessor and require the documentation of non pertinent conditions that reduce the practicality or usefulness of the assessment

Commented [BC8]: Entire buildings almost never reach the end of their service life do to techincal reasons, such building wide replacemetns are almost always related to externtail factors outside of the code, desiered building use, asthetics, owner finicial circomstances, etc. Accordingly, the term should be building component.

Commented [BC9]: Since evaluation and repair do not cover the full extent of ALL of the things not in the document.

to verify that construction follows the design documents used to build the structure. If *structural distress* is exhibited, it is recommended that an in- situ evaluation be performed by a qualified individual to understand the reason for such distress. This Guideline presents three types of assessments: Maintenance, Supplemental, and Periodic *Condition Assessment*s, which are recommended to be performed as described herein, at a minimum. This Guideline is not intended to be utilized for any other purpose.

Discussion: See comment in margin.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #24 (Searer 3)
Proponent: Searer, Gwenyth

Guideline Change:

1.2 Scope

The scope of this document is to establish the base framework for an Existing Building Safety *Condition Assessment* Program, by recommending minimum timeframes for visual *condition assessments* throughout the lifespan of the building. The recommended minimum timeframes and visual *conditions assessments* presented herein are intended to assist a building owner if addressing items that identify and addressing potential or current *unsafe* conditions. ~~This document is intended to be a guide and under no circumstances are these minimum recommendations intended to relieve building owners of their responsibilities under applicable codes, laws, ordinances, or regulations nor supplant proper professional judgment of those performing the condition assessments~~.

The visual *condition assessments* discussed herein should be performed on a regular and predetermined schedule, beginning with issuance of the certificate of occupancy or other similarly recognized authorizations for occupancy by the Authority Having Jurisdiction (AHJ). The recommendations in this guideline provide a framework for AHJ's to consider as a baseline as they develop an annual maintenance and periodic assessment schedule.

Discussion: Repeated from Section 1.1

Committee Action: Considered, no action taken.

PUBLIC COMMENT #25 (Manley 3)
Proponent: Manley, Bonnie

Guideline Change:

1.2 Scope

The scope of this document is to establish the base framework for an Existing Building Safety *Condition Assessment* Program, by recommending minimum timeframes for visual *condition assessments* throughout the lifespan of the building. The recommended minimum timeframes and visual *conditions assessments* presented herein are intended to assist a building owner ~~if~~ in addressing items that identify and addressing potential or current *unsafe* conditions. This document is intended to be a guide and under no circumstances are these minimum recommendations intended to relieve building owners of their responsibilities under applicable codes, laws, ordinances, or regulations nor supplant proper professional judgment of those performing the condition assessments.

The visual *condition assessments* discussed herein should be performed on a regular and predetermined schedule, beginning with issuance of the certificate of occupancy or other similarly recognized authorizations for occupancy by the Authority Having Jurisdiction (AHJ). The

Commented [KM10]: Elsewhere in the guide the term "code official" is used. One or the other should be used consistently throughout the document.

recommendations in this guideline provide a framework for AHJ's to consider as a baseline as they develop an annual maintenance and periodic assessment schedule.

Discussion: See comment in margin.

Committee Action: Approved as Modified, proposed change is accepted, the AHJ vs. Code Official language need to be addressed in final correlation of the document.

PUBLIC COMMENT #26 (Bloch 2)
Proponent: Bloch, Tracy

Guideline Change:

1.2 Scope

The scope of this document is to establish the base framework for an Existing Building Safety *Condition Assessment* Program, by recommending minimum timeframes for visual *condition assessments* throughout the lifespan of a ~~the~~ building. The recommended minimum timeframes and visual *conditions assessments* presented herein are intended to assist a building owner in identifying ~~if addressing items that identify~~ and addressing potential or current *unsafe* conditions. This document is intended to be a guide and under no circumstances are these minimum recommendations intended to relieve building owners of their responsibilities under applicable codes, laws, ordinances, or regulations nor supplant proper professional judgment of those performing the condition assessments.

The visual *condition assessments* discussed herein should be performed on a regular and predetermined schedule, beginning with issuance of the certificate of occupancy or other similarly recognized authorizations for occupancy by the Authority Having Jurisdiction (AHJ). The recommendations in this guideline provide a framework for AHJ's to consider as a baseline as they develop an annual maintenance and periodic assessment schedule.

Discussion: None Provided.

Committee Action: AM – accept "a" in lieu of "the"; prefer second part of PC will use PC #27.

PUBLIC COMMENT #27 (Kersting 4)
Proponent: Kersting, Ryan

Guideline Change:

1.2 Scope

The scope of this document is to establish the base framework for an Existing Building Safety *Condition Assessment* Program, by recommending minimum timeframes for visual *condition assessments* throughout the lifespan of the building. The recommended minimum timeframes and visual *conditions assessments* presented herein are intended to assist ~~a~~ building owners and jurisdictions ~~if addressing items that identify and addressing~~to identify potential or current *unsafe* conditions. This document is intended to be a guide and under no circumstances are these minimum recommendations intended to relieve building owners of their responsibilities under applicable codes, laws, ordinances, or regulations nor supplant proper professional judgment of those performing the condition assessments.

Discussion: Fix sentence to clarifying wording and make it clearly understood.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #28 (Bonowitz 4)
Proponent: Bonowitz, David

Guideline Change:

1.2 Scope

Discussion:

1. Unclear, and a fundamental problem: Is this Guide meant to help an AHJ establish a program to implement the IPMC or a separate mandatory program (as stated in Sec 1.1), or is it meant "to assist a building owner" as stated here? These are fundamentally different contexts and scopes. In particular, the written report required by the definition of condition assessment means something entirely different depending on the context of the work. Is the intent of the guide that this report will be submitted to and approved by the AHJ? Even if the report is intended only for the owner, the fact that it's required by this guide makes it a massive liability trap for all parties (as SEAOC's 2021 position warned).

2. Maintenance inspections should be "performed on a regular and predetermined schedule," but I (and SEAOC) note that they should not be limited to that schedule; they should also be event-based. More important, a predetermined schedule for "periodic assessment" is a bad idea and should not be a minimum requirement at all, at least not for structural issues. Emphasis on periodic assessment signals that routine maintenance inspection – and follow-up of maintenance issues – is unimportant because the building hasn't hit its periodic deadline yet. Emphasis on periodic assessment will do more harm than good.

Committee Action: Considered, No Action

PUBLIC COMMENT #29 (Herrera 4)
Proponent: Herrera, Richardo

Guideline Change:

1.2.1 Condition Assessment.

A CA ~~condition assessment~~ is a tool used to identify undesirable and unwanted flaws. ~~neglect, damage, dilapidation, deterioration, or disrepair.~~ Unusual conditions and ~~/~~activities that reduce the service-life ~~of a building~~ or signify the end of the service life of a building may warrant shorter timeframes for the assessments, and more diligent attention than simply routine maintenance. AHJ's should closely consider local conditions and adjust the recommended time frames accordingly.

Discussion: None provided

Committee Action: Considered, no action taken.

PUBLIC COMMENT #30 (Gries 2)

Formatted: Highlight

Proponent: Gries, Matt

Guideline Change:

1.2.1 Condition Assessment.

A *condition assessment* is a tool used to identify neglect, damage or ~~dilapidation~~, *deterioration*, ~~or disrepair~~, conditions that reduce the ~~performance~~ of the building. ~~The minimum requirements proposed in this guide are limited to conditions that reduce building performance beneath minimum standards of reliability for the health, safety, and welfare of the occupants and public.~~ Unusual conditions and/activities that reduce the service-life of a building or signify the end of the service life of a building may warrant shorter timeframes for the assessments, and more diligent attention than routine maintenance. AHJ's should closely consider local conditions and adjust the recommended time frames accordingly.

Discussion: See comment in margin.

Committee Action: Approve as Modified, see track changes, above.

PUBLIC COMMENT #31 (Munstertegier 2)
Proponent: Munsterteiger, Jeffery

Guideline Change:

1.2.1 Condition Assessment.

A *condition assessment* is a tool used to identify neglect, damage, dilapidation, *deterioration*, or disrepair. Unusual conditions and/ activities that reduce the service-life of a building or signify the end of the service life of a building may warrant shorter timeframes for the assessments, and more diligent attention than routine maintenance. AHJ's should closely consider local conditions and adjust the recommended time frames accordingly.

Discussion: See comment in margin.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #32 (Kesner 2)
Proponent: Kesner, Keith

Guideline Change:

1.2.1 Condition Assessment.

ideally these terms are defined somewhere

A *condition assessment* is a tool used to identify neglect, damage, dilapidation, *deterioration*, or disrepair. Unusual conditions and/activities that reduce the service-life of a building or signify the end of the service life of a building may warrant shorter timeframes for the assessments, and more diligent attention than routine maintenance. AHJ's should closely consider local conditions and adjust the recommended time frames accordingly.

Formatted: Font: (Default) Calibri-Light, Ligatures: None

Formatted: Default Paragraph Font, Font: (Default) Calibri-Light, Ligatures: None

Formatted: Font: (Default) Calibri-Light, Underline, Ligatures: None

Formatted: Font: (Default) Calibri-Light, Strikethrough, Ligatures: None

Formatted: Default Paragraph Font, Font: (Default) Calibri-Light, Strikethrough, Ligatures: None

Formatted: Font: (Default) Calibri-Light, Ligatures: None

Formatted: Font: (Default) Calibri-Light, Strikethrough, Ligatures: None

Formatted: Default Paragraph Font, Font: (Default) Calibri-Light, Strikethrough, Ligatures: None

Formatted: Font: (Default) Calibri-Light, Underline, Ligatures: None

Commented [MG14]: Every structure has damage or deterioration. Need to qualify when it matters. Consistent with the objective of this guide, it only matters when it reduces performance beneath some minimum for safety.

Formatted: Font: (Default) Calibri-Light, Ligatures: None

Formatted: Default Paragraph Font, Font: (Default) Calibri-Light, Ligatures: None

Formatted: Font: (Default) Calibri-Light, Ligatures: None

Formatted: Default Paragraph Font, Font: (Default) Calibri-Light, Ligatures: None

Commented [JM17]: Doesn't seem the "/" is necessary in this sentence.

Comment: A condition assessment is a tool used to identify ~~neglect,~~ damage, ~~dilapidation,~~ deterioration~~, or disrepair~~.

Discussion: Strike the terms neglect, dilapidation, and disrepair. The terms neglect, damage, dilapidation, and disrepair are not defined in the text or in other ICC documents. Neglect is particularly bad is it assigns fault rather than being objective. The lack of definitions makes it less clear about how the observed conditions affect the performance of the structure. Suggest adding definitions for damage (from ACI 562) and deterioration (ACI CT-16). These are shown later in these comments.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #33 (Bonowitz 5)
Proponent: Bonowitz, David

Guideline Change:

1.2.1 Condition Assessment

Discussion:

1. Description of "condition assessment" should refer to the definition in Sec 3 (which itself is deeply flawed). The 2d and 3d sentences are so vague that they severely limit the usefulness of the rest of the Guide.

2. Aside from the problematic definition of condition assessment, the description here needs to clarify how this intended "tool" relates to the scope of the IPMC. Is condition assessment a procedure used to implement the IPMC? Or is it a supplement to the IPMC? Or is it fundamentally different from the IPMC because it is focused only on conditions that cross a line into unsafe or dangerous territory? In Sec 1.3, what is the purpose of providing the IPMC excerpts? Is the intent that this guide is adopting those provisions and is intended to find these conditions (i.e. the guide is a tool for implementing the IPMC)? That could make sense, but then the last part of Sec 1.3 adds a new list of conditions and a new layer of requirements, again confusing the relationship of this Guide to the IPMC. The bullet list is (typically) vague and unenforceable, but it's enough to increase liability for all parties. (Also see Section 1.3)

Committee Action: Approved as Modified. See revised language below.

1.2.1 Condition Assessment. (taken from #23).

As defined, a *condition assessment* is a tool used to identify ~~neglect~~ distress, damage, or ~~dilapidation,~~ *deterioration*~~, or disrepair~~. Unusual conditions and/activities that significantly reduce the ~~service life~~ performance of a building component or signify the end of the service life of a building component may warrant shorter timeframes for the assessments, and more diligent attention than routine maintenance. AHJ's should closely consider local conditions and adjust the recommended time frames accordingly.

CONDITION ASSESSMENT. An observation of the existing building, facility, system(s) or component(s) and review of records, where available, resulting in a written report.

1. A visual observation, performance or testing of building elements or equipment, as noted in this guideline, to assess non-structural elements or equipment for obvious distress , ~~defects~~ damage, or ~~disrepair~~ deterioration that reduce the safety of the building ~~that~~ or ~~would~~ may render the building ~~unfit for occupancy~~, *unsafe*, *dangerous*, or otherwise a create hazard to the occupants.
2. A visual observation of exposed, accessible, and available conditions, to determine if the capacity of structural elements may be affected by any *structural distress* or if *dangerous* structural conditions exist. A visual structural condition assessment does not include performing ~~additional~~ structural calculations, analysis, or evaluation, or testing of the existing conditions beyond the visual observation.

PUBLIC COMMENT #34 (Herrera 5)
Proponent: Herrera, Richardo

Guideline Change:

1.2.2 Items that are not in Scope of this Document.

The e~~E~~valuation and repair ~~existing~~of building condition(s) are often governed by ~~existing~~ building codes such as the International Existing Building Code (IEBC). ~~and such~~The evaluations and repairs they call out are not within the scope of this Guide~~document~~. Some IEBC ~~E~~evaluations ~~include detailed~~ are meant to determine code compliance and/or adequate demand- capacity ratios of the structural members. T~~,~~ the results of such evaluations ~~contribute to~~will ~~the~~ determination of necessary repairs or ~~-~~remediations. The~~se~~ guide~~lines~~ does not cover any ~~intent to verify that construction~~consideration about ~~follows~~ the design documents that were used to build the structure. If structural distress is exhibited, it is recommended that an in- situ evaluation be performed by a qualified individual to understand the reason for such distress. This Guide~~line~~ presents three types of CA~~assessments~~: Maintenance, Supplemental, and Periodic ~~Condition Assessments~~, which are recommended to be performed as described herein, at a minimum. This Guide~~line~~ is not intended to be ~~utilized~~ used for any other purpose.

Discussion: None provided

Committee Action: Considered, no action taken.

PUBLIC COMMENT #35 (Kehoe 1)
Proponent: Kehoe, Brian

Guideline Change:

1.2.1 Condition Assessment.

A *condition assessment* is a tool used to identify neglect, damage, dilapidation, *deterioration*, or

disrepair. Unusual conditions and/activities that reduce the service-life of a building or signify the end of the service life of a building may warrant shorter timeframes for the assessments, and more diligent attention than routine maintenance. AHJ's should closely consider local conditions and adjust the recommended time frames accordingly.

1.2.2 Items that are not in Scope of this Document.

Evaluation and repair existing building condition(s) are governed by existing building codes such as the International Existing Building Code (IEBC) and such evaluations and repairs are not within the scope of this document. Evaluations include detailed to determine code compliance and/or adequate demand-capacity ratios, the results of such contribute to the determination of necessary repairs or remediations. These guidelines do not cover any intent to verify that construction follows the design documents used to build the structure. If *structural distress* is exhibited, it is recommended that an in-situ evaluation be performed by a qualified individual to understand the reason for such distress. This Guideline presents three types of assessments: Maintenance, Supplemental, and Periodic *Condition Assessment*s, which are recommended to be performed as described herein, at a minimum. This Guideline is not intended to be utilized for any other purpose.

Discussion: (*Highlighted sections):* Condition assessment, assessment of code compliance, and verification of following design documents are not mutually exclusive tasks.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #36 (Kersting 5)
Proponent: Kersting, Ryan

Guideline Change:

1.2.1 Condition Assessment.

A *condition assessment* is a tool used to identify neglect, damage, dilapidation, *deterioration*, or disrepair. Unusual conditions and/activities that reduce the service-life of a building or signify the end of the service life of a building may warrant shorter timeframes for the assessments, and more diligent attention than routine maintenance. AHJ's should closely consider local conditions and adjust the recommended time frames accordingly.

This Guideline presents three types of assessments: Maintenance, Supplemental, and Periodic *Condition Assessment*s, which are recommended to be performed as described herein, at a minimum. This Guideline is not intended to be utilized for any other purpose.

1.2.2 Items that are not in Scope of this Document.

Evaluation and repair of existing building condition(s) are governed by existing building codes such as the International Existing Building Code (IEBC) and such evaluations and repairs are not within the scope of this document. Evaluations include detailed analysis to determine code compliance and/or adequate demand- capacity ratios, the results of such contribute to the determination of necessary repairs or remediations. These guidelines do not cover any intent to verify that construction follows the design documents used to build the structure. Similarly, these guidelines do not cover any intent to verify if the current construction complies with the original code of construction nor verify if the current construction could be certified (or re-certified) as being in compliance with current code requirements.

Visual assessments may provide the opportunity to identify structural distress, but only within the preceding limitations. If *structural distress* is exhibited, it is recommended that an in--situ evaluation be performed by a qualified individual to understand the reason for such distress. Such evaluations, and other similar evaluations of other systems, are beyond the scope of this document. ~~This Guideline presents three types of assessments: Maintenance, Supplemental,~~

~~and Periodic *Condition Assessments*, which are recommended to be performed as described herein, at a minimum. This Guideline is not intended to be utilized for any other purpose.~~

Discussion: None provided.

Committee Action: Approved as Submitted.

PUBLIC COMMENT # 37 (Kehoe 2)
Proponent: Kehoe, Brian

Guideline Change:

1.2.2 Items that are not in Scope of this Document.

Evaluation and repair existing building condition(s) are governed by existing building codes such as the International Existing Building Code (IEBC) and such evaluations and repairs are not within the scope of this document. Evaluations include detailed analyses to determine code compliance and/or adequate demand-capacity ratios, the results of such contribute to the determination of necessary repairs or remediations. These guidelines do not cover any intent to verify that construction follows the design documents used to build the structure. If *structural distress* is exhibited, it is recommended that an in-situ evaluation be performed by a qualified individual to understand the reason for such distress. This Guideline presents three types of assessments: Maintenance, Supplemental, and Periodic *Condition Assessment*s, which are recommended to be performed as described herein, at a minimum. This Guideline is not intended to be utilized for any other purpose.

Discussion: None

Committee Action: Considered, no action taken.

PUBLIC COMMENT #38 (Gries 3)
Proponent: Gries, Matt

Guideline Change:

1.2.2. ~~Items that are not in Scope of this Document~~ Guide Scope Limitations.
Evaluation and repair existing building condition(s) are governed by existing building codes such as the ~~International Existing Building Code (~~IEBC~~)~~ and such evaluations and repairs are not within the scope of this document. Evaluations include detailed to determine code compliance and/or adequate demand-capacity ratios, the results of such contribute to the determination of necessary repairs or remediations. These guidelines do not cover any intent to verify that construction follows the design documents used to build the structure. If *structural distress* is exhibited, it is recommended that an in- situ evaluation be performed by a qualified individual to understand the reason for such distress. This Guideline presents three types of assessments: Maintenance, Supplemental, and Periodic *Condition Assessment*s, which are recommended to be performed as described herein, at a minimum. This Guideline is not intended to be utilized for any other purpose.

Commented [MG18]: Defined in 1.1

Discussion: See comment in margin.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #39 (Munsterteiger 3)
Proponent: Munsterteiger, Jeffery

Guideline Change:

1.2.2 Items that are not in Scope of this Document.

Evaluation and repair existing building condition(s) are governed by existing building codes such as the International Existing Building Code (IEBC) and such evaluations and repairs are not within the scope of this document. Evaluations include ~~detailed~~ details to determine code compliance and/or adequate demand- capacity ratios, the results of ~~such~~ which contribute to the determination of necessary repairs or remediations. These guidelines do not cover any intent to verify that construction follows the design documents used to build the structure. If *structural distress* is exhibited, it is recommended that an in- situ evaluation be performed by a qualified individual to understand the reason for such distress. This Guideline presents three types of assessments: Maintenance, Supplemental, and Periodic *Condition Assessment*s, which are recommended to be performed as described herein, at a minimum. This Guideline is not intended to be utilized for any other purpose.

Commented [JM19]: Word choice- include "details" to determine?

Commented [JM20]: Word choice- the result of "which" contribute to?

Discussion: See comment in margin.

Committee Action: Approved as Submitted.

PUBLIC COMMENT # 40 (Kesner 3)
Proponent: Kesner, Keith.

Guideline Change:

1.2.2 Items that are not in Scope of this Document.

Evaluation and repair existing building condition(s) are governed by existing building codes such as the International Existing Building Code (IEBC) and such evaluations and repairs are not within the scope of this document. Evaluations include detailed to determine code compliance and/or adequate demand-capacity ratios, the results of such contribute to the determination of necessary repairs or remediations. These guidelines do not cover any intent to verify that construction follows the design documents used to build the structure. If *structural distress* is exhibited, it is recommended that an in-situ evaluation be performed by a qualified individual to understand the reason for such distress. This Guideline presents three types of assessments: Maintenance, Supplemental, and Periodic *Condition Assessments*, which are recommended to be performed as described herein, at a minimum. This Guideline is not intended to be utilized for any other purpose.

observed or documented

Editorial comment: If structural distress is ~~exhibited~~ observed.

Discussion: Distress will be exhibited whether or not it is observed. We can only address what is observed or documented.

Committee Action: Approved as Submitted. Use the term observed as recommended by the commenter.

PUBLIC COMMENT #41(Searer 4)

Proponent: Searer, Gwenyth

Guideline Change:

1.2.2 Items that are not in Scope of this Document.

Evaluation and repair existing building condition(s) are governed by existing building codes such as the International Existing Building Code (IEBC) and such evaluations and repairs are not within the scope of this document. Evaluations include detailed to determine code compliance and/or adequate demand-capacity ratios, the results of such contribute to the determination of necessary repairs or remediations. These guidelines do ~~not cover any intent to verify~~ that construction follows the design documents used to build the structure. If *structural distress* is exhibited, it is recommended that an in-situ evaluation be performed by a qualified individual to understand the reason for such distress. This Guideline presents three types of assessments: Maintenance, Supplemental, and Periodic *Condition Assessments*, which are recommended to be performed as described herein, at a minimum. This Guideline is not intended to be utilized for any other purpose.

Discussion: Mandate verification

Committee Action: Considered, no action taken.

PUBLIC COMMENT #42 (Manley 4)
Proponent: Manley, Bonnie

Guideline Change:

1.2.2 Items that are not in Scope of this Document.

Evaluation and repair existing building condition(s) are governed by existing building codes such as the International Existing Building Code (IEBC) and such evaluations and repairs are not within the scope of this document. Evaluations include detailed to determine code compliance and/or adequate demand-capacity ratios, the results of such contribute to the determination of necessary repairs or remediations. These guidelines do not cover any intent to verify that construction follows the design documents used to build the structure. If *structural distress* is exhibited, it is recommended that an in-situ evaluation be performed by a qualified individual to understand the reason for such distress. This Guideline presents three types of assessments: Maintenance, Supplemental, and Periodic *Condition Assessments*, which are recommended to be performed as described herein, at a minimum. This Guideline is not intended to be utilized for any other purpose.

Commented [KM21]: Awkward sentences -- something seems to be missing from both?

Commented [KM22]: Awkward sentences -- something seems to be missing from both?

Commented [KM23]: Sentence seems out of place since title of section is "Items that are NOT in the scope of this document".

Discussion: See comment in margin.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #43 (Bloch 3)
Proponent: Bloch, Tracy

Guideline Change:

1.2.2 Items that are not in Scope of this Document.

Evaluation and repair existing building condition(s) are governed by existing building codes such as the International Existing Building Code (IEBC) and such evaluations and repairs are not within the scope of this document. Detailed evaluations ~~Evaluations include detailed to~~ determine code compliance and/or

adequate demand-capacity ratios~~.~~, ~~the~~ The results of such evaluations contribute to the determination of necessary repairs or remediations. These guidelines do not cover any intent to verify that construction ~~follows~~ followed the design documents used to build the structure. If *structural distress* is exhibited, it is recommended that an in-situ evaluation be performed by a qualified individual to understand the reason for such distress. This Guideline presents three types of assessments: Maintenance, Supplemental, and Periodic *Condition Assessment*s, which are recommended to be performed as described herein, at a minimum. This Guideline is not intended to be utilized for any other purpose.

Discussion: None provided.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #44 (Bonowitz 6)
Proponent: Bonowitz, David

Guideline Change:

1.2.2 Items that are not in Scope of this Document.

Discussion:

1. The structural part of the condition assessment definition is specifically looking for structural distress. But Sec 1.2.2 says dealing with structural distress is not in the guideline's scope. So I think this means that the condition assessment process is supposed to look for distress, but if it's found, then it recommends an evaluation, so is that within the guide or not? If not, then if distress is found, the user should go to the IEBC? Well, the IPMC (Sec 304.1.1 etc.) already says that. So is this Guide saying something different from the IPMC? Again, coordination with the IPMC is lacking.

2. "Maintenance, Supplemental, and Periodic." If these are all presented in the Guide, why are they described in a section about items not in the scope of the guide? What is the relation of this sentence to the prior sentences?

Committee Action: Considered, no action taken.

PUBLIC COMMENT #45 (Calderone 2)
Proponent: Calderone, Brian

Guideline Change:

1.3 Methodology

It is recommended that *qualified professional*s perform the *condition assessment*(s) as described herein. Multiple professionals with varying areas of expertise will likely ~~may~~ be required to assess the ~~building and~~ all of the subject systems and components that comprise a building. The *condition assessment* should be conducted throughout ~~all~~ habitable and non-habitable areas of the building, as deemed necessary by the assessing professional. During the assessment, the professionals should critically consider visible cues that may be indicative of ~~neglect~~ distress, damage, ~~dilapidation~~, *deterioration*~~, or disrepair~~. The IEBC contains provisions for repair, alternations, change of occupancies addition to, and relocation of existing buildings. The IFC includes existing building provisions for emergency planning and preparedness, fire and smoke protection features, fire safety provisions for interior finishes, and operation, testing and maintenance of fire protection systems. The IFC further contains provisions for life safety systems such as means of egress. The IPMC requires both the interior and exterior of the building to be maintained in good repair, structurally sound, and not pose a threat to public health, safety and welfare. *Unsafe* structures and equipment are addressed in Section 109 of the IPMC. Below are excerpts from the 2024 edition of the IPMC:

> **109.1.1 Unsafe structures.** An *unsafe* structure is one that is found to be hazardous to the life, health, property, or safety of the public or the occupants of the structure by not providing minimum safeguards to protect or warn occupants in the event of fire, or because such structure contains *unsafe* equipment or is *dangerous*.
>
> **109.1.2 Unsafe equipment.** *Unsafe* equipment includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers or other equipment on the *premises* or with in the structure that is in such disrepair or condition that such equipment is a hazard to life, health, property, or safety of the public or occupants of the *premise* or structure.
>
> **109.1.3 Structure unfit for human occupancy.** A structure is unfit for human occupancy whenever the *code official* finds that such structure is *unsafe*, unlawful or, because of the degree to which the structure is in disrepair or lacks maintenance, is unsanitary, vermin or rat infested, contains filth and contamination, or lacks ventilation, illumination, sanitary or heating facilities or other essential equipment required by this code, or because the location of the structure constitutes a hazard to the occupants of the structure or to the public.

Section 109.1.5 of the IPMC further identifies specific hazardous conditions or defects that must be remedied to provide the requisite level of safety to the occupants.

An important criterion for the establishment of the existing building *condition assessment* program and frequency is based on one or more of the following characteristics:

- Age of the building (or era of construction) and applicable code at time of construction
- Construction type
- Construction materials and method(s) of construction
- The building system or component
- Environmental and exposure factors for the building's location and/or use.
- History of environmental hazards or other damaging events

Table 4 provides recommended thresholds where *condition assessment*s are required and guidance for the *condition assessment* types and frequencies based on the parameters above.

Discussion:

Remove "all". There may be non-habitable areas that cannot be safely accessed without being overly or unnecessarily burdensome to the Owner/Assessor

Many examples of use related non-environmental factors that impact this, such as buildings that store or process corrosive materials.

Committee Action: Considered, No Action Taken.

PUBLIC COMMENT #46 (Herrera 6)
Proponent: Herrera, Richardo

Guideline Change:

1.3 Methodology

It is recommended that qualified subject matter professionals perform the CAs~~condition assessment(s) as~~ described herein. ~~Multiple~~Other ~~-~~professionals with varying areas of expertise may be required to assess portions of the building and its ~~all~~ systems. The CA~~condition assessment~~ should be conducted throughout all ~~habitable and non-habitable~~ areas of the building that are used on a daily basis, at ~~s~~ the discretion ~~deemed necessary~~ of by the assessing professional. During the assessment, the team professionals should critically consider all visible cues that may be indicative of neglect, damage, ~~dilapidation,~~ deterioration, or disrepair. The IEBC contains provisions for repair, alter~~n~~ations, change of occupancies addition to, and relocation of existing buildings. The IFC includes existing building provisions for emergency planning and preparedness, fire and smoke protection features, fire safety provisions for interior finishes, and operation, testing and maintenance of fire protection systems. The IFC further contains provisions for life safety systems such as means of egress. The IPMC requires both the interior and exterior of the building to be maintained in good repair, structurally sound, and not pose a threat to public health, safety and welfare. Unsafe structures and equipment are addressed in Section 109 of the IPMC. Below are excerpts from the 2024 edition of the IPMC:

> **109.1.1 Unsafe ~~structures~~ buildings.**~~Unsafe~~ equipment such as ~~includes any~~ boiler, heating equipment, elevators, ~~moving stairway~~escalators, backup generators can become unsafe if nt properly maintained. Frayed or undersized electrical wiring or device, flammable liquid containers ~~or other equipment on the premises or with in the structure that is in such disrepair or~~ condition that such equipment is a hazard to life, health, property, or safety of the public or occupants of the premise or structure
>
> **109.1.2 Unsafe equipment.** *Unsafe* equipment includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers or other equipment on the *premises* or with in the structure that is in such disrepair or condition that such equipment is a hazard to life, health, property, or safety of the public or occupants of the *premise* or structure.
>
> **109.1.3 Buildings~~Structure~~ unfit for human occupancy.**A building ~~structure~~ is unfit for human occupancy whenever a ~~the~~ code official of the AHJ determines ~~finds~~ that such building ~~structure~~ is unlawful, unsafe, ~~unlawful~~ or, because of the degree to which the building ~~structure~~ is in disrepair from ~~or~~ lack of ~~s~~ maintenance, is unsanitary, is vermin or rat infested, is ~~contains~~ filthy and contaminated~~ion~~, ~~or~~ lacks ventilation, illumination, sanitary, ~~or~~ heating facilities or other

essential equipment and systems required by this code, or because the location of the building ~~structure~~ constitutes a hazard to its ~~the~~ occupants ~~of the structure~~ or to the general public.

Section 109.1.5 of the IPMC ~~further identifies specific~~ lists other hazardous conditions or defects ~~on~~ on the premises that must be remedied in order to provide the requisite level of safety to the occupants.

~~An important criterion~~ The need for the adoption ~~establishment~~ of ~~the~~a ~~existing~~ building condition assessment program ~~and frequency~~ is ~~based~~ triggered by ~~on~~ one or more of the following ~~characteristics:~~

- Age of the building ~~(or era of construction)~~ and the ~~applicable~~ code applicable at the time of construction
- Construction type
- Construction materials and method(s) of construction
- The nature of the structural ~~building~~ system or its component
- Environmental hazards and related factors at ~~for~~ the building's location
- ~~History of environmental hazards or other damaging events~~

Table 4 provides recommended thresholds where ~~condition~~ CAs ~~assessments~~ are required ~~and guidance for the condition assessment types and frequencies based on the parameters above~~.

Discussion: None provided

Committee Action: Out of Scope.

PUBLIC COMMENT #47 (Kehoe 3)
Proponent: Kehoe, Brian

Guideline Change:

1.3 Methodology

It is recommended that *qualified professional*s perform the *condition assessment*(s) as described herein. Multiple professionals with varying areas of expertise may be required to assess the building and all systems. The *condition assessment* should be conducted throughout ~~all habitable and non-habitable areas of~~ the building, as deemed necessary by the assessing professional. During the assessment, the professionals should critically consider visible cues that may be indicative of neglect, damage, dilapidation, *deterioration*, or disrepair. The IEBC contains provisions for repair, alternations, change of occupancies addition to, and relocation of existing buildings. The IFC includes existing building provisions for emergency planning and preparedness, fire and smoke protection features, fire safety provisions for interior finishes, and operation, testing and maintenance of fire protection systems. The IFC further contains provisions for life safety systems such as means of egress. The IPMC requires both the interior and exterior of the building to be maintained in good repair, structurally sound, and not pose a threat to public health, safety and welfare. *Unsafe* structures and equipment are addressed in Section 109 of the IPMC. Below are excerpts from the 2024 edition of the IPMC:

109.1.1 Unsafe structures. An *unsafe* structure is one that is found to be ~~imminently~~ hazardous to the life, health, property, or safety of the public or the occupants of the structure by not providing minimum safeguards to protect or warn occupants in the event of fire, or because such structure contains *unsafe* equipment or is *dangerous*.

(remaining portion of section unchanged).

Discussion:

It is not always feasible or practical to assess all areas.

An unsafe structure needs to be imminently hazardous otherwise any structure not compliant with current codes could be considered hazardous.

Committee Action: Approved as Modified. Approved as note, except modification made to section copied from IPMC (see track changes, above).

PUBLIC COMMENT #48 (Gries 4)
Proponent: Gries, Matt

Guideline Change:

1.3 Methodology

It is recommended that *qualified professional*s perform the *condition assessment*(s) as described herein. Multiple professionals with varying areas of expertise may be required to assess the building and all relevant systems. The *condition assessment* should be conducted throughout relevant ~~all~~ habitable and non-habitable areas of the building~~, as deemed necessary by the assessing professional~~. During the assessment, the professionals should critically consider visible cues that may be indicative of ~~neglect,~~ damage, ~~dilapidation,~~ *deterioration* conditions that reduce the performance of the building. The IEBC contains provisions for repair, alter~~n~~ations, changes of occupancy~~,ies~~ additions to, and relocation of existing buildings. The IFC includes existing building provisions for emergency planning and preparedness, fire and smoke protection features, fire safety provisions for interior finishes, and operation, testing and maintenance of fire protection systems. The IFC further contains provisions for life safety systems such as means of egress. The IPMC requires both the interior and exterior of the building to be maintained in good repair, structurally sound, and not pose a threat to public health, safety and welfare. *Unsafe* structures and equipment are addressed in Section 109 of the IPMC. Below are excerpts from the 2024 edition of the IPMC:

> **109.1.4 Unsafe structures.** An *unsafe* structure is one that is found to be hazardous to the life, health, property, or safety of the public or the occupants of the structure by not providing minimum safeguards to protect or warn occupants in the event of fire, or because such structure contains *unsafe* equipment or is *dangerous*.
>
> **109.1.5 Unsafe equipment.** *Unsafe* equipment includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers or other equipment on the *premises* or with in the structure that is in such disrepair or condition that such equipment is a hazard to life, health, property, or safety of the public or occupants of the *premise* or structure.

Commented [MG24]: Necessary for what? Section 1.1. identifies there will be limitations on where one can access. Why does the design professional get to say? The owner ultimately carries the risk of their building's performance, they must also have say in the scope of the inspection.

Commented [MG25]: Same comments as in 1.2.2.

> **109.1.6 Structure unfit for human occupancy.** A structure is unfit for human occupancy whenever the *code official* finds that such structure is *unsafe*, unlawful or, because of the degree to which the structure is in disrepair or lacks maintenance, is unsanitary, vermin or rat infested, contains filth and contamination, or lacks ventilation, illumination, sanitary or heating facilities or other essential equipment required by this code, or because the location of the structure constitutes a hazard to the occupants of the structure or to the public.

Section 109.1.5 of the IPMC further identifies specific hazardous conditions or defects that must be remedied to provide the requisite level of safety to the occupants.

An important criterion for the establishment of the existing building *condition assessment* program and frequency is based on one or more of the following characteristics:

- Age of the building (or era of construction) and applicable code at time of construction
- ~~Construction type~~ Type of Construction.
- ~~Construction materials~~ and method(s~~) of construction~~ of assembly
- The building system or component
- Environmental ~~factors~~ exposure ~~for the building's location~~
- History of environmental hazards or other damaging events

Table 4 provides recommended thresholds where *condition assessment*s are required and guidance for the *condition assessment* types and frequencies based on the parameters above.

Discussion: See comments in margin.

Committee Action: Approved as Modified – No changes proposed to be accepted except those recommended by the work group (see track changes).

Commented [MG26]: redundant

PUBLIC COMMENT #49 (Munsterteiger 4)
Proponent: Munsterteiger, Jeffery

Guideline Change:

1.3 Methodology

It is recommended that *qualified professional*s perform the *condition assessment*(s) as described herein. Multiple professionals with varying areas of expertise may be required to assess the building and all systems. The *condition assessment* should be conducted throughout all habitable and non-habitable areas of the building, as deemed necessary by the assessing professional. During the assessment, the professionals should critically consider visible cues that may be indicative of neglect, damage, dilapidation, *deterioration*, or disrepair. ~~The IEBC contains provisions for repair, alternations, change of occupancies addition to, and relocation of existing buildings. The IFC includes existing building provisions for emergency planning and preparedness, fire and smoke protection features, fire safety provisions for interior finishes, and operation, testing and maintenance of fire protection systems. The IFC further contains provisions for life safety systems such as means of egress. The IPMC requires both the interior and exterior of the building to be maintained in good repair, structurally sound, and not pose a threat to public health, safety and welfare. *Unsafe* structures and equipment are addressed in Section 109 of the IPMC. Below are excerpts from the 2024 edition of the IPMC:~~

~~**Unsafe structures.** An *unsafe* structure is one that is found to be hazardous to the life, health,~~

~~property, or safety of the public or the occupants of the structure by not providing minimum safeguards to protect or warn occupants in the event of fire, or because such structure contains *unsafe* equipment or is *dangerous*.~~

~~**Unsafe equipment.** *Unsafe* equipment includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers or other equipment on the *premises* or with in the structure that is in such disrepair or condition that such equipment is a hazard to life, health, property, or safety of the public or occupants of the *premise* or structure.~~

~~**Structure unfit for human occupancy.** A structure is unfit for human occupancy whenever the *code official* finds that such structure is *unsafe*, unlawful or, because of the degree to which the structure is in disrepair or lacks maintenance, is unsanitary, vermin or rat infested, contains filth and contamination, or lacks ventilation, illumination, sanitary or heating facilities or other essential equipment required by this code, or because the location of the structure constitutes a hazard to the occupants of the structure or to the public.~~

Formatted: Indent: Left: 0.57", Right: 0.5", No widow/orphan control, Don't adjust space between Latin and Asian text, Don't adjust space between Asian text and numbers

~~Section 109.1.5 of the IPMC further identifies specific hazardous conditions or defects that must be remedied to provide the requisite level of safety to the occupants.~~

Where the condition assessment suggests that corrective or enforcement action is necessary, steps must be taken to ensure the building is safe for occupancy. Any corrective actions or enforcement action to maintain the building is safe that requires permits should follow the appropriate model building code for compliance.

An important criterion for the establishment of the existing building *condition assessment* program and frequency is based on one or more of the following characteristics:

- Age of the building (or era of construction) and applicable code at time of construction
- ~~Construction type~~ Type of Construction
- Construction materials and method(s) ~~of construction~~ of assembly.
- The building system or component
- Environmental factors for the building's location
- History of environmental hazards or other damaging events

Table 4 provides recommended thresholds where *condition assessment*s are required and guidance for the *condition assessment* types and frequencies based on the parameters above.

Discussion: See comments in margin.

Committee Action: Approved as Modified, including modification from committee (adding word "steps" in first sentence).

Commented [JM27]: For this guideline, it should tell the user of this guideline where to find information needed for the application of the guideline.

Some of this doesn't seem to be a part of the guideline, for example requirements for emergency planning and preparedness, change of occupancy and relocated buildings. Suggest deleting the text.

PUBLIC COMMENT #50 (Searer 5)
Proponent: Searer, Gwenyth

Guideline Change:

1.3 Methodology

It is recommended that *qualified professional*s perform the *condition assessment*(s) as described herein. Multiple professionals with varying areas of expertise may be required to assess the building and all systems. The *condition assessment* should be conducted throughout all habitable and non-habitable areas of the building, as deemed necessary by the assessing professional. During the assessment, the professionals should critically consider visible cues that may be indicative of neglect, damage, dilapidation, *deterioration*, or disrepair. The IEBC contains provisions for repair, alternations, change of occupancies addition to, and relocation of existing buildings. The IFC includes existing building provisions for emergency planning and preparedness, fire and smoke protection features, fire safety provisions for interior finishes, and operation, testing and maintenance of fire protection systems. The IFC further contains provisions for life safety systems such as means of egress. The IPMC requires both the interior and exterior of the building to be maintained in good repair, structurally sound, and not pose a threat to public health, safety and welfare. *Unsafe* structures and equipment are addressed in Section 109 of the IPMC. ~~Below are excerpts from the 2024 edition of the IPMC:~~

Commented [KM28]: Is the intent to cause jurisdictions to adopt the IPMC?
I also do not know what a user of this guide is supposed to do with
these quotes. Recommend delete.

~~**109.1.1 Unsafe structures.** An *unsafe* structure is one that is found to be hazardous to the life, health, property, or safety of the public or the occupants of the structure by not providing~~

~~minimum safeguards to protect or warn occupants in the event of fire, or because such structure contains *unsafe* equipment or is *dangerous*.~~

~~**109.1.2 Unsafe equipment.** *Unsafe* equipment includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers or other equipment on the *premises* or with in the structure that is in such disrepair or condition that such equipment is a hazard to life, health, property, or safety of the public or occupants of the *premise* or structure.~~

~~**109.1.3 Structure unfit for human occupancy.** A structure is unfit for human occupancy whenever the *code official* finds that such structure is *unsafe*, unlawful or, because of the degree to which the structure is in disrepair or lacks maintenance, is unsanitary, vermin or rat infested, contains filth and contamination, or lacks ventilation, illumination, sanitary or heating facilities or other essential equipment required by this code, or because the location of the structure constitutes a hazard to the occupants of the structure or to the public.~~

Section 109.1.5 of the IPMC further identifies specific hazardous conditions or defects that must be remedied to provide the requisite level of safety to the occupants.

