ICC — Performance Code

2021 GROUP A PROPOSED CHANGES TO THE I-CODES

April 11 – May 5, 2021
Virtual Committee Action Hearings

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INTERNATIONAL CODE COUNCIL®

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2021 GROUP A – PROPOSED CHANGES TO THE INTERNATIONAL FIRE CODE

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TENTATIVE ORDER OF DISCUSSION
2021 PROPOSED CHANGES TO THE INTERNATIONAL FIRE CODE

The following is the tentative order in which the proposed changes to the code will be discussed at the public hearings. Proposed changes which impact the same subject have been grouped to permit consideration in consecutive changes.

Proposed change numbers that are indented are those which are being heard out of numerical order. Indentation does not necessarily indicate that one change is related to another. Proposed changes may be grouped for purposes of discussion at the hearing at the discretion of the chair. Note that some F and PC code change proposals may not be included on this list, as they are being heard by another committee.

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Proponents: David Collins, representing The American Institute of Architects (dcollins@preview-group.com)

THIS CODE CHANGE WILL BE HEARD BY THE BUILDING CODE GENERAL COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THAT COMMITTEE.

2021 International Code Council Performance Code

CHAPTER 3
DESIGN PERFORMANCE LEVELS

SECTION 301 MINIMUM PERFORMANCE.

Revise as follows:

[BG] 301.1 Purpose. This chapter provides the basis for developing the acceptable level of design based on building use, risk factors and magnitudes of event and acceptable level of damage. Magnitudes are defined in subsequent chapters of this code but interrelate with this chapter in the development of design methods for the mitigation of hazards.

[BG] 301.2 Objective. To establish ~~performance groups~~ risk categories for buildings and ~~facilities~~ other structures and to establish minimum acceptable losses based on those ~~performance groups~~ risk categories.

[BG] 301.3.2 Demonstration of performance. Performance is acceptable where the design performance levels are demonstrated to be met or exceeded, to the satisfaction of the code official, in accordance with the assigned or designated use groups, risk categories ~~performance groups~~, magnitudes of event and maximum tolerable damage limits; and the objectives, functional statements and performance requirements of this code.

SECTION 302 USE AND OCCUPANCY CLASSIFICATION.

Revise as follows:

[BG] 302.2 Determination of use. In determining the primary use of a building or ~~facility,~~ other structure, or portion of a building or ~~facility,~~ other structure, the following shall be considered:

1. **Principal purpose or function.** The principal purpose or function of the building or ~~facility~~ other structure.
2. **Hazards.** The hazard-related risk(s) to the users of the building or ~~facility~~ other structure.

[BG] 302.4 Risk factors. In determining the hazard-related risk(s) to users of buildings and ~~facilities~~ other structures, the following risk factors shall be considered:

[BG] 302.4.1 Nature of the hazard. The nature of the hazard, whether it is likely to originate internal or external to the building or ~~facility~~ other structure, and how it may impact the occupants, the building or ~~facility~~ other structure, and the contents.

[BG] 302.4.2 Number of occupants. The number of persons normally occupying, visiting, employed in or otherwise using the building, ~~facility~~ other structure or portion of the building or ~~facility~~ other structure.

[BG] 302.4.3 Length of occupancy. The length of time the building or ~~facility~~ other structure is normally occupied by people.

[BG] 302.4.5 Familiarity. Whether the building or ~~facility~~ other structures' occupants and other users are expected to be familiar with the building or ~~facility~~ other structures' layout and means of egress.

[BG] 302.4.6 Vulnerability. Whether a significant percentage of the building or ~~facility~~ other structures' occupants are, or are expected to be, members of vulnerable population groups such as infants, young children, elderly persons, persons with physical disabilities, persons with mental disabilities, or persons with other conditions or impairments that could affect their ability to make decisions, egress without the physical assistance of others or tolerate adverse conditions.

[BG] 302.4.7 Relationships. Whether a significant percentage of building or ~~facility~~ other structures' occupants and other users have family or dependent relationships.

SECTION 303 ~~PERFORMANCE GROUPS~~ RISK CATEGORIES.

[BG] 303.1 ~~Performance group~~ Risk category allocation. Use groups and hazard-related occupancies have been allocated to ~~performance groups~~ risk category using the risk factors identified in Section 302.4. Specific buildings and ~~facilities~~ other structures have been allocated to ~~performance groups~~ risk categories using the risk factors identified in Section 302.4 combined with the relative importance of protecting the building

or ~~facility~~ other structure to the community. These ~~performance group~~ risk category allocations are shown in Table 303.1.

[BG] TABLE 303.1
~~PERFORMANCE GROUP CLASSIFICATIONS FOR BUILDINGS AND FACILITIES~~ RISK CATEGORY OF BUILDINGS AND OTHER STRUCTURES

~~PERFORMANCE GROUP~~ RISK CATEGORIES	~~USE AND OCCUPANCY CLASSIFICATIONS FOR SPECIFIC BUILDINGS OR FACILITIES~~ NATURE OF OCCUPANCY
I	Buildings and ~~facilities~~ other structures that represent a low hazard to human life in the event of failure, including, but not limited to: 1. Agricultural facilities. 2. Certain temporary facilities. 3. Minor storage facilities.
II	All buildings and ~~facilities~~ other structures except those listed in ~~Performance Groups~~ Risk Categories I, III and IV.
III	Buildings and ~~facilities~~ other structures that represent a substantial hazard to human life in the event of failure, including, but not limited to: 1. Buildings and ~~facilities~~ other structures where more than 300 people congregate in one area. 2. Buildings and ~~facilities~~ other structures with elementary school, secondary school or day care facilities with a capacity greater than 250. 3. Buildings and ~~facilities~~ other strutures with a capacity greater than 500 for colleges or adult education facilities. 4. Health-care facilities with a capacity of 50 or more residents but not having surgery or emergency treatment facilities. 5. Jails and detention facilities. 6. Any other occupancy with an occupant load greater than 5,000. 7. Power-generating facilities, water treatment for potable water, wastewater treatment facilities and other public utilities facilities not included in ~~Performance Group~~ Risk Category IV. 8. Buildings and ~~facilities~~ other structures not included in ~~Performance Group~~ Rick Category IV containing sufficient quantities of highly toxic gas or explosive materials capable of causing acutely hazardous conditions that do not extend beyond property boundaries.
IV	Buildings and ~~facilities~~ other structures designated as essential facilities, including, but not limited to: 1. Hospitals and other health-care facilities having surgery or emergency treatment facilities. 2. Fire, rescue and police stations and emergency vehicle garages. 3. Designated earthquake, hurricane or other emergency shelters. 4. Designated emergency preparedness, communication, and operation centers and other facilities required for emergency response. 5. Power-generating stations and other utilities required as emergency backup facilities for ~~Performance Group~~ Risk Category IV buildings or ~~facilities~~ other structures . 6. Buildings and ~~facilities~~ other structures containing highly toxic gas or explosive materials capable of causing acutely hazardous conditions beyond the property boundaries. 7. Aviation control towers, air traffic control centers and emergency aircraft hangars. 8. Buildings and ~~facilities~~ other structures having critical national defense functions. 9. Water treatment facilities required to maintain water pressure for fire suppression. 10. Ancillary structures (including, but not limited to, communication towers, fuel storage tanks or other structures housing or supporting water or other fire suppression material or equipment) required for operation of ~~Performance Group~~ Risk Category IV structures during an emergency.

[BG] 303.2 Unique performance group allocation. Where necessary or desired, allocation of specific buildings or ~~facilities~~ other structures to ~~performance groups~~ risk categories differing from Table 303.1 is permitted based on the needs specific to a community or owner or if there are unusual circumstances associated with the building or other structure ~~facility~~.

[BG] 303.3 Magnitudes of event and level of damage. ~~Performance groups~~
Risk categories identify the minimum required performance of buildings or ~~facilities~~ other structures through a relationship of the magnitude of an

event to the maximum level of impact or damage to be tolerated shown in Table 303.3. The use of Table 303.3 shall be an iterative process. It shall be used to determine the acceptable impact of certain events based on their magnitude, and then used iteratively to evaluate various designed mitigation features. Assignment of risk categories is accomplished through consideration of building or ~~facility~~ other structures uses, building or ~~facility~~ other structure risk factors, and the importance of a building or ~~facility~~ other structures to a community.

[BG] TABLE 303.3
MAXIMUM LEVEL OF IMPACT OR DAMAGE TO BE TOLERATED BASED ON ~~PERFORMANCE GROUPS~~ RISK CATEGORIES AND DESIGN EVENT MAGNITUDES

			INCREASING LEVEL OF PERFORMANCE →→→→→→→→→→→→→→→→→→→→→→→→→→→→ ~~PERFORMANCE GROUPS~~ RISK CATEGORIES			
			~~Performance Group~~ Risk Category I	**~~Performance Group~~ Risk Category II**	**~~Performance Group~~ Risk Category III**	**~~Performance Group~~ Risk Category IV**
MAGNITUDE OF DESIGN EVENT ~~INCREASING MAGNITUDE OF EVENT~~	←	VERY LARGE (Very Rare)	SEVERE	SEVERE	HIGH	MODERATE
	←	LARGE (Rare)	SEVERE	HIGH	MODERATE	MILD
	←	MEDIUM (Less Frequent)	HIGH	MODERATE	MILD	MILD
	←	SMALL (Frequent)	MODERATE	MILD	MILD	MILD

[BG] 303.4 ~~Performance groups~~ Risk categories. There are four ~~performance groups (PG)~~ risk categories (RC), identified as I, II, III and IV.

[BG] 303.4.1 ~~Performance Group~~ Risk category I. The minimum design performance level with which all buildings or ~~facilities~~ other structures posing a low risk to human life, should the buildings or ~~facilities~~ other structure fail, shall comply.

[BG] 303.4.2 ~~Performance Group~~ Risk Category II. The minimum design performance level with which all buildings or ~~facilities~~ other structures subject to this code, except those classified as ~~PG~~ PC I, ~~PG~~ PC III or ~~PG~~ PC IV, shall comply.

[BG] 303.4.3 ~~Performance Group~~ Risk Category III. The minimum design performance level with which buildings or ~~facilities~~ other structure of an increased level of societal benefit or importance shall comply.

[BG] 303.4.4 ~~Performance Group~~ Risk Category IV. The minimum design performance level with which buildings or ~~facilities~~ other structures that present an unusually high risk or that are deemed essential facilities shall comply.

[BG] 303.5 Alternative ~~performance group~~ risk category designations. The ~~performance group~~ risk category for specific buildings or ~~facilities~~ other structures or classes of buildings or ~~facilities~~ other structures is permitted to be redesignated with the approval of the code official. If a higher design performance level is desired, the design team, with the approval of the code official, shall be permitted to choose a higher ~~performance group~~ risk category. For existing buildings or ~~facilities~~ other structures, the code official is authorized to adjust tolerable limits of impact to a building or ~~facility~~ other structures and its contents.

SECTION 304 MAXIMUM LEVEL OF IMPACT OR DAMAGE TO BE TOLERATED.

[BG] 304.1 General. Design performance levels establish how a building or ~~facility~~ other structure is expected to perform, in terms of tolerable limits, under varying load conditions. For each magnitude of event (small to very large), considered as a design load, based on realistic event scenarios, the design shall provide high confidence that the corresponding maximum level of damage to be tolerated for the appropriate ~~performance group~~ risk category will be met. This relationship is illustrated in Table 303.3.

[BG] 304.2 Level of impact or damage. There are four design performance levels defined in terms of tolerable limits of impact or damage to the building or ~~facility~~ other structures, its contents and its occupants: mild, moderate, high and severe.

[BG] 304.2.1 Mild impact or damage. The tolerable impacts of the design loads are assumed as follows:

304.2.1.1 Structural damage. The building or ~~facility~~ other structure does not have structural damage and is safe to occupy.

304.2.1.2 Nonstructural systems. Nonstructural systems needed for normal building or ~~facility~~ other structure use and emergency operations are fully operational.

[BG] 304.2.1.3 Occupant hazards. Injuries to building or ~~facility~~ other structure occupants from hazard-related applied loads are minimal in numbers and minor in nature. There is a very low likelihood of single or multiple life loss. The nature of the applied load, such as fire hazards, may result in higher levels of expected injuries and damage in localized areas, whereas the balance of the areas may sustain fewer injuries and less damage.

[BG] 304.2.1.4 Overall extent of damage. Damage to building or ~~facility~~ other structure contents from hazard-related applied loads is minimal in extent and minor in cost.

