IPMC 304.1.1, 304.10. 304.11, 305.1.1, 305.4. 305.6

SECTION 304 EXTERIOR STRUCTURE

304.1 General. The exterior of a *structure* shall be maintained in good repair, structurally sound and sanitary so as not to pose a threat to the public health, safety or welfare.

PM5-21, PM6-21 AS

- 304.1.1 Potentially unsafe Unsafe conditions. The following conditions shall be determined as considered to be potentially unsafe, shall be assessed, and shall be repaired or replaced to comply with the International Building Code or addressed in compliance with the International Existing Building Code, the International Residential Code or the International Building Code as required for existing buildings:
 - 1. <u>Structural members have deterioration or distress that appears to reduce their load-carrying capacity The nominal strength of any structural member is exceeded by nominal loads, the load effects or the required strength.</u>
 - 2. The *anchorage* of the floor or roof to walls or columns, and of walls and columns to foundations <u>have</u> deterioration or distress that appears to reduce their load-carrying capacity is not capable of resisting all nominal loads or load effects.
 - 3. Structures or components thereof have deterioration or distress that appears to reduce their load-carrying capacity that have reached their limit state.
 - 4. Siding and masonry joints including joints between the building envelope and the perimeter of windows, doors and skylights are not maintained, weather resistant or water tight.
 - 5. Structural members that have evidence of *deterioration* or that are not capable of safely supporting all nominal loads and load effects.
 - 56. Foundation systems that are not firmly supported by footings, are not plumb and free from open cracks and breaks, are not properly *anchored* or-are not capable of supporting all nominal loads and resisting all load effects.
 - 67. Exterior walls that are not *anchored* to supporting and supported elements or are not plumb and free of holes, cracks or breaks and loose or rotting materials, are not properly *anchored* or are not capable of supporting all nominal loads and resisting all load effects.
 - **78.** Roofing or roofing components that have defects that admit rain, roof surfaces with inadequate drainage, or any portion of the roof framing that is not in good repair with signs of *deterioration*, fatigue or without proper anchorage and incapable of supporting all nominal loads and resisting all load effects.
 - **89**. Flooring and flooring components with defects that affect serviceability or flooring components that show signs of *deterioration* or fatigue, are not properly *anchored* or are incapable of supporting all nominal loads and resisting all load effects.
 - **910**. Veneer, cornices, belt courses, corbels, trim, wall facings and similar decorative features not properly *anchored* or that are *anchored* with connections not capable of supporting all nominal loads and resisting all load effects.
 - 1011. Overhang extensions or projections including, but not limited to, trash chutes, canopies, marquees, signs, awnings, fire escapes, standpipes and exhaust ducts not properly *anchored* or that are *anchored* with connections not capable of supporting all nominal loads and resisting all load effects.
 - Exterior stairs, <u>ramps</u>, <u>landings</u>, <u>porches</u>, decks, <u>porches</u>, balconies <u>or other walking surfaces</u> and <u>all similar appurtenances attached thereto</u>, including <u>associated guards</u> and handrails, <u>which</u> are not structurally sound, not properly <u>anchored</u> or that are <u>anchored</u> with connections not capable of supporting all nominal loads and resisting all load effects that <u>have deterioration or distress that appear to reduce their load-carrying capacity</u>.

1243. Chimneys, cooling towers, smokestacks and similar appurtenances not structurally sound or not properly *anchored*, or that are *anchored* with connections not capable of supporting all nominal loads and resisting all load effects.

Exceptions:

- 1. Where substantiated otherwise by an approved method.
- 2. Demolition of unsafe conditions shall be permitted where approved by the code official.

304.10 Stairways, decks, porches and balconies Stairs, ramps and walking surfaces. Every exterior stairway stair, ramp, landing, porch, deck, porch and balcony, or other walking surface and all appurtenances attached thereto, including associated *guards* and handrails, shall be maintained structurally in sound condition, in good repair, with proper *anchorage* and capable of supporting the imposed loads.

304.12 Handrails and guards. Every handrail and *guard* shall be firmly fastened and capable of supporting normally imposed loads and shall be maintained in good condition.

SECTION 305 INTERIOR STRUCTURE

305.1 General. The interior of a *structure* and equipment therein shall be maintained in good repair, structurally sound and in a sanitary condition. *Occupants* shall keep that part of the *structure* that they occupy or control in a clean and sanitary condition. Every *owner* of a *structure* containing a *rooming house, housekeeping units*, a hotel, a dormitory, two or more *dwelling units* or two or more nonresidential *occupancies*, shall maintain, in a clean and sanitary condition, the shared or public areas of the *structure* and *exterior property*.