An important criterion for the establishment of the existing building *condition assessment* program and frequency is based on one or more of the following characteristics:

- Age of the building (or era of construction) and applicable code at time of construction
- Construction type
- Construction materials and method(s) of construction
- The building system or component
- Environmental factors for the building's location
- History of environmental hazards or other damaging events

Table 4 provides recommended thresholds where *condition assessment*s are required and guidance for the *condition assessment* types and frequencies based on the parameters above

Discussion: Is the intent to cause jurisdictions to adopt the IPMC? I also do not know what a user of this guide is supposed to do with these quotes. Recommend delete.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #51 (Manley 5)
Proponent: Manley, Bonnie

Guideline Change

1.3 Methodology
It is recommended that *qualified professional*s perform the *condition assessment*(s) as described herein. Multiple professionals with varying areas of expertise may be required to assess the building and all systems. The *condition assessment* should be conducted throughout all habitable and non-habitable areas of the building, as deemed necessary by the assessing professional. During the assessment, the professionals should critically consider visible cues that may be indicative of neglect, damage, dilapidation, *deterioration*, or disrepair. The IEBC contains provisions for repair, alternations, change of occupancies, addition to, and relocation of existing buildings. The IFC includes existing building provisions for emergency planning and preparedness, fire and smoke protection features, fire safety provisions for interior finishes, and operation, testing and maintenance of fire protection systems. The IFC further contains provisions for life safety systems such as means of egress. The IPMC requires both the interior and exterior of the building to be maintained in good repair, structurally sound, and not

Commented [KM29]: Awkward

pose a threat to public health, safety and welfare. *Unsafe* structures and equipment are addressed in Section 109 of the IPMC. Below are excerpts from the 2024 edition of the IPMC:

> **109.1.1 Unsafe structures.** An *unsafe* structure is one that is found to be hazardous to the life, health, property, or safety of the public or the occupants of the structure by not providing minimum safeguards to protect or warn occupants in the event of fire, or because such structure contains *unsafe* equipment or is *dangerous*.
>
> **109.1.2 Unsafe equipment.** *Unsafe* equipment includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers or other equipment on the *premises* or with in the structure that is in such disrepair or condition that such equipment is a hazard to life, health, property, or safety of the public or occupants of the *premise* or structure.
>
> **109.1.3 Structure unfit for human occupancy.** A structure is unfit for human occupancy whenever the *code official* finds that such structure is *unsafe*, unlawful or, because of the degree to which the structure is in disrepair or lacks maintenance, is unsanitary, vermin or rat infested, contains filth and contamination, or lacks ventilation, illumination, sanitary or heating facilities or other essential equipment required by this code, or because the location of the structure constitutes a hazard to the occupants of the structure or to the public.

Section 109.1.5 of the IPMC further identifies specific hazardous conditions or defects that must be remedied to provide the requisite level of safety to the occupants.

~~An important criterion for the~~The establishment of the existing building *condition assessment* program and frequency ~~is~~ should be based on one or more of the following characteristics:

- Age of the building (or era of construction) and applicable code at time of construction
- Construction type
- Construction materials and method(s) of construction
- The building system or component
- Environmental factors for the building's location
- History of environmental hazards or other damaging events

Table 4 provides recommended thresholds where *condition assessment*s are required and guidance for the *condition assessment* types based on the parameters above. The recommended ~~and~~ frequencies of condition assessment as shown in Table 4 should be reviewed and may need to be modified by the adopting authority having jurisdiction ~~based on the parameters above.~~

Commented [KM30]: Awkward sentence followed by a vague list.

Commented [KM31]: So, buildings with a good track record will not need to be assessed as frequently. Is that what is being said here?

Commented [KM32]: Instead of referencing a table much futher on in the guide, consider simplying referencing the applicable section.

Discussion: See comments in margin.

Committee Action: Approved as Modified (see track changes).

PUBLIC COMMENT #52 (Bloch 4)
Proponent: Bloch, Tracy

Guideline Change:

1.3 Methodology

It is recommended that *qualified professional*s perform the *condition assessment*(s) as described herein. Multiple professionals with varying areas of expertise may be required to assess the building and all systems. The *condition assessment* should be conducted throughout all habitable and non-habitable

areas of the building, as deemed necessary by the assessing professional. During the assessment, the professionals should critically consider visible cues that may be indicative of neglect, damage, dilapidation, *deterioration*, or disrepair. The IEBC contains provisions for repair, alternations, change of occupancies, additions, to, and relocation of existing buildings. The IFC includes existing building provisions for emergency planning and preparedness, fire and smoke protection features, fire safety provisions for interior finishes, and operation, testing and maintenance of fire protection systems. The IFC further contains provisions for life safety systems such as means of egress. The IPMC requires both the interior and exterior of the building to be maintained in good repair, structurally sound, and not pose a threat to public health, safety and welfare. *Unsafe* structures and equipment are addressed in Section 109 of the IPMC. Below are excerpts from the 2024 edition of the IPMC:

> **109.1.1 Unsafe structures.** An *unsafe* structure is one that is found to be hazardous to the life, health, property, or safety of the public or the occupants of the structure by not providing minimum safeguards to protect or warn occupants in the event of fire, or because such structure contains *unsafe* equipment or is *dangerous*.
>
> **109.1.2 Unsafe equipment.** *Unsafe* equipment includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers or other equipment on the *premises* or with in the structure that is in such disrepair or condition that such equipment is a hazard to life, health, property, or safety of the public or occupants of the *premise* or structure.
>
> **109.1.3 Structure unfit for human occupancy.** A structure is unfit for human occupancy whenever the *code official* finds that such structure is *unsafe*, unlawful or, because of the degree to which the structure is in disrepair or lacks maintenance, is unsanitary, vermin or rat infested, contains filth and contamination, or lacks ventilation, illumination, sanitary or heating facilities or other essential equipment required by this code, or because the location of the structure constitutes a hazard to the occupants of the structure or to the public.

Section 109.1.5 of the IPMC further identifies specific hazardous conditions or defects that must be remedied to provide the requisite level of safety to the occupants.

Commented [KM33]: this is accurate and similar to the structural section - here the document which mandates this is referenced and cannot be mandated due to this being a guide

An important criterion for the establishment of the existing building *condition assessment* program and frequency is based on one or more of the following characteristics:

- Age of the building (or era of construction) and applicable code at time of construction
- Construction type
- Construction materials and method(s) of construction
- The building system or component
- Environmental factors for the building's location
- History of environmental hazards or other damaging events

Table 4 provides recommended thresholds where *condition assessment*s are required and guidance for the *condition assessment* types and frequencies based on the parameters above.

Discussion: See comments in margin.

Committee Action: Considered, No Action

PUBLIC COMMENT #53 (Kersting 6)
Proponent: Kersting, Ryan

Guideline Change:

1.3 Methodology

It is recommended that *qualified professional*s perform the ~~visual~~ *condition assessment*(s) as described herein. Multiple professionals with varying areas of expertise may be required to assess the building and all systems. The ~~visual~~ *condition assessment* should be conducted throughout all habitable and non-habitable areas of the building, in accordance with this document. If the assessing professional deems ~~visual~~ the *condition assessment* of certain areas of the building or certain systems unnecessary through rational extrapolation of other areas already assessed, such determinations shall be clearly conveyed to the owner and to the AHJ.~~as deemed necessary by the assessing professional.~~ During the assessment, the professionals should critically consider visible cues that may be indicative of neglect, damage, dilapidation, *deterioration*, or disrepair. The IEBC contains provisions for repair, alternations, change of occupancies addition to, and relocation of existing buildings. The IFC includes existing building provisions for emergency planning and preparedness, fire and smoke protection features, fire safety provisions for interior finishes, and operation, testing and maintenance of fire protection systems. The IFC further contains provisions for life safety systems such as means of egress. The IPMC requires both the interior and exterior of the building to be maintained in good repair, structurally sound, and not pose a threat to public health, safety and welfare. *Unsafe* structures and equipment are addressed in Section 109 of the IPMC. Below are excerpts from the 2024 edition of the IPMC:

(remaining portion of section unchanged).

Discussion: It is not always feasible or practical to assess all areas, but this should be clearly conveyed to owner and AHJ.

Committee Action: Approved as Modified: removal of the term visual and clarify condition assessment).

PUBLIC COMMENT #54 (Bonowitz 7)
Proponent: Bonowitz, David

Guideline Change:

1.3 Methodology

Discussion:

1. Since maintenance assessment is a type of condition assessment (per Sec 1.2.2 and Table 4), then the Guide wants an owner's maintenance staff to be approved by the building official as qualified? Or is that only for whoever signs the written report submitted (?) annually?

2. Don't use a long list of words if only one of them is defined.

3. Why is the IEBC even mentioned here, given that Sec 1.2.2 said the IEBC's scope is separate?

Committee Action: Considered, No Action

Formatted: Highlight
Formatted: Strikethrough
Formatted: Strikethrough
Formatted: Strikethrough
Formatted: Font: Italic

PUBLIC COMMENT #55 (Taecker2)
Proponent: Taecker, John

Guideline Change:

1.3 Methodology

Discussion: Besides the IPMC, the IFC also has specific requirements regarding the need for abatement of unsafe conditions (Sections 601.2, 603.2, and 605.2). The IMC and IPC also include "repairs" within the scope of those codes.

Committee Action: Considered, No Action

PUBLIC COMMENT #56 (Herrera 7)
Proponent: Herrera, Richardo

Guideline Change:

1.4 Planning and Preparation. Effective p~~P~~lanning and preparation can help ~~provide~~uncover ~~-~~useful documents and information when performing a ~~visual building assessment~~CA. It ~~and~~ can include research of public trecords and collection of pertinent building documents. ~~and an i~~interviews with the building owner, construction, or maintenance management personnel familiar with the building.

Discussion: None provided

Committee Action: Considered, No Action Taken.

PUBLIC COMMENT #57 (Bloch 5)
Proponent: Bloch, Tracy

Guideline Change:

1.4 Planning and Preparation
~~Planning and preparation can help provide useful documents and information when~~ ~~When~~ Prior to performing a visual building ~~assessment and can include~~ assessment, planning and preparation through research is important. ~~and~~ The collection of pertinent building documents ~~and an interview with~~ and interviewing the building *owner*, construction, or maintenance management personnel familiar with the building is recommended (see Appendix A).

Discussion: None provided

Committee Action: Approved as Modified (see track changes).

PUBLIC COMMENT #58 (Calderone 3)
Proponent: Calderone, Brian

Guideline Change:

1.5.1 Structural Condition Assessment

The purpose of this guide is to provide a recommended minimum level of maintenance-related structural assessment for aging buildings in order to reduce the probability that unaddressed structural conditions will create significant life safety hazards.

The initial phase of a structural condition assessment is limited to a review of available construction and maintenance-related documents and a visual examination of open and exposed components from readily accessible areas.

~~Structural *condition assessments* are performed in the accessible, available, and exposed areas of the building in order to determine whether *structural distress* or an *unsafe* structural condition exists in an existing building. A condition of *structural distress* refers to a condition that is observed during the time of the assessment which may negatively affect the structural integrity of the building. An *unsafe* structural condition refers to a condition that is observed during the time of the assessment that meets the definition of *dangerous*. In general, the scope of the visual structural *condition assessment* described herein is limited to an initial visual observation of the currently exposed, accessible, and available conditions to determine if the capacity of structural elements may be affected by any *structural distress* or if *dangerous* structural conditions are present.~~

Conditions that may negatively affect the structural integrity of a building include any structural element~~, material~~ or assembly of a building that exhibits visual signs of significant decreased structural capacity or other indication of lack of adequate capacity. ~~Structural integrity may be reduced by observed *structural distress* or may be reduced by an observed condition that could lead to *structural distress* in the future.~~

With the exception of conditions that meet the very significant threshold of Dangerous, given its limited nature, in most cases an initial structural condition assessment will only be able to identify the existence of distress, damage, or deterioration on the portions of the structural elements visually assessed, but not the potential root cause(s) or structural significance (if any) of most conditions. To understand the root cause(s) and/or the significance of observed conditions to the performance of the structure, additional information and/or a structural evaluation would likely be necessary. Professionals performing structural condition assessments will be required to exercise substantial engineering judgment to determine what conditions warrant further assessment and/or evaluation.

When performing these assessments, it is imperative to understand that many structural elements can sustain considerable damage without becoming deficient; “damaged” and “deficient” mean different things. Consequently, when characterizing the significance of documented structural conditions, it may often be necessary to determine the capacity of the affected element, as the subject component could still be adequate. Note that such structural evaluations are not included within the scope of this guide.

The *condition assessment* does not include detailed assessment or analysis of whether elements are capable of safely supporting loads that are currently imposed or are required by past or current building codes. Similarly, the visual condition assessment is not a validation that the original design and construction nor any additions or alterations met the applicable codes at the time of construction nor current codes.

Following the completion of ~~the~~ an initial structural *condition assessment*, the following situations may be identified:

- No evidence of distress, damage, or deterioration, on the portions of the structural

Commented [BC34]: This paragraph contains incorrect and imprecise language such as the condition assessment is not performed “in accessible available and exposed areas”, rather it's performed “of” open and exposed components “from” accessible locations...
Further the paragraph is extremely duplicative, with the first and last sentences being near mirror images of each other. It also provides definitions of terms that are defined in the definition sections the document and has some potential continuity issues there. Consider revising the entirety of the sentence, alternate proposed language for consideration is provided above.

Commented [BC35]: Not needed since all structural elements are made up of materials.

Commented [BC36]: This qualifier is needed. There are enormous number of mechanisms and events that can result in visual evidence of a condition that represents a extremely minor reduction in capacity, everything from very minor surface corrosion on interior steel framing, to cementitious paste wind scour on exterior concrete surfaces. Further many structures intolerate large amounts of damaged distress or deterioration before they become significant. Corners spalls or delaminations on large concrete mat slab foundations, reduce their capacity but to a degree that repair or maintenance may not be required for centuries. Accordingly the use of the word significantly is important to not overly burden the assessor and require the documentation of non pertinent conditions that reduce the practicality or usefulness of the assessment

Commented [BC37]: Im not sure this sentence is needed as it doesn't really serve a particular purpose for this section of the document. It is also a self-explanatory sentence. It's the equivalent of saying something might be hot if it contains a lot of heat. Considered deleting

Commented [BC38]: The current structural integrity of a building is not in anyway reduced by something that could happen in the future.

elements visually assessed. For such conditions, no further action would be required at this time.

- Evidence of damage, distress, and/or deterioration on the portions of the structural components visually assessed. The root cause and or significance of such items will be unknown at this time. Accordingly, further evaluation and/or assessment to understand the cause (s), significance, and potential for requiring remedial action may or may not be warranted depending on the circumstances.
- Evidence that damage, distress, and/or deterioration maybe present on portions of structural elements that are concealed or were otherwise not visually assessed. Depending on the circumstances, additional assessment may or may not be warranted depending on the circumstances.
- Evidence of a condition that meets or is likely to meet the definition of dangerous on the portions of the structure visually assessed. For such circumstances, a combination of mitigating action, structural evaluation, and/or potentially additional assessment would likely be required depending on the circumstances.

~~additional assessment and/or evaluation may be recommended or necessary. Depending on the conclusion(s) of the structural visual *condition assessment*, the following actions are likely to be recommended by the *registered design professional*:~~

- ~~"Indication of *structural distress* observed" likely prompts additional structural *condition assessment* by means of exploratory, nondestructive, or destructive testing in order to confirm or verify if *structural distress* is present.~~
- ~~"Actual *structural distress* observed" likely prompts additional structural *condition assessment* by means of exploratory, nondestructive, or destructive testing in order to determine the extent of the *structural distress*, and/or additional structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed to remedy the *structural distress*. Such a condition may also require shoring and/or limited access.~~
-
- ~~"Indication of *dangerous* condition observed" generally prompts immediate notification of the *owner* and additional structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed to remedy the conditions. Such a condition may also require shoring and/or limited access.~~
- ~~"Actual *dangerous* condition observed" generally prompts immediate notification of the *owner* and the *code official*. This conclusion also generally prompts additional structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed in order to remedy the *dangerous* condition. Such a condition may also require shoring and/or limited access.~~

~~Remediation of *structural distress* will always require a structural evaluation, the result of which may require a repair.~~ Mitigating action is required for structural components and/or systems where an evaluation has identified that their estimated in situ structural capacity/stability is less than the minimally required structural capacity/stability identified in the corresponding applicable building code for that particular structure. The type and extent of ~~repair~~ mitigating action, however, is generally governed by the International Existing Building Code, and will depend upon ~~several~~ many factors, ~~including but not limited to the role of the member in the structural system, and degree of distress~~. Cosmetic type repairs may suffice in certain situations provided that the remaining sound material is sufficient for the required function. ~~For members carrying assigned gravity or other loads, cosmetic type~~

Commented [CB39]: The "likely" recomendations are misleading. If there's the condition identified that may be structurally relevant, and not enough information is known, the subsequent action that could or should be taken will range wildly depending on the specific circumstances of the condition being considered. In some cases it may be non-destructive evaluation or openings, while in other cases it might be analytics or evaluations, or in other cases it may be more document review and research etc. There are are likely circumstances where multiple approaches are equally appropriate.
An example might be, a steel trust with a bent bottom cord. Maybe that bend is evidence of structural distress, maybe it's evidence of damage. In neither case would non-destructive or destructive testing be needed in order to verify if it was structural distress. The only important question to understand is does that bend matter, regardless if it is structural distress or not. To determine that, a engineering evaluation of the trusses performance and potentially capacity and how the dent affects it is the only thing that may be warranted. There are countless other examples that are similar for all types of structures and materials.

The proposed rewarding tries to keep it more simple and applicable to the wide range of circumstances potentially identified.

Commented [BC40]: This is not true, owners or engineers can elect to repair conditions without doing an evaluation. There may be circumstances we're doing an evaluation is more costly than simply performing the repairs. That's actually fairly common occurrence for owners that are proactive with maintenance.

Commented [CB41]: Following a visual assessment, without performing an evaluation, many circumstances will exist where an assessor would not know if the condition was actual structural distress or some other condition. It's the evaluation (which dos not have to be some complex or in-depth structural analysis, it can even be a rational evaluation of how the structure or element behaves) that allows and assessor to distinguish whether a condition is evidence of structural distress or something else. For example, you have to understand that not every crack in the concrete structure is evidence of structural distress. You need to distinguis between cracks that have no significance to the performance of a structure, and cracks that while do not represent a reduction in capacity may be indication of some other past event or future problem.

Commented [CB42]: These two aren't all that problematic, however they include some slight inaccuracies and some slightly misleading context. A proposed rewritten version of this is provided above consistent with the other proposed new bullet points .

Commented [CB43]: So why not just say loads

Commented [CB44R43]: Or better yet, just call them structural members to cover it

~~repairs will only be permitted if it can be demonstrated by rational analysis during a structural evaluation, that the remaining material, if protected from further *deterioration*, can still perform its assigned function at acceptable stress levels. Failing that, adequate repairs or reinforcement will be considered mandatory.~~

From a structural perspective, buildings are not considered the same even where their occupancy, size, or height is similar. Each building must be considered unique based on its site location including but not limited to its: ~~due to concerns in response to the following. If the below conditions or information are not available or accessible at the time of the assessment, the assessment conclusions must state which items were not able to be identified:~~

- Structural design and construction type: structural systems, layout, and materials used.
- Structural demands
- Occupancy and Use Classification of interior areas.
- ~~*Risk Category*~~
- Structural load demands ~~Areas of high risk of natural hazard occurrence: earthquake, wind, rain, flood, snow, etc.~~
- ~~History of exposure or damage from natural hazard(s) or other event(s)~~
- Environmental ~~influences~~ exposure such as humidity, temperature, presence of salt air, presence of chlorides, etc.
- Age of the building, era of construction, and applicable code(s) at time of construction
-
- ~~Geotechnical conditions or hazards may affect foundation systems~~.

Discussion: See commentsin margin

Committee Action: Approved as Modified (Structural Work Group combined comments PC #58 – PC #68 in to a single proposal addressing overlapping and conflicting comments; see document below with track changes regarding repairs as further modified).

1.5 Building Systems:

1.5.1 Visual Structural Condition Assessment

Visual ~~S~~structural *condition assessments* are performed by a Registered Design Professional in the accessible~~, available,~~ and exposed areas of the building (including those areas that can be exposed without destructive means, e.g., removing ceiling tiles) in order to ~~determine~~ assess whether *structural distress* ~~or an *unsafe* structural condition~~ exists ~~in an existing building~~. ~~A condition of *structural distress* refers to a condition that is observed during the time of the assessment which may negatively affect the structural integrity of the building. An *unsafe* structural condition refers to a condition that is observed during the time of the assessment that meets the definition of *dangerous*. In general, t~~The scope of the visual structural *condition assessment* described herein is limited to ~~an initial~~ visual observation of the currently exposed, accessible, and available conditions to determine if the capacity of structural elements may be affected by any *structural distress* or if *dangerous* structural conditions are present.

~~Conditions that may negatively affect the structural integrity of a building include any structural element, material or assembly of a building that exhibits visual signs of~~

Commented [CB45]: Why is this mandatory language here? Why are we talking about any of this anyways it's all beyond the scope of an assessment guide. We're now talking about what to do post and evaluation something also not included in the guide.

Commented [CB46R45]: Consider deleting the entire paragraph

Commented [CB47]: There is no provision anywhere that would require any action for a structural element that can meet all the minimum prescriptive applicable code requirements.

Commented [CB48]: See the above two comments, as again this is not even true. It's also mandatory language in a guide. It's also discussing something outside of the guide which is what to do in a repair.

Commented [CB49]: Mandatory language in a guide should be removed. It's also referencing a statement that isn't true for many circumstances and situations.

Commented [CB50]: What risk category. What if this building was built before a building code had a risk category for that building. If your referencing the current risk categories what good is that if nothing else in the building was built for the current building code. Such a current risk category would be entirely irrelevant and provides no valuable information to someone performing an assessment.

Commented [CB51]: What would distinguish a high risk compared to a low or a medium or a medium high risk etc. It's an arbitrary distinction. Further if you know where the building is, the engineer should always have an understanding of what the reasonable environmental ...

Commented [CB52]: How much history, what was done after the significant event in the past. Does that matter, how do you know what you don't know. Why would I repo ...

Commented [CB53]: This is another circumstance where you wouldn't know what you don't know. Either you would be painfully aware of all of the environmental factors that ...

Commented [CB54]: Again if there are geotechnical hazards present that you are unaware of, you won't know that you're unaware of them. You will only know of the ...

Commented [CB55]: Seems out of place either move up within this section or delete.

Commented [PL56]: Kersting 7 but with "visual" preceding structural condition assessment. Removed "qualified" preceding RDP. RDP's must practice in their ar ...

Commented [PL57]: Munsterteiger 5 - "reachable" vs. "accessible". I believe this was previously resolved by retaining accessible.

Commented [PL58]: Searer 6.

Commented [PL59]: Several deletions related to Bonowitz 8 to remove redundancy and replace "unsafe" with consistent use of "dangerous".

~~decreased structural capacity or other indication of lack of adequate capacity. Structural integrity may be reduced by observed *structural distress* or may be reduced by an observed condition that could lead to *structural distress* in the future.~~

The visual structural *condition assessment* does not include detailed ~~assessment~~ evaluation or analysis of whether elements are capable of safely supporting loads that are currently imposed or are required by past or current building codes. Similarly, the visual structural condition assessment is not a validation that the original design and construction nor any additions, ~~or~~ alterations, or repairs ~~met the applicable codes at the time of~~ code in effect when permitted for construction nor current codes.

Following the completion of the visual structural *condition assessment*, additional assessment and/or evaluation may be recommended or necessary. Depending on the conclusion(s) ~~of~~ resulting from the visual structural ~~visual~~ *condition assessment*, the following actions ~~are likely to~~ may be recommended by the *registered design professional*:

- "Indication of *structural distress* observed" ~~likely~~ generally prompts additional structural *condition assessment* by means of exploratory, nondestructive, or destructive testing in order to ~~confirm or verify if~~ assess whether *structural distress* is present.
- "~~Actual~~ *structural distress* observed" ~~likely~~ generally prompts additional structural *condition assessment* by means of exploratory, nondestructive, or destructive testing in order to determine the extent of the *structural distress*, and/or ~~additional~~ recommended structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed to remedy the *structural distress*. Such a condition may also require shoring and/or limiting~~ed~~ access.
- "Indication of *dangerous* condition observed" generally prompts immediate notification of the *owner* and ~~additional~~ recommended structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed to remedy the conditions. Such a condition may also require shoring and/or limiting~~ed~~ access.
- "~~Actual~~ *dangerous* condition observed" generally prompts immediate notification of the *owner* and the *code official*. This conclusion also generally prompts ~~additional~~ recommended structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed in order to remedy the *dangerous* condition. Such a condition may also require shoring and/or limited access.

Remediation of *structural distress* will ~~always~~ generally require a structural evaluation, the result of which may require a repair. The type and extent of repair, however, is generally governed by the International Existing Building Code, and will depend upon several factors, including but not limited to the role of the member in the structural system, and degree of distress. ~~Cosmetic type repairs may suffice in certain situations provided that the remaining sound material is sufficient for the required function. For members carrying assigned gravity or other loads, cosmetic type repairs will only be permitted if it can be demonstrated by rational analysis during a structural evaluation, that the remaining material, if protected~~

Commented [PL60]: I would like to propose deleting this paragraph and rely on the prior sentence and definition of "structural distress" which captures decreased structural capacity. Dangerous is also mentioned in the prior sentence. This is redundant and uses the term structural integrity which is not defined (Bonowitz 9). Removal of para also gets rid of "may" which Bonowitz suggest should be "might".

Deletion proposed by Gries 5.

Commented [KM61]: Further modification made during motion for AM.

Commented [PL62]: Prior action.

Commented [PL63]: Bonowitz 9 indicates these actions are different than IPMC and IEBC. Need to re-review the actions required elsewhere.

Commented [PL64]: Searer 6.

Commented [PL65]: "generally" used for consistency with last two items.

Commented [PL66]: Searer 6.

Kehoe 4 comment about redundant "confirm or verify" resolved by Searer 6.

Commented [PL67]: Kehoe 4

Commented [PL68]: See Kehoe 4.

Commented [PL69]: Kehoe 4

Commented [PL70]: Agree with Bonowitz 8, item 14.

PL: Remainder of paragraph after cosmetic can be deleted as out of scope.

Kesner 4 also does not like "Cosmetic" and suggests replacement.

~~from further *deterioration*, can still perform its assigned function at acceptable stress levels. Failing that, adequate repairs or reinforcement will be considered mandatory.~~

~~From a structural perspective, buildings are not considered the same even where their occupancy, size, or height is similar. Each building must be considered unique based on its site location due to concerns in response to the following. If the below conditions or information are not available or accessible at the time of the assessment, the assessment conclusions must state which items were not able to be identified:~~

~~Structural design and construction type: structural systems, layout, and materials used.~~

~~Occupancy and Use Classification of interior areas.~~

~~Risk Category~~

~~Areas of high risk of natural hazard occurrence: earthquake, wind, rain, flood, snow, etc.~~

~~History of exposure or damage from natural hazard(s) or other event(s)~~

~~Environmental influences such as humidity, temperature, presence of salt air, presence of chlorides, etc.~~

~~Age of the building, era of construction, and applicable code(s) at time of construction~~

~~Geotechnical conditions or hazards may affect foundation systems.~~

Commented [PL71]: Bonowitz 9 suggests these are out of Scope. I think he has a point - bullet 1 mentions structural design….

PL: Entire section is a candidate for deletion due to scope.

PUBLIC COMMENT #59 (Herrera 8)
Proponent: Herrera, Richardo

Guideline Change:

1.5.1 Structural CA~~ondition Assessment~~

Structural CAs~~condition assessments~~ can be ~~are~~ performed in the accessible, readily available, and otherwise exposed areas of the building ~~in order~~ to determine whether structural distress exists or a~~n unsafe~~ structural condition exists that makes it unsafe ~~in an existing building. A condition of~~ structural distress refers to a condition ~~that is observed during the time of the assessment~~ which may negatively affect the structural integrity of the building. An unsafe structural determination ~~condition~~ refers to a collection of observed condition ~~that is observed during the time of the assessment~~ that clearly rmeets the definition of dangerous. ~~In general, the scope of the visual structural condition assessment described herein is limited to an initial visual observation of the currently exposed, accessible, and available conditions to determine if the capacity of structural elements may be affected by any structural distress or if dangerous structural conditions are present.~~

Conditions that may negatively affect the structural integrity of a building occur when ~~include~~ any structural element, material or assembly of a building ~~that exhibits~~ visually exhibits signs of decreased structural capacity or some other indication of lack or diminished ~~of adequate~~ capacity~~. Structural integrity may be reduced by observed structural distress or may be reduced by an observed condition that could lead to structural distress in the future.~~

The CA~~condition assessment~~ does not include detailed numerical assessment or any preparation of a model for analysis to determine ~~of~~ whether elements are capable of safely supporting loads that are currently imposed on them or that are required by past or current building codes to be carried. Similarly, the visual CA~~condition assessment~~ does not in any way become ~~is not~~ a validation that the original design and construction, nor any additions or alterations, met the ~~applicable~~ codes applicable at the time of construction nor any current codes.

Following the completion of the structural CA~~condition assessment~~, additional assessment and/or evaluation may be ~~recommended o~~r necessary. as a consequence of ~~Depending on~~ the conclusion(s) of the ~~structural visual condition assessment~~CA, Some of the following actions may ~~are~~ likely ~~to~~ be recommended by the registered design professional who crried it out:

- ~~·~~For "Indication of structural distress observed", ~~likely prompts~~ additional structural A~~condition assessment by means of~~using exploratory, nondestructive, or destructive testing will be needed in order to confirm ~~or verify~~ if structural distress is present.

- For · "Actual structural distress observed" ~~likely prompts~~ additional structural ~~condition assessment by means of~~ exploratory, nondestructive, or destructive testing will be needed ~~in order~~ to determine the extent of the structural distress, ~~and/or~~ Aadditional structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed to remedy the structural distress is likely as well. ~~Such a condition may also require shoring and/or limited access.~~

- ·Fr "Indication of dangerous condition observed" thisngenerally prompts immediate notification to ~~of~~ the owner and additional structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed to remedy the conditions. ~~Such a condition may also require shoring and/or limited access.~~

- ·Forn "Actual dangerous condition observed" ~~generally prompts~~ the owner isn immediate notifedication ~~of the owner and the code official~~as well as the AHJ. Undoubtedly,m~~This conclusion also generally prompts~~ additional structural evaluation to determine where shoring might be needed while the urgently neededmnec~~appropriate~~ repair, retrofit, replacement, or other action needed is devised in order to remedy the dangerous condition~~. Such a condition may also require shoring and/or limited access.~~

Remediation of structural distress will always require a structural evaluation, the result of which may require a repair. The type and extent of repair, however, is generally governed by the IEBC~~nternational Existing Building Code~~, and will depend upon several factors, including but not limited to the role of the member in the structural system, and the degree of its distress. Cosmetic type repairs may suffice in certain situations provided that the remaining sound material is sufficient for its ~~the~~ required structural function. For members carrying ~~assigned~~ gravity or other loads, cosmetic type repairs will only be permitted if it can be demonstrated by rational analysis during a structural evaluation, that the remaining material, if protected from further deterioration, can still perform its assigned function at acceptable stress levels. Failing that, ~~adequate~~ repairs or reinforcement will need to be ~~considered~~ mandatory.

From a structural perspective, ~~buildings are not considered the same even where their occupancy, size, or height is similar.~~ Each building must be considered unique based on its ~~site~~ location due to concerns in response to the following. If the ~~below~~ conditions or if information is ~~are~~ not available or accessible at the

time of the CA~~assessment~~, the ~~assessment~~ conclusions must state all ~~which~~ items that were not ~~able to be~~ identified:

- Structural design and construction type: structural systems, layout, and materials used.
- Occupancy and Use Classification of interior areas.
- Code's Risk Category
- Locations ~~Areas~~ of known high risk of natural hazard occurrence: earthquake, wind, rain, flood, snow, etc.
- History of exposure to or damage from natural hazard(s) or other potentially destructive event(s)
- Environmental conditions ~~influences~~ such as very high humidity, temperature extremes, presence of salt air, ~~presence of~~ chlorides, etc.
- Age of the building, special conditions for the era of construction, and the applicable code(s) at time of initial construction
- Geotechnical in-situ conditions or other hazards that may impact ~~affect~~ foundation systems.

Discussion: None provided

Committee Action: Approved as Modified, see action on #58.

PUBLIC COMMENT #60 (Kehoe 4)
Proponent: Kehoe, Brian

Guideline Change:

1.5.1 Structural Condition Assessment

Structural *condition assessments* are performed in the accessible, available, and exposed areas of the building in order to determine whether *structural distress* or an *unsafe* structural condition exists in an existing building. A condition of *structural distress* refers to a condition that is observed during the time of the assessment which may negatively affect the structural integrity of the building. An *unsafe* structural condition refers to a condition that is observed during the time of the assessment that meets the definition of *dangerous*. In general, the scope of the visual structural *condition assessment* described herein is limited to an initial visual observation of the currently exposed, accessible, and available conditions to determine if the capacity of structural elements may be affected by any *structural distress* or if *dangerous* structural conditions are present.

Conditions that may negatively affect the structural integrity of a building include any structural element, material or assembly of a building that exhibits visual signs of decreased structural capacity or other indication of lack of adequate capacity. Structural integrity may be reduced by observed *structural distress* or may be reduced by an observed condition that could lead to *structural distress* in the future.

The *condition assessment* does not include detailed assessment or analysis of whether elements are capable of safely supporting loads that are currently imposed or are required by past or current building codes. Similarly, the visual condition assessment is not a validation that the original design and construction nor any additions or alterations met the applicable codes at the time of construction nor current codes.

Following the completion of the structural *condition assessment*, additional assessment and/or evaluation may be recommended or necessary. Depending on the conclusion(s) of the structural visual *condition assessment*, the following actions are likely to be recommended by the *registered design professional*:

- "Indication of *structural distress* observed" likely prompts additional structural *condition*

Commented [KM72]: This conflicts with section 1.3 that states that all areas of the building should be assessed

Commented [KM73]: Why is it necessary to introduce the term unsafe as meaning dangerous? Just use dangerous.

Commented [KM74]: This is too broad. Any spall in concrete or corrosion of steel or hole in a wood member can be considered to have decreased the structural capacity. These things can only be characterized as distress if these can be shown to change the demand to capacity ratio below 1.0

Commented [KM75]: This is not feasible to separate assessment from analysis. The wording is also awkward since it says that assessment does not include assessment

assessment by means of exploratory, nondestructive, or destructive testing in order to confirm or verify if *structural distress* is present.

- "~~Actual~~ *structural distress* observed" likely prompts additional structural *condition assessment* by means of exploratory, nondestructive, or destructive testing in order to determine the extent of the *structural distress*, and/or additional structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed to remedy the *structural distress*. Such a condition may also require shoring and/or limited access.
- "Indication of *dangerous* condition observed" generally prompts immediate notification of the *owner* and additional structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed to remedy the conditions. Such a condition may also require shoring and/or limited access.
- "~~Actual~~ *dangerous* condition observed" generally prompts immediate notification of the *owner* and the *code official*. This conclusion also generally prompts ~~additional~~ structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed in order to remedy the *dangerous* condition. Such a condition may also require shoring and/or limited access.

Remediation of *structural distress* ~~will always~~ may require a structural evaluation, fthe result of which may require a repair. The type and extent of repair, however, is generally governed by the International Existing Building Code, and will depend upon several factors, including but not limited to the role of the member in the structural system, and degree of distress. Cosmetic type repairs may suffice in certain situations provided that the remaining sound material is sufficient for the required function. For members carrying assigned gravity or other loads, cosmetic type repairs will only be permitted if it can be demonstrated by rational analysis during a structural evaluation, that the remaining material, if protected from further *deterioration*, can still perform its assigned function at acceptable stress levels. ~~Failing that,~~ If the evaluation demonstrates that the affected member cannot adequately resist required demands as required by the evaluation, adequate repairs or reinforcement ~~will be considered mandatory~~ may be recommended.

From a structural perspective, buildings are not considered the same even where their occupancy, size, or height is similar. Each building must be considered unique based on its site location due to concerns in response to the following. If the below conditions or information are not available or accessible at the time of the assessment, the assessment conclusions must state which items were not able to be identified:

- Structural design and construction type: structural systems, layout, and materials used.
- Occupancy and Use Classification of interior areas.
- *Risk Category*
- Areas of high risk of natural hazard occurrence: earthquake, wind, rain, flood, snow, etc.
- History of exposure or damage from natural hazard(s) or other event(s)
- Environmental influences such as humidity, temperature, presence of salt air, presence of chlorides, etc.
- Age of the building, era of construction, and applicable code(s) at time of construction
- Geotechnical conditions or hazards may affect foundation systems.
- Historical status

Discussion: See comments in margin.

Committee Action: Approved as Modified, see action on #58.

PUBLIC COMMENT #61 (Gries 5)
Proponent: Gries, Matt

Commented [BK76]: Unnecessarily repetitive

Commented [BK77]: The term actual does not provide any needed clarification

Commented [BK78]: If this document is for only condition assessment and not evaluation, then there would be no previous structural evaluation that would necessitate an "additional" evaluation.

Commented [BK79]: See comment above regarding the term "actual" as being unnecessary

Commented [BK80]: See comment above regarding the term "additional"

Commented [BK81]: This conflicts with the third sentence in this paragraph that says that the structural distress may require a cosmetic repair for which a structural evaluation would not be required.

Commented [BK82]: There are alternatives to mandatory repairs, such as change in use

Guideline Change:

1.5.1 Structural Condition Assessment

Structural *condition assessments* are performed ~~in the accessible, available, and exposed areas of the building in order~~ to ~~determine whether~~ identify observable *structural distress* or an *unsafe* structural condition ~~exists~~ in an existing building. A condition of *structural distress* become relevant to the minimum requirements of this guide when it is expected to reduce building performance beneath minimum standards of reliability for the health, safety, and welfare of the occupants and public, as defined by the applicable building code. ~~refers to a condition that is observed during the time of the assessment which may negatively affect the structural integrity of the building.~~ An *unsafe* structural condition refers to a condition that is observed during the time of the assessment that meets the definition of *dangerous*, which relate to situations of collapse or significant collapse risk under imminent loads. In general, the scope of the visual structural *condition assessment* described herein is limited to an initial visual observation of the currently exposed, accessible, and available conditions to determine if the capacity of structural elements may be affected by any *structural distress* or if *dangerous* structural conditions are present.

~~Conditions that may negatively affect the structural integrity of a building include any structural element, material or assembly of a building that exhibits visual signs of decreased structural capacity or other indication of lack of adequate capacity. Structural integrity may be reduced by observed *structural distress* or may be reduced by an observed condition that could lead to *structural distress* in the future.~~

The *condition assessment* does not include detailed assessment or analysis of whether elements are capable of safely supporting loads that are currently imposed or are required by ~~past or current~~ applicable building codes. Similarly, the visual condition assessment is not a validation that the original design and construction nor any additions or alterations met the applicable codes at the time of construction nor current codes.

Following the completion of the structural *condition assessment*, additional assessment and/or evaluation may be recommended or necessary. Depending on the conclusion(s) of the structural visual *condition assessment*, the following actions are ~~likely to~~ among those that may be recommended by the *registered design professional*:

- "Indication of *structural distress* observed" likely prompts additional structural *condition assessment* by means of exploratory, nondestructive, or destructive testing in order to confirm or verify if *structural distress* is present.

- "Actual *structural distress* observed" likely prompts additional structural *condition assessment* by means of exploratory, nondestructive, or destructive testing in order to determine the extent of the *structural distress*, and/or additional structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed to remedy the *structural distress*. Such a condition may also require shoring and/or limited access.

- "Indication of *dangerous* condition observed" generally prompts immediate notification of the *owner* and additional structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed to remedy the conditions. Such a condition may also require shoring and/or limited access.

- "Actual *dangerous* condition observed" generally prompts immediate notification of the *owner* and the *code official*. This conclusion also generally prompts additional structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed in order to remedy the *dangerous* condition. Such a condition may also require shoring and/or limited access.

Commented [MG83]: Redundant with sentence at end of paragraph.

Commented [MG84]: This can easily be interpreted in a logically flawed way. You cannot affirm that unsafe conditions do not exist (because you cannot know everything about a building from visual inspection). You can only affirm conditions that you see (and even that does not affirm if they are safe/unsafe). Very important to no imply that performing a condition assessment affirms a building is "safe" (i.e., not "unsafe").

Commented [MG85]: By the definition of distress, this is overly broad. Taken to an extreme, a single dent in an element is distress, but is this useful? Suggest limiting this definition to that relevant to the minimum performance.

Commented [MG86]: This description is a redefinition of the term, but varies from the definition in Section 3.

Commented [MG87]: Decreased from what? Too vague. Suggest deleting entire paragraph and uses undefined terms like structural integrity.

Commented [MG88]: Don't want to confuse which is applicable by stating both. I note the good statement about applicability of codes later in this document.

Commented [MG89]: Wordsmithing soften the applicability of these examples

Remediation of *structural distress* ~~will always require~~ may warrant a structural evaluation and/or ~~the result of which may require a~~ repairs. The type and extent of repair, however, is generally governed by the International Existing Building Code, and will depend upon several factors, including but not limited to the role of the member in the structural system, and degree of distress. Cosmetic type repairs may suffice in certain situations provided that the remaining sound material is sufficient for the required function. For members carrying assigned gravity or other loads, cosmetic type repairs will only be permitted if it can be demonstrated by rational analysis during a structural evaluation, that the remaining material, if protected from further *deterioration*, can still perform its assigned function at acceptable stress levels. Failing that, adequate repairs or reinforcement will be considered mandatory.

~~From a structural perspective, buildings are not considered the same even where their occupancy, size, or height is similar.~~ Each building must be ~~considered unique~~ evaluated based on its specific characteristics, including those identified below. The assessment should qualify the extent to which the following information is known: ~~. If the below conditions or information are not available or accessible at the time of the assessment, the assessment conclusions must state which items were not able to be identified:~~

- Structural design and construction type: structural systems, layout, and materials used.
- Occupancy and Use Classification of interior areas.
- *Risk Category*
- Areas of high risk of natural hazard occurrence: earthquake, wind, rain, flood, snow, etc.
- History of exposure or damage from natural hazard(s) or other event(s)
- Environmental influences such as humidity, temperature, presence of salt air, presence of chlorides, etc.
- Age of the building, era of construction, and applicable code(s) at time of construction
- Geotechnical conditions or hazards may affect foundation systems.

Discussion: See comments in margin.