[BG] 304.2.2 Moderate impact or damage. The tolerable impacts of the design loads are assumed as follows:

[BG] 304.2.2.2 Nonstructural systems. Nonstructural systems needed for normal building or ~~facility~~ other structure use are fully operational, although some cleanup and repair may be needed. Emergency systems remain fully operational.

[BG] 304.2.2.3 Occupant hazards. Injuries to building or ~~facility~~ other structure occupants from hazard-related applied loads may be locally significant, but generally moderate in numbers and in nature. There is a low likelihood of single life loss with a very low likelihood of multiple life loss. The nature of the applied load, such as fire hazards, may result in higher levels of expected injuries and damage in localized areas, whereas the balance of the areas may sustain fewer injuries and less damage.

[BG] 304.2.2.4 Overall extent of damage. Damage to building or ~~facility~~ other structure contents from hazard-related applied loads may be locally significant, but is generally moderate in extent and cost. The nature of the applied load, such as fire hazards, may result in higher levels of expected injuries and damage in localized areas, whereas the balance of the areas may sustain fewer injuries and less damage.

[BG] 304.2.3 High impact or damage. The tolerable impacts of the design loads are assumed as follows:

[BG] 304.2.3.2 Nonstructural systems. Nonstructural systems needed for normal building or ~~facility~~ other structure use are significantly damaged and inoperable; egress routes may be impaired by light debris; emergency systems may be significantly damaged, but remain operational.

[BG] 304.2.3.3 Occupant hazards. Injuries to building or ~~facility~~ other structure occupants from hazard-related applied loads may be locally significant with a high risk to life, but are generally moderate in numbers and in nature. There is a moderate likelihood of single life loss, with a low probability of multiple life loss. The nature of the applied load, such as fire hazards, may result in higher levels of expected injuries and damage in localized areas, whereas the balance of the areas may sustain fewer injuries and less damage.

[BG] 304.2.3.4 Overall extent of damage. Damage to building or ~~facility~~ other structure contents from hazard-related applied loads may be locally total and generally significant. The nature of the applied load, such as fire hazards, may result in higher levels of expected injuries and damage in localized areas, whereas the balance of the areas may sustain fewer injuries and less damage.

[BG] 304.2.4 Severe impact or damage. The tolerable impacts of the design loads are assumed as follows:

[BG] 304.2.4.2 Nonstructural systems. Nonstructural systems for normal building or ~~facility~~ other structure use may be completely nonfunctional. Egress routes may be impaired; emergency systems may be substantially damaged and nonfunctional.

[BG] 304.2.4.3 Occupant hazards. Injuries to building or ~~facility~~ other structure occupants from hazard-related applied loads may be high in numbers and significant in nature. Significant risk to life may exist. There is a high likelihood of single life loss and a moderate likelihood of multiple life loss. The nature of the applied load, such as fire hazards, may result in higher levels of expected injuries and damage in localized areas, whereas the balance of the areas may sustain fewer injuries and less damage.

[BG] 304.2.4.4 Overall extent of damage. Damage to building or ~~facility~~ other structure contents from hazard-related applied loads may be total. The nature of the applied load, such as fire hazards, may result in higher levels of expected injuries and damage in localized areas, whereas the balance of the areas may sustain fewer injuries and less damage.

SECTION 305 MAGNITUDES OF EVENT.

Revise as follows:

[BG] 305.1.2 Technological hazards. The types of loads due to technological hazards that may be reasonably expected to impact on the building or ~~facility~~ other structure, its users and its contents during construction and throughout its intended life include, but are not limited to:

[BG] 305.2 Definition of magnitude of event. Magnitude of event can be defined, quantified and expressed either deterministically or probabilistically in accordance with the best current practice of the relevant profession as published in recognized authoritative documents. In some

authoritative documents, magnitude of event may be expressed only for a single ~~performance group~~ risk group~~; for example, nominal live and dead loads are defined only for Performance Group II~~. In other cases, magnitude of event may be provided for all performance levels such as seismic provisions. In all cases, it is the responsibility of the design engineer to demonstrate that the design performance levels are met for the loads anticipated.

[F] 602.2 Functional statement. Buildings shall be designed with safeguards against the spread of fire so that persons not directly adjacent to or involved in the ignition of a fire shall not suffer serious injury or death from a fire and so that the magnitude of the property losses are limited as follows:

- Risk Category ~~Performance Group~~ I—High
- Risk Category ~~Performance Group~~ II—Moderate
- Risk Category ~~Performance Group~~ III—Mild
- Risk Category ~~Performance Group~~ IV—Mild

[F] 1701.2 Functional statements. Facilities shall be designed with safeguards against the spread of fire so that persons not directly adjacent to or involved in the ignition of a fire shall not suffer serious injury or death from a fire, and so that the magnitude of the property loss is limited as follows:

- Risk Category ~~Performance Group~~ I—High
- Risk Category ~~Performance Group~~ II—Moderate
- Risk Category ~~Performance Group~~ III—Mild
- Risk Category ~~Performance Group~~ IV—Mild

[F] 1701.3.15.2 Range of fire sizes. Magnitudes of design fire events shall be defined as small, medium, large and very large, based on the quantification of the design fire event as a function of the building use and associated ~~performance group~~ risk category.

[F] 1701.3.15.3.2 Design parameters. Multiple design fire scenarios, ranging from small to very large design fire events, shall be considered to ensure that associated levels of tolerable damage are not exceeded as appropriate to the ~~performance group~~ risk category.

[F] 2201.3.19.3 Range of event sizes. Magnitudes of design events shall be defined as small, medium, large and very large, where the quantification of the design event is a function of building or facility use and associated ~~performance group~~ risk category.

[F] 2201.3.19.5 Design parameters. Multiple scenarios, ranging from small to very large design events, must be considered to ensure that associated levels of tolerable damage are not exceeded as appropriate to the ~~performance group~~ risk category.

APPENDIX B
WORKSHEET FOR ASSIGNING SPECIFIC STRUCTURES TO ~~PERFORMANCE GROUPS~~ RISK CATEGORIES

SECTION B101 RISK FACTOR.

Revise as follows:

[BG] B101.1 General. Table B101.1 shall be used as a guide for determining the appropriate ~~performance group~~ risk category allocation for specific structures that have unique characteristics.

TABLE B101.1
WORKSHEET FOR ASSIGNING SPECIFIC STRUCTURES TO ~~PERFORMANCE GROUPS~~ RISK CATEGORIES

RISK FACTORS	RELATIVE LEVEL OF RISK FOR SPECIFIC STRUCTURE
Occupant Load. Maximum number of persons permitted to be in the structure or a portion of the structure.	
Duration. Maximum length of time that the structure is significantly occupied.	
Sleeping. Do people normally sleep in the building?	
Occupant Familiarity. Are occupants expected to be familiar with the building layout and means of egress?	
Occupant Vulnerability. What percentage of occupants, employees or visitors is considered to comprise members of a vulnerable population?	
Dependent Relationships. Is there a significant percentage of occupants or visitors who are expected to have relationships that may delay egress from the building?	
HAZARD FACTORS	
Nature of the Hazard. What is the nature of the hazard, and what are its impacts on the occupants, the structure and the contents?	
Internal or External Hazard. Is the hazard likely to originate internally or externally or both?	
LEVEL OF IMPORTANCE	
Population. Are large numbers of people expected to be present?	
Essential Facilities. Is the structure required for emergency response or post-disaster emergency treatment, utilities, communications or housing?	
Damage Potential. Is significant risk of widespread and/or long-term injuries, deaths or damage possible from the failure of the structure?	
Community Importance. Is the structure or its use largely responsible for economic stability or other important functions of the community?	
SPECIFIC ADJUSTMENTS	
Are the design performance levels adequate and appropriate for the specific structure?	
OVERALL RISK, HAZARD, IMPORTANCE FACTORS & ~~PERFORMANCE GROUP~~ RISK CATEGORIES ASSIGNMENT	

Staff Note: This proposal for Table 303.1 addresses requirements in a different or contradicting manner to those found in Code Change PC2-21. The committee is urged to make their intentions clear with their actions on these proposals.

Reason Statement: In 1998, the president of the AIA established a Blue Ribbon Panel to examine the future of the architectural profession and its relationship to codes and standards as part of AIA's public policies.
We stand for protecting communities from the impact of climate change. Global warming and man-made hazards pose an increasing threat to the safety of the public and the vitality of our nation. Rising sea levels and devastating natural disasters result in unacceptable losses of life and property. Resilient and adaptable buildings are a community's fires line of defense against disasters and changing conditions of life and property. This is why we advocate for robust building codes and policies that make our communities more resilient.

A key finding of the Blue Ribbon Panel was the need to direct the architect's practices toward higher performing buildings, while meeting and exceeding the standards adopted in our communities. AIA's 2019 and 2020 Codes and Standards Committee began that effort by reviewing the ICC's Performance Building Code that has remained largely unchanged since its initial publication in 2003.

This effort has led to the development of a series of changes intended to improve the usefulness of the International Code Council Performance Code for Buildings and Facilities (ICCPC). Many of these changes are proposed to clarify and coordinate the ICCPC with the family of I-Codes that have been advanced since the initial effort to create this performance based code. Some findings are best addressed in the guide for the use of the ICCPC. AIA has already reached out to the ICC staff to facilitate that effort following the completion of these code change.

A significant part of the proposed changes consolidate various requirements on the same subject that are currently located in different parts of the

code for no apparent reason. Doing so left some things unsaid in one part that are stated in another without reference. Design and evaluation of performance designs and the disparate elements of a building aren't done independently, but are a part of a comprehensive examination of the involved systems and materials associated with the design.

In addition to the proposed changes to consolidate these requirements, we encourage a reexamination of the structure of the ICCPC to more closely reflect the baseline standards in the other element of the ICC family of codes.

The purpose of this change is to correlate Chapter 3 of the ICCPC with the latest editions of the IBC—specifically ICCPC Table 303.1 with the virtually identical table in the IBC (Table 1604.5). Where the IBC uses the term "risk category," the ICCPC uses "performance group." (We propose that these tables be linked so this kind of change isn't overlooked in the future, or until a different set of criteria are developed for use in the ICCPC.)

The structure of "Performance Groups" used in the ICCPC are identical to the "Risk Categories" used in the IBC. To make it clear to users of the code and to keep things consistent, and to remove any unintended confusion, we are suggesting by this change to keep the terminology the same in both codes, using the IBC as the guide. Structural engineers are very familiar with the use of risk categories (architects to a lesser degree, but still relevant).

The ICCPC in Section 304.2 also introduces the concept of "performance levels," which are similarly named as "performance groups"; thus, leading to some additional confusion. By making this change it becomes much clearer as to how to use Table 303.3. Once a building's or structure's risk is determined (i.e. Risk Category), then the required performance can be determined (i.e. Performance Level).

Additionally, Section uses "damage" and "impact" almost interchangeably. A building can suffer damage, but not impact its operation. Conversely, a building may suffer little damage, but the impact may be significant. This proposal adds "impact" where only "damage" is mentioned and adds "damage" where only "impact" is mentioned.

Finally, IBC Chapter 16 uses the terms *building* and *structure* and not *facility*. By IBC definition, a *facility* includes *buildings* and *structures*, but also "site improvements, elements and pedestrian and vehicular routes located on a site." Since the intent of this section is to address buildings and structures only, then the use of the term *facility* is inappropriate; thus, *facility* is replaced with "other structures," which also further aligns ICCPC Table 303.1 with IBC Table 1604.5.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

Because this change is simply correlating concepts and language from the IBC into the ICCPC, there is no cost impact of the change. Correlating these aspects of the two codes can actually reduce cost due to misunderstanding or misapplication of the codes.

PC2-21

ICCPC: [BG] 303.1, [BG] TABLE 303.1, [BG] 303.2, [BG] 303.4.1, [BG] 303.4.3, [BG] 303.4.4

Proponents: Robert Pekelnicky, Degenkolb Engineers, representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (rpekelnicky@degenkolb.com); Kelly Cobeen, Wiss Janney Elstner Associates, Inc., representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (kcobeen@wje.com); Michael Mahoney, Federal Emergency Management Agency, representing Federal Emergency Management Agency (mike.mahoney@fema.dhs.gov)

THIS PROPOSAL WILL BE HEARD BY THE BUILDING CODE GENERAL COMMITTEE. SEE THE TENTATIVE HEARING ORDER THE IBC-GENERAL COMMITTEE.

