GG224-14 A105.4, A105.4.1

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Add new text as follows:

SECTION 508 BUILDING SERVICE LIFE PLAN

Revise as follows:

A105.4-508.1 Building service life plan project electives. Projects seeking a building service life plan project elective shall comply with this section. The A building service life plan (BSLP) in accordance with Section 508.1.1 A105.4.1 shall be included in the construction documents.

A105.4.1 508.1.1 Plan and components. The building service life plan (BSLP) shall indicate the intended length in years of the design service life for the building as determined by the building owner or *registered design professional*, and shall include a maintenance, repair, and replacement schedule for each of the following components. The maintenance, repair and replacement schedule shall be based on manufacturer's reference service life data or other *approved* sources for the building components. The manufacturer's reference service life data or data from other *approved* sources shall be included in the documentation.

- 1. Structural elements and concealed materials and assemblies.
- 2. Material sand assemblies where replacement is cost prohibitive or impractical.
- 3. Major materials and assemblies that is replaceable.
- Roof coverings.
- 5. Mechanical, electrical and plumbing equipment and systems.
- Site hardscape.

Reason: This proposal moves the Building Service Life Plan (BSLP) from project electives to a mandatory section in Chapter 5.

Building Service Life Planning (BSLP) is an important aspect of green building. It documents that life cycle thinking was used in the design process. It should be included as a mandatory requirement of the IgCC.

BSLP is not a new concept although the term may be unfamiliar. In new construction, most building owners examine initial costs and return on investment when considering a building project. In existing construction, most building owners evaluate the purchase of a new product in terms of the life cycle costs of the product relative to the length of time they expect to own the building. At a very fundamental level, that is Building Service Life Planning (BSLP).

BSLP involves consideration of the likely performance of the building under likely conditions over the whole of its life. BSLP is especially important for buildings designed and constructed to the IgCC because certain IgCC requirements may limit the kinds of materials or treatments that may be used for or applied to components.

BSLP practices have been refined over many years. The most comprehensive protocols for BSLP have been developed through ISO. ISO TC 59/SC14 on Design Life of Buildings has published/updated 10 standards on the topic.

- ISO 15686-1:2011 Buildings and constructed assets -- Service life planning -- Part 1: General principles and framework
- ISO 15686-2:2001 Buildings and constructed assets -- Service life planning -- Part 2: Service life prediction procedures
- ISO 15686-3:2002 Buildings and constructed assets -- Service life planning -- Part 3: Performance audits and reviews
- ISO 15686-5:2008 Buildings and constructed assets -- Service-life planning -- Part 5: Life-cycle costing
- ISO 15686-6:2004 Buildings and constructed assets -- Service life planning -- Part 6: Procedures for considering environmental impacts
- <u>ISO 15686-7:2006</u> Buildings and constructed assets -- Service life planning -- Part 7: Performance evaluation for feedback of service life data from practice
- <u>ISO 15686-8:2008</u> Buildings and constructed assets -- Service-life planning -- Part 8: Reference service life and service-life estimation
- <u>ISO/TS 15686-9:2008</u> Buildings and constructed assets -- Service-life planning -- Part 9: Guidance on assessment of service-life data
- ISO 15686-10:2010 Buildings and constructed assets -- Service life planning -- Part
- 10: When to assess functional performance

Various other standards organizations have documents on the topic as well. The service life plan is similar in concept to Canadian Standards Associations (CSA) Standard S478, Guideline on Durability for Buildings, and ASHRAE 189.1 Section 10.3.2.3. Other organizations including BSI, BRE, and CEN also have documents on service life. Cost Impact: Will increase the cost of construction.

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