Committee Action: Approved as Modified, see action on #58.

PUBLIC COMMENT #62 (Musterteiger 5)
Proponent: Munsterteiger, Jeffery

Guideline Change:

1.5.1 Structural Condition Assessment

Structural *condition assessments* are performed in the ~~accessible~~reachable, available, and exposed areas of the building in order to determine whether *structural distress* or an *unsafe* structural condition exists in an existing building. A condition of *structural distress* refers to a condition that is observed during the time of the assessment which may negatively affect the structural integrity of the building. An *unsafe* structural condition refers to a condition that is observed during the time of the assessment that meets the definition of *dangerous*. In general, the scope of the visual structural *condition assessment* described herein is limited to an initial visual observation of the currently exposed, ~~accessible~~reachable, and available conditions to determine if the capacity of structural elements may be affected by any *structural distress* or if *dangerous* structural conditions are present.

Conditions that may negatively affect the structural integrity of a building include any structural element, material or assembly of a building that exhibits visual signs of decreased structural capacity or other indication of lack of adequate capacity. Structural integrity may be reduced by observed *structural distress* or may be reduced by an observed condition that could lead to *structural distress* in the future.

Commented [MG90]: This is not true in practice. There are many repairs that occur without evaluation e.g., sealing a crack or repairing a small delamination - both of which meet the broad definition of distress.

Commented [MG91]: I understand the general intent of this sentence, but as written this sentence does not have meaning. Of course similar things are not the same.

Commented [JM92]: Word choice- see BCAC Group A proposals eliminating the use of the word accessible in this context.

Suggest "reachable" as an alternate word choice.

Commented [JM93]: Word choice- see BCAC Group A proposals eliminating the use of the word accessible in this context.

Suggest "reachable" as an alternate word choice.

The *condition assessment* does not include detailed assessment or analysis of whether elements are capable of safely supporting loads that are currently imposed or are required by past or current building codes. Similarly, the visual condition assessment is not a validation that the original design and construction nor any additions or alterations met the applicable codes at the time of construction nor current codes.

Following the completion of the structural *condition assessment*, additional assessment and/or evaluation may be recommended or necessary. Depending on the conclusion(s) of the structural visual *condition assessment*, the following actions are likely to be recommended by the *registered design professional*:

- "Indication of *structural distress* observed" likely prompts additional structural *condition assessment* by means of exploratory, nondestructive, or destructive testing in order to confirm or verify if *structural distress* is present.
- "Actual *structural distress* observed" likely prompts additional structural *condition assessment* by means of exploratory, nondestructive, or destructive testing in order to determine the extent of the *structural distress*, and/or additional structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed to remedy the *structural distress*. Such a condition may also require shoring and/or limited access.
- "Indication of *dangerous* condition observed" generally prompts immediate notification of the *owner* and additional structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed to remedy the conditions. Such a condition may also require shoring and/or limited access.
- "Actual *dangerous* condition observed" generally prompts immediate notification of the *owner* and the *code official*. This conclusion also generally prompts additional structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed in order to remedy the *dangerous* condition. Such a condition may also require shoring and/or limited access.

Remediation of *structural distress* will always require a structural evaluation, the result of which may require a repair. The type and extent of repair, however, is generally governed by the International Existing Building Code, and will depend upon several factors, including but not limited to the role of the member in the structural system, and degree of distress. Cosmetic type repairs may suffice in certain situations provided that the remaining sound material is sufficient for the required function. For members carrying assigned gravity or other loads, cosmetic type repairs will only be permitted if it can be demonstrated by rational analysis during a structural evaluation, that the remaining material, if protected from further *deterioration*, can still perform its assigned function at acceptable stress levels. Failing that, adequate repairs or reinforcement will be considered mandatory.

From a structural perspective, buildings are not considered the same even where their occupancy, size, or height is similar. Each building must be considered unique based on its site location due to concerns in response to the following. If the below conditions or information are not available ~~or accessible~~ at the time of the assessment, the assessment conclusions must state which items were not able to be identified:

- Structural design and construction type: structural systems, layout, and materials used.
- Occupancy and Use Classification of interior areas.
- *Risk Category*
- Areas of high risk of natural hazard occurrence: earthquake, wind, rain, flood, snow, etc.
- History of exposure or damage from natural hazard(s) or other event(s)
- Environmental influences such as humidity, temperature, presence of salt air, presence of chlorides, etc.
- Age of the building, era of construction, and applicable code(s) at time of construction

Commented [JM94]: Word choice- see BCAC Group A proposals eliminating the use of the word accessible in this context.

Suggest it could simply be deleted here.

There are approximately 19 uses of the word accessible in this document, I did not identify all of them.

- Geotechnical conditions or hazards that may affect foundation systems.

Commented [JM95]: Missing word- hazards "that" may...

Discussion: See comments in margin.

Committee Action: Approved as Modified, see action on #58.

PUBLIC COMMENT #63 (Kesner 4)
Proponent: Kesner, Keith

Guideline Change:

1.5.1 Structural Condition Assessment

Remediation of *structural distress* will always require a structural evaluation, the result of which may require a repair. The type and extent of repair, however, is generally governed by the International Existing Building Code, and will depend upon several factors, including but not limited to the role of the member in the structural system, and degree of distress. Cosmetic type repairs may suffice in certain situations provided that the remaining sound material is sufficient for the required function. For members carrying assigned gravity or other loads, cosmetic type repairs will only be permitted if it can be demonstrated by rational analysis during a structural evaluation, that the remaining material, if protected from further *deterioration*, can still perform its assigned function at acceptable stress levels. Failing that, adequate repairs or reinforcement will be considered mandatory.

non-structural? protective?

Comment: ~~Cosmetic~~ Non-structural or protective type repairs…

Discussion: The term cosmetic repair is not clear, and implies the intent is to cover up damage deterioration. Suggest non-structural or protective in lieu of protective as these terms suggest intent.

Committee Action: Approved as Modified, see action on #58.

PUBLIC COMMENT #64 (Searer 6)
Proponent: Searer, Gwenyth

Guideline Change:

1.5.1 Structural Condition Assessment

Structural *condition assessments* are performed in the accessible, available, and exposed areas of the building in order to ~~determine~~ assess whether *structural distress* or an *unsafe* structural condition likely exists in an existing building. A condition of *structural distress* refers to a condition that is observed during the time of the assessment ~~which~~ that may negatively affect the structural integrity of the building. An *unsafe* structural condition refers to a condition that is observed during the time of the assessment that meets the definition of *dangerous*. In general, the scope of the visual structural *condition assessment* described herein is limited to an initial visual observation of the currently exposed, accessible, and available conditions to determine if the capacity of structural elements may be affected by any *structural distress* or if *dangerous* structural conditions are present.

Conditions that may negatively affect the structural integrity of a building include any structural element, material or assembly of a building that exhibits visual signs of decreased structural capacity or other indication of lack of adequate capacity. ~~Structural integrity may be reduced by observed *structural distress* or may be reduced by an observed condition that could lead to *structural distress* in the future.~~

The *condition assessment* does not include detailed assessment or analysis of whether elements are capable of safely supporting loads that are currently imposed or are required by past or current

building codes. Similarly, the visual condition assessment is not a validation that the original design and construction nor any additions or alterations met the applicable codes at the time of construction ~~nor current codes~~.

Following the completion of the structural *condition assessment*, additional assessment and/or evaluation may be recommended or necessary. Depending on the conclusion(s) resulting from ~~of~~ the structural visual *condition assessment*, the following actions may ~~are likely to~~ be recommended by the *registered design professional*:

- "Indication of *structural distress* observed" likely prompts additional structural *condition assessment* by means of exploratory, nondestructive, or destructive testing in order to assess whether ~~confirm or verify if~~ *structural distress* is present.
- "Actual *structural distress* observed" likely prompts additional structural *condition assessment* by means of exploratory, nondestructive, or destructive testing in order to determine the extent of the *structural distress*, and/or additional structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed to remedy the *structural distress*. Such a condition may also require shoring and/or limited access.
- "Indication of *dangerous* condition observed" generally prompts immediate notification of the *owner* and additional structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed to remedy the conditions. Such a condition may also require shoring and/or limited access.
- "Actual *dangerous* condition observed" generally prompts immediate notification of the *owner* and the *code official*. This conclusion also generally prompts additional structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed in order to remedy the *dangerous* condition. Such a condition may also require shoring and/or limited access.

Remediation of *structural distress* will always require a structural evaluation, the result of which may require a repair. The type and extent of repair, however, is generally governed by the International Existing Building Code, and will depend upon several factors, including but not limited to the role of the member in the structural system, and degree of distress. Cosmetic type repairs may suffice in certain situations provided that the remaining sound material is sufficient for the required function. For members carrying assigned gravity or other loads, cosmetic type repairs will only be permitted if it can be demonstrated by rational analysis during a structural evaluation, that the remaining material, if protected from further *deterioration*, can still perform its assigned function at acceptable stress levels. Failing that, adequate repairs or reinforcement will be considered mandatory.

From a structural perspective, buildings are not considered the same even where their occupancy, size, or height is similar. Each building must be considered unique based on its site location due to concerns in response to the following. If the below conditions or information are not available or accessible at the time of the assessment, the assessment conclusions must state which items were not able to be identified:

- Structural design and construction type: structural systems, layout, and materials used.
- Occupancy and Use Classification of interior areas.
- *Risk Category*
- Areas of high risk of natural hazard occurrence: earthquake, wind, rain, flood, snow, etc.
- History of exposure or damage from natural hazard(s) or other event(s)
- Environmental influences such as humidity, temperature, presence of salt air, presence of chlorides, etc.
- Age of the building, era of construction, and applicable code(s) at time of construction
- Geotechnical conditions or hazards may affect foundation systems.

Discussion:

1. Delete, delete, delete. "Structural integrity" is not defined and structural integrity is not reduced by the act of observing distress. It is also not reduced by speculative potential for future structural distress that may or may not occur.
2. At the time of current codes? This doesn't make sense. Delete

Committee Action: Approved as Modified, see action on #58.

PUBLIC COMMENT #65 (Manley 6)
Proponent: Manley, Bonnie

Guideline Change:

1.5.1 Structural Condition Assessment

Structural *condition assessments* are performed in the accessible, available, and exposed areas of the building in order to determine whether *structural distress* or an *unsafe* structural condition exists in an existing building. A condition of *structural distress* refers to a condition that is observed during the time of the assessment which may negatively affect the structural integrity of the building. An *unsafe* structural condition refers to a condition that is observed during the time of the assessment that meets the definition of *dangerous*. In general, the scope of the visual structural *condition assessment* described herein is limited to an initial visual observation of the currently exposed, accessible, and available conditions to determine if the capacity of structural elements may be affected by any *structural distress* or if *dangerous* structural conditions are present.

Conditions that may negatively affect the structural integrity of a building include any structural element, material or assembly of a building that exhibits visual signs of decreased structural capacity or other indication of lack of adequate capacity. Structural integrity may be reduced by observed *structural distress* or may be reduced by an observed condition that could lead to *structural distress* in the future.

The *condition assessment* does not include detailed assessment or analysis of whether elements are capable of safely supporting loads that are currently imposed or are required by past or current building codes. Similarly, the visual condition assessment is not a validation that the original design and construction nor any additions or alterations met the applicable codes at the time of construction nor current codes.

Following the completion of the structural *condition assessment*, additional assessment and/or evaluation may be recommended or necessary. Depending on the conclusion(s) of the structural visual *condition assessment*, the following actions are likely to be recommended by the *registered design professional*:

- "Indication of *structural distress* observed" likely prompts additional structural *condition assessment* by means of exploratory, nondestructive, or destructive testing in order to confirm or verify if *structural distress* is present.
- "Actual *structural distress* observed" likely prompts additional structural *condition assessment* by means of exploratory, nondestructive, or destructive testing in order to determine the extent of the *structural distress*, and/or additional structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed to remedy the *structural distress*. Such a condition may also require shoring and/or limited access.
- "Indication of *dangerous* condition observed" generally prompts immediate notification of the *owner* and additional structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed to remedy the conditions. Such a condition may also require shoring and/or limited access.
- "Actual *dangerous* condition observed" generally prompts immediate notification of the *owner* and the *code official*. This conclusion also generally prompts additional structural evaluation to

Commented [KM96]: The discussion in this section seems to be far more detailed than appropriate for an introductory section. In fact, it goes on for more than a page when the other systems are just a paragraph or two long. It's good information -- can it be relocated later in the guide? How about Section 5?

Commented [KM97]: Doesn't seem to be needed.

Commented [KM98]: Where is this definition? It might be helpful to the document to reprint it here.

Commented [KM99]: This seems to mean more than just a visual assessment. There is a judgement as to the remaining capacity.

Commented [KM100]: Like what? This is a visual condition assessment only. This seems out of scope.

Commented [KM101]: Other places use AHJ. The guide should use consistent terminology.

determine the appropriate repair, retrofit, replacement, or other action needed in order to remedy the *dangerous* condition. Such a condition may also require shoring and/or limited access.

Remediation of *structural distress* will always require a structural evaluation, the result of which may require a repair. The type and extent of repair, however, is generally governed by the International Existing Building Code, and will depend upon several factors, including but not limited to the role of the member in the structural system, and degree of distress. Cosmetic type repairs may suffice in certain situations provided that the remaining sound material is sufficient for the required function. For members carrying assigned gravity or other loads, cosmetic type repairs will only be permitted if it can be demonstrated by rational analysis during a structural evaluation, that the remaining material, if protected from further *deterioration*, can still perform its assigned function at acceptable stress levels. Failing that, adequate repairs or reinforcement will be considered mandatory.

From a structural perspective, buildings are not considered the same even where their occupancy, size, or height is similar. Each building must be considered unique based on its site location due to concerns in response to the following. If the below conditions or information are not available or accessible at the time of the assessment, the assessment conclusions must state which items were not able to be identified:

- Structural design and construction type: structural systems, layout, and materials used.
- Occupancy and Use Classification of interior areas.
- *Risk Category*
- Areas of high risk of natural hazard occurrence: earthquake, wind, rain, flood, snow, etc.
- History of exposure or damage from natural hazard(s) or other event(s)
- Environmental influences such as humidity, temperature, presence of salt air, presence of chlorides, etc.
- Age of the building, era of construction, and applicable code(s) at time of construction
- Geotechnical conditions or hazards that ~~may~~ affect foundation systems.

Commented [KM102]: Awkward language -- these two sentences both seem to be introducing the list.

Commented [KM103]: Expand on the type of wind event -- tornado, hurricane, straight-line, etc...

Discussion: See comments in margin.

Committee Action: Approved as Modified, see action on #58.

PUBLIC COMMENT #66 (Bloch 6)
Proponent: Bloch, Tracy

Guideline Change:

1.5.1 Visual Structural Condition Assessment.

Visual structural ~~Structural~~ *condition assessments* are performed in the accessible, available, and exposed areas of the building in order to determine whether *structural distress* or an *unsafe* structural condition exists in an existing building. A condition of *structural distress* refers to a condition that is observed during the time of the assessment which may negatively affect the structural integrity of the building. An *unsafe* structural condition refers to a condition that is observed during the time of the assessment that meets the definition of *dangerous*. In general, the scope of the visual structural *condition assessment* described herein is limited to an initial visual observation of the currently exposed, accessible, and available conditions to determine if the capacity of structural elements may be affected by any *structural distress* or if *dangerous* structural conditions are present.

Conditions that may negatively affect the structural integrity of a building include any structural element, material or assembly of a building that exhibits visual signs of decreased structural capacity or other indication of lack of adequate capacity. Structural integrity may be reduced by observed

structural distress or may be reduced by an observed condition that could lead to *structural distress* in the future.

The visual *condition assessment* does not include detailed assessment or analysis of whether elements are capable of safely supporting loads that are currently ~~imposed or are required by past or current~~ imposed or those required by current code or past building codes. Similarly, the visual condition assessment is not a validation that the original design and construction nor any additions or alterations met the applicable codes at the time of construction nor current codes.

Following the completion of the visual structural *condition assessment*, additional subsequent separate assessment and/or evaluation may be recommended or deemed necessary. Depending on the conclusion(s) of the visual structural ~~visual~~ *condition assessment*, the following actions are likely to be recommended by the *registered design professional*:

- "Indication of *structural distress* observed" likely prompts additional structural *condition assessment* by means of exploratory, nondestructive, or destructive testing in order to confirm or verify if *structural distress* is present.
- "Actual *structural distress* observed" likely prompts additional structural *condition assessment* by means of exploratory, nondestructive, or destructive testing in order to determine the extent of the *structural distress*. ~~, and/or additional~~ A subsequent separate structural evaluation may be required to determine the appropriate repair, retrofit, replacement, or other action needed to remedy the *structural distress*. Such a condition may also require shoring and/or ~~limited~~ limiting access.
- "Indication of *dangerous* condition observed" generally prompts immediate notification of the *owner* ~~and additional~~ and the undertaking of a subsequent structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed to remedy the conditions. Such a condition may also require shoring and/or ~~limited~~ limited access.
- "Actual *dangerous* condition observed" generally prompts immediate notification of the *owner* and the *code official*. This conclusion also generally ~~prompts additional~~ subsequent structural evaluation to determine the appropriate repair, retrofit, replacement, or other action needed in order to remedy the *dangerous* condition. Such a condition may also require shoring and/or limited access.

Remediation of *structural distress* will always require a structural evaluation, the result of which may require a repair or replacement. The type and extent of ~~repair~~ remediation, however, is generally governed by the International Existing Building Code, and will depend upon several factors, including but not limited to the role of the member in the structural system, and degree of distress. ~~Cosmetic~~ Protective surface repair type repairs may suffice in certain situations provided that the remaining sound material is sufficient for the required function. For members carrying assigned gravity or other loads, cosmetic type repairs will only be permitted if it can be demonstrated by rational analysis during a structural evaluation, that the remaining material, if protected from further *deterioration*, can still perform its assigned function at acceptable stress levels. Failing that, adequate repairs or reinforcement will be considered mandatory.

From a structural perspective, buildings are not considered the same even where their occupancy, size, or height is similar. Each building must be considered unique based on its site location due to concerns in response to the following. If the below conditions or information are not available or accessible at the time of the assessment, the assessment conclusions ~~must~~ should state which items were not able to be identified:

- Structural design and construction type: structural systems, layout, and materials used.
- Occupancy and Use Classification of interior areas.
- *Risk Category*
- Areas of high risk of natural hazard occurrence: earthquake, wind, rain, flood, snow, etc.
- History of exposure or damage from natural hazard(s) or other event(s)
- Environmental influences such as humidity, temperature, presence of salt air, presence of chlorides,

Commented [KM104]: (evaluation is separate and not part of visual assessment - please clarify for owners)

Commented [KM105]: define evaluation? =computational analysis

Commented [KM106]: define evaluation? = computational analysis

Commented [KM107]: difficult to limit expectation to a repair

Commented [KM108]: protective surface repairs" would be more accurate in the context of structural repairs Surficial repairs? While structural is part of and can be part of the architecture, by definition, assessing structurally is not cosmetic - that would be architectural. I would suggest/recommend surficial repair if it would prevent further deterioration. Frankly, as a structural engineer, I am not assessing cosmetic issues - By definitions: cosmetic improves appearance not performance

Commented [KM109]: as a guide, I don't think you can say this -
as engineers we recommend - we can report to building officials but even we can't mandate repairs subsequent to a visual condition
assessment. who is mandating or enforcing? Generally speaking, as a guide, this document
defines visual assessment and seems to be providing guidance to conducting it and its purpose and scope

Commented [KM110]: The IBC requires what is shown on the structural plans. As a guide, this document is not a requirement. I am hoping there will be a minimum code standard for structural assessments and evaluations at some point - as well as for the filing of documents for at least estimating expected capacity and expected member sizes and configurations, etc that are concealed and can't measured or verified unless all finishes are removed - more informative than assumptions.

etc.

- Age of the building, era of construction, and applicable code(s) at time of construction
- Geotechnical conditions or hazards may affect foundation systems.

Discussion: See comments in margin.

Committee Action: Approved as Modified, see action on #58.

PUBLIC COMMENT #67 (Kersting 7)
Proponent: Kersting, Ryan

Guideline Change:

1.5.1 Structural Visual Condition Assessment

Structural visual *condition assessments* are performed by a qualified Registered Design Professional in the accessible, available, and exposed areas of the building (including those areas that can be exposed without destructive means, e.g., removing ceiling tiles) in order to determine whether *structural distress* or an *unsafe* structural condition exists in an existing building. A condition of *structural distress* refers to a condition that is observed during the time of the assessment which may negatively affect the structural integrity of the building. An *unsafe* structural condition refers to a condition that is observed during the time of the assessment that meets the definition of *dangerous*. In general, the scope of the visual structural *condition assessment* described herein is limited to an initial visual observation of the currently exposed, accessible, and available conditions to determine if the capacity of structural elements may be affected by any *structural distress* or if *dangerous* structural conditions are present.

Conditions that may negatively affect the structural integrity of a building include any structural element, material or assembly of a building structure that exhibits visual signs of decreased structural capacity or other indication of lack of adequate capacity. Structural integrity may be reduced by observed *structural distress* or may be reduced by an observed condition that could lead to *structural distress* in the future.

The visual *condition assessment* does not include detailed ~~assessment~~ evaluation or analysis of whether elements are capable of safely supporting loads that are currently imposed or are required by past or current building codes. Similarly, the visual condition assessment is not a validation that the original design and construction nor any additions or alterations met the applicable codes at the time of construction nor current codes.

Following the completion of the structural visual *condition assessment*, additional assessment and/or evaluation may be recommended or necessary. Depending on the conclusion(s) of the structural visual *condition assessment*, the following actions are likely to be recommended by the *registered design professional*:

…

Discussion: None provided.

Committee Action: Approved as Modified, see action on #58.

PUBLIC COMMENT # 68 (Bonowitz 9)
Proponent: Bonowitz, David

Guideline Change:

1.5.1 Structural Condition Assessment

Discussion:

1. If structural condition assessment means part 2 of the definition of condition assessment, just say that.

2. Accessible and exposed, ok. But "available" is not an appropriate limit, as it is too easily gamed by the owner or tenant.

3. Replace "unsafe structural condition" with "dangerous." No need to explain that the former means the latter. As written, this graf confusingly misuses the IEBC definition of unsafe.

4. Per the IPMC, maintenance inspections only identify potentially unsafe structural conditions, which are then referred to an engineer for assessment with the IEBC (IPMC Sec 304.1.1, etc.). So is structural condition assessment meant to imply this whole process contemplated by the IPMC? If so, this section is in conflict with Sec 1.2.2.

5. Reference to a "visual structural condition assessment" implies that there are other kinds of condition assessment – which there are, but this guide does not make adequate distinctions and uses the two phrases interchangeably, leading to confusion.

6. Don't use "may" – not because it's "permissive" but because it also means "is allowed to be," which is not what the Guide intends. Use "might" instead.

7. Is this commentary? It seems to be explaining the definition of structural distress (which definition is itself deeply flawed).

8. Is there any precedent for this broad understanding of "structural integrity"? Lots of conditions (existing leaks, exposure to the elements, unpainted surfaces, etc.) indicate a need for maintenance, but is it necessary to say these also represent a loss of "structural integrity" because they might lead to capacity loss if not maintained, some time in the distant future? Imagine a written report saying a building has diminished structural integrity because the paint is peeling. Is that the intent, because that is what this graf implies.

9. Similar to previous comment on this section, the following logical cascade is unacceptable (and was probably unintended): Structural distress includes conditions "which may negatively affect the structural integrity." Structural integrity is affected by conditions that can lead to future capacity loss. Thus any lack of maintenance affects structural integrity and therefore represents structural distress, and therefore is an "indication of structural distress" (if not "actual structural distress") requiring "additional" assessment possibly involving destructive testing.

10. ("The condition assessment…") Repetitive of Sec 1.2.2. See my comment there and at Sec 1.1.

11. ("Following…") What is the difference between this "additional assessment" and a "supplemental assessment" described in Secs 1.2.2, 4.1.3, etc.?

12. IPMC 304.1.1 etc. are already clear about what to do given "indication of structural distress observed." The recommendation given here is different (and also appears to conflict with Sec 1.2.2). Is it the intent here to supersede the IPMC?

13. The IEBC is already clear about what to do, and what is required, by a dangerous condition. Why not just say that, especially since Sec 1.2.2 already says anything in the scope of the IEBC is outside the scope of this Guide?

14. Do not use "cosmetic type repairs" in reference to damage that has just been described as actual structural distress, or damage in the language of the IEBC. If cosmetic work is sufficient, it wasn't structural damage.

15. ("From a structural…") Delete this entire subsection. Everything discussed here is outside the scope of maintenance or condition assessment and has already been described in Sec 1.2.2 as outside the scope of this guide.

Committee Action: Approved as Modified, see action on #58.

PUBLIC COMMENT # 69 (Kehoe 5)
Proponent: Kehoe, Brian

Guideline Change:

1.5.2 ~~Non-Structural~~ Nonstructural Condition Assessments

(remaining text in section unchanged)

Discussion: None.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #70 (Bonowitz 10)
Proponent: David Bonowitz

Guideline Change:

1.5.2 Non-Structural Condition Assessments

Discussion:

1. If non-structural condition assessment means part 1 of the definition of condition assessment, just say that.

2. Not reviewed, except for the comment about the title above.

Committee Action: Considered, No Action.

PUBLIC COMMENT #71 (Herrera 9)
Proponent: Herrera, Richardo

Guideline Change:

1.5.2.1 Envelope.

The building's exterior envelope must ~~plays an important role in maintaining the requisite weather resistance of the building~~ be maintained water tight, ~~its structural elements and building service equipment to make sure the interior is free from water penetration into the building. A possible~~ unsafe conditions due to water infiltration may exist ~~where~~ when the envelope, including the roof covering components~~assembly~~, is not maintained to be ~~weather resistant or~~ watertight. ~~This includes~~ proper roof flashing and effective drainage as well as exterior wall water barriers ~~flashing~~ at protruding decks, windows, and doors.

Discussion: None provided

Committee Action: Approved as Modified, combining PC #71, #73, and #74 into a single coordinated paragraph (see below):

1.5.2.1 Envelope.

The building's exterior envelope plays ~~an~~ important roles in maintaining ~~the requisite~~ weather resistance and resistance to external fire exposure ~~of the building, its structural elements and building service equipment to make sure the interior is free from water penetration into the building~~. A possible *unsafe* condition due to water infiltration may exist where the envelope, including the roof assembly, is not maintained to be weather resistant or watertight. This includes proper roof flashing and drainage as well as exterior wall flashing at protruding decks, windows, and doors. A possible *unsafe* condition also may exist where the envelope's resistance to external fire exposure has deteriorated.

PUBLIC COMMENT #72 (Munstertreiger 6)
Proponent: Munsterteiger, Jeffery

Guideline Change:

1.5.2.1 Envelope

The building's exterior envelope plays an important role in maintaining the requisite weather resistance of the building, its structural elements and building service equipment to make sure the interior is free from water penetration ~~into the building~~. A possible *unsafe* condition due to water infiltration may exist where the envelope, including the roof assembly, is not maintained to be weather resistant or watertight. This includes proper roof flashing and drainage as well as exterior wall flashing at protruding decks, windows, and doors.

Commented [JM111]: Sentence structure- the end of this sentence doesn't read well, suggest "into the building" isn't necessary to complete the thought.

Discussion: See comments in margin.
Committee Action: Approved as Submitted.

PUBLIC COMMENT #73 (Manley 7)
Proponent: Manley, Bonnie

Guideline Change:

1.5.2.1 Envelope

The building's exterior envelope plays an important role in maintaining the requisite weather resistance of the building, its structural elements and building service equipment to make sure the interior is free from water penetration into the building. A possible *unsafe* condition due to water infiltration may exist where the envelope, including the roof assembly, is not maintained to be weather resistant or watertight. This includes proper roof flashing and drainage as well as exterior wall flashing at protruding decks, windows, and doors.

Commented [KM112]: Awkward

Discussion: See comments in margin.

Committee Action: Approved as Modified, combined PC #71, #73, and #74 (see revised language in PC #71).

PUBLIC COMMENT #74 (Tacker 3)
Proponent: Taecker, John

Guideline Change:

1.5.2.1 Envelope

Discussion: While the exterior envelope plays an important role in maintaining weather resistance, it also plays an extremely important role in providing resistance to external fire exposure. This should also be identified.

Committee Action: Approved as Modified, combined PC #71, #73, and #74 (see revised language in PC #71).

PUBLIC COMMENT #75 (Herrera 10)
Proponent: Herrera, Richardo

Guideline Change:

1.5.2.2 Life Safety/Means of Egress

A safe, continuous, and unobstructed path of travel should be ~~provided and~~ maintained from any ~~point~~ location in a building or structure to eventually the public way. ~~The means of egress to the public way is a fundamental and important component of a safe building.~~ The basic material components of the egress path ~~of the building~~ should not be compromised. Slip resistance on any stairs and horizontal walking surfaces must be ~~confirmed to be in place and~~ maintained for effective use ~~to be used~~ in any emergency circumstance~~s~~.

Discussion: None provided

Committee Action: Considered No Action.

PUBLIC COMMENT #76 (Taecker 4)
Proponent: Taecker, John

Guideline Change:

1.5.2.2 Life Safety/Means of Egress

Discussion: Wouldn't it be better to use the code-defined term of "means of egress system"?

Committee Action: Considered, No Action.

PUBLIC COMMENT #77 (Herrera 11)
Proponent: Herrera, Richardo

Guideline Change:

1.5.2.3 Passive Fire Protection Systems

Existing fire-resistance ratings of building components ~~elements~~ including structural system ~~building~~ elements, walls, firestops, shafts, smoke barriers, floors, and penetrations should have fire ratings ~~protection~~ maintained to ~~-~~ensure the safety of the ~~a safe~~ built environment. These elements need to be observed ~~accessed~~ for their continued suitability of fire-~~-~~resistance whenever ~~as intended and~~ repair~~sed~~, restor~~ationsed~~, or other material replaced whenever ~~re~~ damaged, altered, breached, or penetrated.

Discussion: None provided

Committee Action: Considered No Action.

PUBLIC COMMENT #78 (Munsterteiger 7)
Proponent: Munsterteiger, Jeffery

Guideline Change:

1.5.2.3 Passive Fire Protection Systems

Existing fire-resistance ratings of building elements including structural building elements, walls, firestops, shafts, smoke barriers, floors, and penetrations should have protection maintained to ensure a safe built environment. These elements need to be ~~accessed~~ assessed for the suitability of fire- resistance as intended and repaired, restored, or replaced where damaged, altered, breached, or penetrated.

Discussion: See comment in margin.

Committee Action: Approved as Submitted.

Commented [JM113]: Sentence structure- this phrase in this context could infer that passive fire resistance is required to be accessed as part of this evaluation. Many of these components, such as fire-stopping in building cavities are concealed for their entire service life.

Suggest this could be a word choice error, and it should be assessed instead of accessed.

PUBLIC COMMENT #79 (Taecker 5)
Proponent: Taecker, John

Guideline Change:

1.5.2.3 Passive Fire Protection Systems

Discussion: By IBC definition, building elements are only those items covered in Table 601.1, which does not include firestops, shafts, smoke barriers, or penetrations. Those items, including opening protectives and dampers, which are components or assemblies are covered in Chapter 7. Looking at IBC 703.2, consider replacing "building elements" with "building elements, components and assemblies". Also, consider changing "should have protection maintained" to "should be maintained".

Committee Action: Approved as Submitted (simply insert language, see below.).

1.5.2.3 Passive Fire Protection Systems

Existing fire-resistance ratings of building elements including structural building elements components and assemblies, walls, firestops, shafts, smoke barriers, floors, and penetrations should ~~have protection~~ be maintained to ensure a safe built environment. These elements need to be accessed for the suitability of fire-resistance as intended and repaired, restored, or replaced where damaged, altered, breached, or penetrated.

PUBLIC COMMENT #80 (Herrera12)
Proponent: Herrera, Richardo

Guideline Change:

1.5.2.4 Active Fire Protection Systems

Active fire protection systems are an important and vital component ~~part off or~~of life and property safety that typically require periodic ~~continuous~~ testing and maintenance. These systems ~~need to be confirmed~~ assure ~~operational to provide an~~ effective level of protection for the building occupants and a safe building for its continued use and occupancy.

Discussion: None provided

Committee Action: Approved with intent to modify, see track change, above.

PUBLIC COMMENT #81 (Munsterteiger 8)
Proponent: Herrera, Richardo

Guideline Change:

1.5.2.4 Active Fire Protection Systems

Active fire protection systems are an important and vital part of life and property safety that typically require ~~continuous~~ regular testing and maintenance. These systems need to be confirmed operational to provide an effective level of protection for the building

Commented [JM114]: Word choice- suggest regular is a better choice. Continuous seems an overstatement for systems that often only have an annual test requirement.

occupants and a safe building for continued use and occupancy.

Discussion: See comments in margin.

Committee Action: Considered, no action taken; PC 80 made same correction.

PUBLIC COMMENT #82 (Hugo 1)
Proponent: Hugo, Jeffrey

Guideline Change:

1.5.2.4 Active Fire Protection Systems
Active fire protection systems including automatic sprinkler systems, standpipe systems, and fire alarm systems are an important and vital part of life and property safety that typically require continuous inspecting, testing and maintenance. These systems need to be confirmed operational to provide an effective level of protection for the building occupants and a safe building for continued use and occupancy.

Discussion: Many of the 1.5.2 assessments provide some examples of the systems being served. By adding automatic sprinkler systems, standpipe, and fire alarm systems, the user can process what active systems are while reading.

Committee Action: Approved as Submitted. Note correction may be needed.

PUBLIC COMMENT #83 (Herrera 13)
Proponent: Herrera, Richardo

Guideline Change:

1.5.2.5 Electrical

Electrical systems in an existing building can become ~~cause~~ unsafe ~~conditions~~ for the occupants and to the building due to lack of maintenance and exposure to adverse environmental conditions. Electrical CAs~~condition assessments~~ are intended to investigate ~~assess~~ the ~~electrical system for~~ potential for shock, electrocution, fire, or arc-flash hazards, ~~deficiencies~~, as well as damage or non-~~-~~compliant installations. These conditions are often qualified under the following:

1. Electric service and other power production sources; and

2. Feeders, branch circuits, wiring methods and materials.

Discussion: None provided

Committee Action: Approved as Modified, see paragraph below for replacement language that addresses PC #83, #84, and #85.

1.5.2.5 Electrical

The premises wiring system must be properly installed and maintained in a safe working condition and capable of performing the intended function. Electrical systems in an existing building can become unsafe for the occupants and to the building due to lack of maintenance and exposure to adverse environmental conditions. Electrical condition assessments are intended to investigate the potential for shock, electrocution, fire, or arc-flash hazards, as well as damage or non-compliant installations.

PUBLIC COMMENT #84 (Searer 7)
Proponent: Searer, Gwenyth

Guideline Change:

1.5.2.5 Electrical

Electrical systems in an existing building can cause *unsafe* conditions for the occupants and the building due to lack of maintenance and exposure to adverse environmental conditions. Electrical *condition assessment*s are intended to assess the electrical system for potential shock, electrocution, fire, or arc-flash hazards, deficiencies, damage or non -compliant installations. ~~These are often qualified under the following:~~

~~1. Electric service and other power production sources; and~~

~~2. Feeders, branch circuits, wiring methods and materials~~

Discussion: No idea why this is going into this level of detail without any requirement. Delete.

Committee Action: Approved as Modified, combined approval PC #83, #84, #85.

PUBLIC COMMENT #85 (Taecker 6)
Proponent: Taecker, John

Guideline Change:

1.5.2.5 Electrical

Discussion: You may want to start this section with the same style that is used for Mechanical (1.5.2.7) and Fuel Gas ((1. 5.2.8), regarding electrical wiring, appliances, and equipment must be properly installed and maintained in a safe working condition and capable of performing the intended function. The two "qualified under" are not the only potential areas of concern. There also can be concerns with a number of other areas, such as lighting, appliances, and pool and spa equipment. Suggest removing the "These are of the qualified under". It is particularly important that overcurrent protection devices (such as circuit breakers and fuses) are maintained and functioning, as well as other required safeguards are maintained.

Committee Action: Approved as Modified, combined approval PC #83, #84, #85.

PUBLIC COMMENT #86 (Herrera 14)
Proponent: Herrera, Richardo

Guideline Change:

1.5.2.6 Plumbing

Plumbing fixtures ~~must provide~~ for sanitary and potable water services must meet health department standards~~to a building.~~ Such fixtures~~-~~ need to be properly maintained to be in good working order. They must also be ; free from clogging ~~obstructions,~~ leaks, and other defects ; and be capable of performing the function for which the~~such~~the ~~-~~fixture is ~~designed.~~being used Potential hazards to the occupants may ~~be the~~ result from ~~of~~ inadequate servicing ~~e~~ and venting, cross connection, back siphonage, and improper installation in response to ~~or~~ deterioration.

Discussion: None provided

Committee Action: Considered, No Action

PUBLIC COMMENT #87 (Munsterteiger 9)
Proponent: Munsterteiger, Jeffery

Guideline Change:

1.5.2.6 Plumbing

Plumbing fixtures must provide sanitary and potable water services to a building. Such fixtures need to be properly maintained in working order; free from obstructions, leaks, and defects; and capable of performing the function for which such fixture is designed. Potential hazards to the occupants or damage to the building may be the result of inadequate service and venting, cross connection, back siphonage, improper installation, leaks or *deterioration*.

Commented [JM115]: Clarification- Plumbing leaks going undetected or unrepaired could also result in damage to the underlying building and should be noted.

Discussion: See comments in margin.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #88 (Taecker 7)
Proponent: Taecker, John

Guideline Change:

1.5.2.6 Plumbing

Discussion: It is not just the plumbing fixtures that provide sanitary and potable water services to a building. Plumbing fixtures are only one part of the plumbing system. Even more critical are the plumbing fixture fittings (e.g. faucets), plumbing pipe and fittings, and plumbing appliances. It is particularly important that backflow protection be maintained, so as not to have nonpotable water back into the potable water system.

Committee Action: Considered, No Action

PUBLIC COMMENT #89 (Herrera 15)
Proponent: Herrera, Richardo

Guideline Change:

1.5.2.6 Mechanical

Mechanical equipment and other devices ~~appliances~~ provide safe, healthy, and comfortable occupancy of a building. These systems should be properly ~~installed and~~ maintained in a safe working condition and capable of performing all their intended functions.

Discussion: None provided

Committee Action: Approved as Submitted.

PUBLIC COMMENT #90 (Herrera 16)
Proponent: Herrera, Richardo

Guideline Change:

~~**1.6 Summary**~~

~~Existing building structural, envelope, egress components, active and passive fire protection systems, plumbing, mechanical, fuel gas, and electrical considerations warrant special attention in termsof maintenance, periodic, condition assessments in accordance with this guide.~~

Discussion: None provided

Committee Action: Approved as Submitted.

PUBLIC COMMENT #91 (Musterteiger 10)
Proponent: Munsterteiger, Jeffery

Guideline Change:

1.6 Summary

Existing building structural, envelope, egress components, active and passive fire protection systems, plumbing, mechanical, fuel gas, and electrical considerations warrant special attention in terms of maintenance, periodic, and *condition assessment*s in accordance with this guide.

Commented [JM116]: Missing word.

Discussion: See comments in margin.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #92 (Bonowitz 11)
Proponent: Bonowitz, Davide

Guideline Change:

1.6 Summary

Discussion: Omit this section, which is not useful. Doing so will avoid having to rewrite the problematic wording about what "warrant[s] special attention."

Committee Action: Approved as Submitted.

PUBLIC COMMENT #93 (Herrera 17)
Proponent: Herrera, Richardo

Guideline Change:

2. RESPONSIBILITIES

The owner ~~or owner's authorized representative of the building~~ bears the responsibility for the maintenance of the building, retention and filing of all maintenance records and CA ~~condition assessment~~ records. The owner ~~or owner's authorized representative~~ is ~~should be~~ responsible for the routine servicing and regular condition assessments that are essential elements for ~~of~~ ensuring public safety. A CA ~~condition assessment~~ summary should be submitted to the AHJ~~code official~~ at the conclusion of each CA~~condition assessment~~ required by Section 4. Any unsafe, dangerous, or hazardous condition must ~~shall~~ be reported to the AHJH~~code official~~ immediately but no later than the next business day by the owner ~~or owner's authorized representative~~. In the event that an imminent hazard or dangerous condition exists, the owner ~~or owner authorized agent~~ shall take immediate action to protect the occupants and the general public. Building components ~~elements~~ are intended to comply with the codes-in-effect at the time the building was built. Routine CA ~~condition assessments~~ are not meant to determine ~~evaluate~~ whether building components ~~elements~~ comply with past or current current codes. A subject matter expert that is a r~~R~~egistered design professionals should be used when required by Section 5. The AHJ ~~code official~~ is authorized to require that all existing buildings are maintained by the owner ~~or owner's authorized representative~~ in accordance with th~~e~~is IPMC or another applicable codes, regulations, or laws. The CAs~~condition assessments~~ required by Section 4 are in addition to those required by the applicable laws, ordinances, and statutes of the jurisdiction. See Section 8 for considerations that may be ~~are~~ unique to each jurisdiction.

Discussion: None provided

Committee Action: Considered, No Action.

PUBLIC COMMENT #94 (Munsterteiger 11)
Proponent: Munsterteiger, Jeffery

Guideline Change:

2.RESPONSIBILITIES

The *owner* or *owner's* authorized representative of the building bears the responsibility for the maintenance of the building, retention and filing of all maintenance records and *condition assessment* records. The *owner* or *owner's* authorized representative should be responsible for the routine servicing and regular *condition assessments* that are essential elements of ensuring public safety. A *condition assessment* summary should be submitted to the *code official* at the conclusion of each *condition assessment* required by Section 4. Any *unsafe*, *dangerous*, or hazardous condition shall be reported to the *code official* immediately but no later than the next business day by the *owner* or *owner's* authorized representative. In the event that an imminent hazard or *dangerous* condition exists, the *owner* or *owner* authorized agent shall take immediate action to protect the public.

Building elements are intended to comply with the codes-in-effect at the time the building was built. Routine condition assessments do not include detailed assessment or analysis of whether elements are capable of safely supporting loads that are currently imposed or are required by past or current building codes. Similarly, the visual condition assessment is not a validation that the original design and construction nor any additions or alterations met the applicable codes at the time of construction nor current codes. ~~Routine *condition assessments* are not meant to evaluate whether building elements comply with current codes.~~

Registered design professionals should be used when required by Section 5.