2021 International Code Council Performance Code

Revise as follows:

[BG] 303.1 Performance group allocation. Use groups and hazard-related occupancies have been allocated to performance groups using the risk factors identified in Section 302.4. Specific buildings and facilities have been allocated to performance groups using the risk factors identified in Section 302.4 combined with the relative importance of protecting the building or facility to the community.~~These performance group allocations are shown in Table 303.1.~~ The allocated performance group shall not be lower than the corresponding risk category determined in accordance with Section 1604.5 of the International Building Code.

Delete without substitution:

~~**[BG] TABLE 303.1**~~
~~**PERFORMANCE GROUP CLASSIFICATIONS FOR BUILDINGS AND FACILITIES**~~

~~PERFORMANCE GROUP~~	~~USE AND OCCUPANCY CLASSIFICATIONS FOR SPECIFIC BUILDINGS OR FACILITIES~~
~~I~~	~~Buildings and facilities that represent a low hazard to human life in the event of failure, including, but not limited to:~~ ~~1. Agricultural facilities.~~ ~~2. Certain temporary facilities.~~ ~~3. Minor storage facilities.~~
~~II~~	~~All buildings and facilities except those listed in Performance Groups I, III and IV.~~
~~III~~	~~Buildings and facilities that represent a substantial hazard to human life in the event of failure, including, but not limited to:~~ ~~1. Buildings and facilities where more than 300 people congregate in one area.~~ ~~2. Buildings and facilities with elementary school, secondary school or day care facilities with a capacity greater than 250.~~ ~~3. Buildings and facilities with a capacity greater than 500 for colleges or adult education facilities.~~ ~~4. Health care facilities with a capacity of 50 or more residents but not having surgery or emergency treatment facilities.~~ ~~5. Jails and detention facilities.~~ ~~6. Any other occupancy with an occupant load greater than 5,000.~~ ~~7. Power generating facilities, water treatment for potable water, wastewater treatment facilities and other public utilities facilities not included in Performance Group IV.~~ ~~8. Buildings and facilities not included in Performance Group IV containing sufficient quantities of highly toxic gas or explosive materials capable of causing acutely hazardous conditions that do not extend beyond property boundaries.~~
~~IV~~	~~Buildings and facilities designated as essential facilities, including, but not limited to:~~ ~~1. Hospitals and other health care facilities having surgery or emergency treatment facilities.~~ ~~2. Fire, rescue and police stations and emergency vehicle garages.~~ ~~3. Designated earthquake, hurricane or other emergency shelters.~~ ~~4. Designated emergency preparedness, communication, and operation centers and other facilities required for emergency response.~~ ~~5. Power generating stations and other utilities required as emergency backup facilities for Performance Group IV buildings or facilities.~~ ~~6. Buildings and facilities containing highly toxic gas or explosive materials capable of causing acutely hazardous conditions beyond the property boundaries.~~ ~~7. Aviation control towers, air traffic control centers and emergency aircraft hangars.~~ ~~8. Buildings and facilities having critical national defense functions.~~ ~~9. Water treatment facilities required to maintain water pressure for fire suppression.~~ ~~10. Ancillary structures (including, but not limited to, communication towers, fuel storage tanks or other structures housing or supporting water or other fire suppression material or equipment) required for operation of Performance Group IV structures during an emergency.~~

Revise as follows:

[BG] 303.2 Unique performance group allocation. Where necessary or desired, allocation of specific buildings or facilities to performance groups differing from ~~Table 303.1~~ the corresponding risk category in Table 1604.5 of the *International Building Code* is permitted based on the needs specific to a community or owner or if there are unusual circumstances associated with the building or facility.

[BG] 303.4 Performance groups. There are four performance groups (PG), identified as I, II, III and IV.

Revise as follows:

[BG] 303.4.1 Performance Group I. The minimum design performance level with which all buildings or facilities allocated to Risk Category I per Section 1604.5 of the *International Building Code* or posing a low risk to human life, should the buildings or facilities fail, shall comply.

[BG] 303.4.2 Performance Group II. The minimum design performance level with which all buildings or facilities subject to this code, except those classified as PG I, PG III or PG IV, shall comply.

Revise as follows:

[BG] 303.4.3 Performance Group III. The minimum design performance level with which buildings or facilitiesallocated to Risk Category III per Section 1604.5 of the *International Building Code* or of an increased level of societal benefit or importance shall comply.

[BG] 303.4.4 Performance Group IV. The minimum design performance level with which buildings or facilitiesallocated to Risk Category IV per Section 1604.5 of the *International Building Code* or that present an unusually high risk or that are deemed essential facilities shall comply.

Staff Note: This proposal for Table 303.1 addresses requirements in a different or contradicting manner to those found in Code Change PC1-21. The committee is urged to make their intentions clear with their actions on these proposals.

Reason Statement: The purpose of this change is to correlate Chapter 3 of the ICCPC with the IBC—Table 1604.5 Risk Categories. Where the IBC uses the term "risk category," the ICCPC uses "performance group." The structure of performance groups used in the ICCPC is identical to that used for risk categories in the IBC, and Table 303.1 is effectively the Risk Category table from an earlier edition of the IBC. Pointing directly to IBC Table 1604.5 instead of revising Table 303.1 is considered more appropriate for several reasons. First it eliminates the need to correlate the two tables, whose changes are heard by separate ICC committees. Second, it is unlikely the tables could be correlated because the ICCPC table changes are heard in Group A while the IBC table changes are heard in Group B – almost ensuring the ICCPC Performance Group table would be one cycle out of sync with the IBC Risk Category table. Third, the ICC's own *User's Guide* for the ICCPC states the general intent that buildings designed in accordance with the IBC "shall be deemed to comply with the performance groups for that use group or occupancy," but this is only true if the ICCPC's default performance groups meet the IBC's default risk categories.
The proposal maintains the jurisdiction's ability to classify a building or facility in a higher Performance Group than the corresponding IBC Risk Category as needed to suit "unusual circumstances," based on the provisions of ICCPC Sections 303.2 and 303.5. Note that while Section 303.2 says the performance group may "differ" from the code's default, the *User's Guide* makes clear that the intent for new buildings is to allow only increases in performance, which is why the proposal wording includes "but not lower than" in Sections 303.1 and 303.4.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
Because this change is simply correlating concepts and language from the IBC into the ICCPC, there is no cost impact of the change. Correlating these aspects of the two codes can actually reduce cost due to misunderstanding or misapplication of the codes.

PC2-21

PC3-21

ICCPC: [BG] 303.3

Proponents: Robert Pekelnicky, Degenkolb Engineers, representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (rpekelnicky@degenkolb.com); Kelly Cobeen, Wiss Janney Elstner Associates, Inc., representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (kcobeen@wje.com); Michael Mahoney, Federal Emergency Management Agency, representing Federal Emergency Management Agency (mike.mahoney@fema.dhs.gov)

THIS PROPOSAL WILL BE HEARD BY THE BUILDING CODE GENERAL COMMITTEE. SEE THE TENTATIVE HEARING ORDER THE IBC-GENERAL COMMITTEE.

2021 International Code Council Performance Code

Revise as follows:

[BG] 303.3 Magnitudes of event and level of damage. Performance groups identify the minimum required performance of buildings or facilities through a relationship of the magnitude of an event to the maximum level of damage to be tolerated shown in Table 303.3. The use of Table 303.3 shall be an iterative process. It shall be used to determine the acceptable impact of certain events based on their magnitude, and then used iteratively to evaluate various designed mitigation features. The use of Table 303.3 shall consider, explicitly or implicitly, all four design event magnitudes for the assigned performance group. Assignment of performance groups is accomplished through consideration of building or facility uses, building or facility risk factors, and the importance of a building or facility to a community.

[BG] TABLE 303.3
MAXIMUM LEVEL OF DAMAGE TO BE TOLERATED BASED ON PERFORMANCE GROUPS AND DESIGN EVENT MAGNITUDES

MAGNITUDE OF DESIGN EVENT (INCREASING MAGNITUDE OF EVENT ↑↑↑↑↑↑↑↑↑↑↑↑)	INCREASING LEVEL OF PERFORMANCE →→→→→→→→→→→→→→→→→→→→→→→→→→→→→→→→ PERFORMANCE GROUPS			
	Performance Group I	Performance Group II	Performance Group III	Performance Group IV
VERY LARGE (Very Rare)	SEVERE	SEVERE	HIGH	MODERATE
LARGE (Rare)	SEVERE	HIGH	MODERATE	MILD
MEDIUM (Less Frequent)	HIGH	MODERATE	MILD	MILD
SMALL (Frequent)	MODERATE	MILD	MILD	MILD

Reason Statement: This proposal clarifies that all four pairings of impact state and hazard intensity should be considered. This is consistent with, but more explicit than, ICCPC Section 301.3.2. It is also consistent with ICC's *User's Guide* for the ICCPC, which states, "Structures must be designed to the levels of performance and magnitudes of event indicated in every applicable square within Table 303.3."

Cost Impact: The code change proposal will not increase or decrease the cost of construction
Because this change is simply clarifying the concepts and language in the ICCPC, there is no cost impact of the change.

PC3-21

PC4-21

ICCPC:[BG]304.2.1.5, [BG]304.2.2.5, [BG]304.2.3.5, [BG]304.2.4.5

Proponents: Robert Pekelnicky, Degenkolb Engineers, representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (rpekelnicky@degenkolb.com); Kelly Cobeen, Wiss Janney Elstner Associates, Inc., representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (kcobeen@wje.com); Michael Mahoney, Federal Emergency Management Agency, representing Federal Emergency Management Agency (mike.mahoney@fema.dhs.gov)

THIS PROPOSAL WILL BE HEARD BY THE BUILDING CODE GENERAL COMMITTEE. SEE THE TENTATIVE HEARING ORDER THE IBC-GENERAL COMMITTEE.

2021 International Code Council Performance Code

[BG] 304.2.1 Mild impact. The tolerable impacts of the design loads are assumed as follows:

Revise as follows:

[BG] 304.2.1.5 Hazardous materials. ~~Minimal~~ There is no significant release of hazardous materials ~~are released to the environment~~ outside of the building or facility. The risk to the community is minimal, and an emergency relocation or shelter in place order is not necessary.

[BG] 304.2.2 Moderate impact. The tolerable impacts of the design loads are assumed as follows:

Revise as follows:

[BG] 304.2.2.5 Hazardous materials. ~~Some~~
There is no major release of hazardous materials ~~are released to the environment~~ outside of the building or facility.~~, but the~~ The risk to the community is minimal~~.~~ and an ~~Emergency~~ emergency relocation or shelter in place order is not necessary.

[BG] 304.2.3 High impact. The tolerable impacts of the design loads are assumed as follows:

Revise as follows:

[BG] 304.2.3.5 Hazardous materials. There is no major release of
~~Hazardous~~ hazardous materials ~~are released to the environment with localized relocation needed for buildings and facilities in the immediate vicinity~~ outside of the facility. The risk the the community is minimal, and an emergency relocation or shelter in place order is not necessary.

[BG] 304.2.4 Severe impact. The tolerable impacts of the design loads are assumed as follows:

Revise as follows:

[BG] 304.2.4.5 Hazardous materials. ~~Significant h~~Hazardous materials are released ~~to the environment~~ outside of the building or facility, ~~with~~ and an emergency relocation or shelter in place order may be needed ~~beyond the immediate vicinity~~.

Reason Statement: Section 1.1 of the 2015 NEHRP Provisions – the document that forms that basis for the seismic provisions in the IBC referenced standard, ASCE 7 – states that avoiding the release of hazardous materials is a design intent of the Provisions. Throughout the commentary to ASCE 7 Chapters 13 and 15 there are references to paying special consideration to preventing the release of hazardous materials outside of the building or facility. In buildings or facilities that require special considerations for hazardous materials it is permissible to have release inside the building or facility because there is secondary containment to prevent release to the environment outside of the building or facility. In the design hazard, typically the “Large” hazard, when the building or facility is assigned to Performance Group (Risk Category) IV, hazardous materials may be released inside the building or facility but, there may be small releases of hazardous materials outside of the building or facility. In the “Very Large “hazard for Performance Group (Risk Category) IV and the “large” hazard for Performance Group (Risk Category) III, some release outside of the building or facility may occur, but the release is not large enough to pose a danger to the surrounding regions. This proposal recognizes that the NEHRP Provisions and ASCE 7 are “authoritative documents” and coordinates the ICCPC with them.
The proposal also recognizes that shelter in place orders are common policy responses to hazardous materials releases. These should be part of the impact descriptions, together with emergency relocation orders.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This change will not increase the cost of construction because it is simply aligning the provisions of the ICC-PC with the provisions in the standards referenced in Chapter 16 of the IBC.