PM5-21, PM6-21, PM9-21 (also added IRC to Section 305.1.1)

305.1.1 Potentially unsafe Unsafe Conditions. Potentially unsafe Unsafe Conditions. The following conditions shall be determined as considered to be potentially unsafe, shall be assessed, and shall be repaired or replaced to comply with the International Building Code or addressed in compliance with the International Existing Building Code, the International Residential Code or the International Building Code as required for existing buildings:

- Structural members have deterioration or distress that appears to reduce their load-carrying capacity—The
 nominal strength of any structural member is exceeded by nominal loads, the load effects or the required
 strength.
- 2. The anchorage of the floor or roof to walls or columns, and of walls and columns to foundations <u>have</u> deterioration or distress that appears to reduce their load-carrying capacity is not capable of resisting all nominal loads or load effects.
- 3. Structures or components thereof <u>have deterioration or distress that appears to reduce their load-carrying capacity that have reached their limit state</u>.
- 4. Structural members are incapable of supporting nominal loads and load effects.
- 45. Stairs, <u>ramps</u>, landings, balconies, <u>porches</u>, <u>decks</u> and all similar walking surfaces, including <u>associated</u> guards and handrails, <u>which</u> are not structurally sound, not properly <u>anchored</u> or are <u>anchored</u> with connections not capable of supporting all nominal loads and resisting all load effects that have deterioration or distress that appear to reduce their load-carrying capacity.
- 56. Foundation systems that are not firmly supported by footings are not plumb and free from open cracks and breaks, are not properly *anchored* or are not capable of supporting all nominal loads and resisting all load effects.

Exceptions:

- 1. Where substantiated otherwise by an *approved* method.
- 2. Demolition of unsafe conditions shall be permitted where approved by the code official.

305.4 Stairs, ramps and walking surfaces. Every stair, ramp, landing, balcony, porch, deck or other walking surface, including associated *guards* and handrails, shall be maintained in sound condition, in and good repair, with proper *anchorage* and capable of supporting the imposed loads.

305.5 Handrails and guards. Every handrail and *guard* shall be firmly fastened and capable of supporting normally imposed loads and shall be maintained in good condition.

SECTION 307 HANDRAILS AND GUARDRAILS

F118-21 Part I

307.1 <u>Handrails</u> General. Every exterior and interior flight of stairs Stairs having more than four risers shall have a handrail on one side of the stair and every open portion of a stair, landing, balcony, porch, deck, ramp or other walking surface that is more than 30 inches (762 mm) above the floor or grade below shall have *guards*. Handrails shall be not less than 30 inches (762 mm) in height or more than 42 inches (1067 mm) in height measured vertically above the nosing of the tread or above the finished floor of the landing or walking surfaces. *Guards* shall be not less than 30 inches (762 mm) in height above the floor of the landing, balcony, porch, deck, or ramp or other walking surface. Ramps shall have handrails where required by the adopted building code.

Exception: Guards shall not be required where exempted by the adopted building code.

307.1.1 Height. Handrails height shall be not less than 30 inches (762 mm) in height or and not more than 42 inches (1067 mm) in height measured vertically above the stair tread nosing of the tread or above the finished floor surface of the ramp, landing or walking surfaces.

307.2 Guards. Guards shall be provided along open-sided walking surfaces, including balconies, porches, decks, stairs, ramps, and landings, that are more than 30 inches (762 mm) above the floor or grade below.

Exception: Guards shall not be required where exempted by the adopted building code.

307.2.1 Height. Guards shall be not less than 30 inches (762 mm) high measured vertically above the stair tread nosing, the finished surface of the ramp or walking surfaces.

Reason: The requirements for repairs for stairways and other walking surfaces under IBC, IRC, and IEBC in Section 304.1.1 and 305.1.1 are not coordinated with the associated maintenance sections in 304.10 and 305.4. In addition, the requirements for maintenance and repairs for exterior and interior stairways and walking surfaces are not coordinated. Handrails and guards are proposed to be included in the requirements for stairways, ramps and walking surfaces.

Section 307 –Ramps are required to have two handrails in IBC 1012.8 (with exceptions in 1029.16) and one handrail in IRC R311.8.3 where the slope exceeds 1:12. Having handrails is important for persons with mobility impairments. The text added to 307.1 would provide guidance for ramps. The revisions to the requirements in Section 307.1.1 is for consistency with IBC Section 1014.2 for handrail height and provides better code language. Landings and walking surfaces were deleted because handrails are not required at these locations. The revision to 307.2.1 is for consistency with the verbiage for how to measure guards in IBC Section 1015.3.

Cost impact: There is no change in cost. While some components were added in some sections, they were included in similar sections.