The *code official* is authorized to require that all existing buildings are maintained by the *owner* or *owner's* authorized representative in accordance with this guide, ~~the IPMC~~ or ~~another~~ other applicable codes, regulations, or laws.

The *condition assessments* required by Section 4 are in addition to those required by the applicable laws, ordinances, and statutes of the *jurisdiction.*

See Section 8 for considerations that are unique to each *jurisdiction.*

Discussion: See comments in margin

Committee Action: Approved as Modified (see track changes).

Commented [JM117]: For clarity- Using the sentence from above in the document is preferred. This is stated multiple times throughout the document and should be made very clear that evaluation of the buildings original design and compliance with original construction documents are outside the scope of the guideline and assessment processes.

Commented [JM118]: Out of scope- This is mandatory language.

Commented [JM119]: For readability- Edits to improve readability.

PUBLIC COMMENT #95 (Hugo 2)
Proponent: Hugo, Jeffrey

Guideline Change:

2. RESPONSIBILITIES
The owner or owner's authorized representative of the building typically bears the responsibility for the maintenance of the building, retention and filing of all maintenance records and condition assessment records. The owner or owner's authorized representative ~~should be~~ is responsible for the routine servicing and regular condition assessments that are essential elements of ensuring public safety. A condition assessment summary should be submitted to the code official at the conclusion of each condition assessment required by Section 4. Any unsafe, dangerous, or hazardous condition shall be reported to the code official immediately but no later than the next business day by the owner or owner's authorized representative. In the event that an imminent hazard or dangerous condition exists, the owner or owner authorized agent shall take immediate action to protect the public.

Discussion: The first sentence puts the responsibility on the owner. The second sentence should be mandatory text, as who else would be responsible for the routine servicing?

Committee Action: AM. Concept of responsibility is accepted, although modification is to keep original language and insert "typical" in first sentence.

PUBLIC COMMENT #96 (Kesner 5)
Proponent: Kesner, Ketih

Guideline Change:

2. RESPONSIBILITIES

Building elements are intended to comply with the codes-in-effect at the time the building was built. Routine *condition assessments* are not meant to evaluate whether building elements comply with current codes.

Registered design professionals should be used when required by Section 5.

The *code official* is authorized to require that all existing buildings are maintained by the *owner* or *owner's* authorized representative in accordance with this IPMC or another applicable codes, regulations, or laws.

The *condition assessments* required by Section 4 are in addition to those required by the applicable laws, ordinances, and statutes of the *jurisdiction.*

See Section 8 for considerations that are unique to each *jurisdiction.*

or the code in effect at the time of construction

permitted for construction

Comment: Building elements are intended to comply with the codes-in-effect at the time the building was ~~built~~ permitted for construction. Routine condition assessments are not meant to evaluation whether building elements comply with current codes or the code in effect at the time the construction was permitted.

Discussion: The IEBC definition of an existing building is based on the time a building permit was issued. This reflects that codes may change during construction. The second change makes the statement more correct.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #97 (Searer 8)
Proponent: Searer, Gwenyth

Guideline Change:

2. Responsibilities

The *owner* or *owner's* authorized representative of the building bears the responsibility for the maintenance ofthe building, retention and filing of all maintenance records and *condition assessment* records. The *owner* or *owner's* authorized representative should be responsible for the routine servicing and regular *condition assessment*s that are essential elements of ensuring public safety. A *condition assessment* summary should be submitted to the *code official* at the conclusion of each *condition assessment* required by Section 4. Any *unsafe*, *dangerous*, or hazardous condition shall be reported to the *code official* immediately but no later than the next business day by the *owner* or *owner's* authorized representative. In the event that an imminent hazard or *dangerous* condition exists, the *owner* or *owner* authorized agent shall take immediate action to protect the public.

Building elements are intended to comply with the codes-in-effect at the time the building was built. Routine *condition assessment*s are not meant to evaluate whether building elements comply with current codes.

Registered design professionals should be used when required by Section 5.

~~The *code official* is authorized to require that all existing buildings are maintained by the *owner* or *owner's* authorized representative in accordance with this IPMC or another applicable codes, regulations, or laws.~~

The *condition assessment*s required by Section 4 are in addition to those required by the applicable laws, ordinances, and statutes of the *jurisdiction.*

~~See Section 8 for considerations that are unique to each *jurisdiction.*~~

Discussion:

We should not be telling the code official what they are and are not authorized to do. Delete

Delete. Section 8 is whatever Section 8 is. We do not need teasers.

Committee Action: Considered, No Action.

PUBLIC COMMENT #98 (Manley 8)
Proponent: Manley, Bonnie

Guideline Change:

2. RESPONSIBILLITIES

The *owner* or *owner's* authorized representative of the building bears the responsibility for the maintenance ofthe building, retention and filing of all maintenance records and *condition assessment* records. The *owner* or *owner's* authorized representative should be responsible for the routine servicing and regular *condition assessment*s that are essential elements of ensuring public safety. A *condition assessment* summary should be submitted to the *code official* at the conclusion of each *condition assessment* required by Section 4. Any *unsafe*, *dangerous*, or hazardous condition shall be reported to the *code official* immediately but no later than the next business day by the *owner* or *owner's* authorized representative. In the event that an imminent hazard or *dangerous* condition exists, the *owner* or *owner* authorized agent shall take immediate action to protect the public.

Building elements are intended to comply with the codes-in-effect at the time the building was built. Routine *condition assessment*s are not meant to evaluate whether building elements comply with current codes.

Registered design professionals should be used when required by Section 5.

Commented [KM120]: Why is this in mandatory language? If the desire is to retain the "shall" then extract the requirement from the applicable I-Code.

Commented [KM121]: Why is this in mandatory language? If the desire is to retain the "shall" then extract the requirement from the applicable I-Code.

The *code official* is authorized to require that all existing buildings are maintained by the *owner* or *owner's* authorized representative in accordance with the ~~this~~ IPMC or another applicable codes, regulations, or laws.

The *condition assessment*s required by Section 4 are in addition to those required by the applicable laws, ordinances, and statutes of the *jurisdiction.*

See Section 8 for considerations that are unique to each *jurisdiction.*

Discussion: See comments in margin.

Committee Action: Considered, No Action.

PUBLIC COMMENT #99 (Herrera 18)
Proponent: Herrera, Richardo

Guideline Change:

3. ~~**TERMS**~~ **DEFINITIONS** The following terms when used in this Gguide are shown in italics. They are ~~and~~ defined based on the applicable International Code for specific use in this Gguide. Where terms are not defined in this Gguide and are defined in other ~~the~~ International Codes, such terms shall ~~ould~~ have the meanings established ~~ascribed~~ in those codes. Where terms are not defined in any of the other ICC codes, such terms shall have the ordinarily accepted meanings that ~~as~~ the context implies.

3.1 Scope.
Unless otherwise expressly stated, the following italicized words and terms shall, for the purposes of this guide, have the meanings shown in this section.

3.2 Interchangeability.
Words used in the present tense include the future; words stated in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural, the singular.

3.3 Terms defined in other codes.
Where terms are not defined in this guide and are defined in the International Codes, such terms shall have the meanings ascribed to them as in those codes.

3.4 Terms not defined.
Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies.

Discussion: None provided

Committee Action: Approved as Submitted (8/12); Approved as Modified (9/9) – updated in track changes.

PUBLIC COMMENT #100 (Manley 9)
Proponent: Manley, Bonnie

Guideline Change:

3. TERMS

The following terms used in this guide are shown in *italics* and defined based on the applicable International Code for specific use in this guide. Where terms are not defined in this guide and are defined in the International Codes such terms should have the meanings ascribed in those codes. Where terms are not defined, such terms shall have ordinarily accepted meanings as the context implies

Discussion: See comments in margin

Committee Action: Considered, no Action.

Commented [KM122]: Can't these definitions (*defined in the I-Codes*) be extracted and shown here? That would be more user friendly.

Commented [KM123]: Shouldn't AHJ be defined herein as well?

Commented [KM124]: Mandatory language is not needed here.

PUBLIC COMMENT #101 (Kehoe 6)
Proponent: Kehoe, Brian

Guideline Change:

ABANDONED BUILDING. A ~~*deteriorated,*~~ unoccupied, and not maintained building premises which has been identified as unoccupied, or abandoned for a certain amount of time whether fixture or furnishings exist or not within the building and absent of connected utilities.

Discussion: An abandoned building is not necessarily deteriorated the moment it is no longer occupied. Deterioration occurs over time and unoccupied buildings may have periodic maintenance the mitigate deterioration.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #102 (Searer 9)
Proponent: Searer, Gwenyth

Guideline Change:

ABANDONED BUILDING. A *deteriorated,* unoccupied, and not maintained building that ~~premises which~~ has been identified as unoccupied, or abandoned for a certain amount of time whether or not fixtures or furnishings exist ~~or not~~ within the building and absent of connected utilities.

Discussion: None provided.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #103 (Searer 10)
Proponent: Searer, Gwenyth

Guideline Change:

~~**CODE OFFICIAL.** The officer or other designated authority charged with the administration and enforcement of this guide, or a duly authorized representative. For purposes of this guide, the general~~

~~term "code official" is used and is intended to reflect the multiple *condition assessment* disciplines covered in this guide.~~

Discussion: This doesn't make sense and is irrelevant. Delete.

Committee Action: Approved as Modified, delete remainer of definition as recommended deletion leave the code defined term.

PUBLIC COMMENT #104 (Manley 10)
Proponent: Manley, Bonnie

Guideline Change:

CODE OFFICIAL. The officer or other designated authority charged with the administration and enforcement of this guide, or a duly authorized representative. For purposes of this guide, the general term "code official" is used and is intended to reflect the multiple *condition assessment* disciplines covered in this guide.

Discussion: See comment in margin.

Committee Action: Considered, No Action (see action on PC #103)

PUBLIC COMMENT #105 (Calderone 4)
Proponent: Calderone, Brian

Guideline Change:

CONDITION ASSESSMENT. An observation of the existing building, facility, system(s) or component(s) and review of records, where available, resulting in a written report.

1. A visual observation, performance or testing of building elements or equipment, as noted in this guideline, to assess non-structural elements or equipment for obvious defects, damage, or disrepair that would render the building unfit for occupancy, *unsafe*, *dangerous*, or otherwise a create hazard to the occupants.
2. A visual observation of exposed, accessible, and available conditions, to determine if ~~the capacity~~ of structural elements may be affected by any *structural distress* or if *dangerous* structural conditions exist. A visual structural condition assessment does not include performing additional structural calculations, analysis, or evaluation, or testing of the existing conditions beyond the visual observation.

Discussion: See comment in margin.

Committee Action: Approved as Modified (see track changes).

PUBLIC COMMENT #106 (Kehoe 7)
Proponent: Kehoe, Brian

Guideline Change:

CONDITION ASSESSMENT. An observation of the existing building, facility, system(s) or component(s)

Commented [KM125]: This has not been done consistently throughout.

Commented [CB126]: Without performing a structural evaluation this is either blatantly incorrect or very misleading. In most cases a structural condition assessment without evaluation will only tell you that there are conditions in the structure that differ from the original construction. The extent to which those conditions matter will almost never be understood from an assessment alone. Only an extreme cases that rise to the level of dangerous (an extream threshold), which are rare and typically only exist following significant events, would a visual assessment be able to identify the significance of the observations from an assessment. Further there are many situations where something may seem dangerous but found to not be dangerous based on evaluation, or situations where something that is not identified as dangerous is later found to be dangerous based on an evaluation. The document should be far more clear about what a person performing a visual condition assessment can actually understand about the performance of a building structure even in a deteriorated state, if an evaluation is not performed in conjunction with the assessment. Further, in most cases, the amount of assessment necessary is actually informed by an evaluation. As a guide, an assessor would evaluate the potential impact of conditions identified during an initial assessment, this evaluation, would tell you if you need to do more assessment, more evaluation, or perform mitigating action. Absence of any evaluation, an assessment will largely only identify the existence of conditions, that may or may not have anything to do with the structural reliability. Leaving an owner with a list of conditions that exist in their building, something they probably already know to a large extent, with no explanation as to the significance of any of those observed conditions, would likely be largely unsatisfying to most owners.

Formatted: Highlight

and review of records, where available, resulting in a written report.

3. A visual observation, performance or testing of building elements or equipment, as noted in this guideline, to assess ~~non-structural~~ nonstructural elements or equipment for obvious defects, damage, or disrepair that would render the building unfit for occupancy, *unsafe*, *dangerous*, or otherwise a create hazard to the occupants.

4. A visual observation of exposed, accessible, and available conditions, to determine if the capacity of structural elements may be affected by any *structural distress* or if *dangerous* structural conditions exist. A visual structural condition assessment does not include performing additional structural calculations, analysis, or evaluation, or testing of the existing conditions beyond the visual observation.

Discussion: *(Highlighted text)*: This is contradictory. It says testing is part of visual observation and then structural condition assessment does not include testing.

Committee Action: Approved as Modified, move sub-definitions to Section 6.1

PUBLIC COMMENT #107 (Kesner 6)
Proponent: Kesner, Keith

Guideline Change:

CONDITION ASSESSMENT. An observation of the existing building, facility, system(s) or component(s) and review of records, where available, resulting in a written report.

Assessment must include path forward - recommendations.

1. A visual observation, performance or testing of building elements or equipment, as noted in this guideline, to assess non-structural elements or equipment for obvious defects, damage, or disrepair that would render the building unfit for occupancy, *unsafe*, *dangerous*, or otherwise a create hazard to the occupants.

2. A visual observation of exposed, accessible, and available conditions, to determine if the capacity of structural elements may be affected by any *structural distress* or if *dangerous* structural conditions exist. A visual structural condition assessment does not include performing additional structural calculations, analysis, or evaluation, or testing of the existing conditions beyond the visual observation.

Comment: Condition Assessment: An observation of the existing building, facility, system(s), or component(s) and review of records where available, resulting in a written report. The written report should include specific recommendations for repairs or other steps to maintain the examined element.

Discussion: The definition as provided is inconsistent with various industry definitions (ASCE, ACI 562, various ISO documents) for assessment. As written, it is really describing an evaluation. The critical step in an assessment is to take the observations and then develop recommendations on how to either repair or maintain the examined structure.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #108 (Searer 11)
Proponent: Calderone, Brian

Guideline Change:

CONDITION ASSESSMENT. An observation of the existing building, facility, system(s) or component(s) and review of records, where available, as documented ~~resulting~~ in a written report.

1. A visual observation, performance or testing of building elements or equipment, as noted in this guideline, to assess non-structural elements or equipment for obvious defects, damage, or disrepair that would render the building unfit for occupancy, *unsafe*, *dangerous*, or otherwise a create hazard to the occupants.
2. A visual observation of exposed, accessible, and available conditions, to determine if the capacity of structural elements may be affected by any *structural distress* or if *dangerous* structural conditions exist. A visual structural condition assessment does not include performing additional structural calculations, analysis, or evaluation, or testing of the existing conditions beyond the visual observation.

Discussion: None provided.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #109 (Bloch 7)
Proponent: Bloch, Tracy

Guideline Change:

CONDITION ASSESSMENT. An observation of the existing building, facility, system(s) or component(s) and review of records, where available, resulting in a written report.

1. A visual observation, performance or testing of building elements or equipment, as noted in this guideline, to assess non-structural elements or equipment for obvious defects, damage, or disrepair that would render the building unfit for occupancy, *unsafe*, *dangerous*, or otherwise a create hazard to the occupants.
2. A visual observation of exposed, accessible, and available conditions, to determine if the capacity of structural elements may be affected by any *structural distress* or if *dangerous* structural conditions exist. A visual structural condition assessment does not include performing ~~additional~~ structural calculations, analysis, ~~or~~ evaluation, or testing of the existing conditions beyond the visual observation.

Discussion: None provided.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #110 (Calderone 5)
Proponent: Calderone, Brian

Guideline Change:

DAMAGE. Physical harm that permanently impairs the function of an object.

Discussion: None Provided.

Committee Action: Considered, No Action

PUBLIC COMMENT #111 (Kesner 7)

Proponent: Kesner, Keith

Guideline Change:

Damage— a decrease in the capacity of an existing member or structure resulting from events, such as loads and displacements, or as a result of deterioration of the structure.

Discussion: This definition from ACI 562, makes clear that when a structure has a decrease in capacity, it is damaged. Helpful to have clear terminology.

Committee Action: Considered, No Action

PUBLIC COMMENT #112 (Calderone 6)
Proponent: Calderone, Brian

Guideline Change:

DETERIORATION. Damage that develops over time from use, age, and/or exposure.
~~Disintegration, cracking, spalling, corrosion, rust, rot, decay, or other weakening that results in loss of strength, stiffness, function, or other measures of effectiveness.~~

Discussion: The previous provided definition contains an incomplete list of some deterioration mechanism and contains several conditions that can result from deterioration but can also be caused from many other things that are not deterioration. Further other weakening that results in the loss of strength stiffen function or measures of effectiveness can occur from lots of things that are not deterioration. Suggested alternate definition provided above.

Committee Action: Considered, No Action.

PUBLIC COMMENT #113 (Kesner 8)
Proponent: Kesner, Keith

Guideline Change:

DETERIORATION. Disintegration, cracking, spalling, corrosion, rust, rot, decay, or other weakening that results in loss of strength, stiffness, function, or other measures of effectiveness.

Deterioration — (1) physical manifestation of failure of a material (for example, cracking, delamination, flaking, pitting, scaling, spalling, and staining) caused by environmental or internal autogenous influences on rock and hardened concrete as well as other materials; (2) decomposition of material during either testing or exposure to service.

Discussion: This definition makes it clear that deterioration is a material phenomenon, but deterioration may not affect the performance of a structure. Minor amounts of deterioration can occur in a structure without affecting performance. The original definition suggested the only time an element was deterioration was if the performance was affected, which is not true.

Committee Action: Considered, No Action.

PUBLIC COMMENT #114 (Searer 12)
Proponent: Searer, Gwenyth

Guideline Change:

DETERIORATION. Disintegration, cracking, spalling, corrosion, rust, rot, decay, or other weakening that results in loss of strength, stiffness, function, ~~or other measures of effectiveness~~

Discussion: What exactly is the intent here? This is so vague, no one can know what it is. Delete.

Committee Action: Considered, No Action.

PUBLIC COMMENT #115 (Kehoe 8)
Proponent: Kehoe, Brian

Guideline Change:

JURISDICTION. ~~The governmental unit that has adopted or enforces this guide.~~ As defined in the International Building Code.

Discussion: None.

Committee Action: Considered, No Action.

PUBLIC COMMENT #116 (Franzoi 1)
Proponent: Franzoi, Glenn

Guideline Change: None Proposed

Discussion: #3 Terms. Is it supposed to be POSITIVE ROOF DRAINAGE?

Committee Action: Considered, No Action.

PUBLIC COMMENT #117 (Gries 6)
Proponent: Gries, Matt

Guideline Change:

~~**POSTIVE**~~**POSITIVE ROOF DRAINAGE.** A design that accounts for deflections from all design loads and has sufficient additional slope to ensure that drainage of the roof occurs within 48 hours of precipitation.

Discussion: None provided

Committee Action: Approved as Submitted.

PUBLIC COMMENT #118 (Herrera 19.1)
Proponent: Herrera, Richardo

Guideline Change:

OWNER FIGURE. The owner, the owner's representative, or property managers responsible for all normal daily and maintenance activities for the building(s), site, and other properties as per a contract with the owner.

Discussion: None provided

Committee Action: Considered, No Action.

PUBLIC COMMENT #119 (Munsterteiger 12)
Proponent: Munsterteiger, Jeffery

Guideline Change:

QUALIFIED PROFESSIONAL. An individual who by education, experience, licensure and/or certification that has the ~~specialize~~ specialized knowledge and understanding in specific discipline(s) of building element(s), demonstrated to the approval of the *code official*, to perform assessments required by this guideline.

Commented [JM127]: Word choice- specialized seems a better fit.

Discussion: See comments in margin.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #120 (Calderone 7)
Proponent: Calderone, Brian

Guideline Change:

STRUCTURALLY DEFICIENT. Lacking the minimum capacity required by the applicable code at the time that the work was performed or code requirements for new construction, whichever are less stringent.

Discussion: None Provided.

Committee Action: Considered, No Action.

PUBLIC COMMENT #121 (Calderone 8)
Proponent: Calderone, Brian

Guideline Change:

STRUCTURAL DISTRESS. Physical indications of unfavorable performance of a structural component, element, or system. ~~An observed actual or indication of potential decreased structural capacity or potential lack of adequate a capacity due to damage, *deterioration*, or~~

~~potential alteration, as compared to apparent original condition,~~

Discussion: I have no idea what that previous definition was trying to say. If we're going to define a term for a guide, it should only be something or it's not something. Structural distress can't be a potential indication of something. It is either structural distress or it not.

Committee Action: Considered, No Action.

PUBLIC COMMENT #122 (Munsterteiger 13)
Proponent: Munsterteiger, Jeffery

Guideline Change:

STRUCTURAL DISTRESS. An observed actual or indication of potential decreased structural capacity or potential lack of adequate ~~a~~ capacity due to damage, *deterioration*, or ~~potential~~ alteration, as compared to apparent original condition,

Discussion: See comments in margin.

Committee Action: Approved as Submitted.

Commented [JM128]: Word choice- Having potential in front of alteration would imply some future alteration is what would lead to structural distress. I don't have a better choice to offer so suggest to delete the word.

PUBLIC COMMENT #123 (Manley 11)
Proponent: Manley, Bonnie

Guideline Change:

STRUCTURAL DISTRESS. An observed actual or indication of potential decreased structural capacity or potential lack of adequate a capacity due to damage, *deterioration*, or potential alteration, as compared to apparent original condition.~~,~~

Discussion: None provided.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #124 (Calderone 9)
Proponent: Calderone, Brian

Guideline Change:

STRUCTURALLY SAFE. Buildings or components thereof that provide a level of structural reliability and protection from gravity and environmental loads generally consistent with other legally occupied structures serving similar occupancies in the same region.

Discussion: None provided.

Committee Action: Considered, No Action.

PUBLIC COMMENT #125 (Kehoe 9)
Proponent: Kehoe, Brian

Guideline Change:

VACANT BUILDING. A lawfully maintained occupiable building premises which is unoccupied for a certain amount of time whether fixture or furnishings exist or not within the building.

Commented [KM129]: What is the required time: 1 hour, 1 day, 1 month, 1 year?

Discussion: See comment in margin.

Committee Action: Considered, No Action.

PUBLIC COMMENT #126 (Searer 13)
Proponent: Searer, Gwenyth

Guideline Change:

VACANT BUILDING. A lawfully maintained occupiable building premises that ~~which~~ is unoccupied for a certain amount of time whether or not fixtures or furnishings exist ~~or not~~ within the building.

Discussion: None provided.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #127 (Davidson 1)
Proponent: Davidson, Robert

Guideline Change:

4.1.1 Occupied or Vacant Buildings. Each building should be assigned a minimum frequency of required condition assessments in accordance with this section. The frequency intervals between all required condition assessments should be maintained for the life of the building. The frequency should begin on the date of the building's certificate of occupancy, or an equivalent date established by the local code official.

Exceptions – The following occupied buildings are exempted from the required condition assessments of this section:

1. Detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress, and their accessory structures not more than three stories above grade plane in height.

2. Other buildings and facilities where a national, state, or local authority and/or organization provides systematic approach to building condition assessment that is determined to provide the requisite level of occupant safety.

3. Other occupancies and building types as determined by the jurisdiction.

Discussion: I offer the following suggestion. If the structure is vacant, it should be covered regardless of occupancy.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #128 (Cook 2)
Proponent: Cook, Allison

Guideline Change:

4.1.1 Occupied or Vacant Buildings. Each building should be assigned a minimum frequency of required *condition assessments* in accordance with this section. The frequency intervals between all required *condition assessments* should be maintained for the life of the building. The frequency should begin on the date of the building's certificate of occupancy, or an equivalent date established by the local *code official*.

Exceptions – The following are exempted from the required *condition assessments* of this section:

1. ~~Detached~~ Occupied detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress, and their accessory structures not more than three stories above grade plane in height.
2. Other buildings and facilities where a national, state, or local authority and/or organization provides systematic approach to building *condition assessment* that is determined to provide the requisite level of occupant safety.
3. Other occupancies and building types as determined by the *jurisdiction.*

Discussion:

Second, under section 4.1 Required Condition Assessment, Exception 1, for detached one- and two-family dwellings and townhouses not more than three stories should be exempt only if occupied. If vacant, particularly townhouses, these buildings pose a greater risk and should have regular assessments.

Exception 3 that allows the jurisdiction to determine other exceptions could still be used for jurisdictions that do not have the personnel or resources to inspect vacant townhouses if that is a concern.

Thank you for the opportunity to provide comments as well as for all of the hard work you and the committee have put into creating a much-needed guide for code officials!

Committee Action: Considered, no action taken.

PUBLIC COMMENT #129 (Calderone 10)
Proponent: Calderone, Brian

Guideline Change:

4.1.1 Occupied or Vacant Buildings. Each building should be assigned a minimum frequency of required *condition assessments* in accordance with this section. The frequency intervals between all required *condition assessments* should be maintained for the life of the building. The frequency should begin on the date of the building's certificate of occupancy, or an equivalent date established by the local *code official*.

Exceptions – The following should likely be exempted from the required *condition assessments* of this section:

1. Detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress, and their accessory structures not more than three stories above grade plane in height.
2. Other buildings and facilities where a national, state, or local authority and/or organization provides systematic approach to building *condition assessment* that is determined to provide the requisite level of occupant safety.
3. Other occupancies and building types as determined by the *jurisdiction.*

Discussion: Make is less mandatory language.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #130 (Herrera 19.2)
Proponent: Herrera, Richardo

Guideline Change:

4.1.1 Occupied or Vacant Buildings

Each building should ~~be assigned~~ have a minimum frequency of required CAs~~condition assessments~~ in accordance with this section. The time ~~frequency~~ intervals ~~between all required condition assessments~~ should ideally be institutionalized~~maintained~~ for the life of the building. The ~~frequency~~ start date should coincide with ~~begin on~~ the date of the building's C~~c~~ertificate of O~~o~~ccupancy, or some other date that may be ~~an equivalent date~~ established by the ~~local code official.~~ AHJ.

Exceptions – The following are exempted from the required CAs~~condition assessments~~ of this section:

1. Detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height, each with a separate means of egress, and their accessory structures not more than three stories above grade plane in height.
2. Other buildings and facilities where a national, state, or local authority and/or organization ~~provides~~ establishes a systematic approach to building CAs~~condition assessment that is determined to provide the requisite level of occupant safety.~~
3. Other occupancies and building types as determined by the jurisdiction.

Discussion: None provided

Committee Action: Considered, No Action.

PUBLIC COMMENT #131 (Kehoe 10)
Proponent: Kehoe, Brian

Guideline Change:

4.1.1 Occupied or Vacant Buildings. Each building should be assigned a minimum frequency of

Commented [KM130]: Every building that is completed with a certificate of occupancy is occupied or vacant so why include these qualifiers?

required *condition assessments* in accordance with this section. The frequency intervals between all required *condition assessments* should be maintained for the life of the building. The frequency should begin on the date of the building's certificate of occupancy, or an equivalent date established by the local *code official*.

Exceptions – The following are exempted from the required *condition assessments* of this section:

1. Detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress, and their accessory structures not more than three stories above grade plane in height.
2. Other buildings and facilities where a national, state, or local authority and/or organization provides systematic approach to building *condition assessment* that is determined to provide the requisite level of occupant safety.
3. Other occupancies and building types as determined by the *jurisdiction.*

Discussion: See comment in margin.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #132 (Manley 12)
Proponent: Manley, Bonnie

Guideline Change:

4.1.1 Occupied of Vacant Buildings

Each building should be assigned a minimum frequency of required *condition assessments* in accordance with this section. The frequency intervals between all required *condition assessments* should be maintained for the life of the building. The frequency should begin on the date of the building's certificate of occupancy, or an equivalent date established by the local *code official*.

Exceptions – The following are exempted from the required *condition assessments* of this section:

1. Detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress, and their accessory structures not more than three stories above grade plane in height.
2. Other buildings and facilities where a national, state, or local authority and/or organization provides systematic approach to building *condition assessment* that is determined to provide the requisite level of occupant safety.
3. Other occupancies and building types as determined by the *jurisdiction.*

Commented [KM131]: It's inappropriate for a guideline document to exempt buildings from a condition assessment. This should be recast to state something along the lines that the code official should consider whether certain buildings and occupancies are automatically exempted from the program.
If the exemption are to stay, they should be up in Section 1 and not buried here in Section 4.

Discussion: See comment in margin.

Committee Action: Considered, no action.

PUBLIC COMMENT #133 (Herrera 20)
Proponent: Herrera, Richardo

Guideline Change:

4.1.1.1 Condition Assessment Intervals. This Gguide~~line~~ provides recommended assessment intervals ~~timeframes~~ (see Table 4) for the ~~maintenance and~~ periodic assessments and maintenance activities along with timeframes for ~~-~~other assessments where environment conditions may exist in a jurisdiction or a project site (see section 4.1.4.1). The guide's~~line~~ assessment intervals were developed for a broad range of building characteristics that may or may not exist in any specific jurisdiction. A different ~~The~~ frequency of these ~~-~~ assessments may be mandated ~~modified~~ by the AHJ, based on ~~consideration of risk category, occupancy type, occupant load, building height, known structural vulnerabilities, or other factors based on~~ the ~~-~~ specific needs of the jurisdiction. ~~Where any condition exists that either a reduction or increase in condition assessment frequency for the building is necessary, such a determination should be subject to approval of the jurisdiction.~~

Discussion: None provided

Committee Action: Considered, no action taken.

PUBLIC COMMENT #134 (Herrera 21)
Proponent: Herrera, Richardo

Guideline Change:

4.1.2 Maintenance CAs~~ondition Assessments~~. Routine maintenance plays a pivotal role in ensuring the safety of the occupants. The maintenance CA~~condition assessment~~ is intended to identify potential problems before they occur. Accordingly, maintenance CAs~~condition assessments~~ are required to be performed on all buildings at least annually, except as exempted in Section 4.1. See Section 5.1 for details.

Discussion: None provided

Committee Action: Considered, no action taken.

PUBLIC COMMENT #135 (Manley 13)
Proponent: Manley, Bonnie

Guideline Change:

4.1.2 Maintenance Condition Assessments. Routine maintenance plays a pivotal role in ensuring the safety of the occupants. The maintenance *condition assessment* is intended to identify potential problems before they occur. Accordingly, maintenance *condition assessments* are required to be performed on all buildings at least annually, except as exempted in Section 4.1. See Section 5.1 for details.

Discussion: See comment in margin.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #136 (Cavallo 1)
Proponent: Cavallo, Eric

Formatted: Highlight

Commented [KM132]: Not necessary.

Guideline Change:

4.1.2.1 Exceptions - The following exceptions will be made to the Maintenance Condition Assessments of this Section.

1. All buildings and structures within the High Hazard group H-1, H-2, H-3, H-4, H-5, and Multiple Hazard occupancies shall be required to have a Maintenance Condition Assessment biyearly.

Discussion: I read through the Existing Building Condition Assessment Guide public draft and would like to offer some feedback. Firstly, I think it's a pretty amazing tool that was put together perfectly. I've attached a PDF with the notes and suggested changes. Most notebly *(sic)* on the suggested which I'll highlight to you again here is a recommendation that an exception be included to section 4.1.2 and that the frequency in which assessments are conducted to High hazard occupancies be on a biyearly basis rather than annually.

Committee Action: Considered, no action taken.

PUBLIC COMMENT # 137 (Herrera 22)
Proponent: Herrera, Richardo

Guideline Change:

4.1.3 Supplemental CAs~~ondition Assessments.~~ Supplemental CAs~~condition assessments~~ may be necessary~~.~~ based on observations from maintenance personnel ~~condition assessments~~ to provide an additional level of reliability~~review and attention to detail.~~ See Section 5.2 for additional details.

Discussion: None provided

Committee Action: Considered, no action taken.

PUBLIC COMMENT # 138 (Herrera 23)
Proponent: Herrera, Richardo

Guideline Change:

4.1.4 Periodic CAs~~ondition Assessment.~~ Periodic CAs~~condition assessments~~ are ~~performed~~ less frequent~~ly~~ but are still ~~and are~~ intended to provide a~~n~~snapshot ~~assessment~~ of ~~the~~ conditions ~~of the existing building~~ to ensure that an unsafe ~~-~~condition does not exist or can arise. Such CAs~~condition assessments~~ should be performed in accordance with Table 4 for the building ~~structural and~~ envelope ~~system.~~ See Section 5.2 for details.

Discussion: None provided

Committee Action: Considered, no action taken.

PUBLIC COMMENT #139 (Calderone 11)
Proponent: Calderone, Brian

Guideline Change:

4.1.4.1 Periodic Condition Assessment with Environmental Factors. Environmental factors potentially shorten the life of building and system components and can warrant more frequent safety *condition assessments*, as well as more diligent attention to routine maintenance.

Discussion: Some environmental factors may warrant less attention. Particularly dry environments with non-extreme temperatures may not provide any time related environmental reasons for increased assessments.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #140 (Herrera 24)
Proponent: Herrera, Richardo

Guideline Change:

4.1.4.1 Periodic C~~ondition A~~ssessment for ~~with~~ Environmental ConditionsFactors. Environmental impacts ~~factors~~ potentially shorten the lifetime of buildings and their support system components and warrant more frequent safety CAs~~condition assessments~~, as well as more diligent attention to routine maintenance.

4.1.4.1.1 Geographic Factors. ~~Environmental factors based on~~ The geographical location typically impacts all buildings~~ within a given area or region.~~ Geographical factors may include but are not limited to extremely dry or humid climates, proximity to a corrosive environment, natural or man made, and other unique environmental conditions of the vicinity. ~~loading poor soil conditions, known termite infestation, known decay fungi and insect attack.~~

4.1.4.1.2 Site-~~specific~~ specificF~~f~~actors. Environmental factors based on site-specific conditions typically impact only the building(s) located on that site and may not apply to adjacent sites. Site-specific factors may include ~~but are not limited to:~~ work performed near the ~~assessed~~ building such as utility trenching, off-site foundation excavations and general construction~~, dewatering and installation of foundations~~.water table effects, runoff from adjacent sites, landslides and rockfalls from adjacent hillsides, etc.

4.1.4.1.3 Component~~s and Building or~~ System~~s~~ Factors. Some ~~Specific~~ building components or systems may have a higher probability of deterioration or other consequence ~~of failure~~ based on their purpose and building location. ~~, use, exterior exposure, or method of construction. Component or system factors may~~ Examples include but are not limited to: structural components ~~elements~~ projecting from or attached ~~located outside of~~to the building envelope, façade components, exterior decks and balconies, handrails, guardrails~~s~~, exterior egress systems (walkways, stairs, fire escapes), and canopies or overhangs.

Discussion: None provided

Committee Action: Considered, no action taken.

PUBLIC COMMENT #141 (Kersting 8)
Proponent: Kersting, Ryan

Guideline Change:

4.1.4 Periodic ~~Visual~~ Condition Assessment. Periodic *condition assessments* are performed less frequently and are intended to provide a~~n visual~~ assessment of the condition of the existing building to ~~ensure that~~potentially identify ~~an~~ *unsafe* condition~~s~~ ~~does not~~ that may exist. Such ~~visual~~ *condition assessments* should be performed in accordance with Table 4 for the structural and envelope system. See Section 5.2 for details.

4.1.4.1 Periodic ~~Visual~~ Condition Assessment with Environmental Factors. Environmental factors potentially shorten the life of building and system components and warrant more frequent ~~safety visual~~ *condition assessments*, as well as more diligent attention to routine maintenance.

4.1.4.1.1 Geographic Factors. Environmental factors based on geographical location typically impact all buildings within a given area or region. Geographical factors may include but are not limited to extremely dry or humid climates, proximity to a corrosive environment, high-wind events, moderate-to-strong ground shaking from earthquakes, other unique environmental loading poor soil conditions, known termite infestation, known decay fungi and insect attack.

Discussion: None provided

Committee Action: AM: The term visual is used in definition and shouldn't need clarification, delete "visual" qualification on the Condition Assessment. Other proposed changes accepted.

PUBLIC COMMENT #142 (Estrich 1)
Proponent: Estrich, Benjamin

Guideline Change:

4.1.4.1.1 Geographic Factors. Environmental factors based on geographical location typically impact all buildings within a given area or region. Geographical factors may include but are not limited to extremely dry or humid climates, proximity to a corrosive environment, winter climates with building components exposed to freeze-thaw cycling and de-icing chemicals, unique environmental loading poor soil conditions, known termite infestation, known decay fungi and insect attack.

Discussion: Section 4.1.4.1.1 Geographic Factors. Consider adding the phrase "winter climates with building components exposed to freeze-thaw cycling and de-icing chemicals" to the list of possible geographical factors.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #143 (Munsterteiger 14)

Formatted: Strikethrough
Formatted: Strikethrough
Formatted: Strikethrough
Formatted: Strikethrough
Formatted: Strikethrough

Proponent: Munsterteiger, Jeffery

Guideline Change:

4.1.4.1.1 Geographic Factors. Environmental factors based on geographical location typically impact all buildings within a given area or region. Geographical factors may include but are not limited to extremely dry or humid climates, proximity to a corrosive environment, unique environmental loading poor soil conditions, known termite infestation, known decay fungi and insect attack.

Commented [JM133]: Clarity- Is this one complete item? Or is this missing a comma?

Discussion: See comment in margin.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #144 (Estrich 2)
Proponent: Estrich, Benjamin

Guideline Change:

4.1.4.1.3 Component or System Factors. Specific building components or systems may have a higher probability or consequence of failure based on their purpose, use, exterior exposure, or method of construction. Component or system factors may include but are not limited to: exterior parking garages, structural elements located outside of the building envelope, façade components, exterior decks and balconies, handrails, guards, exterior egress systems (walkways, stairs, fire escapes), and canopies or overhangs.

Discussion: Section 4.1.4.1.3 Component or System Factors. Consider adding the phrase "exterior parking garages".

Committee Action: Considered, no action taken.

PUBLIC COMMENT: #145 (Estrich 3)
Proponent: Estrich, Benjamin

Guideline Change:

Table 4 Condition Assessment Frequencies for Existing Buildings [a]

Discipline	Maintenance Assessment [b]	Periodic Assessment Frequency [c]	Periodic Assessment Frequency with Environmental Factors [d,e,f]
General 6.1	Yearly	15	10
Structural 6.2	Yearly	15	10

Envelope 6.3	Yearly	15	10
Life Safety/MOE 6.4	Yearly	15	NA
Passive Fire Protection 6.5	Yearly	15	NA
Active Fire Protection6.6	Yearly	15	NA
Electrical 6.7	Yearly	15	NA
Plumbing 6.8	Yearly	15	NA
Mechanical 6.9	Yearly	15	NA
Fuel Gas 6.10	Yearly	15	NA

a. See Section 4.1.1 for building exempted from the required *condition assessment*.
b. See Section 5.1 for maintenance *condition assessment*.
c. The initial periodic *condition assessment* interval is relative to the original certificate of occupancy.
d. The AHJ should consider implementing more-frequent periodic assessments based on the types and severity of environmental factors that are present. The frequency and scope of such assessments when environmental factors are present may vary for different construction types and materials relative to the environmental hazards present. The 10-year recommendation is used to indicate the frequency of assessments should be in this timeframe or shorter, depending on the decision of the AHJ when environmental hazards are present.
e. Periodic assessment frequency for buildings 25-years old or older in exterior winter climate exposures should be reduced to 5-year intervals.
f. See 4.1.4.1.1, 4.1.4.1.2 and 4.1.4.1.3

Discussion: Table 4 Condition Assessment Frequencies for Existing Buildings. Consider adding a footnote that periodic assessment frequency for buildings 25-years old or older in exterior winter climate exposures should be reduced to 5-year intervals

Committee Action: Considered, no action taken.

PUBLIC COMMENT # 146 (Hugo 3)
Proponent: Hugo, Jeffrey

Guideline Change:

Table 4 Condition Assessment Frequencies for Existing Buildings
Periodic Assessment Frequency in Years…Periodic Assessment Frequency with Environmental Factors in Years

Discussion: Seems obvious but the length of time should be noted. Perhaps in a footnote?

Committee Action: Approved as Submitted.

PUBLIC COMMENT #147 (Manley 14)
Proponent: Manley, Bonnie

Guideline Change:

Table 4 Condition Assessment Frequencies for Existing Buildings [a]

Discipline	Maintenance Assessment [b]	Periodic Assessment Frequency [c]	Periodic Assessment Frequency with Environmental Factors [d,e]
General 6.1	Yearly	15	10
Structural 6.2	Yearly	15	10
Envelope 6.3	Yearly	15	10
Life Safety/MOE 6.4	Yearly	15	NA
Passive Fire Protection 6.5	Yearly	15	NA
Active Fire Protection6.6	Yearly	15	NA
Electrical 6.7	Yearly	15	NA
Plumbing 6.8	Yearly	15	NA
Mechanical 6.9	Yearly	15	NA
Fuel Gas 6.10	Yearly	15	NA

a. See Section 4.1.1 for building exempted from the required *condition assessment*.
b. See Section 5.1 for maintenance *condition assessment*.
c. The initial periodic *condition assessment* interval is relative to the original certificate of occupancy.
d. The AHJ should consider implementing more-frequent periodic assessments based on the types and severity of environmental factors that are present. The frequency and scope of such assessments when environmental factors are present may vary for different construction types and materials relative to the environmental hazards present. The 10-year recommendation is used to indicate the frequency of assessments should be in this timeframe or shorter, depending on the decision of the AHJ when environmental hazards are present.
e. See 4.1.4.1.1, 4.1.4.1.2 and 4.1.4.1.3

Commented [KM134]: What do the numbers refer to? This needs to be clarified in the table notes or column heading.

Commented [KM135]: Again, not necessary to repeat this.

Discussion: See comments in margin.

Committee Action: Approved as Modified, add" /Section #" in header.

PUBLIC COMMENT #148 (Herrera 25)
Proponent: Herrera, Richardo

Guideline Change:

4.2 Vacant Buildings. These ~~Each~~ buildings should be assigned a minimum amount of ~~frequency of required~~ CA~~condition assessments~~ visits in accordance with Table 4. ~~, above.~~

Discussion: None provided

Committee Action: Considered, no action taken.

PUBLIC COMMENT #149 (Kehoe 11)

Proponent: Kehoe, Brian

Guideline Change:

4.2 Vacant Buildings. Each building should be assigned a minimum frequency of required *condition assessments* in accordance with Table 4, above.