PC5-21

ICCPC: [BG] 304.2.2.3, [BG] 304.2.3.3

Proponents: Robert Pekelnicky, Degenkolb Engineers, representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (rpekelnicky@degenkolb.com); Kelly Cobeen, Wiss Janney Elstner Associates, Inc., representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (kcobeen@wje.com); Michael Mahoney, Federal Emergency Management Agency, representing Federal Emergency Management Agency (mike.mahoney@fema.dhs.gov)

THIS PROPOSAL WILL BE HEARD BY THE BUILDING CODE GENERAL COMMITTEE. SEE THE TENTATIVE HEARING ORDER THE IBC-GENERAL COMMITTEE.

2021 International Code Council Performance Code

SECTION 304 MAXIMUM LEVEL OF DAMAGE TO BE TOLERATED.

[BG] 304.2.2 Moderate impact. The tolerable impacts of the design loads are assumed as follows:

Revise as follows:

[BG] 304.2.2.3 Occupant hazards. Injuries to building or facility occupants from hazard-related applied loads ~~may be locally significant, but generally moderate~~ are minimal in numbers and minor in nature. There is a ~~low likelihood of single life loss with a~~ very low likelihood of single or multiple life loss. The nature of the applied load, such as fire hazards, may result in higher levels of expected injuries and damage in localized areas, whereas the balance of the areas may sustain fewer injuries and less damage.

[BG] 304.2.3 High impact. The tolerable impacts of the design loads are assumed as follows:

Revise as follows:

[BG] 304.2.3.3 Occupant hazards. Injuries to building or facility occupants from hazard-related applied loads ~~may be locally significant with a high risk to life, but~~ are ~~generally moderate~~ are minimal in numbers and minor in nature. There is a ~~moderate~~ low likelihood of single life loss, with a very low probability of multiple life loss. The nature of the applied load, such as fire hazards, may result in higher levels of expected injuries and damage in localized areas, whereas the balance of the areas may sustain fewer injuries and less damage.

Reason Statement: The definitions of occupant hazard for the moderate and high damage states do not align with the intended performance of buildings designed to the IBC. The ICCPC should not have explicitly lower performance goals than the IBC; the difference should be in the scope of design considerations and in the acceptable methods of verification, not in the expected performance. The most significant misalignment is in the high impact state currently permitting “moderate” likelihood of a single loss of life. This is in direct conflict with the intention of ASCE 7, the structural design standard referenced in the IBC, for the design earthquake seismic hazard, where the goal is to avoid loss of life even at the large hazard level. The intended performance for other environmental hazards in ASCE 7 is life safety or better in the design event, where the design event is generally the large hazard contemplated by the ICCPC.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This change will not increase the cost of construction because it is simply aligning the provisions of the ICC-PC with the provisions in the standards referenced in Chapter 16 of the IBC.

PC6-21

ICCPC: [BG] 304.2.3.2

Proponents: Robert Pekelnicky, Degenkolb Engineers, representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (rpekelnicky@degenkolb.com); Kelly Cobeen, Wiss Janney Elstner Associates, Inc., representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (kcobeen@wje.com); Michael Mahoney, Federal Emergency Management Agency, representing Federal Emergency Management Agency (mike.mahoney@fema.dhs.gov)

THIS PROPOSAL WILL BE HEARD BY THE BUILDING CODE GENERAL COMMITTEE. SEE THE TENTATIVE HEARING ORDER THE IBC-GENERAL COMMITTEE.

2021 International Code Council Performance Code

[BG] 304.2.3 High impact. The tolerable impacts of the design loads are assumed as follows:

Revise as follows:

[BG] 304.2.3.2 Nonstructural systems. Nonstructural systems needed for normal building or facility use are significantly damaged and inoperable; egress routes may be impaired by light debris<u> but means of egress are preserved</u>; emergency systems may be significantly damaged, but remain operational.

Reason Statement: In ICCPC Table 303.3, high impact is the performance level expected of Performance Group II buildings in large events. This objective corresponds to the design of normal occupancy buildings (Risk Category II) in design events using the IBC. Therefore, the performance description should align with the IBC's reference standards and resource documents. Section 1.1 of the 2020 NEHRP Provisions – the document that forms that basis for the seismic provisions in the IBC referenced structural loading standard, ASCE 7 – states that preservation of means of egress is a design intent of the Provisions. Throughout the commentary to Chapter 13 of ASCE 7 there are references to paying special consideration to components whose failure would block means of egress. Therefore, a change is proposed to clarify that while light debris may fall in an egress route, egress out of the building or facility should still be possible.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This change will not increase the cost of construction because it is simply aligning the provisions of the ICC-PC with the intent of the standards referenced Chapter 16 of the IBC.

PC7-21

ICCPC:[BG] 304.2.4.1

Proponents: Robert Pekelnicky, Degenkolb Engineers, representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (rpekelnicky@degenkolb.com); Kelly Cobeen, Wiss Janney Elstner Associates, Inc., representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (kcobeen@wje.com); Michael Mahoney, Federal Emergency Management Agency, representing Federal Emergency Management Agency (mike.mahoney@fema.dhs.gov)

THIS PROPOSAL WILL BE HEARD BY THE BUILDING CODE GENERAL COMMITTEE. SEE THE TENTATIVE HEARING ORDER THE IBC-GENERAL COMMITTEE.

2021 International Code Council Performance Code

SECTION 304 MAXIMUM LEVEL OF DAMAGE TO BE TOLERATED.

[BG] 304.2.4 Severe impact. The tolerable impacts of the design loads are assumed as follows:

Revise as follows:

[BG] 304.2.4.1 Structural damage. There is substantial structural damage, but all significant components continue to carry gravity load demands. Repair may not be technically possible. The building or facility is not safe for reoccupancy, as ~~reoccupancy~~ application of loads could cause collapse.

Reason Statement: Collapse of a compromised structure could be triggered by more than reoccupancy of the structure. After substantial structural damage, a compromised structure may continue to stand and support the present gravity load demands such as self-weight. This gives the impression of a minimum level of continued structural integrity. However, significant portions of the lateral force resisting system may have been compromised beyond to ability to resist applied loads above and beyond present gravity loads. As such, the compromised structure would be subject to collapse from earthquake aftershocks, heavy construction equipment or materials, high winds, or other transient applied loads.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
This change will not increase the cost of construction because it is simply clarifying the original intent of the section.

PC8-21

ICCPC: [BG] 402.3.3

Proponents: David Bonowitz, David Bonowitz, S.E., representing Self (dbonowitz@att.net)

THIS PROPOSAL WILL BE HEARD BY THE BUILDING CODE GENERAL COMMITTEE. SEE THE TENTATIVE HEARING ORDER THE IBC-GENERAL COMMITTEE.

2021 International Code Council Performance Code

Revise as follows:

[BG] 402.3.3 Damage and deterioration. For a building designed in accordance with this or a previous edition of the *Performance Code*, where ~~Where~~ damage or deterioration to building or facility elements or systems will impact the objectives of this code or the design, those elements or systems shall be repaired or replaced in order to maintain the level of performance intended by this code. For any other building, damage or deterioration shall be addressed in accordance with the *International Existing Building Code*.

Staff Note: This proposal addresses requirements in a different or contradicting manner to those found in Code Change PC9-21. The committee is urged to make their intentions clear with their actions on these proposals.

Reason Statement: The ICCPC's provisions for repair of damage are impossible to apply to many existing buildings. This proposal resolves the problem by distinguishing buildings that are ready for the ICCPC from those that are not.

The ICCPC is meant to apply to existing buildings (101.3.1, 102.3.11) – even, potentially, to buildings designed with the IBC, with a legacy code, or with no recognizable code at all. The ICCPC does not have a separate Existing Buildings chapter, but it does have several existing building provisions scattered throughout. One of those is Section 402.3.3, regarding the repair of damage or deterioration. But in order to apply this provision, you need to know "the objectives of ... the design." Beyond that, to apply any of the ICCPC provisions for existing buildings, you need information that you would only have for buildings that were designed with the ICCPC in the first place. These include:

- Documentation of which parts of the building had a "performance-based" design (102.3.5.3, 102.3.11)
- An operations and maintenance manual (102.3.4.2.3)
- Building-specific bounding conditions for the design (102.3.3.6), used to set requirements for a proposed addition, alteration, change of use, etc. (102.3.11)
- Building-specific performance objectives (Chapter 3)
- An allowance for adjusted performance objectives for existing buildings (303.5)
- A stated intended life of the building (402.3.2).

Buildings for which this information is not available – that is, essentially any building not designed with the ICCPC – will need a different set of provisions. This conclusion is consistent with ICCPC Section 102.3.11, which already distinguishes buildings that were designed "under a performance-based code" from those that were not. For those that were not, the IEBC is perfectly suited to the task, as it has a complete set of thoughtful provisions for the repair of existing buildings.

Therefore, this proposal does two things:

1. It preserves the intent of ICCPC Section 402.3.3 but limits it to ICCPC-designed buildings. If the building was designed with the ICCPC, it may use the ICCPC to regulate repairs.
2. It points to the IEBC as the reasonable approach for other buildings. This is the approach essentially all existing buildings are currently taking anyway.

(Similar clarifications of the ICCPC's other provisions for existing buildings might be needed, but they are beyond the scope of this proposal and beyond the scope of Group A. For example, it should be possible to write a more complete set of existing building provisions for the ICCPC, clarifying current provisions such as Sections 102.3.11 and 303.5. It should also be possible to identify other "performance-based codes" as contemplated by Section 102.3.11, or even to certify an existing non-ICCPC design as eligible for the ICCPC's existing building provisions, possibly including Section 402.3.3.)

Cost Impact: The code change proposal will not increase or decrease the cost of construction

This change will have no effect on the cost of construction, since it only clarifies the applicability of the ICCPC. Buildings not eligible for the ICCPC are already using the IEBC to regulate repairs, and this proposal would not change that.

PC9-21

ICCPC: [BG] 402.3.3

Proponents: Robert Pekelnicky, Degenkolb Engineers, representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (rpekelnicky@degenkolb.com); Kelly Cobeen, Wiss Janney Elstner Associates, Inc., representing Federal Emergency Management Agency/Applied Technology Council - Seismic Code Support Committee (kcobeen@wje.com); Michael Mahoney, Federal Emergency Management Agency, representing Federal Emergency Management Agency (mike.mahoney@fema.dhs.gov)

THIS PROPOSAL WILL BE HEARD BY THE BUILDING CODE GENERAL COMMITTEE. SEE THE TENTATIVE HEARING ORDER THE IBC-GENERAL COMMITTEE.

2021 International Code Council Performance Code

Revise as follows:

[BG] 402.3.3 Damage and deterioration. Where damage or deterioration to building or facility elements or systems will impact the objectives of this code or the design, those elements or systems shall be repaired or replaced in order to maintain the level of performance intended by this code. Structural elements or systems shall be repaired or replaced in accordance with the provisions of the *International Existing Building Code.*

Staff Note: This proposal addresses requirements in a different or contradicting manner to those found in Code Change PC8-21. The committee is urged to make their intentions clear with their actions on these proposals.

Reason Statement: The existing language in ICCPC Section 402.3.3 is in conflict with the IEBC and with other allowances within the ICCPC with respect to structural elements and systems. It currently requires damage repair “to maintain the level of performance intended by this code,” suggesting that a building designed to a previous edition must be brought up to the current code whenever repairs are made. If one reasonably understands “this code” to mean the ICCPC as it applies to new construction. This provision could easily avoid the confusion by referencing the IEBC instead (much as the ICCPC already references the IBC for use and occupancy definitions). The IEBC has detailed provisions specifying when damage or deterioration may be repaired and when the repair must be supplemented by a retrofit beyond the damaged area. It also has provisions that allow for alternative retrofit criteria that differ from IBC criteria for new construction. The alternative criteria include the performance-based seismic retrofit standard, ASCE 41. In effect, the IEBC represents just the sort of authoritative document the ICCPC intends, providing the bounding conditions and the performance-based design approaches needed for ICCPC compliance. Instead of attempting to match or replace those provisions (which are typically altered with each subsequent ICC cycle), this change points to the IEBC.

Cost Impact: The code change proposal will decrease the cost of construction
Depending on how one reads the ICCPC, this change will either decrease the cost of construction or have no effect on the cost of construction. A decrease is possible because the proposed change would remove the current ICCPC requirement that buildings being repaired must also meet ICCPC requirements for new construction.

PC10-21

ICCPC: CHAPTER 6, 16 & 17

Proponents: David Collins, representing The American Institute of Architects (dcollins@preview-group.com)

THIS PROPOSAL WILL BE HEARD BY THE FIRE CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER THE IFC COMMITTEE.

2021 International Code Council Performance Code

Delete without substitution:

~~CHAPTER 6~~
~~FIRE SAFETY~~

~~**SECTION 601 SOURCES OF FIRE IGNITION.**~~

~~**[F] 601.1 Objective.** To prevent unwanted ignition caused by building equipment and systems.~~

~~**[F] 601.2 Functional statements.**~~

~~**[F] 601.2.1 Fuel-burning appliances and services.** Fuel-burning appliances and services shall be installed in a manner that reduces their potential as sources of fire ignition.~~

~~**[F] 601.2.2 Electrical equipment, appliances and services.** Electrical equipment, appliances and services shall be installed in a manner that reduces their potential as sources of fire ignition.~~

~~**[F] 601.3 Performance requirements.**~~

~~**[F] 601.3.1 Uncontrolled combustion and explosion.** Fuel-burning appliances and services shall be installed so that the appliance or service will not cause uncontrolled combustion or explosion.~~

~~**[F] 601.3.2 Fuel-burning appliances and services as sources of ignition.** Fuel-burning appliances and services shall be installed so that they will not become sources of ignition.~~

~~**[F] 601.3.3 Sparks and arcing.** Electrical equipment, appliances and services shall be installed so that they will not allow sparks or arcing to escape their enclosures.~~

~~**[F] 601.3.4 Electrical equipment, appliances and services.** Electrical equipment, appliances and services shall be installed so that they will not become sources of ignition.~~

~~**SECTION 602 LIMITING FIRE IMPACT.**~~

~~**[F] 602.1 Objective.** To provide an acceptable level of fire safety performance when facilities are subjected to fires occurring in the fire loads that may be present in the facility during construction or alteration and throughout the intended life.~~

~~**[F] 602.2 Functional statement.** Buildings shall be designed with safeguards against the spread of fire so that persons not directly adjacent to or involved in the ignition of a fire shall not suffer serious injury or death from a fire and so that the magnitude of the property losses are limited as follows:~~

- ~~Performance Group I—High~~
- ~~Performance Group II—Moderate~~
- ~~Performance Group III—Mild~~
- ~~Performance Group IV—Mild~~

~~**[F] 602.2.1 Building and adjacent buildings.** Buildings and facilities shall be designed and constructed so that the building and adjacent buildings or facilities and their occupants, contents and amenities are appropriately protected from the impact of fire and smoke.~~

~~**[F] 601.3.5 Flammable, combustible and explosive atmospheres.** Separate ignition sources from areas where a flammable, combustible or explosive atmosphere may exist.~~

~~**[F] 602.2.2 Needs of fire fighters.** Buildings and facilities shall be designed and constructed so that fire fighters can appropriately perform rescue operations, protect property and utilize fire-fighting equipment and controls.~~

~~**[F] 602.3 Performance requirements.** See Section 1701.3.~~

Revise as follows:

CHAPTER 16

FIRE PREVENTION AND IMPACT MANAGEMENT

SECTION 1601 FIRE PREVENTION.

[F] 1601.1 Objective. To limit or control the likelihood that a fire will start because of the design, operation or maintenance of a facility or its systems so as to minimize impacts on people, property, processes and the environment.

[F] 1601.2 Functional statement. Facility services, systems and activities that represent a potential source of ignition or can contribute fuel to an incipient fire shall be designed, operated, managed and maintained to reduce the likelihood of a fire starting.

[F] 1601.3 Performance requirements.

[F] 1601.3.1 Ignition sources. Electrical, mechanical and chemical systems or processes and facility services capable of supplying sufficient heat under normal operating conditions or anticipated failure modes to ignite combustible system components, facility elements or nearby materials shall be designed, operated, managed and maintained to prevent the occurrence of fire.

[F] 1601.3.2 Fuel sources. The quantities, configurations, characteristics or locations of combustible materials, including components or facility systems, facility elements, facility contents and accumulations of readily ignitable waste or debris shall be managed or maintained to prevent ignition by facility service equipment and other ignition sources associated with processes normally present or expected to be present within the facility.

[F] 1601.3.3 Ignition and fuel source interactions. Design, operate, and maintain facility services and facility system installation locations to prevent the occurrence or to control the extent of atmospheres likely to pose an ignition hazard.

Delete without substitution:

~~CHAPTER 17~~
~~FIRE IMPACT MANAGEMENT~~

Revise as follows:

SECTION ~~1701~~ 1602 FIRE IMPACT MANAGEMENT.

[F] ~~1701.1~~ 1602.1 Objective. To provide an acceptable level of fire safety performance when facilities are subjected to fires occurring in the fire loads present in the facility during construction or alteration and throughout the intended life.

[F] ~~1701.2~~ 1602.2 Functional statements. Facilities shall be designed with safeguards against the spread of fire so that persons ~~not directly adjacent to or involved in the ignition of a fire~~ shall not suffer serious injury or death from a fire, and so that the magnitude of the property loss is limited and consistent with the design Risk Category determined in Chapter 3 as follows:

- Performance Group I—High
- Performance Group II—Moderate
- Performance Group III—Mild
- Performance Group IV—Mild

[F] ~~1701.2.1~~ 1602.2.1 Fire potential. Facilities and contents shall be maintained in a manner that limits the potential for fire.

[F] ~~1701.2.2~~ 1602.2.2 Fire impact. Facilities shall be designed, constructed and maintained to limit the fire impact to people and property.

[F] ~~1701.2.3~~ 1602.2.3 Time for evacuation. Facilities shall be designed, constructed, maintained and operated with appropriate safeguards in place to limit the spread of fire and products of combustion so that occupants have sufficient time to escape the fire.

[F] ~~1701.2.4~~ 1602.2.4 Limitation on fire spread. Facilities shall be designed, constructed, maintained and operated in such a manner that the spread of fire through a building is restricted, and that fire does not spread to adjacent properties.

[F] ~~1701.2.5~~ 1602.2.5 Wildland fires. In wildland interface areas, facilities and vegetation shall be designed, constructed, arranged and maintained in such a manner to limit the impact to the building and the facilities during a wildland fire event.

[F] ~~1701.2.6~~ 1602.2.6 Emergency responder needs. Facilities shall be arranged, constructed, maintained and operated with appropriate safeguards in place to allow fire-fighting personnel to perform their duties during an emergency event ~~rescue operations and to protect property~~.

Add new text as follows:

1602.2.6.1 Needs of fire fighters. Buildings and facilities shall be designed and constructed so that fire fighters can appropriately perform rescue operations, protect property and utilize fire-fighting equipment and controls.

Revise as follows:

[F] ~~1701.2.7~~ 1602.2.7 Structural integrity. Facilities shall be arranged, constructed and maintained so as to limit the impact of a fire on the structural integrity of the facility.

[F] ~~1701.2.8~~ 1602.2.8 Capability of building or facility users. Facilities open to persons of varying physical and mental capabilities shall provide reasonably equivalent levels of fire safety protection for those persons to the levels it provides for persons without disabilities.

[F] ~~1701.3~~ 1602.3 Performance requirements. Facilities or portions thereof shall be designed, constructed and operated to normally prevent any fire from growing to a stage that would cause life loss or serious injury, taking into account all anticipated and permitted fire loads that would affect their performance. Facilities shall be designed to sustain local fire damage, and the facility as a whole will remain intact and not be damaged to an extent disproportionate to the original local damage.

[F] ~~1701.3.1~~ 1602.3.1 Interior surface finishes. Interior surface finishes on walls, floors, ceilings and suspended building elements shall resist the spread of fire and limit the generation of unacceptable levels of toxic gases, smoke and heat appropriate to the design performance level and associated hazards, risks and fire safety systems or features installed.

[F] ~~1701.3.2~~ 1602.3.2 Building materials, processes and contents. Limit quantities, configurations and combustibility of building materials, processes and contents so that fire growth and size can be controlled.

[F] ~~1701.3.3~~ 1602.3.3 Emergency responders. Where necessary, provide appropriate measures to limit fire and smoke spread and damage to acceptable levels so that fire fighters are not unduly hindered in suppression or rescue operations.

[F] ~~1701.3.4~~ 1602.3.4 Detection and notification. Where human intervention or system or equipment response is necessary to limit the fire impact, provide appropriate means for detection and notification of fire.

[F] ~~1701.3.5~~ 1602.3.5 Activation of detection systems. Fire detection systems, where provided, shall activate at a fire size appropriate to the fire and life safety strategies selected.

[F] ~~1701.3.6~~ 1602.3.6 Activation of suppression systems. Automatic fire suppression systems, where provided as a means of controlling fire growth or to suppress the fire, shall deliver sufficient suppression agent to control or suppress the fire as appropriate.

[F] ~~1701.3.7~~ 1602.3.7 Control of smoke. Smoke control systems, where provided, shall limit the unacceptable spread of smoke to nonfire areas as appropriate in a manner so as not to endanger occupants.

[F] ~~1701.3.8~~ 1602.3.8 Concealed spaces. Construction in concealed spaces shall inhibit the unseen spread of fire and unacceptable movement of hot gases and smoke, appropriate to associated hazards, risks and fire safety systems or features installed.

[F] ~~1701.3.9~~ 1602.3.9 Vertical openings. Vertical openings shall be constructed, arranged, limited or protected to limit fire and smoke spread as appropriate to the fire and life-safety strategies selected.

[F] ~~1701.3.10~~ 1602.3.10 Wall, floor, roof and ceiling assemblies. Wall, floor, roof and ceiling assemblies forming compartments including their associated openings shall limit the spread of fire appropriate to the associated hazards, risks and fire-safety systems or features installed.

[F] ~~1701.3.11~~ 1602.3.11 Structural members and assemblies. Structural members and assemblies shall have a fire resistance appropriate to their function, the fire load, the predicted fire intensity and duration, the fire hazard, the height and use of the building, the proximity to other properties or structures, and any fire protection features.

[F] ~~1701.3.12~~ 1602.3.12 Exterior wall and roof assemblies' restriction of fire spread. Construction of exterior wall and roof assemblies shall restrict the spread of fire to or from adjacent buildings and from exterior fire sources, appropriate to the associated hazards, risks and fire safety systems or features installed.

[F] ~~1701.3.13~~ 1602.3.13 Exterior wall and roof assemblies' contribution to fire growth. Construction of exterior wall and roof assemblies shall resist the spread of fire by limiting their contribution to fire growth and development, appropriate to the associated hazards, risks and fire safety systems or features installed.

[F] ~~1701.3.14~~ 1602.3.14 Air handling and mechanical ventilation systems. Air handling and mechanical ventilation systems, where provided, shall be designed to avoid or limit the unacceptable spread of fire and smoke to nonfire areas as appropriate.

[F] ~~1701.3.15~~ 1602.3.15 Magnitude of fire event. Design fire events shall realistically reflect the ignition, growth and spread potential of fires and fire effluents that could occur in the fire load that may be present in the facility by its design and operational controls.

[F] ~~1701.3.15.1~~ 1602.3.15.1 Design fire events. Magnitudes of design fire events shall be described in terms of the potential spread of fire and fire effluents given the proposed design, arrangement, construction, furnishing and use of a building.

[F] ~~1701.3.15.2~~ 1602.3.15.2 Range of fire sizes. Magnitudes of design fire events shall be defined as small, medium, large and very large, based on the quantification of the design fire event as a function of the building use and associated performance group.

[F] ~~1701.3.15.3~~ 1602.3.15.3 Engineering analyses of potential fire scenarios. Quantification of the magnitudes of design fire events shall be based on engineering analyses of potential fire scenarios that can be expected to impact a building through its intended life. For each design fire scenario considered, the analyses shall include the ignitability of the first item, the peak heat release rate of the item first ignited, the rate of heat release and expected fire growth, and the overall fuel load, geometry, and ventilation of the space and adjoining spaces.

[F] ~~1701.3.15.3.1~~ 1602.3.15.3.1 Relationship of design fire to tolerable damage. When determining (assigning) the magnitude of a design fire

event, the physical properties of the fire and its effluents shall only be considered in terms of how they impact the levels of tolerable damage. The magnitude of the fire event is not required to be characterized solely on the basis of the physical size of the fire in terms of its heat release and smoke production rates.