Discussion: Since 4.1.1 applies to occupied and vacant buildings, this section is redundant.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #150 (Gries 7)
Proponent: Gries, Matt

Guideline Change:

4.2 Vacant Buildings. Each building should be assigned a minimum frequency based on its proximity and risk to the surrounding public~~of required *condition assessments* in accordance with Table 4, above~~.

Commented [MG136]: I disagree that this requirement is applicable. Unless the structure poses a threat to the adjacent public, why force this on a building owner? In my opinion, a façade inspection may be worthwhile if the area around the building is publicly accessible.

Discussion: See comments in margin.

Committee Action: Considered, No Action.

PUBLIC COMMENT #151 (Manley 15)
Proponent: Name

Guideline Change:

4.2 Vacant Building. Each building should be assigned a minimum frequency of required *condition assessments* in accordance with Table 4, above.

Commented [KM137]: Not necessary.

Discussion: See comment in margin.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #152 (Cook 3)
Proponent: Cook, Allison

Guideline Change:

4.3 Abandoned Buildings. Buildings, structures and premises for which an *owner* cannot be identified or located by dispatch of a certificate of mailing to the last known or registered address, which persistently or repeatedly become unprotected or unsecured, which have been occupied by unauthorized persons or for illegal purposes, or which present a danger of structural collapse or fire spread to adjacent properties should be considered to be abandoned, declared *unsafe* and abated by demolition or rehabilitation in accordance with the *International Property Maintenance Code* and the *International Existing Building Code*.

Discussion:

Finally, section 4.3 Abandoned Buildings. makes reference to "rehabilitation in accordance with the International Property Maintenance Code and the International Building Code" but I believe the International Existing Building Code would be a more appropriate reference than the IBC.

Thank you for the opportunity to provide comments as well as for all of the hard work you and the committee have put into creating a much-needed guide for code officials!

Committee Action: Approved as Submitted.

PUBLIC COMMENT #153 (Herrera 26)
Proponent: Herrera, Richardo

Guideline Change:

4.3 Abandoned Buildings. Buildings, structures and premises for which an owner cannot be identified or located ~~by dispatch of a certificate of mailing to the last known or registered address,~~ which persistently or repeatedly become unprotected or unsecured, which have been occupied by unauthorized persons or for illegal purposes, or which present a danger of structural collapse ~~or fire spread to adjacent properties~~ should be considered to be abandoned, declared unsafe and abated by sale as is, demolition or rehabilitation in accordance with the IPMC~~nternational Property Maintenance Code~~ and the IEBC~~nternational Building Code.~~

4.3.1 Abandoned buildings due for Periodic Assessments can remain for a period of up to two ~~five~~ years without an assessment if ~~when~~ scheduled for demolition,and with –all utilities remain disconnected, ~~and the building remains unoccupied.~~

Discussion: None provided

Committee Action: Considered, no action taken.

PUBLIC COMMENT #154 (Munsterteiger 15)
Proponent: Munsterteiger, Jeffery

Guideline Change:

4.1 Abandoned Buildings. Buildings, structures and premises for which an *owner* cannot be identified or located by dispatch of a certificate of mailing to the last known or registered address, which persistently or repeatedly become unprotected or unsecured, which have been occupied by unauthorized persons or for illegal purposes, or which present a danger of structural collapse or fire spread to adjacent properties should be considered to be abandoned, declared *unsafe* and abated by demolition or rehabilitation in accordance with the *International Property Maintenance Code* and the *International Building Code or in accordance with state or local statute or regulation*.

Commented [JM138]: For clarity- Some jurisdictions may regulate the abatement of hazardous buildings and structures outside of the building code process.

Discussion: See comment in margin.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #155 (Manley 16)
Proponent: Manley, Bonnie

Guideline Change:

4.3 Abandoned Buildings. Buildings, structures and premises for which an *owner* cannot be identified or located by dispatch of a certificate of mailing to the last known or registered address, which persistently or repeatedly become unprotected or unsecured, which have been occupied by unauthorized persons or for illegal purposes, or which present a danger of structural collapse or fire spread to adjacent properties should be considered to be abandoned, declared *unsafe* and abated by demolition or rehabilitation in accordance with the International Property Maintenance Code and the International Building Code.

Commented [KM139]: This is a run-on sentence. It should be converted into a list.

Discussion: See comment in margin.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #156 (Herrera 27)
Proponent: Herrera, Richardo

Guideline Change:

5. BUILDING CONDITION ASSESSMENT SCOPE AND QUALIFICATIONS

The CAs~~condition assessments~~ noted in this Guide~~guideline~~ should include the following requirements~~observations~~:

Discussion: None provided

Committee Action: Considered, no action taken.

PUBLIC COMMENT #157 (Calderone 12)
Proponent: Calderone, Brian

Guideline Change:

5.1 Maintenance Condition Assessment

Maintenance *condition assessment* required by Section 4.1.2 should be visual surveillance by the *owner* or *owner*'s authorized representative and include the *condition assessment* of the building for obvious defects or damage and the documentation thereof.

Maintenance *condition assessments*, which are less detailed but more frequent, are intended to recommend a supplemental *condition assessment* when observations warrant an additional level of review. ~~Surface imperfections such as cracks, distortion, sagging, excessive deflections,~~

~~significant misalignment, signs of water leakage or water ponding, and peeling of finishes should be viewed critically as indications of possible structural vulnerability and of need of~~ Structural components that exhibit characteristics that differ significantly from their intended original construction may warrant a supplement *condition assessment*.

Maintenance *condition assessments* that identify signs of *deterioration*, conditions that could cause potential future *deterioration*, or suspected reduction of capacity or function, should result in a notification to the *owner* that a supplemental *condition assessment* *or mitigation action may be warranted*. ~~is required to be conducted by a *registered design professional* or another *qualified professional* with the necessary expertise and experience.~~

Written reports should be ~~required~~ performed for all *condition assessment* and note the description of the type of *condition assessment* and how the *condition assessment* was performed, noting problem areas and recommended repairs. All repairs requiring a building permit shall be submitted and approved by the *code official*.

Discussion: Removed the mandatory language. Not every condition that could result in deterioration someday maybe, would require an additional condition assessment. It's possible that some of them might, that's possible that some of them might not need anything, and it's also totally reasonable for them to just patch the roof, or change out the light in the exit sign, without performing a supplemental condition assessment.
Committee Action: Consider, no action taken.

PUBLIC COMMENT #158 (Herrera 28)
Proponent: Herrera, Richardo

Guideline Change:

5.1 Maintenance C~~**ondition Assessment**~~ Maintenance CA~~condition assessment~~ required by Section 4.1.2 should be visual in nature ~~surveillance~~ performed by ~~by~~ the owner ~~or owner's authorized representative~~ and include the CA~~condition assessment~~ of the entire building for obvious defects or damage, all of which must be documented ~~and the documentation thereof.~~

Maintenance CA~~condition assessments~~, which are less detailed in scope but more frequent, are intended to recommend a supplemental CA~~condition assessment~~ when observations warrant more ~~an additional level of~~ review. Surface imperfections such as cracks, finish distortion or ~~,~~ sagging, excessive deflections, significant misalignment at joints, signs of water leakage or water ponding, and peeling of finishes should be viewed critically as indications of possible structural vulnerability and a clear ~~of~~ need of a supplement CA~~condition assessment~~.

Maintenance CA~~condition assessments~~ that uncover ~~identify~~ signs of deterioration, other conditions that could cause potential future deterioration, or circumstantial evidence of suspected reduction of capacity or function, should result in a notification to the owner that a supplemental CA~~condition assessment~~ is required and that it ~~to~~ needs to be conducted by a registered design professional or another qualified professional with the necessary subject matter expertise and experience.

Written reports should be required for all CA~~condition assessment~~ that specify ~~and note the description of~~ the type of CA~~condition assessment~~ performed, ~~and~~ how the CA~~condition assessment~~ was performed, noting all problem areas and recommended repairs, as well as the limitations of the CA. All repairs requiring a building permit shall be submitted and approved by the AHJ ~~code official.~~

Discussion: None provided

Committee Action: Consider, no action taken.

PUBLIC COMMENT #159 (Munsterteiger 16)
Proponent: Munsterteiger, Jeffery

Guideline Change:

5.1 Maintenance Condition Assessment

Maintenance *condition assessment* required by Section 4.1.2 should be visual surveillance by the *owner* or *owner*'s authorized representative and include the *condition assessment* of the building for obvious defects or damage and the documentation thereof.

Maintenance *condition assessment*s, which are less detailed but more frequent, are intended to recommend a supplemental *condition assessment* when observations warrant an additional level of review. Surface imperfections such as cracks, distortion, sagging, excessive deflections, significant misalignment, signs of water leakage or water ponding, and peeling of finishes should be viewed critically as indications of possible structural vulnerability and of need of a supplement *condition assessment*.

Maintenance *condition assessment*s that identify signs of *deterioration*, conditions that could cause potential future *deterioration*, or suspected reduction of capacity or function, should result in a notification to the *owner* that a supplemental *condition assessment* is required to be conducted by a *registered design professional* or another *qualified professional* with the necessary expertise and experience.

Written reports should be required for all *condition assessment*s ~~and note the description of~~detailing the type of *condition assessment* and how ~~the *condition assessment* it~~ was performed, noting problem areas and recommended repairs. All repairs requiring a building permit shall be submitted and approved by the *code official*.

Commented [JM140]: Readability- Rewrite to improve readability.

Discussion: See comments in margin.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #160 (Manley 17)
Proponent: Manley, Bonnie

Guideline Change:

5.1 Maintenance Condition Assessment.

Maintenance *condition assessment* required by Section 4.1.2 should be visual surveillance by the *owner* or *owner*'s authorized representative and include the *condition assessment* of the building for obvious defects or damage and the documentation thereof.

Maintenance *condition assessments*, which are less detailed but more frequent, are intended to recommend a supplemental *condition assessment* when observations warrant an additional level of review. Surface imperfections such as cracks, distortion, sagging, excessive deflections, significant misalignment, signs of water leakage or water ponding, and peeling of finishes should be viewed critically as indications of possible structural vulnerability and of need of a supplement *condition assessment*.

Maintenance *condition assessments* that identify signs of *deterioration*, conditions that could cause potential future *deterioration*, or suspected reduction of capacity or function, should result in a notification to the *owner* that a supplemental *condition assessment* is required to be conducted by a *registered design professional* or another *qualified professional* with the necessary expertise and experience.

Written reports should be required for all *condition assessment* and note the description of the type of *condition assessment* and how the *condition assessment* was performed, noting problem areas and recommended repairs. ~~All repairs requiring a building permit shall be submitted and approved by the *code official*.~~

Discussion: See comment in margin.

Committee Action: Approved with Intent to Modify, see track changes, above.

PUBLIC COMMENT #161 (Calderone 13)
Proponent: Calderone, Brian

Guideline Change:

5.2 Supplemental Condition Assessment

Supplemental *condition assessment* ~~required by~~ performed in response to the results of a maintenance *condition assessment* should be a visual *condition assessment* performed by a *registered design professional* (RDP) or *Qualified Professional*. At a minimum, the *condition assessment* must be conducted throughout all habitable and non-habitable areas of the building, as deemed necessary by the RDP to determine if an *unsafe* condition exists.

The *owner* or *owner*'s authorized representative, other than the contractor, may employ one or more approved *registered design professionals* or *qualified professionals* to provide supplemental visual *condition assessment*.

All *condition assessment* results, as well as any corrective measures necessary, ~~must~~ should be documented and ~~should~~ in some cases, may be provided to the *code official*.

The *registered design professional* or *qualified professional* ~~shall~~ *should* notify the *code official* immediately of any *imminent danger* which requires immediate action by the code official to ensure occupant safety. ~~This may result in immediate occupant evacuation as directed by the *code official*.~~

Discussion: See comments in margin.

Committee Action: Considered, No Action Taken, see PC 166

PUBLIC COMMENT #162 (Herrera 29)
Proponent: Herrera, Richardo

Commented [KM141]: Again, mandatory language is not appropriate here. If desired, simply extract the relevant requirement from the I-Code as an example.

Commented [BC142]: Mandatory language.

Commented [BC143]: Mandatory language. How should we force someone to go through all the non-habitable portions of a building.

Commented [BC144]: Depending on what was identified during the maintenance assessment, a visual assessment might be entirely useless. Let's say a maintenance assessment safe a crack they didn't like, and the engineer for the supplemental assessment comes out and goes yep my visual assessment confirmed that's a crack. I have no idea of its significance until I perform an evaluation or do a bunch of other work potentially, please pay me for the visual assessment because you followed this guide. The point is there are a enormous number of circumstances that a maintenance assessment may lead to a supplemental assessment, what should be done during that supplemental assessment would depend entirely on the circumstances that led to its request. Suggesting that it should be a visual only doesn't necessarily make sense

Commented [BC145]: Really? Do code officials in all (or most) jurisdictions really want every assessment report done? There's literally hundreds of jurisdictions in the United States (especially smaller and more rural regions) where the code official might be on a part-time basis with no staff. Even for large jurisdictions in metropolitan areas, how many billing departments would be able to take in potentially tens of thousands or hundreds of a thousands of assessments annually. What good would all that information be. Is that being done now widely?

Commented [BC146]: If you identified an imminently dangerous guardrail on a balcony, would you really call the building official immediately., or would you just close off the balcony till the owner and not let anyone out there until they fix the guardrail? Same would be true for perhaps an overhead incipient spall in a precarious location, I don't think that all imminently dangerous conditions require prompt notification of the building official. I think most imminently dangerous situations that are identified are addressed between the professional and the building owner. Further still it's incredibly rare to identify at least a structural condition that would require evacuation of an entire building.

Guideline Change:

5.2 Supplemental CA~~ondition Assessment~~.

Supplemental CA~~condition assessment~~ required by the results of a maintenance CA~~condition assessment~~ should be a visual CA~~condition assessment~~ performed by a registered design professional (RDP) or a Qualified Professional (QP). At a minimum, the CA~~condition assessment~~ must be conducted throughout all occupied ~~habitable~~ and regularly un~~non-~~occupied ~~habitable~~ areas of the building, as deemed necessary by the RDP or QP to determine if an unsafe condition exists there.

The owner ~~or owner's authorized representative, other than the contractor,~~ may employ one or more RDPs~~approved registered design professionals or qualified professionals~~or QP to provide the supplemental visual CA~~condition assessment.~~

All CA ~~condition assessment~~ results, as well as any corrective measures necessary, must be documented and included in the report that must ~~should~~ be provided to the AHJ~~code official.~~

The RDP ~~registered design professional~~ or QP ~~qualified professional~~ shall notify the AHJ ~~code official~~ immediately of any condition of apparent imminent danger which requires immediate action to ensure occupant safety. A decision for ~~This may result in~~ immediate ~~occupant~~ evacuation is the responsibility of the AHJ~~as directed by the code official.~~

Discussion: None provided

Committee Action: Considered, No Action Taken.

PUBLIC COMMENT #163 (Munsterteiger 17)
Proponent: Munsterteiger, Jeffery

Guideline Change:

5.2 Supplemental Condition Assessment

Supplemental *condition assessments* required by the results of a maintenance *condition assessment* should be a visual *condition assessment* performed by a *registered design professional* (RDP) or *Qualified Professional*. At a minimum, the *condition assessment* must be conducted throughout all habitable and non-habitable areas of the building, as deemed necessary by the RDP to determine if an *unsafe* condition exists.

The *owner* or *owner*'s authorized representative~~, other than the contractor,~~ may employ one or more approved *registered design professionals* or *qualified professionals* to provide supplemental visual *condition assessment*.

All *condition assessment* results, as well as any corrective measures necessary, must be documented and should be provided to the *code official*.

Commented [JM147]: Out of scope- This should not be limited by this document.

The *registered design professional* or *qualified professional* shall notify the *code official* immediately of any *imminent danger* which requires immediate action to ensure occupant safety. This may result in immediate occupant evacuation as directed by the *code official*.

Discussion: See comment in margin.

Committee Action: Considered, No Action Taken.

PUBLIC COMMENT #164 (Manley 18)
Proponent: Manley, Bonnie

Guideline Change:

5.2 Supplemental Condition Assessment.

Supplemental *condition assessment* required by the results of a maintenance *condition assessment* should be a visual *condition assessment* performed by a *registered design professional* (RDP) or *Qualified Professional*. At a minimum, the *condition assessment* must be conducted throughout all habitable and non-habitable areas of the building, as deemed necessary by the RDP or qualified professional to determine if an *unsafe* condition exists.

The *owner* or *owner*'s authorized representative, other than the contractor, may employ one or more approved *registered design professionals* or *qualified professionals* to provide supplemental visual *condition assessment*.

All *condition assessment* results, as well as any corrective measures necessary, must be documented and should be provided to the *code official*.

The *registered design professional* or *qualified professional* shall notify the *code official* immediately of any *imminent danger* which requires immediate action to ensure occupant safety. This may result in immediate occupant evacuation as directed by the *code official*.

Commented [KM148]: Again, mandatory language is not appropriate here. If desired, simply extract the relevant requirement from the I-Code as an example.

Discussion: See comment in margin.

Committee Action: Approved as Submitted. (note italicized/defined term issue here).

PUBLIC COMMENT #165 (Bloch 8)
Proponent: Cavallo, Eric

Guideline Change:

5.2 Supplemental Condition Assessment

Supplemental *condition assessment* required by the results of a maintenance *condition assessment* should be a visual *condition assessment* performed by a *registered design professional* (RDP) or *Qualified Professional*. At a minimum, the *condition assessment* must be conducted throughout all habitable and non-habitable areas of the building, as deemed necessary by the RDP to determine if an *unsafe* condition exists.

The *owner* or *owner*'s authorized representative, other than the contractor, may employ one or more approved *registered design professionals* or *qualified professionals* to provide supplemental visual *condition assessment*.

All *condition assessment* results, as well as any corrective measures necessary, must be documented and should be provided to the *code official*.

The *registered design professional* or *qualified professional* shall notify the *code official* immediately of any *imminent danger* which requires immediate action to ensure occupant safety. This may result in immediate occupant evacuation as directed by the *code official*.

Discussion: See comment in margin.

Committee Action: Considered, No Action

Commented [KM149]: Can this document mandate or is this? I am concerned that if it isn't required to be provided to the code official, corrective measures, specifically, may not be documented - what is done with the documentation.

Formatted: Indent: Left: 0.5"

PUBLIC COMMENT #166 (Kersting 9)
Proponent: Kersting, Ryan

Guideline Change:

5.2 Supplemental Condition Assessment

…

The *registered design professional* or *qualified professional* shall notify the owner and the *code official* immediately of any *imminent danger* ~~which~~ that was observed and requires immediate action to ensure occupant safety. This may result in immediate occupant evacuation as directed by the *code official*. In the event that an imminent hazard or dangerous condition was observed, the owner or owner authorized agent shall take immediate action to protect the public.

Discussion: None provided

Committee Action: Approved as Submitted.

PUBLIC COMMENT #167 (Cavallo 2)
Proponent: Cavallo, Eric

Guideline Change:

5.3 Periodic Condition Assessment.

….

The owner should keep records of condition assessments and tests for the life of the building and should submit reports of condition assessments and tests ~~.~~ to the code official.

…

Discussion: I read through the Existing Building Condition Assessment Guide public draft and would like to offer some feedback. Firstly, I think it's a pretty amazing tool that was put together perfectly. I've attached a PDF with the notes and suggested changes. Most notebly *(sic)* on the suggested which I'll highlight to you again here is a recommendation that an exception be included to section 4.1.2 and that

the frequency in which assessments are conducted to High hazard occupancies be on a biyearly basis rather than annually.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #168 (Herrera 30)
Proponent: Herrera, Ricardo

Guideline Change:

5.3 Periodic CA~~ondition Assessment~~ Periodic CA~~ondition Assessments~~ required by Table 4 should be performed by a RDP ~~registered design professional.~~ The owner ~~or owner's~~ ~~authorized representative~~ may employ one or more RDPs ~~registered design professionals.~~ who ~~The registered design professional shall be~~ are qualified and registered in the discipline associated with ~~for~~ the system being evaluated in accordance with the professional registration laws of the state or jurisdiction in which the building is located. See Appendix C for Recommended Periodic CA~~ondition Assessment~~ Checklists for each of the disciplines covered in this guide.

Periodic Assessments established by Table 4 take~~s~~ into account different circumstances ~~cycles~~ depending on the building's exposure to varying environmental factors. The initial event ~~cycle~~ occurs when ~~from the date the C~~ertificate of Occupancy is first issued, or at an alternate date established by the AHJ~~code official.~~

The RDP should submit ~~provide~~ a final report to the owner, documenting the results of the CA~~condition assessment~~ and any additional recommended follow up steps.

The owner should keep all records of CA ~~condition assessments~~ and tests for the lifetime of the building and should submit reports of CAs~~condition assessments~~ and tests~~.~~ to the AHJ ~~code official.~~ When so requested.

The RDP ~~registered design professional~~ shall notify the AHJ ~~code offici~~al immediately of any situation of imminent danger that requires immediate action to ensure occupant safety. ~~This may result in immediate occupant evacuation as directed by the code official.~~

The AHJ ~~code official~~ may require additional CA~~condition assessments~~ as necessary to approve the corrective action(s) necessary.

Discussion: None provided.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #169 (Munsterteiger 18)
Proponent: Munsterteiger, Jeffery

Guideline Change:

5.3 Periodic Condition Assessment

Periodic *Condition Assessment*s required by Table 4 should be performed by a *registered design professional*. The owner or *owner*'s authorized representative may employ one or more *registered design professionals*. The *registered design professional* shall be qualified and registered in the discipline for the system being evaluated in accordance with the professional registration laws of the state or jurisdiction in which the building is located. See Appendix C for Recommended Periodic *Condition Assessment* Checklists for each of the disciplines covered in this guide.

Periodic Assessments established by Table 4 take into account different cycles depending on the building's exposure to varying environmental factors. The initial cycle occurs from the date the certificate of occupancy is issued, or an alternate date established by the *code official*.

The RDP should provide a final report to the *owner*, documenting the results of the *condition assessment* and ~~additional recommended~~ follow up steps.

Commented [JM150]: Clarification- These words seem unnecessary qualifiers, RDP should provide the follow-up steps.

The *owner* should keep records of *condition assessment*s and tests for the life of the building and should submit reports of *condition assessment*s and tests to the *code official.*

The *registered design professional* shall promptly notify the *code official* ~~immediately~~ of any *imminent danger* that requires immediate action to ensure occupant safety. This may result in ~~immediate~~ occupant evacuation as directed by the *code official*.

Commented [JM151]: Readability, the word immediate appeared three times in two sentences. Suggesting changes for readability without loosing emphasis.

The *code official* may require additional *condition assessment*s as necessary to approve the corrective action(s) necessary.

Discussion: See comment in margin.

Committee Action: Approved as Modified (changes to 5th paragraph only).

PUBLIC COMMENT #170 (Hugo 4)
Proponent: Hugo, Jeffrey

Guideline Change:

5.3 Periodic Condition Assessment
Periodic Condition Assessments required by Table 4 should be performed by a registered design Professional or qualified professional where approved by the ~~fire~~ code official. The owner or owner's authorized representative may employ one or more registered design professionals. The registered design professional shall be qualified and registered in the discipline for the system being evaluated in accordance with the professional registration laws of the state or jurisdiction in which the building is located. See Appendix C for Recommended Periodic Condition Assessment Checklists for each of the disciplines covered in this guide.

Discussion: In Section 6.6, items 1,2,4,5,6,7,8 are inspected annually or more frequently in the maintenance standards, i.e., NFPA 25 (for example, see Section 5.2.1.1.1) and NFPA 72 by qualified professionals now. Several are also covered by IFC Appendix I and where adopted are inspected by code officials. Requiring a registered design professional to review at 15-year frequencies, when it is already done annually, seems redundant and outside their scope of practice. Furthermore, the owners will have the records of these inspections on their facilities.

Committee Action: Approved as Modified. Remove term "fire" where proposed, the appropriate code official should approve the use of a qualified professional.

PUBLIC COMMENT #171 (Manley 19)
Proponent: Manley, Bonnie

Guideline Change:

5.3 Periodic Condition Assessment.

Periodic *Condition Assessment*s required by Table 4 should be performed by a *registered design professional*. The owner or *owner*'s authorized representative may employ one or more *registered design professionals*. The *registered design professional* shall be qualified and registered in the discipline for the system being evaluated in accordance with the professionalregistration laws of the state or jurisdiction in which the building is located. See Appendix C for Recommended Periodic *Condition Assessment* Checklists for each of the disciplines covered in this guide.

Periodic Assessments established by Table 4 take into account different cycles depending on the building's exposure to varying environmental factors. The initial cycle occurs from the date the certificate of occupancy is issued, or an alternate date established by the *code official*.

The RDP should provide a final report to the *owner*, documenting the results of the *condition assessment* and additional recommended follow up steps.

The *owner* should keep records of *condition assessment*s and tests for the life of the building and should submit reports of *condition assessment*s and tests.to the *code official.*

The *registered design professional* shall notify the *code official* immediately of any *imminent danger* that requires immediate action to ensure occupant safety. This may result in immediate occupant evacuation as directed by the *code official*.

The *code official* may require additional *condition assessment*s as necessary to approve the correctiveaction(s) necessary.

Discussion: See comments in margin.

Committee Action: Considered, no action taken.

Commented [KM152]: Again, mandatory language is not appropriate here. If desired, simply extract the relevant requirement from the I-Code as an example.

Commented [KM153]: While this is ideal, it is far from practical. Also, this seems to be better covered in Section 7.0. Consider deleting this here or pointing to Section 7.0.

Commented [KM154]: Again, mandatory language is not appropriate here. If desired, simply extract the relevant requirement from the I-Code as an example.

PUBLIC COMMENT #172 (Kersting 10)
Proponent: Kersting, Ryan

Guideline Change:

5.3 Periodic Visual Condition Assessment

Periodic Visual *Condition Assessment*s required by Table 4 should be performed by a *registered design professional*. The owner or *owner*'s authorized representative may employ one or more *registered design professionals*. The *registered design professional* shall be qualified and registered in the discipline for the system being evaluated in accordance with the professional registration laws of the state or jurisdiction in which the building is located. See Appendix C for Recommended Periodic Visual *Condition Assessment* Checklists for each of the disciplines covered in this guide.

Periodic Visual Assessments established by Table 4 take into account different cycles depending on the building's exposure to varying environmental factors. The initial cycle occurs from the date the certificate of occupancy is issued, or an alternate date established by the *code official*.
The RDP should provide a final report to the *owner*, documenting the results of the *condition assessment* and additional recommended follow up steps.

The *owner* should keep records of *condition assessment*s and tests for the life of the building and should submit reports of *condition assessment*s and tests.to the *code official.*

The *registered design professional* shall notify the owner and the *code official* immediately of any *imminent danger* that was observed and requires immediate action to ensure occupant safety. This may result in immediate occupant evacuation as directed by the *code official*. In the event that an imminent hazard or dangerous condition was observed, the owner or owner authorized agent shall take immediate action to protect the public.
The *code official* may require additional *condition assessment*s as necessary to approve the corrective action(s) necessary.

The *registered design professional* or *qualified professional* shall notify the owner and the *code official* immediately of any *imminent danger* ~~which~~ that was observed and requires immediate action to ensure occupant safety. This may result in immediate occupant evacuation as directed by the *code official*. In the event that an imminent hazard or dangerous condition was observed, the owner or owner authorized agent shall take immediate action to protect the public.

Discussion: None provided

Committee Action: Considered, No Action Taken.

PUBLIC COMMENT #173 (Calderone 14)
Proponent: Cavallo, Eric

Guideline Change:

6. CONDITION ASSESSMENT TYPES OF INSPECTIONS

Periodic *condition assessment*s are intended to be a visual in nature of the system where accessible. The following is the recommended scope of *condition assessments*. ~~necessary to ensure buildings are evaluated for a general assurance that no *unsafe* conditions exist in the building~~. As stated previously, existing buildings are unique which may warrant individual attention and *condition assessment*s customized to address potential hazards to the occupants and the public. The elements to be assessed should be in accordance with the code in which it was built under and, where adopted, the provisions of Chapter 11 of the

See Appendix C for Recommended Periodic *Condition Assessment* Checklists for each of the disciplines covered in this guide.

Discussion: There is nothing about a visual assessment that could generally assure no unsafe conditions exist in the building. As noted earlier in the document, unsafe conditions associated with inherent design or construction defects could exist and not be identified if such conditions did not exhibit distress at the time of the assessment. And unsafe existing conditions could exist in concealed elements that were not exposed, accessible or otherwise assessed. At most, the visual assessment identifies the presence or

absence of evidence of distress in observed components. Saying that it does any more than this is wrong and will mislead the users of the document and the public.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #174 (Herrera 31)
Proponent: Herrera, Richardo

Guideline Change:

6. ~~**CONDITION ASSESSMENT**~~ **TYPES OF CA INSPECTIONS**

Periodic CAs~~condition assessments~~ are intended to be ~~a~~ visual in nature of the building system wherever they accessible. The following sections provide ~~is~~ the recommended scope of CAs~~condition assessments~~ necessary to ensure ~~buildings are evaluated for a general assurance~~ that no unsafe conditions exist in the building. ~~As stated previously, existing buildings are unique which may warrant individual attention and condition assessments customized to address potential hazards to the occupants and the public.~~ The system components ~~elements~~ to be assessed should be in accordance with ~~the code in which it was built under and, where adopted,~~ the provisions of Chapter 11 of the IFC ~~nternational Fire Code~~.

See Appendix C for Recommended Periodic Condition Assessment Checklists for each of the disciplines covered in this Gguide.

Discussion: None provided

Committee Action: Considered, no action taken.

PUBLIC COMMENT #175 (Kehoe 12)
Proponent: Kehoe, Brian

Guideline Change:

6. CONDITION ASSESSMENT TYPES ~~OF INSPECTIONS~~

Discussion: A condition assessment is NOT an inspection

Committee Action: Approved as Submitted.

PUBLIC COMMENT # 176 (Munsterteiger 19)
Proponent: Munsterteiger, Jeffery

Guideline Change:

6. CONDITION ASSESSMENT TYPES OF INSPECTIONS

Periodic *condition assessment*s are intended to be ~~a~~ visual in nature of the system where accessible. The following is the recommended scope of *condition assessment*s necessary to ensure buildings are

evaluated for a general assurance that no *unsafe* conditions exist ~~in the building~~. As stated previously, existing buildings are unique which may warrant individual attention and *condition assessment*s customized to address potential hazards to the occupants and the public. ~~The elements to be assessed should be in accordance with the code in which it was built under and, where adopted, the provisions of Chapter 11 of the *International Fire Code*.~~

See Appendix C for Recommended Periodic *Condition Assessment* Checklists for each of the disciplines covered in this guide.

Discussion: See comment in margin.

Committee Action: Approved as Submitted.

PUBLIC COMMENT # 177 (Manley 20)
Proponent: Manley, Bonnie

Guideline Change:

6. Condition Assessment Types of Inspections

Periodic *condition assessment*s are intended to be a visual in nature of the system where accessible. The following is the recommended scope of *condition assessment*s necessary to ensure buildings are evaluated for a general assurance that no *unsafe* conditions exist in the building. As stated previously, existing buildings are unique which may warrant individual attention and *condition assessment*s customized to address potential hazards to the occupants and the public. The elements to be assessed should be in accordance with the code in which it was built under and, where adopted, the provisions of Chapter 11 of the *International Fire Code*.

See Appendix C for Recommended Periodic *Condition Assessment* Checklists for each of the disciplines covered in this guide.

Discussion: See comment in margin.

Committee Action: Considered No Action, based on previous action #176.

PUBLIC COMMENT # 178 (Kersting 11)
Proponent: Kersting, Ryan

Guideline Change:

6. SCOPE OF PERIODIC CONDITION ASSESSMENTS ~~TYPES OF INSPECTIONS~~

Periodic *condition assessment*s are intended to be ~~a~~ visual in nature of the system where accessible, including those areas that can be exposed and accessed through reasonable non-destructive means. The following is the recommended scope of periodic visual *condition assessment*s necessary to ensure buildings are evaluated to potentially identify unsafe conditions that may exist ~~for a general assurance that no *unsafe* conditions exist in the building~~. As stated previously, existing buildings are unique which may warrant individual attention and *condition assessment*s customized to address potential hazards to the occupants and the public. …

Commented [JM155]: Out of scope- These statement is not in line with the introduction that says determining compliance with original construction documents and permitting requirements is outside the scope of the guideline.

Commented [KM156R155]: 19

Commented [JM157]: Out of scope- Compliance with Fire Code is outside the scope of this and should be left up to the local jurisdiction adopting the Fire code.

Commented [KM158]: This statement should recognize that local jurisdictions may have specialized requirements beyond this.

Discussion: None Provided.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #179 (Herrera 32)
Proponent: Herrera, Richardo

Guideline Change:

6.1 General: It is important that:

1. The The current use of the building is consistent with the ~~issued~~ original Certificate ~~ion~~ of Occupancy or the last available document for ~~known~~ approved use or occupancy.

2. Additions, alterations, and repairs of the building have been properly permitted and inspected by the AHJ ~~jurisdiction~~, where required.

Discussion: None provided

Committee Action: Considered, no action taken.

PUBLIC COMMENT #180 (Munsterteiger 20)
Proponent: Munsterteiger, Jeffery

Guideline Change:

6.1 General:

~~1. The use of the building is consistent with the issued Certification of Occupancy or the last known approved use or occupancy.~~
~~2. Additions, alterations, and repairs of the building have been properly permitted and inspected by the *jurisdiction*, where required.~~

Discussion: See comment in margin.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #181 (Manley 21)
Proponent: Manley, Bonnie

Guideline Change:

6.1 General

1. The use of the building is consistent with the issued Certification of Occupancy or the last known approved use or occupancy.

Commented [JM159]: Out of scope- These statements are not in line with the introduction that says determining compliance with original construction documents and permitting requirements is outside the scope of the guideline.

Commented [KM160]: An introductory sentence seems to be missing.

2. Additions, alterations, and repairs of the building have been properly permitted and inspected by the *jurisdiction*, where required.

Discussion: See comment in margin.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #182 (Taecker 7)
Proponent: Taecker, John

Guideline Change: Not specific.

6.1 General

Discussion: An additional across-the-board item to include should be that equipment, materials, systems and products should be maintained in accordance with the manufacturer's instructions. Another item to address is that equipment rooms should not be used as a storage room.

Committee Action: Considered, no action taken.

PUBLIC COMMENT 183 (Cavallo 3)
Proponent: Cavallo, Eric

Guideline Change:

6.2 Structural Condition Assessment items

(portion of text removed for brevity)

The areas reviewed for the visual condition assessment should include the reasonably accessible and exposed areas of the building, including but not limited to the following:

- Characteristic locations of critical structural load-bearing members, including the roof, underside of pools, floor, walls, and foundation components and connections reasonably accessible to view without removal of finishes;

(remaining text unchanged)

Discussion: I read through the Existing Building Condition Assessment Guide public draft and would like to offer some feedback. Firstly, I think it's a pretty amazing tool that was put together perfectly. I've attached a PDF with the notes and suggested changes. Most notebly on the suggested which I'll highlight to you again here is a recommendation that an exception be included to section 4.1.2 and that the frequency in which assessments are conducted to High hazard occupancies be on a biyearly basis rather than annually.

Committee Action: Considered, No Action.

PUBLIC COMMENT #184 (Calderone 15)
Proponent: Calderone, Brian

Guideline Change:

6.2 Structural Condition Assessment Items:

The structural *condition assessment* should visually review the condition of the structural systems and components for potentially *dangerous* structural conditions, including those described in the International Property Maintenance Code Section 304.1.1.

The visual *condition assessment* should identify all observed conditions that may be reasonably considered to contribute to a structural ~~safety~~ reliability or stability vulnerability, when the observed conditions are exposed, accessible, and available during the assessment. The assessment should document: ~~Such conditions include but are not limited to the following:~~

- Any sign of damage, *deterioration*, distress, or alteration that appears to significantly reduce load-carrying capacity or stability of a structural component, connection, or system;
- Conditions associated with the primary structural systems which meet the definition of *dangerous*, as defined herein.

Common evidence of such conditions may include but are not limited to the following:

- Significant ~~Surface imperfections or~~ irregularities such as cracks, spalling, ~~etc~~ etc;
- Excessive deflections (including evidence of unintended ponding water due to deflections);
- Evidence of significant translation, rotation, or displacement of structural components or components rigidly attached to structural components that may reflect evidence of such unintended ~~Misalignment (differential displacement) or leaning (out-of-plumbness) of structural components~~;
- Signs of water ~~leaking~~ intrusion, ~~ponding~~ condensation, or related damage (or the potential of such to occur), where such conditions could indicate unintended exposure of concealed structural components to deterioration mechanisms, or where such conditions may be a direct indication of a concealed structural issue;
- ~~Signs of condensation or related damage (or the potential of such to occur)~~;
- Signs of significant post installation differential movement of the foundation ~~soil subsidence,~~ (settlement, heaving), loss of foundational support (scour, washout, subsidence), or other conditions that may affect the foundation;
- Cut, fractured, or discontinuous elements or connections.
- Significant loss of cross sections area (corrosion, fire consumption, rot, insect/animal damage, freeze-thaw distress, ASR, DEF, impact/mechanical damage, erosion, lixiviation, etc.)
- Missing fasteners/connectors of primary structural components.
- Locked or restrained expansion/movement joints.

- ~~Peeling of finishes;~~
- ~~Apparent changes of use and/or structural layout, which increase loading on a load-carrying member; and~~

Formatted: Highlight

Commented [BC161]: Stability vulnerability would be part of the structural reliability.

Commented [BC162]: This qualifier is needed. There are enormous number of mechanisms and events that can result in visual evidence of a condition that represents a extremely minor reduction in capacity, everything from very minor surface corrosion on interior steel framing, to cementitious paste wind scour on exterior concrete surfaces. Further many structures intolerate large amounts of damaged distress or deterioration before they become significant. Corners spalls or delaminations on large concrete mat slab foundations, reduce their capacity but to a degree that repair or maintenance may not be required for centuries. Accordingly the use of the word significantly is important to not overly burden the assessor and require the documentation of non pertinent conditions that reduce the practicality or usefulness of the assessment

Commented [BC163]: This is kind of the whole thing. Everything else provided is just a more granular example of this initial one. I propose the following format revision for clarity.

Commented [BC164]: Everything in the following list is an example of evidence that could be detected that may be an issue for the structurer. In most cases some kind of evaluation or assessment would be needed or figure out if any of these conditions were evidence of an actual problem.

Commented [BC165]: Again, Requiring the documentation of surface imperfections suggests collection of information about likely non-pertinent conditions.

Commented [BC166]: Moved this out of water leakage and condensation since it is a different core issue.

Commented [BC167]: This is not precise and/or other too specific (not broad enough). Many elements are not intended to be plumb.

Commented [BC168]: Same as intrusion

Commented [BC169]: While this may be implied, it's best to be specific in guidelines where provisions should apply. Documenting water leakage that does not relate to

Commented [BC170]: Move to leakage since the point is unintended exposure to water

Commented [BC171]: soil is an imprecise term for material supporting a foundation. As soil is one specific type of geotechnical material. Really what we mean is commor

Commented [BC172]: So we are not counting all the drywall screws.

Commented [BC173]: This is entirely unnecessary item to document and would be an amateur suggestion for multiple reasons. First the main point of this would be either cover

Commented [BC174]: This gets into design review. A visual assessment would largely not be able to identify a change of use or increase in loading without following a

- ~~Conditions which meet the definition of *dangerous*, as defined herein.~~

The areas reviewed for the visual *condition assessment* should include the reasonably accessible and exposed areas of the building, including but not limited to the following:

- Characteristic locations of critical structural load-bearing members, including the roof, floor, walls, and foundation components and connections reasonably accessible to view without removal of finishes;
- Exterior wall(s) and wall joints. including connections, and finishes;
- Exterior cladding, joints, and connections reasonably accessible to view; and
- Roof(s)

Depending on other aspects of the existing building, specific conditions may warrant specific attention and/or may warrant an additional investigation beyond a visual *condition assessment,* including but not limited to the following:

- Exposed elevated exterior elements located or connected one level or more above grade plane including stairs, decks, balconies, walkways, handrails, guardrails, canopies, overhangs, and similar elements and their connections;
- Any other areas or elements supporting significant gravity loads that are exposed to weather that are difficult to view, even if such elements are designed to be protected by a waterproofing system (for example, exterior spaces with pavers and/or waterproofing systems regardless of type of construction;
- Inaccessible areas of structural significance; and
- Areas of known unpermitted past work on structural members.

Commented [BC175]: Like foundations? What level of structural significance? Are all structural elements not fairly significant? Can we be more specific? If not delete?

Discussion: See comments in the margin.

Committee Action: AM w/ 184, 185, and 188 (see updated document, below).

6.2 Structural Condition Assessment Items:

The scope of the structural *condition assessment* should include visual~~ly~~ ~~observe~~observation of~~review~~ the condition of the structural systems and components for potentially unsafe or *dangerous* structural conditions, including visual observation of those items described in the International Property Maintenance Code Section 304.1.1.

Commented [RK176]: Check for consistency of wording based on other revisions to earlier sections of the document

The visual *condition assessment* should document~~identify~~ all observed conditions that may be reasonably considered to contribute to a structural safety or stability vulnerability, when the observed conditions are exposed, accessible, and available during the assessment. The assessment should document ~~Such~~ conditions include~~-~~ing but ~~are~~ not limited to the following:

Commented [RK177]: Some public comments suggested this reference be removed completely, but SWG felt there was value to maintain a clarified reference (note that the clarification about visual is important here because some items of the IPMC list require calculations to confirm adequacy to resist loads, which is outside the scope of the condition assessments intended by this guide)

- Any sign of *deterioration*, distress, damage, or alteration that appears to reduce load-carrying capacity or stability of a structural component, connection or system;
- Conditions which meet the definition of *dangerous*, as defined herein;
- Surface imperfections or irregularities such as cracks, spalling, ~~etc~~etc.;
- Excessive deflections;
- Misalignment (differential displacement) or leaning (out-of-plumbness) of structural components;

Commented [RK178]: Check for consistency of wording based on other revisions to earlier sections of the document

- Signs of water ~~leaking,~~ intrusion, ponding, condensation, or related damage (or the potential of such to occur), where such conditions could indicate exposure of structural components to deterioration mechanisms;
- ~~Signs of condensation or related damage (or the potential of such to occur);~~
- Signs of soil ~~subsidence,~~ settlement, heaving, or other conditions that may affect the foundation.~~;~~
- ~~Peeling of finishes;~~
- ~~Apparent changes of use and/or structural layout, which increase loading on a load-carrying member; and~~
- ~~Conditions which meet the definition of *dangerous*, as defined herein.~~

The ~~areas reviewed~~building areas observed for the visual *condition assessment* should include the reasonably accessible and exposed areas of the building, including but not limited to the following:

- Characteristic locations of critical structural load-bearing members and lateral load resisting components, including ~~the~~ roof members, floor members, walls, ~~and~~ foundation components and connections reasonably accessible to view ~~without~~that do not require removal of finishes;
- Exterior wall(s) and wall joints. including connections, and finishes;
- Exterior cladding, joints, and connections ~~reasonably accessible to view~~; and
- Roof(s) structural system members.

Depending on other ~~aspects~~characteristics of the existing building, specific conditions may warrant ~~specific~~ attention and/or may warrant an additional investigation. ~~beyond a visual *condition assessment*.~~ Such conditions may include ~~including~~ but not limited to the following:

- Exposed elevated exterior elements located or connected one level or more above grade plane including stairs, decks, balconies, walkways, handrails, guardrails, canopies, overhangs, and similar elements and their connections;
- Any other areas or elements supporting significant gravity loads that are exposed to weather that are difficult to view, even if such elements are designed to be protected by a waterproofing system (for example, exterior spaces with pavers and/or waterproofing systems regardless of type of construction;
- Structural components ~~it~~naccessible for visual assessment;~~areas of structural significance;~~ and
- Areas of known unpermitted past work on structural members.

PUBLIC COMMENT #185 (Herrera 33)
Proponent: Herrera, Richardo

Guideline Change:

6.2 Structural CA Items: The structural CA should visually observe ~~review~~ the condition of the structural system~~s and~~ components for potentially dangerous structural deficiencies~~conditions~~, including those described in ~~the~~ IPMC ~~nternational Property Maintenance Code~~ Section 304.1.1.

The visual CA~~condition assessment~~ should document ~~identify~~ all observed conditions that may be reasonably considered to contribute to a structural safety or stability vulnerability, ~~when the observed conditions are exposed, accessible, and available during the assessment~~. Such conditions include but are not limited to the following:

- Any sign of deterioration, distress, or alteration that appears to reduce load-carrying capacity;
- Surface imperfections or irregularities such as cracks, spalling, etc;
- Excessive deflections;
- Misalignment (differential displacement) or leaning (out-of-plumbness) of structural components;
- Signs of water leaking, intrusion, ponding, or related damage (or the potential of such to occur);

Apparent changes of use and/or structural layout, which increase loading on a load-carrying member;

and

- Conditions which meet the definition of dangerous, as defined herein

The building features observed ~~areas reviewed for the visual condition assessment~~ should include the reasonably accessible and exposed areas of the building, including but not limited to all of the following:

- ~~Characteristic~~ locations of all critical structural load-bearing and lateral load resisting members, including ~~the~~ roof members, floor members, walls, ~~and~~ foundation components and connections ~~reasonably accessible to view~~ that do not require ~~without~~ removal of finishes;
- Exterior wall(s) and wall joints. including connections, and not paint finishes;
- Exterior cladding, joints, and connections ~~reasonably accessible to view~~; and
- Roof structural system members~~(s)~~

Depending on other characteristics ~~aspects~~ of the existing building, specific conditions may warrant ~~specific~~special attention and/or may warrant an additional investigation beyond a visual CA~~condition assessment~~, including but not limited to the following:

Exposed elevated exterior elements located or connected one level or more above grade plane including stairs, decks, balconies, walkways, handrails, guardrails, canopies, overhangs, and similar elements and their connections;

Any other areas or elements supporting significant gravity loads that are exposed to weather that are difficult to view, even if such elements are designed to be protected by a waterproofing system (for example, exterior spaces with pavers and/or waterproofing systems regardless of type of construction;

Inaccessible areas of structural significance; and

Areas of known unpermitted past work on structural members.

Discussion: None provided

Committee Action: Approved as Modified (combined PC #184, #185, and #188).

PUBLIC COMMENT #186 (Munstertieger 21)
Proponent: Munstertieger, Jeffery

Guideline Change:

6.2 Structural Condition Assessment Items:

The structural *condition assessment* should visually review the condition of the structural systems and components for potentially *dangerous* structural conditions~~, including those described in the International Property Maintenance Code Section 304.1.1~~.

(remaining text unchanged)

Discussion: See comment in margin.

Committee Action: Considered, No Action Taken

Commented [JM179]: Referenced standards- This statement brings the IPMC into this document as a referenced standard. I don't recall that was the intent.

PUBLIC COMMENT #187 (Szoke 1)
Proponent: Szoke, Stephen

Guideline Change:
6.2 Structural Condition Assessment Items: The structural condition assessment should visually review the condition of the structural systems and components for potentially dangerous structural conditions, including those described in the International Property Maintenance Code Section 304.1.1. The visual condition assessment should identify all observed conditions that may be reasonably considered to contribute to a structural safety or stability vulnerability, when the observed conditions are exposed, accessible, and available during the assessment. Such conditions include but are not limited to the following:

- Any sign of deterioration, distress, or alteration that appears to reduce load-carrying capacity;
- Surface imperfections or irregularities such as cracks, spalling, etc;
- Excessive deflections;
- Misalignment (differential displacement) or leaning (out-of-plumbness) of structural components;
- Signs of water leaking, intrusion, ponding, or related damage (or the potential of such to occur);
- Signs of condensation or related damage (or the potential of such to occur);
- Signs of soil subsidence, settlement, heaving, or other conditions that may affect the foundation;
- Peeling of finishes;
- Apparent changes of use and/or structural layout, which increase loading on a load-carrying member; and
- Conditions which meet the definition of dangerous, as defined herein.

<u>For additional guidance on assessment of structural concrete see Appendix A.</u>

<u>Appendix A</u>
<u>American Concrete Institute (ACI) Resources Related to Assessment of Structural Concrete</u>

Topic	Designation	Title
Resources to Assist in Visual Assessments		
Tolerances	PRC-117.1-14	*Guide for Tolerance Compatibility in Concrete Construction*
	ACI SPEC-117-10 Reapproved 2015	*Specification for Tolerances for Concrete Construction and Materials*
Durability	PRC 201.2-23	*Durable Concrete – Guide*
Protection of Metals	PRC 222-19	*Guide to Protection of Metals in Concrete Against Corrosion*
	PRC-222.3-11	*Guide to Design and Construction Practices to Mitigate Corrosion of Reinforcement in Concrete Structures*
Cracks	PRC-224.1-07	*Causes, Evaluation, and Repair of Cracks in Concrete Structures*
Visual Survey	PRC-228.4-23	*Visual Condition Survey of Concrete – Guide*
Resources for More In-Depth Assessments		
Core Samples	PRC-214.4-21	*Obtaining Cores and Interpreting Core Compressive Strength Results*
Strength Evaluation	PRC-214-11 Reapproved 2019	*Guide to Evaluation of Strength Test Results of Concrete*
	PRC-228.1-19	*Report on Methods for Estimating In-Place Concrete Strength*
	PRC-228.2-13	*Report on Nondestructive Test Methods for Evaluation of Concrete in Structures*
	PRC-228.3-23	*What an Owner Should Know about Nondestructive Testing—TechNote*
	PRC-364.4-21	*Determining the Load Capacity of a Structure when Structural Drawings are Unavailable – TechNote*
	PRC-437-19	*Strength Evaluation of Existing Concrete Buildings*
Fire Protection	CODE-216.1-14 Reapproved 2019	*Code Requirements for Determining Fire Resistance of Concrete and Masonry Construction Assemblies*
Cracks	PRC-224-01 Reapproved 2008	*Control of Cracking in Concrete Structures*
Assessment	PRC-364.1-19	*Guide for Assessment of Concrete Structures Before Rehabilitation*
	CODE-562-21	*Assessment, Repair, and Rehabilitation of Existing Concrete Structures - Code and Commentary*
New Construction	SPEC-301-20	*Specifications for Concrete Construction*
	PRC-311.4-05	*Guide for Concrete Inspection*
	SPEC-311.7-18	*Specification for Inspection of Concrete Construction*
	CODE-318-19 Reapproved 2022	*Building Code Requirements for Structural Concrete and Commentary*
Seismic Evaluation	PRC-369-11	*Guide for Seismic Rehabilitation of Existing Concrete Frame Buildings and Commentary*
	CODE-369.1-22	*Seismic Evaluation and Retrofit of Existing Concrete Buildings—Code and Commentary*
Deflections	PRC-435.8-85 Reapproved 1997	*Observed Deflections of Reinforced Concrete Slab Systems, and Causes of Large Deflections*
	PRC-435-20	*Report on Deflection of Nonprestressed Concrete Structures*
Load Testing	PRC-437.1-07	*Load Tests of Concrete Structures: Methods, Magnitude, Protocols & Acceptance Criteria*
	CODE-437.2-22	*Load Testing of Concrete Structures - Code and Commentary*

Health Monitoring	PRC-444.2-21	*Structural Health Monitoring Technologies for Concrete Structures – Report*
Resources for Repair of Structural Concrete		
Evaluation and Repair	PRC-546-23	*Concrete Repair—Guide*
	CODE-562-21	*Assessment, Repair, and Rehabilitation of Existing Concrete Structures - Code and Commentary*
	SPEC-563-18	*Specifications for Repair of Concrete in Buildings*
Anchors	CODE-355.2-22	*Post-Installed Mechanical Anchors in Concrete—Qualification Requirements and Commentary*
	CODE-355.4-19 Reapproved 2021	*Qualification of Post-Installed Adhesive Anchors in Concrete and Commentary*
Corrosion	PRC-364.10-14	*TechNote: Rehabilitation of Structure with Reinforcement Section Loss*
	PRC-364.3-22	*Cementitious Repair Material Data Sheet – Guide*
	PRC-546.3-23	*Materials Selection for Concrete Repair—Guide*
Concrete Removal	PRC-364.6-22	*Concrete Removal in Repairs Involving Corroded Reinforcing Steel—TechNote*
	PRC-364.8-22	*Hydrodemolition for Concrete Removal in Unbonded Post-Tensioned Systems—TechNote*
Cracks in Repairs	PRC-364.9-21	*Cracks in a Concrete Repair – TechNote*
Fiber Reinforced Polymer	PRC-440-07	*Report on Fiber-Reinforced Polymer (FRP) Reinforcement for Concrete Structures*
	PRC-440.1-15	*Guide for the Design and Construction of Structural Concrete Reinforced with Fiber-Reinforced Polymer Bars*
	PRC-440.2-23	*Design and Construction of Externally Bonded Fiber-Reinforced Polymer (FRP) Systems for Strengthening Concrete Structures—Guide*
	SPEC-440.5-22	*Construction with Glass Fiber-Reinforced Polymer Reinforcing Bars – Specification*
	CODE-440.11-22	*Building Code Requirements for Structural Concrete Reinforced with Glass Fiber-Reinforced Polymer (GFRP) Bars—Code and Commentary*
Protective Treatments	PRC-515.2-13	*Guide to Selecting Protective Treatments for Concrete*
	PRC-515.3-20	*Guide for Assessment and Surface Preparation for Application of Protection Systems for Concrete*

Discussion:

This appendix adds resources useful to the code official for better understanding the visual assessment, more in-depth assessments, and key aspects of repairs to structural concrete. The resources are groups in these three categories. The first category on visual assessment if directly related to the content of the ICC guide. The second and third categories may be interpreted by some as being outside the scope of the guide, but are believed to be necessary additions as the guide mentions the possibility the some AHJs may need to go beyond the scope of the guide. The information on more in-depth assessment and repair would be helpful for those AHJs identifying a need or potential need require more than a visual assessment.

ACI 117, 216.1, 318, 440.11 are directly referenced in the IBC. ACI 562 is directly referenced in the IEBC.

ACI 562 has commentary references for: 117.1, 201.2, 214.4, 216.1, 222, 222.3, 224, 224.1, 228.1, 228.2, 301, 318, 355.2, 355.4, 364, 364.1, 364.3, 369, 437, 437.1, 437.2, 440, 440.1, 440.2, 515.3, 546, 563. These are shown with blue highlights. ACI 562 contains numerous references to other ACI documents, but they are not deemed to be directly relevant to the scope of this guide. Several references in ACI 562 are also referenced in ACI 440.11. ACI 440.11 commentary also references: 214.4; 311.4; and 440.5. These are shown in yellow highlight.

ACI 228.4 on visual assessment, although not cited in ACI standards referenced in the I-codes augments the content of this ICC guide.
ACI resources for more in-depth assessments include: 228.3 related to strength evaluation; 364.4 related to load capacity; 311.7 related to inspection criteria; 369.1 related to seismic evaluation; 435.8 and 435 related to deflections; and 444.2 related to health monitoring.
ACI resources for repairs include: 364.6 and 364.8 related to concrete removal; 364.9 related to cracks; and 515.2 related to protective treatments.

Committee Action: Approved as Modified, approved appendix for all structural materials for the for additional guidance on material specific with lists or links to a website.

PUBLIC COMMENT #188 (Manley 22)
Proponent: Manley, Bonnie

Guideline Change:
6.2 Structural Condition Assessment Items:

The structural *condition assessment* should visually review the condition of the structural systems and components for potentially *dangerous* structural conditions, including those described in the International Property Maintenance Code Section 304.1.1.
The visual *condition assessment* should identify all observed conditions that may be reasonably considered to contribute to a structural safety or stability vulnerability, when the observed conditions are exposed, accessible, and available during the assessment. Such conditions include but are not limited to the following:

- Any sign of *deterioration*, distress, or alteration that appears to reduce load-carrying capacity;
- Surface imperfections or irregularities such as cracks, spalling, etc;
- Excessive deflections;
- Misalignment (differential displacement) or leaning (out-of-plumbness) of structural components;
- Signs of water leaking, intrusion, ponding, or related damage (or the potential of such to occur);
- Signs of condensation or related damage (or the potential of such to occur);
- Signs of soil subsidence, settlement, heaving, or other conditions that may affect the foundation;
- Peeling of finishes;
- Apparent changes of use and/or structural layout, which increase loading on a load-carrying member; and
- Conditions which meet the definition of *dangerous*, as defined herein.

The areas reviewed for the visual *condition assessment* should include the reasonably accessible and exposed areas of the building, including but not limited to the following:

- Characteristic locations of critical structural load-bearing members, including the roof, floor,

Commented [KM180]: Consider extracting the language from the IPMC to aid the user in the application of this section.

Commented [KM181]: The desire to include this is understandable, but this seems outside the scope of the condition assessment.

walls, and foundation components and connections reasonably accessible to view without removal of finishes;
- Exterior wall(s) and wall joints. including connections, and finishes;
- Exterior cladding, joints, and connections reasonably accessible to view; and
- Roof(s)

Depending on other aspects of the existing building, specific conditions may warrant specific attention and/or may warrant an additional investigation beyond a visual *condition assessment*, including but not limited to the following:
- Exposed elevated exterior elements located or connected one level or more above grade plane including stairs, decks, balconies, walkways, handrails, guardrails, canopies, overhangs, and similar elements and their connections;
- Any other areas or elements supporting significant gravity loads that are exposed to weather that are difficult to view, even if such elements are designed to be protected by a waterproofing system (for example, exterior spaces with pavers and/or waterproofing systems regardless of type of construction;
- Inaccessible areas of structural significance; and
- Areas of known unpermitted past work on structural members.

Commented [KM182]: Guidance needs to be given as to what is "beyond a visual condition assessment." In reality, this discussion may be outside the scope of the document.

Discussion: See comments in the margin.

Committee Action: Approved as Modified (combined with PC #184, #185, and #188).

PUBLIC COMMENT #189 (Taecker 8)
Proponent: Taecker, John

Guideline Change:

6.2 Structural Condition Assessment Items:

Discussion:

1. Consider adding inspection of BIPV and roof-mounted PV for issues, as well as thermal solar collectors.

2. Section (3)(v) – Gas vents and attic vents also need to be free of visible obstructions and defects. These are different than plumbing vents.

Committee Action: Approved as Modified (track changes noted, below).

6.3 Envelope Condition Assessment Items:

(Item #1 removed for brevity)

2. Roof System
    i. Overall roof covering for signs of *deterioration* and to identify any leaks or damage.

ii. Flashing and penetration of the roof covering for obvious signs of water damage, open seams, deformation, punctures, and missing flashing.
iii. Roof accessories (equipment, ladders, railings, lighting rods, etc.) for missing, broken, or loose items.
iv. The roof surface exhibits *positive roof drainage* and is free of ponding water. Roof drainage systems for clogged drains or scuppers, missing parts of drainage systems, or loose gutters. Roof water should not be discharged in a manner that creates a public nuisance.
v. Plumbing vents and combustion exhaust vents should be free of visible obstructions and defects.
vi. Available standard: ASTM D7053-17, "Standard guide for determining and evaluating the causes of water leakage of low-slope roofs."

Commented [RK183]: BEWG should review, see comment 189

PUBLIC COMMENT #190 (Cavallo 4)
Proponent: Cavallo, Eric

Guideline Change:

6.3 Envelope Condition Assessment Items:

(portions of text removed for brevity)

3. Fenestration System

iii. Structural Glazing

2. ASTM C1394 standard adopts the three-level evaluation approach for assessing SSG for performance. The recommended timeframe for inspections includes, perform a Level 1 between 1 and 2 years after substantial completion and/or Certificate of occupancy is issued, a Level 1 after 5 years, a Level 2 after 10 years, a Level 1 after 15 years (if Level 2 was performed as recommended after 10 years), and a Level 2 after 20 years and each successive 10 years thereafter.

(remaining text unchanged)

Discussion: I read through the Existing Building Condition Assessment Guide public draft and would like to offer some feedback. Firstly, I think it's a pretty amazing tool that was put together perfectly. I've attached a PDF with the notes and suggested changes. Most notebly on the suggested which I'll highlight to you again here is a recommendation that an exception be included to section 4.1.2 and that the frequency in which assessments are conducted to High hazard occupancies be on a biyearly basis rather than annually.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #191 (Calderone 16)
Proponent: Calderone, Brian

Guideline Change:

6.3 Envelope Condition Assessment Items:

1. Building Façade
   i. The building façade for general conditions identifying any surface defects, unsecure or loose elements, signs of leaks or damage – see also Item 6 of Section 6.2.
   ii. Cementitious (concrete, ~~or~~ masonry, stucco) building façade elements for cracking, spalling, displacement, exposed reinforcing, or mortar damage.
   iii. Verification that the structural framing elements on balconies and other elevated walking surfaces exposed to weather-exposed surfaces have ~~a moisture resistive barrier that has~~ been maintained in satisfactory condition.

(remaining text unchanged)

Commented [BC184]: What about stucco, what about brick masonry (which is not cementitious)
What about metal panel facades,
what about marble (and other kinds of stone cladding),
What about timber facades,
what about GFRC or other composites
And others?

Commented [BC185]: There are many different kinds of structurally framed balconies and similar exterior elements that do not have a moisture resist barrier since one is not required by the building code for many situations.

Discussion: See comments in the margin.

Committee Action: Approved as Modified (see track changes, above).

PUBLIC COMMENT #192 (Herrera 34)
Proponent: Herrera, Richardo

Guideline Change:

6.3 Envelope C~~A~~ondition Assessment Items:

1. . Building Façade

i. ~~The building façade~~Take note of ~~for~~such as ~~general conditions identifying any~~ surface defects, unsecure or loose ~~components~~elements, signs of water infiltration ~~leaks~~ or damage – see also Item 6 of Section 6.2.

ii. Examine ~~Cementitious (~~concrete or masonry~~)~~ building façade components ~~elements~~ for signs of cracking, spalling, displacement, exposed reinforcing, or mortar damage.

iii. Verify ~~ication~~ that ~~the~~ structural framing components ~~elements~~for and on balconies and other elevated walking surfaces exposed to weather-~~exposed surfaces~~ have an effective moisture resistant ~~ive~~ barrier that has been and is maintained in satisfactory condition.

iv. The building façade, ~~being part of the envelope of the building~~, often includes appurtenances which are components ~~elements somehow~~ that are mechanically attached or adhered to it, and that in time must be assessed to ~~make sure~~confirm ~~they~~ continue to be properly attached to the building and will not become a falling object. The list of appurtenant elements includes but are not limited to:

   1. Cladding materials
   2. Precast appliques

3. Exterior fixtures
4. Fire escapes
5. Signs
6. Mansard and Parapets
7. Railings and Guardrails
8. Antennas

v. Consideration of a~~A~~vailable ASTM standard~~s~~: ~~ASTM~~ E2270-14(2019), "Standard Practice for Periodic Inspection of ~~-~~Building Facades for Unsafe Conditions", ~~ASTM~~ E2841-19, "Standard Guide for Conducting Inspections of Building Facades for Unsafe Conditions", and ~~ASTM~~ E3036-15(2021), "Standard Guide for Notating Facade Conditions in the Field".

2. Roof System

i. Check overall roof covering for signs of deterioration and ~~to~~ identify any leaks, water blisters ~~-~~or damage.

ii. ~~-~~Flashing and seals at penetrations of the roof covering for obvious signs of water damage, open seams, material deformation, punctures, and missing flashing.

iii. ~~-~~Roof accessories (equipment, ladders, railings, lighting rods, antennas, etc.) for missing, broken, or loose items at attachments or pitch pockets.

iv. ~~-~~The roof surface has ~~exhibits~~ positive roof drainage and is free of ponding water. Check r~~R~~oof drainage system free discharges, ~~s for~~ clogged drains or scuppers, missing components ~~parts~~ of the drainage systems, or loose gutters. Roof~~-~~ water should not be discharged in a manner that creates a public nuisance.

v. Plumbing vents should be free of visible obstructions and defects.

vi. Available standard: ASTM D7053-17, "Standard guide for determining and evaluating the causes of water leakage in ~~of~~ low-slope roofs."

3. Fenestration System

i. Examine g~~G~~lass curtain walls and/or vision panels for water intrusion, ~~buckling,~~ loose ~~gaskets~~ or deformed gaskets, corrosion, l~~L~~oose or missing sealant beads.

ii. Evaluate w~~W~~indow and doors that are ~~as~~ part of the exterior façade for water damage and/or evidence of leaks~~-~~ including weatherstripping damage, broken hardware, inadequate ~~complete~~ closure, racking or warping, corrosion, or threshold damage.

iii. Structural Glazing

1. When t~~T~~he building envelope ~~may~~ includes a curtain wall system composed of Structural Sealant lazing or SSG. Silicone structural glazing is a method utilizing a silicone adhesive to attach glass, metal, or other panel material to the structure of a building. Wind load and other impact loads on the façade are transferred from the glass or panel, through the structural silicone sealant to the structure of the building. The silicone sealant must maintain adhesive and cohesive integrity as the façade is subjected to wind load and thermal stresses.

2. –ASTM C1394-20 standard adopts the three-level evaluation approach for assessing Structural Silicone Glazing (SSG) for performance compliance. The recommended timeframe intervals for inspections includes, performing -a Level 1 between 1 and 2 years after substantial completion, another -Level 1 after 5 years, a Level 2 after 10 years, a Level 1 after 15 years (if ifa -successful Level 2 was performed ~~as recommended~~ after 10 years), ~~and~~ a Level 2 after 20 years and then again at each successive 10 years intervals thereafter. In detail, the 3 Levels involve:

3. -Level 1 evaluation. Perform all the following evaluation procedures:

a. Review project documentation, including original design drawings, shop drawings, mock-up testing report, and previous evaluation reports. Review original SSG design calculations, or if not available, perform calculations to determine stress on sealant from thermal and wind loading (and, where appropriate, seismic loading);

3. Fenestration System

i. Examine g~~G~~lass curtain walls and/or vision panels for water intrusion, ~~buckling,~~ loose ~~gaskets~~ or deformed gaskets, corrosion, loose or missing sealant beads.

ii. Evaluate w~~W~~indow and doors that are ~~as~~ part of the exterior façade for water damage and/or evidence of leaks- including weatherstripping damage, broken hardware, inadequate ~~complete~~ closure, racking or warping, corrosion, or threshold damage.

iii. Structural Glazing

1. When t~~T~~he building envelope ~~may~~ includes a curtain wall system composed of Structural Sealant lazing or SSG. Silicone structural glazing is a method utilizing a silicone adhesive to attach glass, metal, or other panel material to the structure of a building. Wind load and other impact loads on the façade are transferred from the glass or panel, through the structural silicone sealant to the structure of the building. The silicone sealant must maintain adhesive and cohesive integrity as the façade is subjected to wind load and thermal stresses.

2. –ASTM C1394-20 standard adopts the three-level evaluation approach for assessing Structural Silicone Glazing (SSG) for performance compliance. The recommended timeframe intervals for inspections includes, performing -a Level 1 between 1 and 2 years after substantial completion, another -Level 1 after 5 years, a Level 2
after 10 years, a Level 1 after 15 years (if ifa -successful Level 2 was performed ~~as recommended~~ after 10 years), ~~and~~ a Level 2 after 20 years and then again at each successive 10 years intervals thereafter. In detail, the 3 Levels involve:

3. -Level 1 evaluation. Perform all the following evaluation procedures:

a. Review project documentation, including original design drawings, shop drawings, mock-up testing report, and previous evaluation reports. Review original SSG design calculations, or if not available, perform calculations to determine stress on sealant from thermal and wind loading (and, where appropriate, seismic loading);

b. Interview building management and maintenance personnel and tenants regarding breakage history of lites and other distress. Map findings on elevation drawings, and assess whether a pattern exists; and

c. Perform a cursory visual assessment from the interior, and from the exterior ground, roofs, and balconies.

4. Level 2 evaluation. Perform the following, plus all the procedures of Level 1 (unless a Level 1 evaluation has been performed previously and the documentation recommended to be kept by the owner is available.):

a. Perform a close-up visual evaluation from the interior;

b. Observe weather seal joints and structural joints from the exterior. Document distress and assess whether a pattern exists. Utilize high-powered optical tools to assist in observing from remote viewing areas, or from suspended scaffolding. Choose scaffold "drops" to represent the entire building, including different wind zones, elevations, exposures, details, and construction times; and

c. Qualitatively measure the sealant adhesion by pressing in with a thumb. Alternatively, semi-quantitative adhesion strength data can be obtained using a Chatillon spring load indicator or pulling cut tabs to failure and measuring the elongation.

~~.~~5. ~ **Level 3 evaluation**. Perform all the following procedures under the field supervision of a qualified individual~~person~~, plus the procedures of Levels 1 and 2 (except that Level 1 may be eliminated if it has been performed previously and the documentation that had to be preserved by the ~~recommended to be kept by the~~ owner is available.

a. Determine ~~Consider~~ whether the existing conditions indicate that evaluation of all lites is warranted. If not, devise ~~elop~~ a rational approach for evaluating a representative sample of the total quamtity of lites. Clearly t~~T~~here is a trade-off between accuracy and the cost of the study. For quantitative tests and measurements, it is recommended that ~~-~~the number of specimens or test be selected to ensure achieving at least a 90% confidence interval with a maximum 20% margin of error. Different levels of the study may require more stringent ~~stricter~~ parameters; and

b. Perform in-situ load testing on selected lites, either by uniform load (air pressure) or point load (suctions cups). One applicable test method is
described in ASTM C1392-20.~~()~~ See Fig. 1 & 2)

4. ~Available standard: ASTM E2128-20, "Standard Guide for Evaluating Water Leakage of Building Walls."
5. Establish a life expectancy and cost of replacement for the various envelope components.

Discussion: None provided

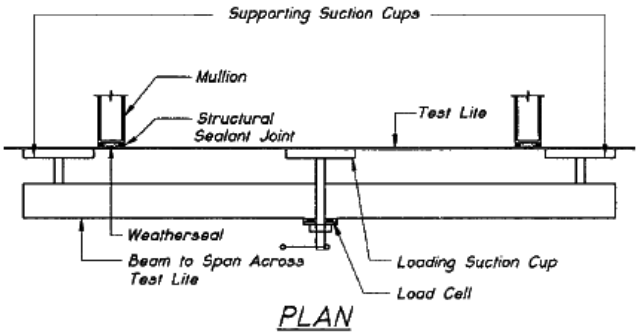
Committee Action: Considered, No Action

PUBLIC COMMENT # 193 (Kehoe 13)
Proponent: Kehoe, Brian

Guideline Change:

6.3 Envelope Condition Assessment Items:

5. **Level 3 evaluation**. Perform all the following procedures under the field supervision of a qualified person, plus the procedures of Levels 1 and 2 (except that Level 1 may be eliminated if it has been performed previously and the documentation recommended to be kept by the *owner* is available.
   a. Consider whether the existing conditions indicate that evaluation of all lites is warranted. If not, develop a rational approach for evaluating a representative sample of the total lites. There is a trade-off between accuracy and the cost of the study. For quantitative tests and measurements, it is recommended that the number of specimens or test be selected to ensure achieving at least a 90% confidence interval with a maximum 20% margin of error. Different levels of study may require stricter parameters; and
   b. Consider performing ~~Perform~~ a structural assessment and in-situ load testing on selected lites, either by uniform load (air pressure) or point load (suctions cups). One applicable test method is described in ASTM C1392. () See Fig. 1 & 2)



6.

Commented [KM186]: Load testing should not be done without a structural evaluation!

Discussion: See comment in margin.

Committee Action: Approved as Modified. See track changes in item b.

PUBLIC COMMENT #194 (Munsterteiger 22)
Proponent: Munsterteiger, Jeffery

Guideline Change:

6.3 Envelope Condition Assessment Items

~~3.~~1. Building Façade
   i. The building façade for general conditions identifying any surface defects, unsecure or loose elements, signs of leaks or damage – see also Item 6 of Section 6.2.
   ii. Cementitious (concrete or masonry) building façade elements for cracking, spalling, displacement, exposed reinforcing, or mortar damage.

iii. Verification that the structural framing elements on balconies and other elevated walking surfaces exposed to weather-exposed surfaces have a moisture resistive barrier that has been maintained in satisfactory condition.

iv. The building façade, being part of the envelope of the building, includes appurtenances which are elements somehow mechanically attached or adhered that in time must be assessed to make sure they continue to be properly attached to the building and will not become a falling object. The list of elements includes but are not limited to:

1. Cladding materials
2. Precast appliques
3. Exterior fixtures
4. Fire escapes
5. Signs
6. Mansard and Parapets
7. Railings and Guardrails
8. Antennas

~~v. Available standard: ASTM E2270-14(2019), "Standard Practice for Periodic Inspection of Building Facades for Unsafe Conditions", ASTM E2841-19, "Standard Guide for Conducting Inspections of Building Facades for Unsafe Conditions", and ASTM E3036-15(2021), "Standard Guide for Notating Facade Conditions in the Field".~~

~~4.~~2. Roof System

i. Overall roof covering for signs of *deterioration* and to identify any leaks or damage.

ii. Flashing and penetration of the roof covering for obvious signs of water damage, open seams, deformation, punctures, and missing flashing.

iii. Roof accessories (equipment, ladders, railings, lighting rods, etc.) for missing, broken, or loose items.

iv. The roof surface exhibits *positive roof drainage* and is free of ponding water. Roof drainage systems for clogged drains or scuppers, missing parts of drainage systems, or loose gutters. ~~Roof water should not be discharged in a manner that creates a public nuisance.~~

v. Plumbing vents should be free of visible obstructions and defects.

vi. Available standard: ASTM D7053-17, "Standard guide for determining and evaluating the causes of water leakage of low-slope roofs."

~~5.~~3. Fenestration System

i. Glass curtain walls and/or vision panels for water intrusion, buckling, loose gaskets, corrosion, lose or missing beads.

ii. Window and doors as part of the exterior façade for water damage and/or evidence of leaks including weatherstripping damage, broken hardware, incomplete closure, racking or warping, corrosion, or threshold damage.

iii. Structural Glazing

1. The building envelope may include a curtain wall system composed of Structural Sealant Glazing or SSG. Silicone structural glazing is a method utilizing a silicone adhesive to attach glass, metal, or other panel material to the structure of a building. Wind load and other impact loads on the façade are transferred from the glass or panel,

Commented [JM187]: Referenced standards- Its unclear why these standards are referneced here. Are inspections complying with these ctandrads required, are they just a suggestion, etc.

Commented [KM189R188]: Keep this item in the document, as approved by the committee.

Formatted: Highlight

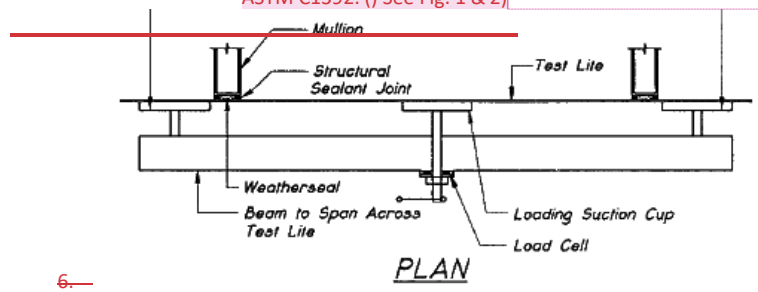
Commented [JM190]: Referenced standards- Its unclear why these standards are referenced here. Are inspections complying with these standards required, are they just a suggestion, etc.

through the structural silicone sealant to the structure of the building. The silicone sealant must maintain adhesive and cohesive integrity as the façade is subjected to wind load and thermal stresses.

2. ASTM C1394 standard adopts the three-level evaluation approach for assessing SSG for performance. The recommended timeframe for inspections includes, perform a Level 1 between 1 and 2 years after substantial completion, a Level 1 after 5 years, a Level 2 after 10 years, a Level 1 after 15 years (if Level 2 was performed as recommended after 10 years), and a Level 2 after 20 years and each successive 10 years thereafter.
3. **Level 1 evaluation**. Perform all the following evaluation procedures:
    a. Review project documentation, including original design drawings, shop drawings, mock-up testing report, and previous evaluation reports. Review original SSG design calculations, or if not available, perform calculations to determine stress on sealant from thermal and wind loading (and, where appropriate, seismic loading);
    b. Interview building management and maintenance personnel and tenants regarding breakage history of lites and other distress. Map findings on elevation drawings, and assess whether a pattern exists; and
    c. Perform a cursory visual assessment from the interior, and from the exterior ground, roofs, and balconies.
4. **Level 2 evaluation**. Perform the following, plus all the procedures of Level 1 (unless a Level 1 evaluation has been performed previously and the documentation recommended to be kept by the *owner* is available.):
    a. Perform a close-up visual evaluation from the interior;
    b. Observe weather seal joints and structural joints from the exterior. Document distress and assess whether a pattern exists. Utilize high-powered optical tools to assist in observing from remote viewing areas, or from suspended scaffolding. Choose scaffold "drops" to represent the entire building, including

        different wind zones, elevations, exposures, details, and construction times; and
    c. Qualitatively measure the sealant adhesion by pressing in with a thumb. Alternatively, semi-quantitative adhesion strength data can be obtained using a Chatillon spring load indicator or pulling cut tabs to failure and measuring the elongation.
5. **Level 3 evaluation**. Perform all the following procedures under the field supervision of a qualified person, plus the procedures of Levels 1 and 2 (except that Level 1 may be eliminated if it has been performed previously and the documentation recommended to be kept by the *owner* is available.
    a. Consider whether the existing conditions indicate that evaluation of all lites is warranted. If not, develop a rational approach for evaluating a representative sample of the total lites. There is a trade-off between accuracy and the cost of the study. For quantitative tests and measurements, it is recommended that the number of specimens or test be selected to ensure achieving at least a 90% confidence interval with a maximum 20% margin of error. Different levels of study may require stricter parameters; and
    b. Perform in-situ load testing on selected lites, either

~~by uniform load (air pressure) or point load (suctions cups). One applicable test method is described in ASTM C1392. () See Fig. 1 & 2)~~



~~6.~~

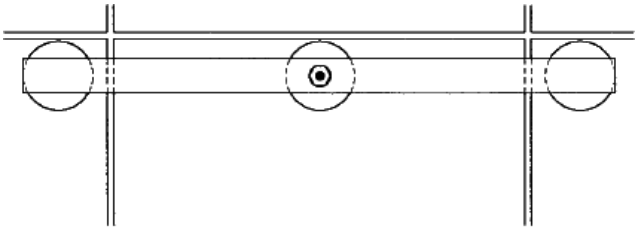


FIG. 1 Schematic of Field Loading Device

~~b.~~

Commented [JM191]: Referenced standards- Its unclear why these standards are referenced here. Are inspections complying with these standrads required, are they just a suggestion, etc.

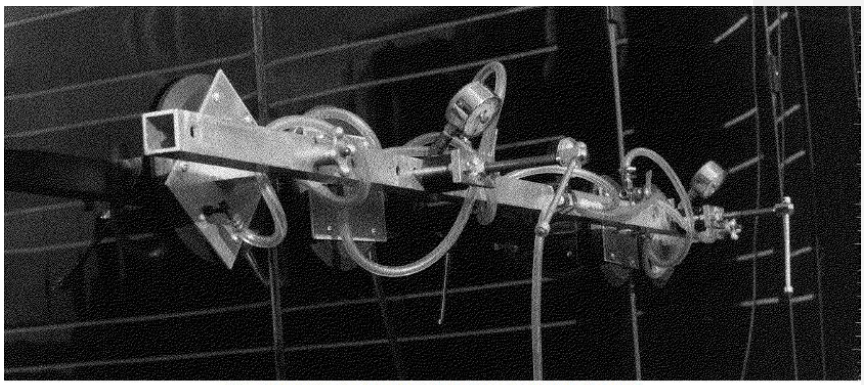


FIG. 2 Example of a Field Loading Device Mounted on a Wall

~~6. Available standard: ASTM E2128-20, "Standard Guide for Evaluating Water Leakage of Building Walls."~~

~~7. Establish a life expectancy and cost of replacement for the various envelope components.~~

Commented [JM192]: Referenced standards- Its unclear why these standards are referenced here. Are inspections complying with these standrads required, are they just a suggestion, etc.

Commented [JM193]: Out of scope- What is the standard by which these should be established?

Discussion: See comments in margin. Note numbering of paragraph not modified, copy/paste error, by user.

Committee Action: Approved as Modified, Remove reference standards here and move to Appendix A-Additional Resources; 6.3.2.v, keep "Roof water should not… nuisance."; 6.3.5, strike "Establish a life expectancy… components." Similar to what the Committee has done with other public comments in other sections. See below for additional standards to appendix/annex.

ASTM		ASTM International 100 Barr Harbor Drive West Conshohocken, PA 19428, USA
Topic	Designation	Title
Façade Assessment	STP 254525	*Assessment of Building Facades in Masonry and Stone*
	C1394-20	*Standard Guide for In-Situ Structural Silicone Glazing Evaluation*
	C1496-18	*Standard Guide for Assessment and Maintenance of Exterior Dimension Stone Masonry Walls and Facades*
	E2270-14(19)	*Standard Practice for Periodic Inspection of Building Facades for Unsafe Conditions*
	E2841-19	*Standard Guide for Conducting Inspections of Building Facades for Unsafe Conditions*
	E3036-15(21)	*Standard Guide for Notating Facade Conditions in the Field*
Seismic Assessment	E2026-24	*Standard Guide for Seismic Risk Assessment of Buildings*

Water Leakage	D7053-17	*Standard Guide for Determining and Evaluating the Causes of Water Leakage in of Low-Slope Roofs*
	E2128-20	*Standard Guide for Evaluating Water Leakage of Building Walls*

PUBLIC COMMENT #195 (Manley 23)
Proponent: Manley, Bonnie

Guideline Change:
6.3 Envelope Condition Assessment Items:

1. Building Façade
   i. The building façade for general conditions identifying any surface defects, unsecure or loose elements, signs of leaks or damage – see also Item 6 of Section 6.2.
   ii. Cementitious (concrete or masonry) building façade elements for cracking, spalling, displacement, exposed reinforcing, or mortar damage.
   iii. Verification that the structural framing elements on balconies and other elevated walking surfaces exposed to weather-exposed surfaces have a moisture resistive barrier that has been maintained in satisfactory condition.
   iv. The building façade, being part of the envelope of the building, includes appurtenances which are elements somehow mechanically attached or adhered that in time must be assessed to make sure they continue to be properly attached to the building and will not become a falling object. The list of elements includes but are not limited to:
      1. Cladding materials
      2. Precast appliques
      3. Exterior fixtures
      4. Fire escapes
      5. Signs
      6. Mansard and Parapets
      7. Railings and Guardrails
      8. Antennas
   v. Available standard: ASTM E2270-14(2019), "Standard Practice for Periodic Inspection of Building Facades for Unsafe Conditions", ASTM E2841-19, "Standard Guide for Conducting Inspections of Building Facades for Unsafe Conditions", and ASTM E3036-15(2021), "Standard Guide for Notating Facade Conditions in the Field".
2. Roof System
   i. Overall roof covering for signs of *deterioration* and to identify any leaks or damage.
   ii. Flashing and penetration of the roof covering for obvious signs of water damage, open seams, deformation, punctures, and missing flashing.
   iii. Roof accessories (equipment, ladders, railings, lighting rods, etc.) for missing, broken, or loose items.
   iv. The roof surface exhibits *positive roof drainage* and is free of ponding water. Roof drainage systems for clogged drains or scuppers, missing parts of drainage systems, or loose gutters. Roof water should not be discharged in a manner that creates a public nuisance.

Commented [KM194]: This seems to be a list of things to check, but it is not clear, since there is no explanatory language. This is a problem for this section and beyond in Section 6. All the sections should be written in a similar fashion. This needs heavy editing to present a coherent discussion that will be useful to the reader.

Commented [KM195]: This terminology is used throughout a number of the following subsections. What does it mean? Perhaps this should be a defined term?

Commented [KM196]: Section 6.2 only has 3 lists of bullets. Which one is Item 6?

Commented [KM197]: This is an awkward way to say that "mechanically attached or adhered appurtenances should assessed to ensure that they are not at imminent risk of falling."

Commented [KM198]: What is the reader supposed to do with this list of ASTM standards? Do the requirements in these match up with the condition assessment defined herein? At a minimum, this requires some discussion.

v. Plumbing vents should be free of visible obstructions and defects.
vi. Available standard: ASTM D7053-17, "Standard guide for determining and evaluating the causes of water leakage of low-slope roofs."