[F] ~~1701.3.15.3.2~~ 1602.3.15.3.2 Design parameters. Multiple design fire scenarios, ranging from small to very large design fire events, shall be considered to ensure that associated levels of tolerable damage are not exceeded as appropriate to the performance group.

[F] ~~1701.3.15.3.3~~ 1602.3.15.3.3 Factors in determining design fire scenarios. The development of design fire scenarios shall consider the use of the room of fire origin and adjoining spaces, in terms of impact on occupant, property and community welfare.

[F] ~~1701.3.15.3.4~~ 1602.3.15.3.4 Justification. Justification of the magnitudes of design fire events and design fire scenarios shall be part of the analysis prepared by the *registered design professional* and shall take into consideration the reasonableness, frequency and severity of the design fire event and design fire scenarios.

[F] ~~1701.3.15.3.5~~ 1602.3.15.3.5 Safety factors. Design fires and fire scenarios shall be chosen to provide appropriate factors of safety to provide adequate performance by accounting for the following factors:

1. Effects of uncertainties arising from construction activities.
2. Variations in the properties of materials and the characteristics of the site.
3. Accuracy limitations inherent in the methods used to predict the fire safety of the building.
4. Variations in the conditions of facilities, systems, contents and occupants.

Reason Statement: In 1998, the president of the AIA established a Blue Ribbon Panel to examine the future of the architectural profession and its relationship to codes and standards as part of AIA's public policies.
We stand for protecting communities from the impact of climate change. Global warming and man-made hazards pose an increasing threat to the safety of the public and the vitality of our nation. Rising sea levels and devastating natural disasters result in unacceptable losses of life and property. Resilient and adaptable buildings are a community's fires line of defense against disasters and changing conditions of life and property. This is why we advocate for robust building codes and policies that make our communities more resilient.

A key finding of the Blue Ribbon Panel was the need to direct the architect's practices toward higher performing buildings, while meeting and exceeding the standards adopted in our communities. AIA's 2019 and 2020 Codes and Standards Committee began that effort by reviewing the ICC's Performance Building Code that has remained largely unchanged since its initial publication in 2003.

This effort has led to the development of a series of changes intended to improve the usefulness of the International Code Council Performance Code for Buildings and Facilities (ICCPC). Many of these changes are proposed to clarify and coordinate the ICCPC with the family of I-Codes that have been advanced since the initial effort to create this performance based code. Some findings are best addressed in the guide for the use of the ICCPC. AIA has already reached out to the ICC staff to facilitate that effort following the completion of these code change.

A significant part of the proposed changes consolidate various requirements on the same subject that are currently located in different parts of the code for no apparent reason. Doing so left some things unsaid in one part that are stated in another without reference. Design and evaluation of performance designs and the disparate elements of a building aren't done independently, but are a part of a comprehensive examination of the involved systems and materials associated with the design.

In addition to the proposed changes to consolidate these requirements, we encourage a reexamination of the structure of the ICCPC to more closely reflect the baseline standards in the other element of the ICC family of codes.

As currently published the ICCPC Splits fire safety requirements in *PART II – Building* (Chapter 6) and *PART III – Fire* (Chapter 17) following the structure of placing similar fire code-related requirements in the International Building Code and building code-related requirements in the International Fire Code. Duplicating requirements in in the IBC and IFC makes sense since these are separately published documents and some users may have one and not the other, but still need access to the common information.

However, the ICC Performance Code is a single published document that provides content that is both building- and fire-related. As a single document, it is not necessary to duplicate fire-related content in the building portion of the ICCPC, and, similarly, building-related content in the fire portion. Maintaining identical (or nearly identical) content in two different locations could possibly lead to conflicting content if one section is updated and not the other.

This proposal moves the fire content from *PART II – Building* (Chapter 6) to a more appropriate location in Chapter 16 and —sections in *PART III – Fire* (Chapter 17) are similarly relocated into Chapter16. Section 602 “Limiting Fire Impact” was very similar to Chapter 17 but not as robust in content; thus, we propose to delete Section 602 and use the content in Chapter 17 (modified slightly) in its place. However, some unique content in Section 602 (Section 602.2.2) that would benefit by the revisions in proposed new Section 1602.2.6.

The following is a guide to the source of the new provisions in Chapter 16.

Sections 1601.2.1 and 1601.2.2 are duplicated from Chapter 6. Currently, Section 1601.2 includes systems and activities that represent a source of ignition, but provides no specific guidance. Section 602.2.2 lists fuel-burning appliances and services and electrical equipment, appliances and services. They are move here to provide the consistent direction that the code intends.

Section 1602.2.6.1 is from Chapter 6, Section 602.2.2. The section has been rephrased to include applicable elements of the Chapter 6 section.

Sections 1601.3.1.1 are duplicated entirely from Chapter 6, Section 601.3.

Section 1602 is Chapter 17 in its entirety. The revised provisions in Section 1602 incorporate , except as modified

Cost Impact: The code change proposal will decrease the cost of construction
The consolidation of Chapters 6, 16 and 17 will reduce the cost of construction by focusing the efforts of design and review in one portion of the ICCPC.

PC10-21

PC11-21

ICCPC: CHAPTER 7 & CHAPTER 19

Proponents: David Collins, representing The American Institute of Architects (dcollins@preview-group.com)

THIS PROPOSAL WILL BE HEARD BY THE BUILDING CODE EGRESS COMMITTEE. SEE THE TENTATIVE HEARING ORDER FOR THAT COMMITTEE.

2021 International Code Council Performance Code

SECTION 701 MEANS OF EGRESS.

[BE] 701.1 Objective. To protect people during egress and rescue operations.

[BE] 701.2 Functional statement. Enable occupants to exit the building, facility and premises or reach a safe place as appropriate to the design performance level determined in Chapter 3.

Revise as follows:

[BE] 701.3 Performance requirements. ~~See Section 1901.3.~~

[BE] ~~1901.3.1~~ 701.3.1 General. The construction, arrangement and number of means of egress, exits and safe places for buildings shall be appropriate to the travel distance, number of occupants, occupant characteristics, building height, and safety systems and features.

[BE] ~~1901.3.2~~ 701.3.2 Identification, illumination and safety of means of egress. Means of egress shall be clearly identified, provided with adequate illumination and be easy and safe to use.

[BE] ~~1901.3.3~~ 701.3.3 Unobstructed path. Means of egress shall provide an unobstructed path of travel from each safe place to not less than one exit.

[BE] ~~1901.3.4~~ 701.3.4 Protection from untenable conditions. Each safe place shall provide adequate protection from untenable conditions, an appropriate communication system and adequate space for the intended occupants.

[BE] ~~1901.3.5~~ 701.3.5 Human biomechanics and expectation of consistency. Means of egress shall enable reasonable use by the occupants in the building with due regard to human biomechanics and expectation of consistency.

[BE] ~~1901.3.6~~ 701.3.6 Maintenance of means-of-egress systems. Suitable means of egress shall be provided in satisfactory arrangement throughout all buildings, facilities and premises, regardless of when they were constructed, based on the number and character of occupants, length of travel, provision of existing alternative paths, timeline of emergency detection and response, risk level, time to exit and safety systems provided.

[BE] ~~1901.3.7~~ 701.3.7 Maintenance of clear path. Means of egress shall be maintained without obstructions or reductions in capacity that would hinder the ability of the occupants to egress safely.

[BE] ~~1901.3.8~~ 701.3.8 Interference with identification of exits. Means of egress shall be readily identifiable. Buildings shall be operated and maintained in a manner that does not interfere with the identification of exits.

[BE] ~~1901.3.9~~ 701.3.9 Ease of use. Means of egress shall be maintained and operated in such a manner to ensure that all egress facilities are readily openable and available without special knowledge or effort consistent with the use or occupancy characteristics.

[BE] ~~1901.3.10~~ 701.3.10 Maintenance of illumination. Means of egress shall be maintained and operated in such a manner to ensure that adequate lighting to facilitate safe egress is available.

Delete without substitution:

~~CHAPTER 19~~
~~MEANS OF EGRESS~~

~~**SECTION 1901 MEANS OF EGRESS.**~~

~~**[BE] 1901.1 Objective.** To protect people during egress and rescue operations.~~

~~**[BE] 1901.2 Functional statement.** Enable occupants to exit the building, facility and premises or reach a safe place as appropriate to the design performance level determined in Chapter 3.~~

~~**[BE] 1901.3 Performance requirements.**~~

Reason Statement: In 1998, the president of the AIA established a Blue Ribbon Panel to examine the future of the architectural profession and its relationship to codes and standards as part of AIA's public policies.
We stand for protecting communities from the impact of climate change. Global warming and man-made hazards pose an increasing threat to the

safety of the public and the vitality of our nation. Rising sea levels and devastating natural disasters result in unacceptable losses of life and property. Resilient and adaptable buildings are a community's fires line of defense against disasters and changing conditions of life and property. This is why we advocate for robust building codes and policies that make our communities more resilient.

A key finding of the Blue Ribbon Panel was the need to direct the architect's practices toward higher performing buildings, while meeting and exceeding the standards adopted in our communities. AIA's 2019 and 2020 Codes and Standards Committee began that effort by reviewing the ICC's Performance Building Code that has remained largely unchanged since its initial publication in 2003.

This effort has led to the development of a series of changes intended to improve the usefulness of the International Code Council Performance Code for Buildings and Facilities (ICCPC). Many of these changes are proposed to clarify and coordinate the ICCPC with the family of I-Codes that have been advanced since the initial effort to create this performance based code. Some findings are best addressed in the guide for the use of the ICCPC. AIA has already reached out to the ICC staff to facilitate that effort following the completion of these code change.

A significant part of the proposed changes consolidate various requirements on the same subject that are currently located in different parts of the code for no apparent reason. Doing so left some things unsaid in one part that are stated in another without reference. Design and evaluation of performance designs and the disparate elements of a building aren't done independently, but are a part of a comprehensive examination of the involved systems and materials associated with the design.

In addition to the proposed changes to consolidate these requirements, we encourage a reexamination of the structure of the ICCPC to more closely reflect the baseline standards in the other element of the ICC family of codes.

This code change moves the provisions for means of egress found in Chapter 19 into Chapter 3 for Design Performance in lieu of a reference. As structured, by placing means of egress in Chapter 19 it that directly implies the only concern for egress is fire safety. Egress, as is evidenced by provisions in Chapters 4, 10 and 34 of the IBC is, in addition to fire safety, a much more complicated and significant design issue and should be considered as part of the overall building designs' performance.

The language in Chapter 19 is broad and performance oriented as evidenced by the use of key words such as "safe" or "safe place." It does not prescribe which safety factors should be included, but by placing it in Chapter 19 it appears to be solely a fire issue. We believe this is misleading and could lead to decisions by the designer that fire is the only concern for design of egress.

The basic code issue involved is whether the code requires some reorganization of content. Chapters 7 and 19 both deal with pedestrian circulation and there appears to be no reason that the two chapters should be consolidated. We viewed this in terms of concept content since in the broadest sense both chapters deal with the movement of occupants in the building. Where they differ is in intent – Chapter 7 focuses on general circulation within the building; criteria for safety during day-to-day movement, while Chapter 19 focuses on circulation intended to provide a path of egress solely necessitated due to emergency conditions.

The content of Chapter 19 could be viewed as a subset of the content of Chapter 7. If consolidated for the purposes of centralizing concept content, the scope of Chapter 7 more readily encompasses the egress circulation requirements of Chapter 19, much more than 19 can accommodate the content of 7.

For this to make sense, the general organization of the entire code must be examined. The overall organization as it stands now makes a certain amount of sense: Administrative (Chapters 1-4), Building Provisions (Chapters 5-15), Fire Provisions (Chapters 16-22), and Appendices (A-E). The problem (if it can be described as such) with this organization, is that within this structure creates repetition of topic, even if there's no outright duplication of rules.

Occupant circulation is a good example. Egress can be seen as a subject for all occupant circulation, which leads to the question of whether it makes more sense to:

a) find all circulation requirements in one place, regardless of whether it's internal circulation or normal egress circulation, or

b) put egress, as an emergency measure in the chapters dealing with fire, thereby requiring the user to look in those two locations for rules on the subject of circulation.

Today's codes mandate designs to consider environmental questions of location and its weather and security, as well as functional requirements that calls for evacuation or defend in place (seismic, tornado and hurricane events per ICC's Standard 500, and institutional and school functions), intrusions, etc. belies that simple focus.