3. Fenestration System
   i. Glass curtain walls and/or vision panels for water intrusion, buckling, loose gaskets, corrosion, lose or missing beads.
   ii. Window and doors as part of the exterior façade for water damage and/or evidence of leaks including weatherstripping damage, broken hardware, incomplete closure, racking or warping, corrosion, or threshold damage.
   iii. Structural Glazing
      1. The building envelope may include a curtain wall system composed of Structural Sealant Glazing or SSG. Silicone structural glazing is a method utilizing a silicone adhesive to attach glass, metal, or other panel material to the structure of a building. Wind load and other impact loads on the façade are transferred from the glass or panel, through the structural silicone sealant to the structure of the building. The silicone sealant must maintain adhesive and cohesive integrity as the façade is subjected to wind load and thermal stresses.
      2. ASTM C1394 standard adopts the three-level evaluation approach for assessing SSG for performance. The recommended timeframe for inspections includes, perform a Level 1 between 1 and 2 years after substantial completion, a Level 1 after 5 years, a Level 2 after 10 years, a Level 1 after 15 years (if Level 2 was performed as recommended after 10 years), and a Level 2 after 20 years and each successive 10 years thereafter.
      3. **Level 1 evaluation**. Perform all the following evaluation procedures:
         a. Review project documentation, including original design drawings, shop drawings, mock-up testing report, and previous evaluation reports. Review original SSG design calculations, or if not available, perform calculations to determine stress on sealant from thermal and wind loading (and, where appropriate, seismic loading);
         b. Interview building management and maintenance personnel and tenants regarding breakage history of lites and other distress. Map findings on elevation drawings, and assess whether a pattern exists; and
         c. Perform a cursory visual assessment from the interior, and from the exterior ground, roofs, and balconies.
      4. **Level 2 evaluation**. Perform the following, plus all the procedures of Level 1 (unless a Level 1 evaluation has been performed previously and the documentation recommended to be kept by the *owner* is available.):
         a. Perform a close-up visual evaluation from the interior;
         b. Observe weather seal joints and structural joints from the exterior. Document distress and assess whether a pattern exists. Utilize high-powered optical tools to assist in observing from remote viewing areas, or from suspended scaffolding. Choose scaffold "drops" to represent the entire building, including different wind zones, elevations, exposures, details, and construction times; and
         c. Qualitatively measure the sealant adhesion by pressing in with a thumb. Alternatively, semi-quantitative adhesion strength data

Commented [KM199]: See previous comments on listed ASTM standards.

Commented [KM200]: I appreciate the explanation; however, it makes me wonder if the remainder of the Section 6 needs to have items explained with this level of detail. That is, will the reader have a working knowledge of all these buildings components?

Commented [KM201]: This seems to contradict what is being recommended in this guideline. At a minimum, discussion is needed to help the user navigate these differences.

Commented [KM202]: Has this been extracted from ASTM C1394 with the appropriate permissions? Nevertheless, this is too much detail when compared to the remainder of the section on envelope condition assessment. Consider deleting it.

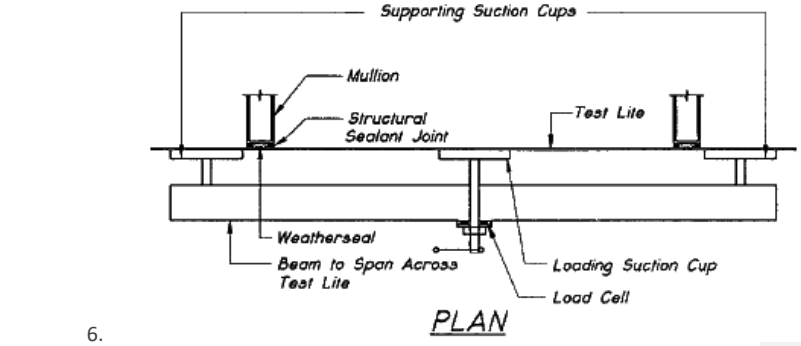
Commented [KM203]: See comment on Level 1 evaluation.

can be obtained using a Chatillon spring load indicator or pulling cut tabs to failure and measuring the elongation.

5. **Level 3 evaluation**. Perform all the following procedures under the field supervision of a qualified person, plus the procedures of Levels 1 and 2 (except that Level 1 may be eliminated if it has been performed previously and the documentation recommended to be kept by the *owner* is available.
   a. Consider whether the existing conditions indicate that evaluation of all lites is warranted. If not, develop a rational approach for evaluating a representative sample of the total lites. There is a trade-off between accuracy and the cost of the study. For quantitative tests and measurements, it is recommended that the number of specimens or test be selected to ensure achieving at least a 90% confidence interval with a maximum 20% margin of error. Different levels of study may require stricter parameters; and
   b. Perform in-situ load testing on selected lites, either by uniform load (air pressure) or point load (suctions cups). One applicable test method is described in ASTM C1392. () See Fig. 1 & 2)

Commented [KM204]: See comment on Level 1 evaluation.

6.



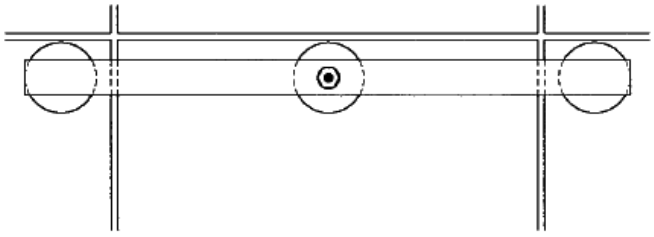


FIG. 1 Schematic of Field Loading Device

b.

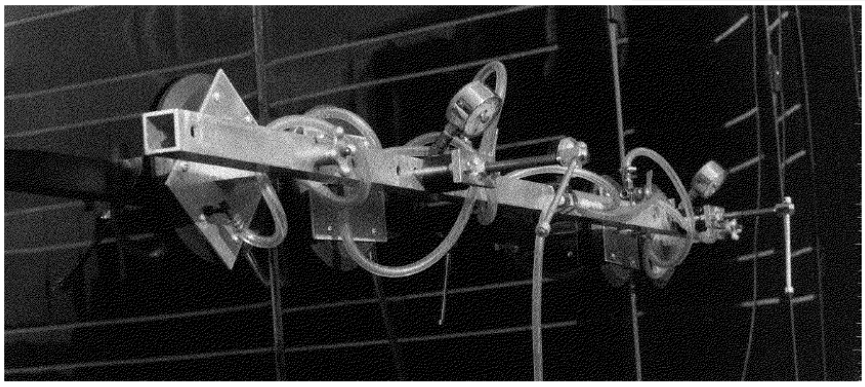


FIG. 2 Example of a Field Loading Device Mounted on a Wall

1.

4. Available standard: ASTM E2128-20, "Standard Guide for Evaluating Water Leakage of Building Walls."
5. Establish a life expectancy and cost of replacement for the various envelope components.

Commented [KM205]: See previous comment on ASTM standards.

Discussion: See comments in margin.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #196 (Taecker 9)
Proponent: Taecker, John

Guideline Change: Not specific, see discussion.

6.3 Envelope Condition Assessment Items:

Discussion:

1. Section 6.3 (3) - Should integrity of caulking materials also be included?

2. Section 6.3 (1)(i) – What is Item 6 of Section 6.2?

3. Section 6.3 (2)(i) – The same conditions to consider for the building façade in 6.3(1)(i) (e.g. surface defects, unsecure or loose elements such as roof shingles or tile) also should apply to roofs.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #197 (Herrera 35)

Proponent: Herrera, Richardo

Guideline Change:

6.4 Life Safety CA~~ondition Assessment~~ (Means of Egress) Items:

1. The number of exits or access to exits is capable of accommodating ~~serving~~ the occupant load relative to ~~for~~ the area served.
2. Exit signage provided is consistent with the exit arrangement.
3. The path of egress travel is clear and unimpeded.
4. Egress doors are operational, swing in the direction of travel and are not locked, chained, or prevented from being used.
5. Path of travel leads to a public way or a safe dispersal area.
6. The means of egress is provided with illumination devices required at the time of construction or per Chapter 11 of the IFC~~nternational Fire Code.~~
7. The stairways are in good condition and suitable for the intended egress use.
8. Where applicable, exit stair pathway ~~tower~~ signage for re-entry should be in place at each floor level.
9. Establish a life expectancy and cost of replacement for the various life safety/means of egress components.

Discussion: None provided

Committee Action: Considered, No Action Taken.

PUBLIC COMMENT #198 (Munsterteiger 23)
Proponent: Munsterteiger, Jeffery

Guideline Change:

6.4 Life Safety Condition Assessment (Means of Egress) Items:

1. The number of exits or access to exits is capable of serving the occupant load for the area served.
2. Exit signage provided is consistent with the exit arrangement.
3. The path of egress travel is clear and unimpeded.
4. Egress doors are operational, swing in the direction of travel and are not locked, chained, or prevented from being used.
5. Path of travel leads to a public way or safe dispersal area.
6. The means of egress is provided with illumination ~~devices required at the time of construction or Chapter 11 of the *International Fire Code*.~~
7. The stairways are in good condition and suitable for the intended use.
8. Where applicable, exit stair tower signage for re-entry should be in place at each floor level.

Commented [JM206]: Out of scope- Going back to requirements at time of construction is beyond the scope of this guideline.

9. ~~Establish a life expectancy and cost of replacement for the various life safety/means of egress components~~.

Commented [JM207]: Out of scope- What is the standard by which these should be established?

Discussion: See comments in margin.

Committee Action: Approved as Modified **(**strike, text in 6 as shown, and strike, as shown #9**).**

PUBLIC COMMENT #199 (Manley 24)
Proponent: Manley, Bonnie

Guideline Change:

6.4 Life Safety Condition Assessment (Means of Egress) Items:

Commented [KM208]: This seems to be a list of things to check, but it is not clear, since there is no explanatory language. All the Section 6 subsections should be written in a similar fashion. This needs heavy editing to present a coherent discussion that will be useful to the reader.

1. The number of exits or access to exits is capable of serving the occupant load for the area served.
2. Exit signage provided is consistent with the exit arrangement.
3. The path of egress travel is clear and unimpeded.
4. Egress doors are operational, swing in the direction of travel and are not locked, chained, or prevented from being used.
5. Path of travel leads to a public way or safe dispersal area.
6. The means of egress is provided with illumination devices required at the time of construction or Chapter 11 of the *International Fire Code*.
7. The stairways are in good serviceable condition and suitable for the intended use.
8. Where applicable, exit stair tower signage for re-entry should be in place at each floor level.
9. Establish a life expectancy and cost of replacement for the various life safety/means of egress components.

Commented [KM209]: This is subjective.

Discussion: See comments in margin.

Committee Action: Approved as Modified, replace good w/ serviceable.

PUBLIC COMMENT #200 (Taecker 10)
Proponent: Taecker, John

Guideline Change:

6.4 Life Safety Condition Assessment (Means of Egress) Items:

Commented [KM210]: This seems to be a list of things to check, but it is not clear, since there is no explanatory language. All the Section 6 subsections should be written in a similar fashion. This needs heavy editing to present a coherent discussion that will be useful to the reader.

Discussion:

1. Section 6.4 (2) – Not only should the signage be consistent with the exit arrangement, but also should be functioning properly to provide direction, and should not have any obstructions that would decrease the visibility. There are particular concerns overtime

regarding photoluminescent and self-luminous exit signs. There are also low level pathway markings in some installations.

2. Section 6.4 (4) – Egress doors should also not be blocked. There are some doors that are allowed to have delayed locking arrangements. The panic hardware needs to also be properly maintained and functioning.

3. Section 6.4 (6) – Not only should the illumination be provided with illumination devices, but they should also be checked to see that they are functioning properly.

4. Section 6.4 (7) – Shouldn't ramps and guardrails also be included?

Committee Action: Approved as Modified, see changes below:

6.4 Life Safety Condition Assessment (Means of Egress) Items:

1. The number of exits or access to exits is capable of serving the occupant load for the area served.
2. Exit signage provided is consistent with the exit arrangement and is functioning properly.
3. The path of egress travel is clear and unimpeded.
4. Egress doors are operational, swing in the direction of travel and are not locked, chained, or prevented from being used. Egress doors should not be blocked. Delayed locking arrangements are functioning correctly. Panic hardware must be properly maintained and functioning.
5. Path of travel leads to a public way or safe dispersal area.
6. The means of egress is provided with illumination devices required at the time of construction and is functioning properly ~~or Chapter 11 of the International Fire Code~~.
7. The stairways ramps and guardrails are in good condition and suitable for the intended use.
8. Where applicable, exit stair tower signage for re-entry should be in place at each floor level.
9. Establish a life expectancy and cost of replacement for the various life safety/means of egress components.

PUBLIC COMMENT #201 (Herrera 36)
Proponent: Herrera, Richardo

Guideline Change:

6.5 Passive Fire Protection Systems Items:

1. Structural building components ~~element~~ and roof covering protection for continuity of protection.

2. Fire-resistantce rated walls and ceilings ~~for integrity and maintenance of the assemblies.~~

3. Opening protection with ~~ves in~~ fire-resistantce-rated assemblies.

4. Fire-resistant ~~ce-rated breach protection for~~ selants where penetrations are needed ~~ng items pass~~ through walls and floors ~~for compliance based on penetration type and listing, assembly.~~

5. ~~Through and membrane penetrations in floor-ceiling assemblies in-place and maintained to prevent the passage of fire, and where applicable, smoke, unless contained within a rated shaft assembly.~~
6. Fire-~~resistance~~-rated stair enclosures and exit passageways ~~protection maintained and the integrity of the fire-resistance-rated assembly provides the requisite protection.~~

7. Automatic door closers in fire rated corridors ~~at fire-resistance-rated assemblies and at elevator lobbies (where installed) operate as intended and not intentionally modified to remain open.~~

8. Fire rated door assembly (door, frame, hardware) with ~~-~~labels easily ~~available and~~ readable.

9~~. Establish life expectancy and cost of replacement for the various passive fire protection system components.~~

Discussion: None provided

Committee Action: Approved as Submitted.

PUBLIC COMMENT #202 (Munsterteiger 24)
Proponent: Munsterteiger, Jeffery

Guideline Change

6.5 Passive Fire Protection Systems Items:

1. Structural building element and roof covering protection for continuity of protection.
2. Fire-resistance rated walls for integrity and maintenance of the assemblies.
3. Opening protectives in fire-resistance-rated assemblies.
4. Fire-resistance-rated breach protection for where penetrating items pass through walls and floors for compliance based on penetration type and listing, assembly.
5. Through and membrane penetrations in floor-ceiling assemblies in-place and maintained to prevent the passage of fire, and where applicable,

smoke, unless contained within a rated shaft assembly.
6. Fire-resistance-rated stair enclosures and exit passageways protection maintained and the integrity of the fire-resistance-rated assembly provides the requisite protection.
7. Automatic door closers at fire- resistance-rated assemblies and at elevator lobbies (where installed) operate as intended and not intentionally modified to remain open.
8. Fire rated door assembly (door, frame, hardware) labels available and readable.
9. ~~Establish life expectancy and cost of replacement for the various passive fire protection system components.~~

Commented [JM211]: Out of scope- What is the standard by which these should be established?

Discussion: See comment in margin.

Committee Action: Approved as Submitted, see previous action (removing life expectancy and cost replacement)>

PUBLIC COMMENT #203 (Manley 25)
Proponent: Manley, Bonnie

Guideline Change

6.5 Passive Fire Protection Systems Items:

Commented [KM212]: This seems to be a list of things to check, but it is not clear, since there is no explanatory language. All the Section 6 subsections should be written in a similar fashion. This needs heavy editing to present a coherent discussion that will be useful to the reader.

1. Structural building element and roof covering protection for continuity of protection.
2. Fire-resistance rated walls for integrity and maintenance of the assemblies.
3. Opening protectives in fire-resistance-rated assemblies.
4. Fire-resistance-rated breach protection for where penetrating items pass through walls and floors for compliance based on penetration type and listing, assembly.
5. Through and membrane penetrations in floor-ceiling assemblies in-place and maintained to prevent the passage of fire, and where applicable, smoke, unless contained within a rated shaft assembly.
6. Fire-resistance-rated stair enclosures and exit passageways protection maintained and the integrity of the fire-resistance-rated assembly provides the requisite protection.
7. Automatic door closers at fire- resistance-rated assemblies and at elevator lobbies (where installed) operate as intended and not intentionally modified to remain open.
8. Fire rated door assembly (door, frame, hardware) labels available and readable.
9. Establish life expectancy and cost of replacement for the various passive fire protection system components.

Discussion: See comment in margin.

Committee Action: Considered, No Action.

PUBLIC COMMENT #204 (Taecker 11)

Proponent: Taecker, John

Guideline Change

6.5 Passive Fire Protection Systems Items:

Discussion:

1. Section 6.5 – Fire, smoke, ceiling radiation, and corridor dampers need to be checked that they are functioning properly.

2. Section 6.5 (2) – Fire resistance rated floors, floor-ceilings, and roof-ceiling assemblies and shaft enclosures should also be included.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #205 (Herrera 37)
Proponent: Herrera, Richardo

Guideline Change

6.6 Active Fire Protection System Items:

1. Fire alarm systems, supervising station alarm systems, public emergency alarm reporting systems, fire and carbon monoxide detection and warning equipment, and emergency communications systems (ECS), with all ~~and~~ ~~their~~ components in good working condition ~~without corroded parts and do not appear to have been modified, altered, or damaged.~~

2. ~~Fire~~ sprinkler systems in good condition, installed as required. ~~s for signs of damage, replacement that does not match existing heads, leakage, or painted that was not factory applied.~~

3. All ~~Fire~~ sprinkler systems ~~for building elements or alterations~~ installed after the Certification of Occupancy in compliance with fire codes. ~~that would alter sprinkler coverage.~~

4. Undamaged Standpipe systems ~~for signs of damage or missing elements~~.

5. Fire, smoke, heat, and carbon monoxide detection equipment in good working condition, ~~have not be modified, altered, or painted that was not factory applied.~~

6. Fire department connections ~~are~~ in good working condition and ~~,~~ visible and at locations required by the code. ~~, and not missing essential parts~~.

7. ~~Fire~~All sprinkler piping, equipment, and appurtenance connections in ~~satisfactory~~ good working condition ~~to support the equipment or devices.~~

8. Fire protection system monitoring software with ~~and~~ cybersecurity protocols, all up to date. ~~have been updated and remain current.~~

9~~. Establish a life expectancy and cost of replacement for the various active fire protection system components~~.

Discussion: None provided

Committee Action: Approved as Submitted (#9 maintained as consistent with previous actions).

PUBLIC COMMENT #206 (Munsterteiger 25)
Proponent: Munsterteiger, Jeffery

Guideline Change

6.6 Active Fire Protection System Items:

1. Fire alarm systems, supervising station alarm systems, public emergency alarm reporting systems, fire and carbon monoxide detection and warning equipment, and emergency communications systems (ECS), and their components in good working condition without corroded parts and do not appear to have been modified, altered, or damaged.
2. Fire sprinklers for signs of damage, replacement that does not match existing heads, leakage, or painted that was not factory applied.
3. Fire sprinkler systems for building elements or alterations installed after the Certification of Occupancy that would alter sprinkler coverage.
4. Standpipe systems for signs of damage or missing elements.
5. Fire, smoke, heat, and carbon monoxide detection equipment in good working condition, have not be modified, altered, or painted that was not factory applied.
6. Fire department connections are in good working condition, visible, and not missing essential parts.
7. Fire sprinkler piping, equipment, and appurtenance connections in satisfactory working condition to support the equipment or devices.
8. Fire protection system software ~~and cybersecurity protocols~~ have been updated and remain current.
9. Establish a life expectancy and cost of replacement for the various active fire protection system components.

Commented [JM213]: Out of scope- To what standard are these required to comply?

Commented [JM214]: Out of scope- What is the standard by which these should be established?

Discussion: See comment in margin.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #207 (Hugo 5)
Proponent: Hugo, Jeffrey

Guideline Change

6.6 Active Fire Protection System Items:

1. Fire alarm systems, supervising station alarm systems, public emergency alarm reporting systems, fire and carbon monoxide detection and warning equipment, and emergency communications systems (ECS), and their components in good working condition without corroded parts and do not appear to have been modified, altered, or damaged.

2. Fire sprinklers for signs of damage, ~~heads~~, leakage, or with paint~~ed~~ or other materials that was not factory applied. Replaced sprinklers that do not match the current hazard classification or commodity.
3. Fire sprinkler systems for building elements or alterations installed after the Certification of Occupancy that would alter sprinkler coverage.

4. Standpipe systems for signs of damage or missing elements.

5. Fire, smoke, heat, and carbon monoxide detection equipment in good working condition, have not be modified, altered, or painted that was not factory applied.

6. Fire department connections are in good working condition, visible, and not missing essential parts.
7. Fire sprinkler piping, equipment, and appurtenance connections in satisfactory working condition to support the equipment or devices. Non-metallic piping (CPVC) is not in contact with non-compatible products, such as paint, caulk, insulation, etc.

8. Fire protection system software and cybersecurity protocols have been updated and remain current.

9. Establish a life expectancy and cost of replacement for the various active fire protection system components.
10. Valves that control water or fuel supply and power to fire protection systems shall be in the open or on position.

11. Hangers and seismic bracing and their connections to the fire protection system and building structural system are in good condition, free of corrosion and are free from supporting non-system components.

Discussion: This list could use some more work, but much of it is redundant from NFPA 25 and NFPA 72. Can this document refer to the referenced maintenance standards? It would be beneficial to have these standards as pre-requisite qualifier for the periodic assessment frequency. As you know a list is followed and the items not on the list are not covered.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #208 (Manely 26)
Proponent: Manley, Bonnie

Guideline Change

6.6 Active Fire Protection System Items:

1. Fire alarm systems, supervising station alarm systems, public emergency alarm reporting systems, fire and carbon monoxide detection and warning equipment, and emergency communications systems (ECS), and their components in ~~good~~ working condition without corroded parts and do not appear to have been modified, altered, or damaged.
2. Fire sprinklers for signs of damage, replacement that does not match existing heads, leakage, or painted that was not factory applied.
3. Fire sprinkler systems for building elements or alterations installed after the Certification of Occupancy that would alter sprinkler coverage.
4. Standpipe systems for signs of damage or missing elements.
5. Fire, smoke, heat, and carbon monoxide detection equipment in ~~good~~ working condition, have not be modified, altered, or painted that was not factory applied.
6. Fire department connections are in ~~good~~ working condition, visible, and not missing essential parts.
7. Fire sprinkler piping, equipment, and appurtenance connections in ~~satisfactory~~ working condition to support the equipment or devices.
8. Fire protection system software and cybersecurity protocols have been updated and remain current.
9. Establish a life expectancy and cost of replacement for the various active fire protection system components.

Discussion: See comments in margin.

Committee Action: Approved as Modified. Remove subjective terms related to the working condition.

Commented [KM215]: This seems to be a list of things to check, but it is not clear, since there is no explanatory language. All the Section 6 subsections should be written in a similar fashion. This needs heavy editing to present a coherent discussion that will be useful to the reader.

Commented [KM216]: Highlighted words are subjective. Use of these descriptors should be minimized or better explained as to what qualifies as "good" or "satisfactory".

PUBLIC COMMENT #209 (Taecker 12)
Proponent: Taecker, John

Guideline Change:

6.6 Active Fire Protection System Items:

Discussion: Need to change “be” to “been”. Need to also check whether they are in need of replacement due to end of life, as well as check the battery back-up. Shouldn’t similar language as used in Section 6.4 (6) also apply?

Committee Action: Approved as submitted.

PUBLIC COMMENT #210 (Herrera 38)
Proponent: Herrera, Richardo

Guideline Change

6.7 Electrical CAondition Assessment Items:

1. Service equipment, disconnecting means and overcurrent protection identified and documented by ratings (voltage, amperage, phase).

2. Service equipment has appropriate working clearance space and dedicated equipment space.

3. Electrical rooms have the required clearances, means of egress, illumination, warning signage, and general condition of the room.

4. Branch circuits for general visual condition, noting deterioration. Where branch circuits are not identified, a qualified individual should locate identify all the branch circuits.

5. Ground and bonding of systems and equipment for code compliancegeneral condition.

6. Evidence of code-complaint wWiring methods and materials (by type) for general condition.

7. Overall condition of fFeeder conductors for general condition.

8. Emergency, legally-required standby and optional standby systems, where installed, for their general operational condition.

9. The installation of special equipment such as onsite renewal energy systems, solar photovoltaic systems, wind generating systems, energy storage systems, and electric vehicle power charging transfer system equipment, where installed, for general condition.

10. Exterior wiring methods and materials (parking garages, parking areas, swimming pools, accessory buildings and structures) for general condition.

11. Thermographic Imaging inspection for systems operating at 400 amps or more. The fundamental test procedures described in Chapter 7 of NFPA 70B Standard for Electrical Equipment Maintenance should be used.

a. Infrared Thermography Inspection for electrical systems operating at 400 amperes or greater, accompanied by a written report of the following electrical equipment such as busways, switchgear, panelboards (except in dwelling unit load centers), disconnects, VFDS, starters, control panels, timers, meter centers, gutters junction boxes, automatic/manual transfer switches, exhaust fans and transformers. The infrared

inspection of electrical equipment shall be- performed by a Level-II or higher certified infrared thermographer who is qualified and trained to recognize and document thermal anomalies in electrical systems.

12. All f~~F~~ield testing and test methods shall be conducted in accordance with Chapter 8 of NFPA 70B Standard for Electrical Equipment Maintenance as required to assess the overall condition of electrical equipment and systems and to accomplish the following objectives:

a. Ascertain the ability of the device ~~under~~ tested to continue to perform its function as designed.

b. Determine whether any corrective maintenance or replacement is necessary.

c. Document the condition of the equipment over its service life.

d. Provide results to ascertain the overall condition of the operating condition ~~maintenance~~ of the device under testing.

13. ~~Existing~~ Dwellings shall be inspected in accordance with NFPA 73 Standard for Electrical Inspections for Existing Dwellings

14. Establish a life expectancy prediction ~~and cost of replacement~~ for the various electrical components.

15. Check Power-limited and Fault-Managed Power Circuits, where installed, for their general operational status~~condition.~~

16. Functionality of Communication systems, ~~where installed~~ for life safety, fire safety, means or egress or emergency

Discussion: None provided

Committee Action: Considered, No Action, see previous action on PC #213.

PUBLIC COMMENT #211 (Munsterteiger 26)
Proponent: Munsterteiger, Jeffery

Guideline Change:

6.7 Electrical Condition Assessment Items:

1. Service equipment, disconnecting means and overcurrent protection identified and documented by ratings (voltage, amperage, phase).
2. Service equipment has appropriate working space and dedicated equipment space.
3. Electrical rooms have ~~the required clearances,~~ means of egress, illumination, warning signage, and general condition of the room.

Commented [JM217]: Out of scope- Required by what standard?

Commented [KM218R217]: 26

4. Branch circuits for general condition, noting *deterioration*. ~~Where branch circuits are not identified, a qualified individual should locate the branch circuits.~~
5. Ground and bonding of systems and equipment for general condition.
6. Wiring methods and materials (by type) for general condition.
7. Feeder conductors for general condition.
8. Emergency, ~~legally required~~ standby and optional standby systems, where installed, for general condition.
9. The installation of special equipment such as onsite renewal energy systems, solar photovoltaic systems, wind generating systems, energy storage systems, and electric vehicle power transfer system equipment, where installed, for general condition.
10. Exterior wiring methods and materials (parking garages, parking areas, swimming pools, accessory buildings and structures) for general condition.
11. Thermographic Imaging inspection for systems operating at 400 amps or more. The fundamental test procedures described in Chapter 7 of NFPA 70B Standard for Electrical Equipment Maintenance should be used.
    a. Infrared Thermography Inspection for electrical systems operating at 400 amperes or greater, accompanied by a written report of the following electrical equipment such as busways, switchgear, panelboards (except in dwelling unit load centers), disconnects, VFDS, starters, control panels, timers, meter centers, gutters junction boxes, automatic/manual transfer switches, exhaust fans and transformers. The infrared inspection of electrical equipment shall be performed by a Level-II or higher certified infrared thermographer who is qualified and trained to recognize and document thermal anomalies in electrical systems.
12. Field testing and test methods shall be conducted in accordance with Chapter 8 of NFPA 70B Standard for Electrical Equipment Maintenance to assess the overall condition of electrical equipment and systems and to accomplish the following objectives:
    a. Ascertain the ability of the device under test to continue to perform its function as designed.
    b. Determine whether any corrective maintenance or replacement is necessary.
    c. Document the condition of the equipment over its service life
    d. Provide results to ascertain the overall condition of maintenance of the device under test.
13. Existing dwellings shall be inspected in accordance with NFPA 73 Standard for Electrical Inspections for Existing Dwellings
14. Establish a life expectancy and cost of replacement for the various electrical components.
15. Power-limited and Fault-Managed Power Circuits, where installed, for general

Commented [JM219]: Out of scope- Identifying branch circuits is a requirement of electrical code. This guideline may lack the authority to impose requirements beyond those required by code at time of installation.

Commented [JM220]: Out of scope- Legally required by what standard?

Commented [JM221]: Out of scope- What is the standard by which these should be established?

condition.

16. Communication systems, where installed for life safety, fire safety, means or egress or emergency communications for general condition.

Discussion: See comment in margin.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #212 (Manley 27)
Proponent: Manley, Bonnie

Guideline Change:

6.7 Electrical Condition Assessment Items:

1. Service equipment, disconnecting means and overcurrent protection identified and documented by ratings (voltage, amperage, phase).
2. Service equipment has appropriate working space and dedicated equipment space.
3. Electrical rooms have the required clearances, means of egress, illumination, warning signage, and general condition of the room.
4. Branch circuits for general condition, noting *deterioration*. Where branch circuits are not identified, a qualified individual should locate the branch circuits.
5. Ground and bonding of systems and equipment for general condition.
6. Wiring methods and materials (by type) for general condition.
7. Feeder conductors for general condition.
8. Emergency, legally-required standby and optional standby systems, where installed, for general condition.
9. The installation of special equipment such as onsite renewal energy systems, solar photovoltaic systems, wind generating systems, energy storage systems, and electric vehicle power transfer system equipment, where installed, for general condition.
10. Exterior wiring methods and materials (parking garages, parking areas, swimming pools, accessory buildings and structures) for general condition.
11. Thermographic Imaging inspection for systems operating at 400 amps or more. The fundamental test procedures described in Chapter 7 of NFPA 70B Standard for Electrical Equipment Maintenance should be used.
    a. Infrared Thermography Inspection for electrical systems operating at 400 amperes or greater, accompanied by a written report of the following electrical equipment such as busways, switchgear, panelboards (except in dwelling unit load centers), disconnects, VFDS, starters, control panels, timers, meter centers, gutters junction boxes, automatic/manual transfer switches, exhaust fans and transformers. The infrared inspection of electrical equipment shall be performed by a Level-II or higher certified infrared thermographer who is qualified and trained to recognize and document thermal anomalies in electrical systems.

Commented [KM222]: This seems to be a list of things to check, but it is not clear, since there is no explanatory language. All the Section 6 subsections should be written in a similar fashion. This needs heavy editing to present a coherent discussion that will be useful to the reader.

Commented [KM223]: Vague term, open to interpretation.

Commented [KM224]: This terminology is used throughout this section. What does it mean? Should it be a defined term?

Commented [KM225]: Do the requirements in NFPA 70B match up with the condition assessment defined herein? At a minimum, this requires some discussion. Also, have the subsections been extracted from NFPA 70B?

Commented [KM226]: Use of mandatory language is not appropriate for a guideline document and seems out of place here. If desired, simply extract the relevant requirement from the I-Code as an example.

Commented [KM227]: Are the necessary qualifications listedin NFPA 70B? Without further explanation, this has little meaning here.

12. Field testing and test methods shall be conducted in accordance with Chapter 8 of NFPA 70B Standard for Electrical Equipment Maintenance to assess the overall condition of electrical equipment and systems and to accomplish the following objectives:
    a. Ascertain the ability of the device under test to continue to perform its function as designed.
    b. Determine whether any corrective maintenance or replacement is necessary.
    c. Document the condition of the equipment over its service life
    d. Provide results to ascertain the overall condition of maintenance of the device under test.
13. Existing dwellings shall be inspected in accordance with NFPA 73 Standard for Electrical Inspections for Existing Dwellings
14. Establish a life expectancy and cost of replacement for the various electrical components.
15. Power-limited and Fault-Managed Power Circuits, where installed, for general condition.
16. Communication systems, where installed for life safety, fire safety, means or egress or emergency communications for general condition.

Commented [KM228]: See previous comment on use of mandatory language.

Commented [KM229]: See previous comment on use of mandatory language.

Commented [KM230]: 1 and 2 family dwellings have been exempted earlier in the document. Does NFPA 73 cover residential properties?Do the requirements in NFPA 73 match up with the condition assessment defined herein? At a minimum, this requires some discussion.

Discussion: See comments in margin.

Committee Action: Considered, No Action, see previous action on PC #213.

PUBLIC COMMENT #213 (Taecker 13)
Proponent: Taecker, John

Guideline Change:

6.7 Electrical Condition Assessment Items:

Discussion:

1. Section 6.7 – A last item should be added to identify “available standards”, NFPA 70B and NFPA 73, like what is done in Section 6.3.

2. Section 6.7 (1) – Disconnecting means and overcurrent protection need to be accessed, as well as functioning properly. In addition, GFCIs and AFCIs need to be functioning properly.

3. Section 6.7 (3) – The electrical room should not be a storage room, and there should be access to the room. Under certain conditions, doors for electrical rooms are required to have panic hardware, which needs to be functioning properly.

4. Section 6.7 (5) – The word “Ground” should be “Grounding”.

5. Section 6.7 (6) – Outlet box covers need to be in place.

6. Section 6.7 (10) – There are other exterior wiring methods and materials. Suggest adding either the word "including" or "such as" within the beginning of the laundry list of locations.

7. Section 6.7 (16) – "means or egress" should be "means of egress"

Committee Action: Approved as modified (see updated language from BEWG, below)

6.7 Electrical Condition Assessment Items:

1. Service equipment, disconnecting means, ~~and~~ overcurrent protection, and other protective devices such as arc-fault circuit interrupters, ground-fault circuit interrupters, and surge protection are accessible, identified, and documented by ratings (voltage, amperage, phase) and functioning properly.
3. Electrical rooms have the required clearances, means of egress, illumination, warning signage, proper egress door hardware and swing, is not being used for storage, and general condition of the room.
5. Grounding and bonding of systems and equipment for general condition.
6. Wiring methods and materials (by type) for general condition, all unused openings in boxes and enclosures are closed, and covers for boxes and enclosures are installed.
10. ~~Exterior~~ Wiring methods and materials located outdoors or on the exterior of buildings and structures such as ~~(~~parking garages, parking areas, swimming pools, accessory buildings and structures~~)~~ for general condition.
16. Communication systems, where installed for life safety, fire safety, means of egress or emergency communications for general condition.
17. Available Standards: NFPA 70B, "Standard for Electric Equipment Maintenance", NFPA 73, "Standard for Electrical Inspections for Existing Dwellings", NFPA 78, "Guide on Electrical Inspections".

PUBLIC COMMENT #214 (Purser 1)
Proponent: Purser, Wendy

Guideline Change:

6.8 Plumbing Items:

(portions of text removed for brevity)

14. Swimming pools
    a. Equipment and visible piping condition.
    b. Condition of niche light(s).
    c. Effective ~~grounding~~ bonding of all metal within proximity of water's edge

Discussion:

The correct terminology, as referenced in NEC 680, for metal near the water's edge should be used.

Note: Supporting emails from:
1. Michael Weinbaum mweinbaum@gmail.com
2. John Weber John.Weber@biolabinc.com
3. Dongell, Jonathan jdongell@pebbletec.com

Committee Action: Approved as Submitted.

PUBLIC COMMENT #215 (Herrera 39)
Proponent: Herrera, Richardo

Guideline Change

6.8 Plumbing Items:

1. Underground building site sanitary and storm sewers, branches, and storm drains for blockages and cracking.

    a. Perform a video inspection of underground sanitary ~~sewage~~ lines to determine the condition of horizontal lines (concrete, PVC or cast iron)~~and to determine condition of any cast iron piping.~~

2. Lift stations, foundation drainage sumps and other pumps necessary to ensure proper system operation.

    a. Verify the condition of the ~~any~~ elevator sump pump and the discharge point.

    b. Lift station visual inspection of pumps, holding tanks, and the pump electrical system.

3. Pipe chases for signs of water, DWV leaks or shifting of piping and adequate hanger system capacity.

4. Cross-connection and backflow assemblies maintained and confirmed operational.

    a. Inspect backflow preventer for leaks and proper operation.

5. Cross-connection components for onsite alternative water sources, maintained and confirmed operational.

6. Grease interceptors should be visually inspected, and their maintenance logs verified.

7. Domestic hot water boilers and water heaters for leaks, or damage.

8. Check ~~Take~~ carbon monoxide readings to determine any if excessive exposures exist ~~limit~~.

9. Electrical connections to plumbing appliances or fixtures – see Section 6.7.

10. Piping and plumbing equipment and appurtenance connections in satisfactory condition to permit proper operation of all ~~support~~ the equipment or devices.

11. Location of site cleanouts and their cleanliness condition

    a. Manhole location(s) and their internal condition

    b. Water main material conditions~~, like galvanized pipes~~.

12. Water tank condition, wherever the tanks are located

    a. Roof top locations

    b. Mechanical room locations

    c. Adequacy of supporting structure

13. Highrise buildings

    a. Assess booster pump condition.

    b. Assess pressure reducing valves.

14. Swimming pools

    a. Visually examine the e~~E~~quipment and the ~~visible~~ piping condition.

    b. Condition of in pool niche light(s).

    c. Existence of e~~E~~ffective grounding of all metal within proximity of water's edge.

15. Establish a life expectancy ~~and cost of replacement~~ for the various plumbing components.

Discussion: None provided

Committee Action: Approved as Submitted.

PUBLIC COMMENT #216 (Munsterteiger 27)
Proponent: Munsterteiger, Jeffery

Guideline Change:

6.8 Plumbing Items:

1. Underground building sanitary and storm sewers, branches, and storm drains for blockages and cracking.
    a. Perform a video inspection of underground sewage lines to determine the condition of horizontal lines and to determine condition of any cast iron piping.
2. Lift stations, foundation drainage sumps and pumps to ensure proper operation.
    a. Verify the condition of any elevator sump pump and the discharge point.
    b. Lift station visual inspection of pumps, tank, and electrical system.
3. Pipe chases for signs of water, DWV leaks or shifting of piping and adequate hanger system capacity.
4. Cross-connection and backflow assemblies maintained and confirmed operational.
    a. Inspect backflow preventer for leaks and operation.
5. Cross-connection components for onsite alternative water sources maintained and confirmed operational.
6. Grease interceptors should be visually inspected, and maintenance logs verified.
7. Domestic hot water boilers and water heaters for leaks, or damage.
8. Take carbon monoxide readings to determine any excessive exposure limit.
9. Electrical connections to plumbing appliances or fixtures – see Section 6.7.
10. Piping and plumbing equipment and appurtenance connections in satisfactory condition to support the equipment or devices.
11. Location of site cleanouts and condition
    a. Manhole location(s) and condition
    b. Water main material condition~~, like galvanized pipes~~.
12. Water tank condition
    a. Roof top locations
    b. Mechanical room locations
    c. Adequacy of supporting structure
13. Highrise buildings
    a. Assess booster pump condition.
    b. Assess pressure reducing valves.
14. Swimming pools
    a. Equipment and visible piping condition.
    b. Condition of niche light(s).
    c. Effective grounding of all metal within proximity of water's edge.
15. Establish a life expectancy and cost of replacement for the various plumbing components.

Commented [JM231]: Clarity- It's unnecessary to specify the piping type, all should be inspected for condition.

Commented [JM232]: Out of scope- What is the standard by which these should be established?

Discussion: See comments in margin.

Committee Action: Approved as Modified, strike #15.

PUBLIC COMMENT #217 (Manley 28)
Manley, Bonnie

Guideline Change:

6.8 Plumbing Items:

1. Underground building sanitary and storm sewers, branches, and storm drains for blockages and cracking.
    a. Perform a video inspection of underground sewage lines to determine the condition of horizontal lines and to determine condition of any cast iron piping.
2. Lift stations, foundation drainage sumps and pumps to ensure proper operation.
    a. Verify the condition of any elevator sump pump and the discharge point.
    b. Lift station visual inspection of pumps, tank, and electrical system.
3. Pipe chases for signs of water, DWV leaks or shifting of piping and adequate hanger system capacity.
4. Cross-connection and backflow assemblies maintained and confirmed operational.
    a. Inspect backflow preventer for leaks and operation.
5. Cross-connection components for onsite alternative water sources maintained and confirmed operational.
6. Grease interceptors should be visually inspected, and maintenance logs verified.
7. Domestic hot water boilers and water heaters for leaks, or damage.
8. Take carbon monoxide readings to determine any excessive exposure limit.
9. Electrical connections to plumbing appliances or fixtures – see Section 6.7.
10. Piping and plumbing equipment and appurtenance connections in satisfactory condition to support the equipment or devices.
11. Location of site cleanouts and condition
    a. Manhole location(s) and condition
    b. Water main material condition, like galvanized pipes.
12. Water tank condition
    a. Roof top locations
    b. Mechanical room locations
    c. Adequacy of supporting structure
13. Highrise buildings
    a. Assess booster pump condition.
    b. Assess pressure reducing valves.
14. Swimming pools
    a. Equipment and visible piping condition.
    b. Condition of niche light(s).
    c. Effective grounding of all metal within proximity of water's edge.
15. Establish a life expectancy and cost of replacement for the various plumbing components.

Discussion: See comments in margin.

Committee Action: Considered, No Action.

Commented [KM233]: This seems to be a list of things to check, but it is not clear, since there is no explanatory language. All the Section 6 subsections should be written in a similar fashion. This needs heavy editing to present a coherent discussion that will be useful to the reader.

Commented [KM234]: Highlighted words are subjective. Use of these descriptors should be minimized or better explained as to what is intended.

PUBLIC COMMENT #218 (Taecker 14)
Proponent: Taecker, John

Guideline Change:

6.8 Plumbing Items:

Discussion:

1. Section 6.8 (1) – Is only the condition of cast iron piping the concern? Isn't there concern for the condition of any piping material that was used?

2. Section 6.8 (7) – The word "domestic" should be removed, because this applies to wherever water heaters are used. Also, boilers are covered by the Mechanical, not the Plumbing code.

3. Section 6.8 (8) – This is a Fuel Gas Item, not a Plumbing Item. Also, there is no direction on what is considered an "excessive exposure limit", or what action to take, other than to take readings.