This code change incorporates the general provisions found in Chapter 19 within Chapter 3 in lieu of only a reference that directly implies that the only performance design concern for egress is based on fire safety. Egress, as evidenced in Chapters 4, 10 and 34 of the IBC is, in addition to fire safety, a much more complicated and significant design issue. The language in Chapter 19 is broad and performance oriented as evidenced by the use of key words such as “safe” or “safe place.” It does not prescribe which safety factors should be included, but by placing it in Chapter 19 it appears to be solely a fire issue. We believe this is misleading and could lead to decisions by the code user, enforcement personnel and designer that fire is the only concern for design of egress.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
There is no cost impact from the reorganization of the means of egress provisions in the ICCPC as they are already contained in the code, but this will clarify the larger scope of egress beyond only consideration for fire events emergency.

PC11-21

PC12-21

ICCPC: CHAPTER 8

Proponents: David Collins, representing The American Institute of Architects (dcollins@preview-group.com)

THIS PROPOSAL WILL BE HEARD BY THE FIRE CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER THE IFC COMMITTEE.

2021 International Code Council Performance Code

Delete without substitution:

~~**SECTION 801 HAZARDOUS MATERIALS.**~~

~~**[F] 801.1 Objective.** To protect people and property from the consequences of unauthorized discharge, fires or explosions involving hazardous materials.~~

~~**[F] 801.2 Functional statements.**~~

~~**[F] 801.2.1 Prevention.** Provide adequate safeguards to minimize the risk of unwanted releases, fires or explosions involving hazardous materials as appropriate to the design performance level determined in Chapter 3.~~

~~**[F] 801.2.2 Mitigation.** Provide adequate safeguards to minimize the consequences of an unsafe condition involving hazardous materials during normal operations and in the event of an abnormal condition in accordance with the design performance level determined in Chapter 3.~~

~~**[F] 801.3 Performance requirements.** See Section 2201.3.~~

Revise as follows:

[F] 806.2.1 Occupant notification. Where required in accordance with the design report per Section 102.3.4.2.2, adequate means of occupant notification shall be provided to warn of the presence of a fire or other emergency in sufficient time to enable occupants to take the contemplated action without being exposed to unreasonable risk of injury or death.

[F] 806.2.2 Emergency responder notification. Where systems are designed to notify emergency responders, such systems shall indicate the type of emergency and the location of the ~~building~~ buildings, premesis or other structures. Where such buildings , premises or other structures are large enough to expect difficulty in prompt location of the fire or other public emergency, identification of the area or zone of the emergency ~~fire zone of origin~~ shall be provided at the ~~building~~ buildings, premises or other structures.

Reason Statement: In 1998, the president of the AIA established a Blue Ribbon Panel to examine the future of the architectural profession and its relationship to codes and standards as part of AIA's public policies.
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A key finding of the Blue Ribbon Panel was the need to direct the architect's practices toward higher performing buildings, while meeting and exceeding the standards adopted in our communities. AIA's 2019 and 2020 Codes and Standards Committee began that effort by reviewing the ICC's Performance Building Code that has remained largely unchanged since its initial publication in 2003.

This effort has led to the development of a series of changes intended to improve the usefulness of the International Code Council Performance Code for Buildings and Facilities (ICCPC). Many of these changes are proposed to clarify and coordinate the ICCPC with the family of I-Codes that have been advanced since the initial effort to create this performance based code. Some findings are best addressed in the guide for the use of the ICCPC. AIA has already reached out to the ICC staff to facilitate that effort following the completion of these code change.

A significant part of the proposed changes consolidate various requirements on the same subject that are currently located in different parts of the code for no apparent reason. Doing so left some things unsaid in one part that are stated in another without reference. Design and evaluation of performance designs and the disparate elements of a building aren't done independently, but are a part of a comprehensive examination of the involved systems and materials associated with the design.

In addition to the proposed changes to consolidate these requirements, we encourage a reexamination of the structure of the ICCPC to more closely reflect the baseline standards in the other element of the ICC family of codes.

Splitting fire safety requirements into PART II—Building, and PART III—Fire, follows the structure of similar fire and building code-related requirements placed in both the *International Building Code* and the *International Fire Code*. Duplicating requirements in the IBC and IFC makes sense since these are separately published documents and some users may have one and not the other, but still provides access to the common information.

However, the *ICC Performance Code* is a single published document that provides content that is both building- and fire-related. As a single document, it is not necessary to duplicate fire-related content in the building portion of the ICCPC, and, similarly, building-related content in the fire portion. Identical (or nearly identical) content maintained in two different locations could lead to conflicting content if one section is updated and not the other. For users finding the provisions in one place without reference to additional aspects of the code that are located elsewhere creates confusion due to lack of familiarity or simply overlooking it.

During our evaluation, we found that Section 801 is redundant since there is an entire chapter (Chapter 22) on hazardous materials. Chapter 22 addresses this subject in much greater depth, whereas Section 801 repeats information already contained in the next four paragraphs (802, 803, 804 and 805) and then directs the reader to Chapter 22. There is no need to provide repeated identical content in two locations in one chapter.

In Section 806.2.1, the statement “Where required” alone is ambiguous and needs to identify the source of the requirement. The design report in Section 102.3.4.2.2 requires the establishment of the criteria that will guide the design, therefore, that section is referenced by this change to be the authoritative document referenced.

Section 806 is titled “Emergency Notification” and includes a functional statement in Section 806.2.2 for “Emergency responder notification.” Section 806.2.2 is nearly identical to Section 2001.3.12, which also includes notification. The proposed modifications to this section incorporate elements of Section 2001.3.12 to provide a comprehensive provision and deletes the duplicate information in Chapter 20 (See proposed changes for Chapter 20).

Cost Impact: The code change proposal will not increase or decrease the cost of construction Changes putting notification in Chapter 8 in lieu of Chapter 20 will simplify the ICCPC and make the code easier to understand.

PC12-21

PC13-21

ICCPC: (New), [BG] 1001.1, [BG] 1001.2, [BG] 1002.2, SECTION 1004, [BG] 1004.3.1, 1004.3.3 (New)

Proponents: David Collins, representing The American Institute of Architects (dcollins@preview-group.com)

THIS PROPOSAL WILL BE HEARD BY THE BUILDING CODE GENERAL CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER THE IBC-GENERAL COMMITTEE.

2021 International Code Council Performance Code

Add new definition as follows:

AIRBORNE PATHOGENS. Pathogenic microbes small enough to be discharged from an infected person via coughing, sneezing, laughing and close personal contact or aerosolization of the microbe. The discharged microbes remain suspended in the air on dust particles, respiratory and water droplets.

Revise as follows:

[BG] 1001.1 Objective. To safeguard people from illness caused by air temperature, airborne pathogens and to safeguard people from injury or loss of amenity caused by inadequate activity space.

[BG] 1001.2 Functional statements. Buildings shall be constructed to provide:

1. Adequately controlled interior temperatures.
2. Adequate activity space for the intended use.
3. Adequately controlled airborne pathogens.

[BG] 1002.2 Functional statement. Habitable spaces within buildings shall be provided with air that contains sufficient oxygen and limits the levels of moisture and contaminants, including airborne pathogens,to levels that are consistent with good health, safety and comfort.

SECTION 1004 ARTIFICIAL AND NATURAL LIGHT.

Revise as follows:

[BG] 1004.3.1 Lighting ~~Illumination~~. Adequate illumination shall be provided appropriate to the use and occupancy of the habitable spaces and means of egress served.

Add new text as follows:

1004.3.3 Pathogens. Appropriate controls of airborne pathogens in occupied spaces to reduce the possibility of transmitting viruses and bacteria in conditioned buildings.

Staff Note: The definition proposed in PC13-21 is also used in the proposed text for PC14-21.

Reason Statement:
In 1998, the president of the AIA established a Blue Ribbon Panel to examine the future of the architectural profession and its relationship to codes and standards as part of AIA's public policies.

We stand for protecting communities from the impact of climate change. Global warming and man-made hazards pose an increasing threat to the safety of the public and the vitality of our nation. Rising sea levels and devastating natural disasters result in unacceptable losses of life and property. Resilient and adaptable buildings are a community's fires line of defense against disasters and changing conditions of life and property. This is why we advocate for robust building codes and policies that make our communities more resilient.

A key finding of the Blue Ribbon Panel was the need to direct the architect's practices toward higher performing buildings, while meeting and exceeding the standards adopted in our communities. AIA's 2019 and 2020 Codes and Standards Committee began that effort by reviewing the ICC's Performance Building Code that has remained largely unchanged since its initial publication in 2003.

This effort has led to the development of a series of changes intended to improve the usefulness of the International Code Council Performance Code for Buildings and Facilities (ICCPC). Many of these changes are proposed to clarify and coordinate the ICCPC with the family of I-Codes that have been advanced since the initial effort to create this performance based code. Some findings are best addressed in the guide for the use of the ICCPC. AIA has already reached out to the ICC staff to facilitate that effort following the completion of these code change.

A significant part of the proposed changes consolidate various requirements on the same subject that are currently located in different parts of the code for no apparent reason. Doing so left some things unsaid in one part that are stated in another without reference. Design and evaluation of performance designs and the disparate elements of a building aren't done independently, but are a part of a comprehensive examination of the involved systems and materials associated with the design.

In addition to the proposed changes to consolidate these requirements, we encourage a reexamination of the structure of the ICCPC to more closely reflect the baseline standards in the other element of the ICC family of codes.

The technology to address airborne pathogens exists today and can be incorporated into many buildings and should be part of building design considerations. These technologies are currently in use in medical facilities to prevent avoidable transfer of pathogens using Ultra Violet (UV) LED lights in the ductwork is 99.9% efficient in eliminating most if not all air borne pathogens. The light wave being proposed is hazardous to humans so can only be used in ductwork. Similar technology has been used in hospitals for isolation and operating rooms where it is critical to remove air borne pathogens from the air entering such rooms.

According to the New York Times article in its section on science, published on December 8, 2020, various designs and technologies can be used including such simple applications as changing indoor air with fresh air that can dilute any pathogen in a space. Ionization can be used to weigh down virus carrying vapor so that it is more readily caught in filtration systems. Similarly high-efficiency particulate air (HEPA) filters provide 99% effectiveness against viruses and other pathogens. More effective systems are in research and design phases and will be on the market in the future to support design of various ventilation designs to remove pathogens from functional spaces within a building.

Cost Impact: The code change proposal will increase the cost of construction
There will be a cost increase, but there are substantial monetary AND non-monetary benefits including fewer sick days for occupants (healthy occupants, less absenteeism, etc.) and fewer employer paid sick days and giving the occupants of the building the peace of mind and psychological ease of working in a building that removes air borne pathogens from the interior environment. Given the Covid 19 situation this seems to be a reasonable step to control both known and unknown viruses from spreading around the enclosed air-conditioned spaces.

PC13-21

PC14-21

ICCPC: [M] 1101.1, 1101.3.4 (New)

Proponents: David Collins, representing The American Institute of Architects (dcollins@preview-group.com)

THIS PROPOSAL WILL BE HEARD BY THE MECHANICAL CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER THE IMC COMMITTEE.

2021 International Code Council Performance Code

Revise as follows:

[M] 1101.1 Objective. To provide the safe installation of the equipment to condition and filter the air for the health and comfort of the occupants.

Add new text as follows:

1101.3.4 Airborne pathogen control. The HVAC system shall include measures to control airborne pathogens.

Staff Note: A definition for 'Airborne Pathogens' is proposed in PC13-21.

Reason Statement:
The design options and current technology being proposed is the installation Ultra Violet (UV) LED lights in the ductwork which is 99.9% efficient to eliminate most if not all air borne pathogens. When using such lights, the light wave being proposed is hazardous to humans so can only be used in ductwork. Similar technology has been used in hospitals for isolation and operating rooms where it is critical to remove air borne pathogens from the air entering these room.

According to the New York Times article in its section on science, published on December 8, 2020, various designs and technologies can be used including such simple applications as changing indoor air with fresh air that can dilute any pathogen in a space. Ionization can be used to weigh down virus carrying vapor so that it is more readily caught in filtration systems. Similarly high-efficiency particulate air (HEPA) filters provide 99% effectiveness against viruses and other pathogens. More effective systems are in research and design phases and will be on the market in the future to support design of various ventilation designs to remove pathogens from functional spaces within a building.