4. Section 6.8 (9) – Should also include electrical connections to plumbing fixture fittings (e.g. metered faucets)

5. Section 6.8 (10) – Should also include plumbing appliances.

6. Section 6.8 (14) – Should add "and spas". Subitems b and c – Swimming pool niche lights, as well as the effective grounding of all the metal within proximity of the water's edge – are Electrical Items, not Plumbing Items. There are also other critical items to check regarding swimming pools and spas, particularly that the elements of pool barriers are maintained and functioning properly (ISPSC Section 305). The barriers are not Plumbing Items, so they should be located elsewhere.

Committee Action: Approved as Modified, item #2 and #6 only

PUBLIC COMMENT #219 (Cavallo 5)
Proponent: Cavallo, Eric

Guideline Change:

6.9 Mechanical Items:

(portions of text removed for brevity)

13. Pump Condition

    a. Connections are free of leaks

(remaining text unchanged)

Discussion: I read through the Existing Building Condition Assessment Guide public draft and would like to offer some feedback. Firstly, I think it's a pretty amazing tool that was put together perfectly. I've attached a PDF with the notes and suggested changes. Most notebly on the suggested which I'll highlight to you again here is a recommendation that an exception be included to section 4.1.2 and that the frequency in which assessments are conducted to High hazard occupancies be on a biyearly basis rather than annually.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #220 (Herrera 40)
Proponent: Herrera, Richardo

Guideline Change

6.9 Mechanical Items:
(portions of text removed for brevity)
17. Generator maintenance

    a. Exhaust piped

    b. Fuel tanks and lines

    c. Equipment e~~E~~xercise schedule

18. Establish a life expectancy ~~and cost of replacement~~ for the various mechanical units.

Discussion: None provided

Committee Action: Approved as modified - #18 modified to be deleted, for consistency with previous actions.

PUBLIC COMMENT #221 (Munsterteiger 28)
Proponent: Munsterteiger, Jeffery

Guideline Change

6.9 Mechanical Items:
1. Stairways and shafts with stairwell pressurization operational.
    a. Assess mechanical equipment.

Commented [KM235]: only

b. Assess door operation into the stairway.
c. Is there a functioning sequence of operation plan.

2. Mechanical ventilation system operational.
   a. Working units
3. Natural ventilation in good repair and operational.
4. Commercial Type I and Type II vents hoods comply with manufacturers' specifications and listing(s).
   a. Filter maintenance.
   b. Exhaust fan operation.
   c. Confirm make-up air.
5. Process and heating/hydronic boilers comply with manufacturers' specifications and listing(s).
6. Electrical connections to mechanical systems, appliances or apparatuses – see Section 6.7.
7. Mechanical equipment and appurtenance connections in satisfactory condition to support the equipment or devices.
8. Cleanliness of ducts.
9. Maintenance of drain pans and condensate lines/p-traps, including adequate point of disposal.
10. Maintenance of air handler and condensing unit coils.
    a. Cooling Towers Operation of chemical treatment and balancing.
    b. Condition of water bleed system.
11. Boilers
    a. Take carbon monoxide readings to determine any excessive exposure limit.
       1. Regulatory Levels (See Table C-1 ANSI.ASHRAE Standard 62.1-2016)
          a. The OSHA personal exposure limit (PEL) for CO is 50 parts per million (ppm). OSHA standards prohibit worker exposure to more than 50 parts of CO gas per million parts of air averaged during an 8-hour time period. The 8-hour PEL for CO in maritime operations is also 50 ppm. Maritime workers, however, must be removed from exposure if the CO concentration in the atmosphere exceeds 100 ppm. The peak CO level for employees engaged in roll-on roll-off operations during cargo loading and unloading is 200 ppm.
          b. The ASHRAE Standard 62.1-2016, "Ventilation for Acceptable Indoor Air Quality" agrees with the US Environmental Protection Agency and the World Health Organization limit of 9 ppm over an 8-hour exposure.
          c. It is recommended that any reading above

Commented [JM236]: Out of scope- This will be increasingly difficult as the appliances age, and may become impossible to fulfill.

Commented [JM237]: Out of scope- This will be increasingly difficult as the appliances age, and may become impossible to fulfill.

Zero PPM be reported and have the equipment serviced before remeasuring.

2. Check for any state inspection requirements in your laws.

12. Chillers
    a. Condition of chilled water piping
    b. Condition of condensate piping
13. Pump condition
14. Water Source Heat Pump condition
15. Heat Exchanger condition
16. Condensing Unit condition
    a. Cleanliness
    b. Leak-free
17. Generator maintenance
    a. Exhaust piped
    b. Fuel tanks and lines
    c. Exercise schedule
18. Establish a life expectancy and cost of replacement for the various mechanical units.

Commented [JM238]: Out of scope- What is the standard by which these should be established?

Discussion: See comments in margin.

Committee Action: Considered, no action taken.

PUBLIC COMMENT #222 (Manley 29)
Proponent: Manley, Bonnie

Guideline Change

6.9 Mechanical Items:

1. Stairways and shafts with stairwell pressurization operational.
    a. Assess mechanical equipment.
    b. Assess door operation into the stairway.
    c. Is there a functioning sequence of operation plan.
2. Mechanical ventilation system operational.
    a. Working units
3. Natural ventilation in good repair and operational.
4. Commercial Type I and Type II vents hoods comply with manufacturers' specifications and listing(s).
    a. Filter maintenance.
    b. Exhaust fan operation.
    c. Confirm make-up air.
5. Process and heating/hydronic boilers comply with manufacturers' specifications and listing(s).
6. Electrical connections to mechanical systems, appliances or apparatuses – see Section 6.7.

Commented [KM239]: This seems to be a list of things to check, but it is not clear, since there is no explanatory language. All the Section 6 subsections should be written in a similar fashion. This needs heavy editing to present a coherent discussion that will be useful to the reader.

Commented [KM240]: Highlighted words are subjective. Use of these descriptors should be minimized or better explained as to what is intended.

Commented [KM241]: Who supplies this information?

7. Mechanical equipment and appurtenance connections in satisfactory condition to support the equipment or devices.
8. Cleanliness of ducts.
9. Maintenance of drain pans and condensate lines/p-traps, including adequate point of disposal.
10. Maintenance of air handler and condensing unit coils.
    a. Cooling Towers Operation of chemical treatment and balancing.
    b. Condition of water bleed system.
11. Boilers
    a. Take carbon monoxide readings to determine any excessive exposure limit.
        1. Regulatory Levels (See Table C-1 ANSI.ASHRAE Standard 62.1-2016)
            a. The OSHA personal exposure limit (PEL) for CO is 50 parts per million (ppm). OSHA standards prohibit worker exposure to more than 50 parts of CO gas per million parts of air averaged during an 8-hour time period. The 8-hour PEL for CO in maritime operations is also 50 ppm. Maritime workers, however, must be removed from exposure if the CO concentration in the atmosphere exceeds 100 ppm. The peak CO level for employees engaged in roll-on roll-off operations during cargo loading and unloading is 200 ppm.
            b. The ASHRAE Standard 62.1-2016, "Ventilation for Acceptable Indoor Air Quality" agrees with the US Environmental Protection Agency and the World Health Organization limit of 9 ppm over an 8-hour exposure.
            c. It is recommended that any reading above Zero PPM be reported and have the equipment serviced before remeasuring.
    b. Check for any state inspection requirements in your laws.
12. Chillers
    a. Condition of chilled water piping
    b. Condition of condensate piping
13. Pump condition
14. Water Source Heat Pump condition
15. Heat Exchanger condition
16. Condensing Unit condition
    a. Cleanliness
    b. Leak-free
17. Generator maintenance
    a. Exhaust piped
    b. Fuel tanks and lines
    c. Exercise schedule
18. Establish a life expectancy and cost of replacement for the various mechanical units.

Discussion: See comments in margin.

Committee Action: Considered, No Action Taken

Commented [KM242]: Could this table be extracted into the guideline with the appropriate prermissions? Is this the latest edition?

Commented [KM243]: Where is this category defined?

PUBLIC COMMENT #223 (Taecker 15)
Proponent: Taecker, John

Guideline Change

6.9 Mechanical Items:

Discussion:

1. Section 6.9 -Should include an assessment of chimney and vents (IMC Chapter 8) to make sure everything is connected and the proper termination caps or spark arresters or decorative shrouds are in place and not blocked. Also clearances to combustible materials are maintained.

2. Section 6.9 (4) – Type I and Type II hoods are not "vents hoods". They are "exhaust hoods". Also, not all Type I hoods are manufactured and listed. The IMC allows for field fabricated hoods. No Type II hoods are listed. In Item c, the interlocking for the make-up air should be confirmed. There should also be checking of recirculating systems (UL 710B) if they are used. Cleaning of the grease ducts is essential.

3. Section 6.9 (7) – Should also include appliances, and everything should functioning properly.

4. Section 6.9 (8) – Which ducts? Air ducts? Grease ducts? Product conveying ducts? There should also be cleaning of lint traps in clothes dryers, and that if a dryer exhaust duct power ventilator is used, it is functioning properly and interlocked with the clothes dryer. Also should inspect the condition of the filtration system within the HVAC system.

5. Section 6.9 (16) – should also be checking the condition of the line sets.

6. Section 6.9 (18) – The term "units" is not a commonly used term in the IMC, but the terms "appliances and equipment" are. Another way to be more encompassing would be to replace the words "mechanical units" with "mechanical system components".

Committee Action: Approved as Modified, as recommended by the Work Group, see modification proposed by the work group:

6.9 Mechanical Items:

4. Commercial Type I and Type II ~~vents~~ hoods comply with manufacturers' specifications and listing(s), when applicable.
    a. Filter and grease ducts maintenance.
    b. Exhaust fan operation.
    c. Confirm make-up air and method of interlock.
    d. Air recirculation system operation.
7. Appliances, equipment and appurtenance connections in satisfactory condition and properly functioning. ~~to support the equipment or devices.~~

8. Cleanliness of all ducts, lint traps, and filtration equipment in air distribution and exhaust systems. Where installed, clothes dryer duct power ventilator is interlocked and functioning properly.
16. Condensing Unit and line sets condition
    a. Cleanliness
    b. Leak-free
18. Establish a life expectancy and cost of replacement for the various mechanical system appliances, equipment, and components. ~~units~~.
19. Chimneys and vents.
    a. Clearances have been maintained.
    b. Cleanouts, connectors, caps, spark arrestors, and other accessory components are installed, where applicable.

PUBLIC COMMENT #224 (Herrera 41)
Proponent: Herrera, Richardo

Guideline Change

6.10 Fuel Gas Items Checks:

1. ~~Fuel gas~~ piping system ~~for~~ leaks.
2. ~~Fuel fired~~ Operational equipment ~~appliance~~ venting systems ~~are operational.~~
3. Pipe chase integrity ~~s for signs of shifting of~~along with pipe hangers and lateral restraintsing and adequate hanger system capacity.
4. All required e~~E~~lectrical connections to the systems ~~required to fuel gas systems or venting of appliances or apparatuses -~~ see Section 6.7.

~~5. Fuel gas piping, equipment, and appurtenance connections in satisfactory condition to support the equipment or devices.~~

~~6. Establish a life expectancy and cost of replacement for the various fuel gas components~~.

Discussion: None provided

Committee Action: Approved as Submitted.

PUBLIC COMMENT #225 (Munsterteiger 29)
Proponent: Munsterteiger, Jeffery

Guideline Change

6.10 Fuel Gas Items:

1. Fuel gas piping system for leaks.
2. Fuel fired appliance venting systems are operational.
3. Pipe chases for signs of shifting of piping and adequate hanger system capacity.
4. Electrical connections required to fuel gas systems or venting of appliances or apparatuses - see Section 6.7.
5. Fuel gas piping, equipment, and appurtenance connections in satisfactory condition to support the equipment or devices.
6. Establish a life expectancy and cost of replacement for the various fuel gas components.

Commented [JM244]: Out of scope- What is the standard by which these should be established?

Commented [KM245R244]: 29

Discussion: See comments in margin.

Committee Action: Considered, No Action, see previous action on PC #224

PUBLIC COMMENT #226 (Manley 30)
Proponent: Manley, Bonnie

Guideline Change
6.10 Fuel Gas Items:

Commented [KM246]: This seems to be a list of things to check, but it is not clear, since there is no explanatory language. All the Section 6 subsections should be written in a similar fashion. This needs heavy editing to present a coherent discussion that will be useful to the reader.

1. Fuel gas piping system for leaks.
2. Fuel fired appliance venting systems are operational.
3. Pipe chases for signs of shifting of piping and adequate hanger system capacity.
4. Electrical connections required to fuel gas systems or venting of appliances or apparatuses - see Section 6.7.
5. Fuel gas piping, equipment, and appurtenance connections in satisfactory condition to support the equipment or devices.
6. Establish a life expectancy and cost of replacement for the various fuel gas components.

Discussion: See comments in margin.

Committee Action: Considered, No Action; may need to look at document for consistent use of terms like good/satisfactory.

PUBLIC COMMENT #227 (Taecker 16)
Proponent: Taecker, John

Guideline Change

6.10 Fuel Gas Items:

Discussion:

1. Section 6.10 – The detail of Section 6.9 (11) should also be in the Fuel Gas Items

2. Section 6.10 (2) – Not only should the venting system be operational, but it should also have the proper termination caps or spark arresters or decorative shrouds are in place and not blocked. It should also be properly secured in place, and there should be proper clearances around the chimney or vent from combustible material.

Committee Action: Considered, No Action

PUBLIC COMMENT #228 (Herrera 42)
Proponent: Herrera, Richardo

Guideline Change

6.11 Condition Assessment Results and Follow-up Action: Where the CA identifies that ~~needed~~ repairs or replacements are needed, ~~to be performed,~~ they shall be ~~such repairs or replacements should be conducted~~ carried out –in accordance with the processes and procedures of the AHJ~~jurisdiction~~.

~~In all cases, where~~wherever –a potential unsafe or dangerous condition(s) exists, the AHJ ~~code official~~ shall be notified as soon as possible to determine if they concur. ~~an imminent dangerous exists such that~~ an order to vacate may be issued ~~to require the occupants to vacate~~ the building or portions thereof while ~~or take other~~ appropriate action(s) to ensure occupant safety are taken.

Discussion: None provided+

Committee Action: Considered, No Action

PUBLIC COMMENT #229 (Manley 31)
Proponent: Manley, Bonnie

Guideline Change

6.11 Condition Assessment Results and Follow-up Action:

Where the *condition assessment* identifies needed repairs or replacements to be performed, such repairs or replacements should be conducted in accordance with the process and procedures of the *jurisdiction.*

In all cases, where a potential *unsafe* or *dangerous* condition(s) exists, the *code official* shall be notified as soon as possible to determine if an *imminent dangerous* exists such that an order may be issued to require the occupants to vacate the building or portions thereof or take other appropriate action(s) to ensure occupant safety.

Commented [KM247]: Use of mandatory language is not appropriate for a guideline document and seems out of place here. If desired, simply extract the relevant requirement from the I-Code as an example.

Discussion: See comment in margin.

Committee Action: Considered, No Action

PUBLIC COMMENT #230 (Herrera 43)
Proponent: Herrera, Richardo

Guideline Change

7.1 ~~Code of~~ Record/Design and Construction Documents. The ~~code of~~ record ~~used for the initial building~~ design and construction documents should be the basis for the ~~minimum building design requirements~~CA . When~~re such documents are~~ available, certified copies of all ~~building~~ permits and approved construction documents, including ~~as-built~~ record drawings, ~~listings~~, equipment manufacturers installation instructions, maintenance manuals~~instructions~~, and the Certificate of Occupancy (or other~~ similarly recognized~~ authorizations for occupancy by the AHJ) should be maintained by the owner and available on site.

~~Appendix A includes~~a list ~~recommended original~~ of certified copies of construction documents that the owner should keep of activities post occupancy need to be ~~have available~~ on site. ~~This appendix also~~ Thes includes construction documents for subsequent additions, alterations and repairs and previous ~~the related~~CAs ~~condition assessment records as~~ well as ~~identification of any~~all maintenance records.

Discussion: None provided

Committee Action: Considered, No Action

PUBLIC COMMENT #231 (Munsterteiger 30)
Proponent: Munsterteiger, Jeffery

Guideline Change

7.1 Code of Record/Design and Construction Documents.

The code of record used for the initial building design should be the basis for the minimum building design requirements. Where such documents are available, certified copies of all building permits and approved *construction documents*, including as-built drawings, listings, manufacturers installation instructions, maintenance instructions, and Certificate of Occupancy (or other similarly recognized authorizations for occupancy by the AHJ) should be maintained by the *owner* and available on site.

Appendix A includes recommended original *construction documents* that the *owner* should have available on site. This appendix also includes construction documents for subsequent additions,

Commented [JM248]: Out of scope- Going back to requirements at time of construction is beyond the scope of this guideline.

alterations and repairs and the related *condition assessment* records as well as identification of any maintenance records.

Discussion: See comment in margin.

Committee Action: Approved as Modified. Modified by Work Group, addresses PC #231- PC #236 (see below):

7. CONDITION ASSESSMENT RECORDS

7.1 Code of Record/Design and Construction Documents.

The adopted code of record used for the initial building design should be the basis for the ~~minimum building design requirements~~condition assessment(s). ~~Where such documents are available, certified copies of all building permits and approved *construction documents*, including as-built drawings, listings, manufacturers installation instructions, maintenance instructions, and Certificate of Occupancy (or other similarly recognized authorizations for occupancy by the AHJ) should be maintained by the *owner* and available on site.~~

~~Appendix A includes recommended original *construction documents* that the *owner* should have available on site. This appendix also includes construction documents for subsequent additions, alterations and repairs and the related *condition assessment* records as well as identification of any maintenance records.~~

7.2 ~~Original Construction Documents Not Available or Incomplete~~ Design and Construction Documents

7.2.1 Original Construction Documents. Where such documents are available, certified copies of all building permits and approved *construction documents*, including as-built drawings, listings, manufacturers installation instructions, maintenance instructions, and Certificate of Occupancy (or other similarly recognized authorizations for occupancy by the AHJ) ~~should be maintained by the *owner* and available on site.~~ should be made available to the assessor.

Appendix A includes recommended original *construction documents* that the *owner* should have available on site. This appendix also includes construction documents for subsequent additions, alterations and repairs and the related *condition assessment* records as well as identification of any maintenance records.

7.2.2 Unavailable or Incomplete Construction Documents. Where there are no copies of the construction documents available for the existing building, a condition assessment of the building should be performed to establish a baseline. This initial condition assessment is to document the existing building conditions to be used as the basis for future condition assessments to be performed. In such instances, it is imperative that the initial condition assessment is representative of the building as it currently exists.

~~If there are no copies of the approved *construction documents* available for the existing building, an assessment of the existing building should be performed to document the existing building conditions to be used as the basis for an assessment of the type of *condition assessment*(s) to be performed. In such instances, it is imperative that the assessment is representative of the as-built construction of the building.~~

Commented [KM249]: New language approved.

Formatted: Normal, Indent: Left: 1", Tab stops: Not at 0.71"

7.3 Existing Building Safety Condition Assessment Log

An Existing Building Safety *Condition Assessment* Log should be created and maintained by the owner to provide an overview of the building, the basic data of the *condition assessment* and the permit documents. This log will serve as a reliable source of information for the *condition assessment*s required by Section 4.

Appendix B includes the recommended minimum content of an Existing Building Safety *Condition Assessment* Log. The log should be referenced while performing all *condition assessment*s noted in this guide and should also be maintained as an electronic document in PDF format.

Commented [KM250]: PC #238

PUBLIC COMMENT #232 (Manley 32)
Proponent: Manley, Bonnie

Guideline Change

7.1 Code of Record/Design and Construction Documents.

The code of record used for the initial building design should be the basis for the minimum building design requirements. Where such documents are available, certified copies of all building permits and approved *construction documents*, including as-built drawings, listings, manufacturers installation instructions, maintenance instructions, and Certificate of Occupancy (or other similarly recognized authorizations for occupancy by the AHJ) should be maintained by the *owner* and available on site.

Appendix A includes recommended original *construction documents* that the *owner* should have available on site. This appendix also includes construction documents for subsequent additions, alterations and repairs and the related *condition assessment* records as well as identification of any maintenance records.

Discussion: See comment in margin.

Committee Action: Approved as Modified (see PC #231)

Commented [KM251]: While the title of Section 7 is Condition Assessment Records, this discussion is focused on much more than just records of condition assessments. In fact, it seems to go beyond the stated scope of the document. Please rework to focus on what is to be done with the condition assessment records/reports only.

PUBLIC COMMENT #233 (Bloch 9)
Proponent: Bloch, Tracy

Guideline Change

7.1 Code of Record/Design and Construction Documents.

The code of record used for the initial building design should be the basis for the minimum performance of the building ~~design requirements~~ components and systems. Where such documents are available, certified copies of all building permits and approved *construction documents*, including as-built drawings, listings, manufacturers installation instructions, maintenance instructions, and Certificate of Occupancy (or other similarly recognized authorizations for occupancy by the AHJ) should be maintained by the *owner* and available on site.

Appendix A includes recommended original *construction documents* that the *owner* should have available on site. This appendix also includes construction documents for subsequent additions, alterations and repairs and the related *condition assessment* records as well as identification of any maintenance records.

Discussion: See comment in margin.

Commented [KM252]: this is similar to current - they should be kept but more often than not, they are not available - in my experience with the availability of structural documents perhaps a central digital/scanned service or repository could be considered to help owners with this?

PUBLIC COMMENT #234 (Herrera 44)
Proponent: Herrera, Richardo

Guideline Change

7.2 Unavailable or Incomplete Original Construction Documents ~~Not Available or Incomplete~~ If there are no copies of the approved construction documents ~~available~~ for the existing building, a~~n~~ CA assessment of the existing building should be performed to ~~document~~ establish a baseline ~~the~~ for the ~~e~~xisting building conditions. to be referenced ~~used as~~ the basis for an assessment of the type of condition assessment(s) to be performed. In such instances, it is imperative that the CA ~~assessment~~ is representative of the record as-built construction of the building.

Discussion: None provided

Committee Action: Approved as Modified (see PC #231)

PUBLIC COMMENT #235 (Manley 33)
Proponent: Manley, Bonnie

Guideline Change

7.2 Original Construction Documents Not Available or Incomplete

If there are no copies of the approved *construction documents* available for the existing building, an assessment of the existing building should be performed to document the existing building conditions to be used as the basis for an assessment of the type of *condition assessment*(s) to be performed. In such instances, it is imperative that the assessment is representative of the as-built construction of the building.

Commented [KM253]: Again, is this section necessary given the limited scope (visual condition assessment) of the guideline?

Discussion: See comment in margin.

Committee Action: Approved as Modified (see PC #231)

PUBLIC COMMENT #236 (Bloch 10)
Proponent: Bloch, Tracy

Guideline Change

7.2 Original Construction Documents Not Available or Incomplete.

If there are no copies of the approved *construction documents* available for the existing building, an assessment of the existing building should be performed to document the existing building conditions to be used as the basis for an assessment of the type of *condition assessment*(s) to be performed. In such instances, it is imperative that the assessment is representative of the as-built construction of the building.

Commented [KM254]: what does this mean? Not sure I understand.
With so much being concealed in buildings - does this refer to, for example, overall types of structural systems visible and accessible to the individual conducting the assessment?

Discussion: See comment in margin.

Committee Action: Approved as Modified (see PC #231)

PUBLIC COMMENT #237 (Herrera 45)
Proponent: Herrera, Richardo

Guideline Change

7.3 ~~Existing~~ Building Safety Condition Assessment Log A~~n Existing~~ Building Safety CA~~ondition Assessment~~ Log should be created and maintained to record all aspects of the CA activities. ~~provide an overview of the building, the basic data of the condition assessment and the permit documents.~~ This log will be ~~serve as~~ a ~~reliable~~ source of information for the CA ~~condition assessments~~ required by Section 4. Appendix B includes the information required. ~~recommended minimum content of an Existing Building Safety Condition Assessment Log.~~ The information in the log should be referenced while performing all CAs~~condition assessments~~ noted in this Gguide. A PDF copy ~~and~~ should also be available.~~maintained as an electronic document in PDF format.~~

Discussion: None provided

Committee Action: Considered, No Action.

PUBLIC COMMENT #238 (Bloch 11)
Proponent: Bloch, Tracy

Guideline Change:

7.3 Existing Building Safety Condition Assessment Log

An Existing Building Safety *Condition Assessment* Log should be created and maintained by the owner to provide an overview of the building, the basic data of the *condition assessment* and the permit documents. This log will serve as a reliable source of information for the *condition assessment*s required by Section 4.

Appendix B includes the recommended minimum content of an Existing Building Safety *Condition Assessment* Log. The log should be referenced while performing all *condition assessment*s noted in this guide and should also be maintained as an electronic document in PDF format.

Discussion: None provided

Committee Action: Approved as Submitted.

PUBLIC COMMENT #239 (Calderone 16)
Proponent: Calderone, Brian

Guideline Change:

No specific change noted.

Discussion: Overall the structural portions of this guide are marginally useful, provides no potential epiphanic information, and appears to be a work in progress filled with errant occurrences of mandatory language, odd organization and inconsistent structure, as well as imprecise language that often implies one thing without being explicitly stated. Standard documents ,even guides, should not rely on gross interpretation and should be written as clearly and specifically and intentionally as possible.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #240 (Herrera 46)
Proponent: Herrera, Richardo

Guideline Change

8. JURISDICTION RESPONSIBILITIES

~~This guide recognizes the fact that~~T the administration of any ~~type of~~ regulation or guide ~~to be used by local jurisdictions~~ by an AHJ to address ~~the challenges in ensuring~~ the safety of occupants in ~~existing~~ buildings requires ~~considerable flexib~~optional scenarios s ~~ility relative to the implementation~~ for the ~~of~~process , procedures, processes, timeframes, ~~repairs, and the like.~~ For AHJs~~jurisdictions~~ that do not already have ~~enforcement provisions in place~~,regulations or a guide, the IPMC ~~nternational Property Maintenance Code~~ provides examples for ~~of~~addressing and/or correcting ~~or addressing~~ violations in Sections 107 through 111. ~~Accordingly,~~ assessment options ~~details~~ that are left to the jurisdiction include, but are not limited to, the following:

- Time Extension ~~of time requests with justification and indications that~~ during which a building can continue to be occupied while the CA ~~inspection~~ process is ongoing.
- When to issue ~~Issuance of~~ a certificate ~~from the local code official~~ that the building has ~~satisfied~~ met the requirements of the CA~~periodic inspection.~~

Discussion: None provided.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #241 (Manely 34)
Proponent: Manley, Bonnie

Guideline Change

8. JURISDICTION RESPONSIBILITIES

This guide recognizes the fact that the administration of any type of regulation or guide to be used by local *jurisdictions* requires special consideration for existing buildings. Flexibility is especially important relative the implementation of procedures, process, timeframes, repairs and the like to address the challenges in ensuring the safety of occupants in existing buildings ~~requires considerable flexibility relative to the implementation of procedures, processes, timeframes, repairs, and the like~~. For jurisdictions that do not already have enforcement provisions in place, the *International Property Maintenance Code* provides examples of correcting or addressing violations in Sections 107 through 111. Accordingly, assessment details that are left to the *jurisdiction* include, but not limited to, the following:

- Extension of time requests with justification and indications that a building can continue to be occupied while the inspection process is ongoing.
- Issuance of a certificate from the local code *official* that the building has satisfied the requirements of the periodic inspection.

Commented [KM255]: Run on sentence.

Commented [KM256]: Please extract this sections. If too long, then reprint in an appendix. This will be more user friendly.

Commented [KM257]: Defined term is "code official". Italicize "code".

Discussion: See comments in margin.

Committee Action: Approved as Modified (see track changes).

PUBLIC COMMENT #242 (Herrera 47)
Proponent: Herrera, Richardo

Guideline Change

APPENDIX A

Recommended Documents From The Original Construction In Order To Perform ~~Existing~~ Building Safety CAs~~Condition Assessments~~

~~Prior to visiting~~ It is imperative that ~~the building, res~~a search for existing ~~available~~ documentation ~~can~~must be conducted prior to the start befo. Documents may include: the ~~original~~ design and construction documents including shop drawings and material testing reports for the original construction. documents for any additions, alterations or repairs that may have occurred throughout the building's history. ~~Documents may also include~~ permits, previous CAs~~assessment~~ reports or construction ~~documents for any additions, alterations or repairs that may have occurred over the building's history.~~ Review of all ~~ongoing~~ maintenance records can be useful. ~~The documents can help the design professional performing the building assessment to better understand the buildings layout and systems and to identify if permitted or non-permitted~~

~~additions, alterations or repairs have occurred since original construction. The available documents can be used by the design professional to verify by observation and measurements non-concealed elements of the original construction and any additions, alterations or repairs that may have occurred since original construction~~. If some or none of the documents are ~~not~~ available, Interviews with relevant parties such as ~~building~~ owners, maintenance staff and property managers ~~can yield useful information that may not be reflected in the available building documents.~~ This information may include the age of the building, an account of un-documented additions, alterations, and repairs that may have occurred, areas of distress, corrosion, cracking, water leaking or signs of condensation, unusual static and dynamic loading conditions including vibrations, and ongoing maintenance concerns. Useful as well are

1. Building permits
2. ~~Approved~~ geotechnical~~/soil~~ investigation reports
3. Approved construction documents, as necessary
4. Structural design ~~analysis and assumptions~~calculations
5. Fire-resistance system designs, manufacturers installation, repair, and maintenance instructions
6. ~~Approved~~ fabrication drawings for pre-cast or prefabricated structural elements
7. ~~Approved~~ erection plans
8. ~~As-built~~ Record drawings
9. Observation Reports by the registered design professional of record
10. Material test reports and CA~~condition assessment~~ records
11. ~~Final special condition assessment reports~~
12. Construction documents for any ~~subsequent~~ additions, alterations, and repairs
13. Inspection/CA~~condition assessment~~ records for the original structure and any subsequent additions, alterations, and repairs
14. ~~Maintenance records~~
15. Certification of Occupancy or equivalent
16. Information about Code-in-effect when first constructed

Discussion: None provided.

Committee Action: Considered, No Action.

PUBLIC COMMENT #243 (Munsterteiger 31)
Proponent: Munsterteiger, Jeffery

Guideline Change

APPENDIX A

Recommended Documents From The Original Construction In Order To Perform Existing Building Safety Condition Assessments

Prior to visiting the building, research for existing available documentation can be conducted. Documents may include the original design and construction documents including shop drawings and material testing reports. Documents may also include permits, previous assessment reports or construction documents for any additions, alterations or repairs that may have occurred over the building's history. Review of ongoing maintenance records can be useful. The documents can help the design professional performing the building assessment to better understand the buildings layout and systems. ~~and to identify if permitted or non-permitted additions, alterations or repairs have occurred since original construction.~~ The available documents can be used by the design professional to verify by observation and measurements non-concealed elements of the original construction and any additions, alterations or repairs that may have occurred since original construction. If some documents are not available, interviews with parties such as building owners, maintenance staff and property managers can yield useful information. ~~If some or none of the documents are not available, Interviews with relevant parties such as building owners, maintenance staff and property managers can yield useful information that may not be reflected in the available building documents.~~
This information may include the age of the building, an account of un-documented additions, alterations, and repairs that may have occurred, areas of distress, corrosion, cracking, water leaking or signs of condensation, unusual static and dynamic loading conditions including vibrations, and ongoing maintenance concerns.

Commented [JM258]: Out of scope- Searching for unpermitted work beyond the scope of this guideline.

(remaining text unmodified).

Discussion: See comment in margin.

Committee Action: Approved as Submitted.

PUBLIC COMMENT #244 (Hugo 6)
Proponent: Hugo, Jeffrey

Guideline Change

APPENDIX A

RECOMMENDED DOCUMENTS FROM THE ORIGINAL CONSTRUCTION IN ORDER TO PERFORM EXISTING BUILDING SAFETY CONDITION ASSESSMENTS

6. Approved ~~fabrication~~ shop drawings. ~~for pre-cast, prefabricated structural elements, and fire protection systems.~~

Discussion: Many structural and fire protection systems come with shop drawings that are part of the original construction document package approval. While they are fabrication drawings, the IBC/IFC refers (at least for fire protection) as shop drawings in IFC Section 106.2.2

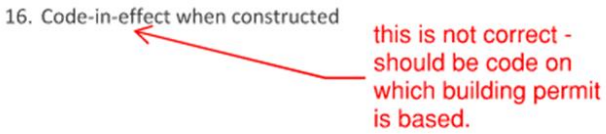
Committee Action: Approved as Modified as recommended by the Work Group (see track changes).

PUBLIC COMMENT #245 (Kesner 9)
Proponent: Kesner, Keith

Guideline Change

APPENDIX A

RECOMMENDED DOCUMENTS FROM THE ORIGINAL CONSTRUCTION IN ORDER TO PERFORM EXISTING BUILDING SAFETY CONDITION ASSESSMENTS



Comment: Code-in-effect when ~~constructed~~ permitted for construction.

Discussion: Change is needed for consistency with the IEBC. The IEBC definition of an existing is based on when the structure is permitted for construction, reflecting code versions may change during construction.

Committee Action: Approved as Modified, as noted below.

16. The code in effect at the time the building was permitted for construction.

PUBLIC COMMENT #246 (Manley 35)
Proponent: Manley, Bonnie

Guideline Change

APPENDIX A

RECOMMENDED DOCUMENTS FROM THE ORIGINAL CONSTRUCTION IN ORDER TO PERFORM EXISTING BUILDING SAFETY CONDITION ASSESSMENTS

Prior to visiting the building, research for existing available documentation can be conducted. Documents may include the original design and construction documents including shop drawings and material testing reports. Documents may also include permits, previous assessment reports or construction documents for any additions, alterations or repairs that may have occurred over the building's history. Review of ongoing maintenance records can be useful. The documents can help the design professional performing the building assessment to better understand the buildings layout and systems and to identify if permitted or non-permitted additions, alterations or repairs have occurred since original construction. The available documents can be used by the design professional to verify by observation and measurements non-concealed elements of the original construction and any additions, alterations or repairs that may have occurred since

Commented [KM259]: Section 7 noted that this would be simply a list of documents; however, this goes beyond just a list and recommends actions (See highlights below). If appropriate for this document, these should be moved into the main body of the document and not buried here.

original construction. If some or none of the documents are not available, Interviews with relevant parties such as building owners, maintenance staff and property managers can yield useful information that may not be reflected in the available building documents. This information may include the age of the building, an account of un-documented additions, alterations, and repairs that may have occurred, areas of distress, corrosion, cracking, water leaking or signs of condensation, unusual static and dynamic loading conditions including vibrations, and ongoing maintenance concerns.

1. Building permits
2. Approved geotechnical/soil investigation reports.
3. Approved *construction documents*, as necessary
4. Structural design analysis and assumptions
5. Fire-resistance designs, manufacturers installation, repair, and maintenance instructions.
6. Approved fabrication drawings for pre-cast or prefabricated structural elements.
7. Approved erection plans
8. As-built drawings
9. Reports by the *registered design professional* of record
10. Material test reports and *condition assessment* records
11. Final special *condition assessment* reports
12. *Construction documents* for any subsequent additions, alterations, and repairs
13. Inspection/*condition assessment* records for the original structure and any subsequent additions, alterations, and repairs
14. Maintenance records
15. Certification of Occupancy or equivalent
16. Code-in-effect when constructed

Discussion: See comment in margin.

Committee Action: Considered, No Action.

PUBLIC COMMENT #247 (Bloch 12)
Proponent: Bloch, Tracy

Guideline Change

APPENDIX A

RECOMMENDED DOCUMENTS FROM THE ORIGINAL CONSTRUCTION IN ORDER TO PERFORM EXISTING BUILDING SAFETY CONDITION ASSESSMENTS

Prior to visiting the building, research for existing available documentation can be conducted. Documents may include the original design and construction documents including shop drawings and material testing reports. Documents may also include permits, previous assessment reports or construction documents for any additions, alterations or repairs that may have occurred over the building's history. Review of ongoing maintenance records can be useful. The documents can help the design professional performing the building assessment to better understand the buildings layout and systems and to identify if permitted or non-permitted additions, alterations or repairs have occurred since original construction. The available documents can be used by the design professional to verify by observation and measurements non-concealed elements of the original construction and any additions, alterations or repairs that may have occurred since original construction. If some or none of the documents are not available, Interviews with relevant parties such as building owners, maintenance staff and property managers can yield useful information that may not be reflected in the available building documents. This information may include the age of the building, an account of un-documented additions, alterations, and repairs that may have occurred, areas of distress, corrosion, cracking, water leaking or signs of condensation, unusual static and dynamic loading conditions including vibrations, and ongoing maintenance concerns.

Below is a list of original construction documents that would be beneficial to the assessor(s) in preparation for a condition assessment, if available:

1. Building permits
2. Approved geotechnical/soil investigation reports.
3. Approved *construction documents*, as necessary
4. Structural design analysis and assumptions
5. Fire-resistance designs, manufacturers installation, repair, and maintenance instructions.
6. Approved fabrication drawings for pre-cast or prefabricated structural elements.
7. Approved erection plans
8. As-built drawings
9. Reports by the *registered design professional* of record
10. Material test reports and *condition assessment* records
11. Final special *condition assessment* reports
12. *Construction documents* for any subsequent additions, alterations, and repairs
13. Inspection/*condition assessment* records for the original structure and any subsequent additions, alterations, and repairs
14. Maintenance records
15. Certification of Occupancy or equivalent
16. Code-in-effect when constructed

Commented [KM260]: many of these documents aren't available, in my experience, especially to this level of detail. will there be a system or structure / guide for maintaining building documents?

Discussion: See comment in margin.

Committee Action: Approved as Modified (see track changes).

PUBLIC COMMENT #248 (Taecker 17)
Proponent: Taecker, John

Guideline Change

APPENDIX A

RECOMMENDED DOCUMENTS FROM THE ORIGINAL CONSTRUCTION IN ORDER TO PERFORM EXISTING BUILDING SAFETY CONDITION ASSESSMENTS

Discussion: The manufacturer's installation and maintenance instructions for the installed appliances and equipment should also be available.

Committee Action: Approved as Modified, see new text below.

11. Manufacturer's installation and maintenance instructions for appliances and equipment.

(renumber as appropriate).

PUBLIC COMMENT #249 (Herrera 48)
Proponent: Herrera, Richardo

Guideline Change

APPENDIX B

Recommended Minimum ~~Existing Building~~ Safety Condition Assessment ~~Log~~ Content

1. Title sheet
2. Table of Contents
3. Copies of relevant building d~~D~~rawings
4. Inspection/condition assessment documents
5. Photos of ~~inspection~~ inspected ~~components~~ items

~~4~~6. Copies of all building permits
~~5~~7. Copies of all prior ~~property owner~~ condition assessment reports ~~results~~
~~8. Copies of all condition assessment results~~
9. Copies of all special inspection~~/condition assessment~~ agency reports ~~and test results~~ performed in accordance with Chapter 17 of the International Building Code

Formatted: Font: Not Bold

Formatted: Font: Not Bold, Italic

Formatted: Highlight

10. Copies of ~~Public records search for~~ any ~~issued Notice of Violations and/or~~ Unsafe Structures or ~~systems~~ Equipment declaration found in search results of public records~~.~~
~~11~~8. Copies of a~~A~~ny tests~~ing~~ performed ~~conducted~~ on ~~the~~ building components and systems.

Discussion: None provided

Committee Action: Approved as Modified, modification to the appendix title to remain as drafted by the committee, see track changes for other modifications recommended by the Work Group.

PUBLIC COMMENT #250 (Herrera 49)
Proponent: Herrera, Richardo

Guideline Change

APPENDIX C

Recommended Condition Assessment Report Templates ~~-~~/Condition Assessment Checklists

The report templates/checklists in this A ~~a~~ppendix ~~are intended to~~ serve as the recommended minimum standard documentation for the Periodic Condition Assessments (PCA) when so mandated in this G~~g~~uide. The ~~report~~ templates/checklists are ~~do~~ not a substitute for ~~proper~~the ~~-~~professional judgment of the assessor whe~~n~~n~~re~~ the existing conditions ~~would~~ suggest a more detailed condition assessment, that includes testing, or investigation is warranted; nor when ~~conditions where in the opinion of the registered design professional~~ an unsafe or dangerous condition exists. ~~In the case of unsafe or dangerous condition(s),~~ the ~~code official~~ AHJ shall be notified as soon as possible to determine if an imminent danger exists such that an order may be issued to require the occupants to vacate the building or portions thereof or take other appropriate action(s) to ensure occupant safety. ~~The~~ R~~r~~eport templates in this A~~a~~ppendix are provided for each discipline identified in the G~~g~~uide that are ~~and~~ referred ~~-~~to ~~those~~the building system categories in Section 6. The “Condition Assessment Items” for each building system report template are to be developed by the AHJ~~jurisdiction~~ depending on how the condition assessment program has been developed and adopted for the community. A report template/checklist has been included for each of the following building ~~system condition~~ assessment topics:

·Structural

·Building Envelope

·Electrical

·Life Safety ~~–~~Means Of Egress

·Passive Fire Protection

·Active Fire Protection

·Plumbing

·Mechanical

·Fuel Gas

Discussion: None provided

Committee Action: Approved as Submitted.

PUBLIC COMMENT #251 (Munsterteiger32)
Proponent: Munsterteiger, Jeffery

Guideline Change:

APPENDIX C

RECOMMENDED CONDITION ASSESSMENT REPORT TEMPLATES /CONDITION ASSESSMENT CHECKLISTS

The report templates in this appendix are intended to serve as the recommended minimum standard for the Periodic *Condition Assessment*s in this guide. The report templates do not substitute for proper professional judgment where conditions would suggest a more detailed *condition assessment*, testing, or investigation is warranted; nor conditions where in the opinion of the *registered design professional* or *Qualified Professional* an *unsafe* or *dangerous* condition exists. In the case of *unsafe* or *dangerous* condition(s), the *code official* shall be notified as soon as possible to determine if an *imminent danger* exists such that an order may be issued to require the occupants to vacate the building or portions thereof or take other appropriate action(s) to ensure occupant safety.

The report templates in this appendix are provided for each discipline identified in the guide and refer to those building system categories in Section 6. The "*Condition Assessment* Items" for each building system report template are to be developed by the jurisdiction depending on how the *condition assessment* program has been developed and adopted for the community. A report template has been included for each of the following building system *condition assessment*:

- **STRUCTURAL**
- **ENVELOPE**
- **ELECTRICAL**
- **LIFE SAFETY – MEANS OF EGRESS**
- **PASSIVE FIRE PROTECTION**
- **ACTIVE FIRE PROTECTION**
- **PLUMBING**
- **MECHANICAL**

- **FUEL GAS**

Discussion: None provided.

Committee Action: Approved as Modified (Qualified Professional doesn't need to be capitalized).