Cost Impact: The code change proposal will increase the cost of construction
There will be a cost increase, but there are substantial monetary AND non-monetary benefits including fewer sick days for occupants (healthy occupants, less absenteeism, etc.) and fewer employer paid sick days and giving the occupants of the building the peace of mind and psychological ease of working in a building that removes air borne pathogens from the interior environment. Given the Covid 19 situation this seems to be a reasonable step to control both known and unknown viruses from spreading around the enclosed air-conditioned spaces.

PC15-21

ICCPC: SECTION 1205 (New)

Proponents: David Collins, representing The American Institute of Architects (dcollins@preview-group.com)

THIS PROPOSAL WILL BE HEARD BY THE PLUMBING CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER THE IPC COMMITTEE.

2021 International Code Council Performance Code

Delete without substitution:

~~**[P] 1203.3.2 Nonpotable water.** Water supplies and outlets providing nonpotable water shall be clearly identified.~~

Add new text as follows:

SECTION 1205 NONPOTABLE WATER SYSTEMS.

1205.1 Objective,. To provide safe nonpotable water systems consisting of collection, storage, treatment, and distribution components for gray water, rainwater, and recycled water sources.

1205.2 Functional Statement. Nonpotable water systems shall collect nonpotable water from approved sources, provide treatment and storage of nonpotable water, and distribute nonpotable water to approved fixtures and outlets.

1205.3 Performance requirements. The performance requirements of nonpotable water systems shall be in accordance with Sections 1205.3.1 through 1205.3.7.2.

1205.3.1 Identification. Nonpotable water systems shall be clearly identified.

1205.3.2 Separation. Nonpotable water systems shall be provided in systems isolated from potable water systems to avoid potable water contamination.

1205.3.3 Water quality. Nonpotable water shall meet the minimum water quality requirements established by the jurisdiction.

1205.3.4 Flow rate and pressure. Nonpotable water supplies shall be provided at a flow rate and pressure to fixtures and outlets adequate for their operation.

1205.3.5 Leak prevention. Piping and storage tanks for nonpotable water systems shall be installed in a leak-free manner.

1205.3.6 Access. Nonpotable water systems shall be installed to allow adequate access for maintenance.

1205.3.7 Storage. Storage of nonpotable water collected on-site shall be provided of sufficient size and capacity to support the intended uses.

1205.3.7.1 Venting and overflow. Nonpotable water storage shall be designed and installed to allow venting of gases and to control overflow without damage to the system in accordance with requirements established by the jurisdiction.

1205.3.7.2 Makeup water. Where required for the intended uses, other sources of water supply shall be provided to ensure that there is an uninterrupted supply of water from the nonpotable water system.

Reason Statement: In 1998, the president of the AIA established a Blue Ribbon Panel to examine the future of the architectural profession and its relationship to codes and standards as part of AIA's public policies.
We stand for protecting communities from the impact of climate change. Global warming and man-made hazards pose an increasing threat to the safety of the public and the vitality of our nation. Rising sea levels and devastating natural disasters result in unacceptable losses of life and property. Resilient and adaptable buildings are a community's fires line of defense against disasters and changing conditions of life and property. This is why we advocate for robust building codes and policies that make our communities more resilient.

A key finding of the Blue Ribbon Panel was the need to direct the architect's practices toward higher performing buildings, while meeting and exceeding the standards adopted in our communities. AIA's 2019 and 2020 Codes and Standards Committee began that effort by reviewing the ICC's Performance Building Code that has remained largely unchanged since its initial publication in 2003.

This effort has led to the development of a series of changes intended to improve the usefulness of the International Code Council Performance Code for Buildings and Facilities (ICCPC). Many of these changes are proposed to clarify and coordinate the ICCPC with the family of I-Codes that have been advanced since the initial effort to create this performance based code. Some findings are best addressed in the guide for the use of the ICCPC. AIA has already reached out to the ICC staff to facilitate that effort following the completion of these code change.

In the 2012 I-Codes, the IPC created a new chapter (Chapter 13) titled “Gray Water Recycling Systems.” This was changed in 2015 to “Nonpotable Water Systems” and has remained that way since. Currently, the ICCPC only requires nonpotable water to require it to be identified in Section 1203.3.2.

Currently, the ICCPC only provides a single paragraph (Section 1203.3.2) that mentions nonpotable water systems and that is limited to the identification of such systems. It does not address the unique features of such systems that is comprehensively addressed in the IPC. We propose to delete Section 1203.3.2 and create a new Section to provide objective, functional statements, and performance requirements for the following types of systems:

· On-site nonpotable water reuse systems for the collection, storage, treatment and distribution of gray water from bathtubs, showers, lavatories, and clothes washing.

· Nonpotable rainwater collection and distribution systems for the collection, storage, treatment and distribution of rainwater from roof surfaces and pavements.

· Reclaimed water systems for the collection, storage, treatment and distribution of nonpotable water from treatment facilities or systems conforming to jurisdictional requirements.

By including this change, the ICCPC will incorporate elements beyond simply identification of the system as nonpotable.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
Little if any cost impact should be realized by this change as the provisions for nonpotable water are currently in the IPC and referenced only to labeling in the ICCPC.

PC15-21

PC16-21

ICCPC:1401.3.8.1(New)

Proponents: David Collins, representing The American Institute of Architects (dcollins@preview-group.com)

THIS PROPOSAL WILL BE HEARD BY THE BUILDING CODE GENERAL COMMITTEE. SEE THE TENTATIVE HEARING ORDER THE IBC-GENERAL COMMITTEE.

2021 International Code Council Performance Code

Revise as follows:

[BG] 1401.3.8 Essential services and equipment. Essential services and equipment shall have a power supply protected in a manner to ensure continued operation for an appropriate time after a power failure.

Add new text as follows:

1401.3.8.1 Secondary services and equipment. Secondary services and equipment shall have a power supply protected in a manner to ensure continued operation for an appropriate time after a power failure.

Reason Statement: In 1998, the president of the AIA established a Blue Ribbon Panel to examine the future of the architectural profession and its relationship to codes and standards as part of AIA's public policies.
We stand for protecting communities from the impact of climate change. Global warming and man-made hazards pose an increasing threat to the safety of the public and the vitality of our nation. Rising sea levels and devastating natural disasters result in unacceptable losses of life and property. Resilient and adaptable buildings are a community's fires line of defense against disasters and changing conditions of life and property. This is why we advocate for robust building codes and policies that make our communities more resilient.

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In addition to the proposed changes to consolidate these requirements, we encourage a reexamination of the structure of the ICCPC to more closely reflect the baseline standards in the other element of the ICC family of codes.

The IBC currently has two levels of power; emergency and secondary. The ICCPC appears to address only one level of electrical power labeled essential services. This is reinforced by the User's Guide where it suggests support for patients in hospitals and to fire-safety system. The IBC lists various systems that are dependent not only on emergency power, but also allows various systems that are key to life safety to be on a standby system. By adding the secondary services, the code expands the performance requirements to include systems such as elevators, emergency lighting systems, systems controlling air borne pathogens, and filtration systems for basic human needs, such as potable water and sanitary management. We believe the performance requirements of the code should consider both essential and secondary services.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
There are no technical changes or content additions that would increase the construction cost. It may actually be a reduction in overall costs because of the common understanding between code officials and the building designer/owner about what is expected.

PC17-21

ICCPC: CHAPTER 20, SECTION 2001, [F] 2001.1.1, [F] 2001.1.2, [F] 2001.2, [F] 2001.3.12, [F] 2001.3.13

Proponents: David Collins, representing The American Institute of Architects (dcollins@preview-group.com)

THIS PROPOSAL WILL BE HEARD BY THE FIRE CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER THE IFC COMMITTEE.

2021 International Code Council Performance Code

Revise as follows:

CHAPTER 20
EMERGENCY ~~NOTIFICATION,~~ ACCESS AND FACILITIES

SECTION 2001 EMERGENCY ~~NOTIFICATION,~~ ACCESS AND FACILITIES.

[F] 2001.1.1 ~~Notification, a~~ Access and facilities for emergency responders. To provide and maintain means of ~~notification,~~ access and facilities for emergency operations and responders.

Delete without substitution:

~~**[F] 2001.1.2 Notification for life safety and property protection.** To provide notification of the need to take some manual action to preserve the safety of occupants or to limit property damage.~~

Revise as follows:

[F] 2001.2 Functional statements. As appropriate to the design performance level in Chapter 3, the following shall be addressed:

1. Provide and maintain appropriate access for emergency vehicles.
2. Provide and maintain appropriate access for emergency responders.
3. Provide and maintain necessary staging, command and control areas, support facilities and equipment for emergency operations.
4. Provide sufficient, reliable water for fire-fighting operations.
5. ~~Provide and maintain appropriate means of promptly notifying emergency responders.~~
6. ~~Where required, provide and maintain adequate means of occupant notification to warn of the presence of a fire or other emergency in sufficient time to enable occupants to take the contemplated action without being exposed to unreasonable risk of injury or death.~~

Delete without substitution:

~~**[F] 2001.3.12 Notification requirements.** Where systems are designed to notify the emergency response agency of the need to respond to an emergency, such system shall indicate the type of emergency and the location of the building, premises or facility. Where such buildings, premises or facilities are large enough that difficulty is expected in promptly locating the emergency, identification of the area or zone of the emergency shall be provided at the building, premises or facilities.~~

~~**[F] 2001.3.13 Notification of occupants.** Notification of occupants shall be by means appropriate to the needs of the occupants, the use of the building and the emergency egress strategy employed.~~

Reason Statement:
In 1998, the president of the AIA established a Blue Ribbon Panel to examine the future of the architectural profession and its relationship to codes and standards as part of AIA's public policies.

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This effort has led to the development of a series of changes intended to improve the usefulness of the International Code Council Performance Code for Buildings and Facilities (ICCPC). Many of these changes are proposed to clarify and coordinate the ICCPC with the family of I-Codes that have been advanced since the initial effort to create this performance based code. Some findings are best addressed in the guide for the use of the ICCPC. AIA has already reached out to the ICC staff to facilitate that effort following the completion of these code change.

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In addition to the proposed changes to consolidate these requirements, we encourage a reexamination of the structure of the ICCPC to more closely reflect the baseline standards in the other element of the ICC family of codes.

Splitting fire safety requirements into PART II—Building, and PART III—Fire, follows the structure of similar fire and building code-related requirements placed in both the *International Building Code* and the *International Fire Code*. Duplicating requirements in the IBC and IFC makes sense since these are separately published documents and some users may have one and not the other, but still provides access to the common information.

However, the *ICC Performance Code* is a single published document that provides content that is both building- and fire-related. As a single document, it is not necessary to duplicate fire-related content in the building portion of the ICCPC, and, similarly, building-related content in the fire portion. Identical (or nearly identical) content maintained in two different locations could lead to conflicting content if one section is updated and not the other. For users finding the provisions in one place without reference to additional aspects of the code that are located elsewhere creates confusion due to lack of familiarity or simply overlooking it.

Emergency notification is already addressed in Chapter 8. Chapter 20 is included in Part III—Fire, but is more logical to keep the notification provisions in Chapter 8, which is included in Part II—Building, since they are a building feature.

The proposed modifications delete all references to notification and retains those provisions in Chapter 8.

Cost Impact: The code change proposal will not increase or decrease the cost of construction
These changes only organize the provisions for notifications in Chapter 8 in lieu of Chapter 20, making the use of the code simpler and easier to understand.

PC17-21

PC18-21

ICCPC: [F] 2201.3.19

Proponents: David Collins, representing The American Institute of Architects (dcollins@preview-group.com)

THIS PROPOSAL WILL BE HEARD BY THE FIRE CODE COMMITTEE. SEE THE TENTATIVE HEARING ORDER THE IFC COMMITTEE.

2021 International Code Council Performance Code

Revise as follows:

[F] 2201.3.19 Levels of impact or damage. Levels of ~~impact related to injuries to persons~~, damage to processes, structure, contents and to the environment and the impact related to business and or community and injuries to persons, shall comply with the requirements of Section 304 for design performance levels.

Reason Statement:
This section of the ICCPC refers back to section 304, “Maximum Level of Damage to be Tolerated.” Section 2201.3.19 should include both impact and damage (which may or may not be the same). Section 2201.3.19 addresses impact related to injuries, and damage to processes, etc. In addition to the impact related to injuries, the business and community may also be impacted and may be of greater concern, and therefore should be considered.

Changing the wording expands the meaning of this section better addressing both actual damage as well as the impact on injuries, businesses and communities. It also causes it to be in better harmony with section 304.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

This clarification of the reason for review of the impact of hazardous materials to a community may be severe and is generally understood to be a major part of any design. This should not increase the cost of construction.