4.28 Fire Sprinkler System Coverage Requirements for Balconies and Terraces (2025)

Reference: 2025 NFPA 13 Sections 9.2.1.20, 9.2.3, 9.2.3.4, 9.3.19, and 9.3.19.2 (as amended by California Fire Code Chapter 80); 2025 NFPA 13R; 2025 California Fire Code (CFC) Section 903.3.1.2.1; 2025 SFFD Administrative Bulletin 2.04.

Purpose: To establish when balconies and terraces need to be provided with fire sprinkler protection for buildings of combustible and noncombustible construction.

I. **NFPA 13 SYSTEM SPRINKLER REQUIREMENTS**

For systems installed in accordance with 2025 NFPA 13 (comply with NFPA 13 Section 9.2.3 except as modified below), the following conditions will require sprinkler protection of balconies and terraces if protected by an automatic sprinkler system throughout the building:

1. **Human Occupancy.** The balcony or terrace deck is intended for human occupancy, which can lead to the potential for the storage of combustibles.

2. **Width and Depth More Than 4'.** The occupied balcony or terrace deck is more than 4' wide or more than 4' deep at any point along the deck.

3. **Exterior Projections/Ceilings.** The following shall apply for exterior projections or ceilings:

    A. **Exterior Projections More Than 2'.** An exterior projection (e.g. balcony, overhang, etc.) more than 2' deep at any point along the projection that is present at the next level or floor directly above an occupied deck per items 1 and 2 require sprinkler protection.

        Exceptions:

        (1) Exterior projection overhangs more than 2' deep and more than one level above the deck are exempt from sprinkler protection.

        (2) Sprinkler protection is not required below exterior projections more than 2' deep if an occupied balcony or terrace deck per items 1 and 2 is not located at the next level or floor directly below the projection (no occupied deck or occupied decks located at alternate levels or floors).

    B. **Tapered Exterior Projections.** Sprinkler protection is required below tapered exterior projections at the location where the outer edge of the projection is more than 2' deep above an occupied deck per items 1 and 2.

        Exception: Sprinkler protection is not required below exterior projections more than 2' deep if an occupied balcony or terrace deck per items 1 and 2 is not located at the next level or floor directly below the projection (no occupied deck or occupied decks located at alternate levels or floors).

C. **Exterior Projection/Recessed Ceiling Above Building Entry.** An exterior projection or recessed ceiling more than 2' deep that is present at the next level or floor directly above a building entry where storage may be located or combustibles may be present requires sprinkler protection. Items 3A, 3B, 3E, 4 and 5B also apply.

   Exception: Exterior projection overhangs more than 2' deep and more than one level above the building entry are exempt.

D. **Exterior Projection Above Building Entry Planter.** An exterior projection more than 4' deep that is present at the next level or floor directly above a building entry planter requires sprinkler protection.

   Exception: Exterior projection overhangs more than 4' deep and more than one level above the building entry planter are exempt.

E. **Ceilings Extending More Than 2'.** Sprinkler protection is required below ceilings extending more than 2' deep from the building exterior located above recessed occupied decks per items 1 and 2.

4. **Depth Measurement.** The depth of the occupied balcony or terrace deck and the exterior projection shall be measured either:
A. Horizontally from the building exterior solid wall surface, or
B. From the face of the fixed glass panel with surrounding mullions or minor protrusions ignored. This is the location where storage of combustibles can accumulate. The face of any solid panel or glass doors can be ignored as the area in front of the doors would not provide a location where combustibles could accumulate.

5. **Horizontal Dimensions.** The following shall apply for horizontal dimensions:

A. **Balcony/Deck.** The horizontal dimensions of the occupied balcony or terrace deck shall terminate at the vertical face of the guardrail, parapet, balustrade or other vertical surface immediately adjacent to the deck. This is the location where storage of combustibles can accumulate.

B. **Exterior Projections Above Balcony/Deck.** The horizontal dimensions of the exterior projection above the balcony or terrace deck shall terminate at the furthermost point of the projection outer edge, regardless of whether or not the edge inclines inward or outward ("tiered" in or out).

6. **Reference Drawings.** Architectural or other design drawings of the balconies and terraces describing the conditions in items 1 through 5 shall be submitted for reference with the Fire Sprinkler Submittal per the SFFD AB 2.04.

7. **Sprinkler Deflector Elevation.** The minimum listed sprinkler deflector elevation per 2025 NFPA 13 below the exterior projection must be maintained.

8. **Low Rise Buildings.** For low rise buildings only, regardless of the conditions noted in items 1 through 7 above, fire sprinklers may only be omitted from balconies or terraces (occupied decks) per item 1 when the exterior projection located above the balcony or terrace is of non-combustible or limited-combustible construction.

II. <u>**NFPA 13R SYSTEM SPRINKLER REQUIREMENTS**</u>

For systems installed in accordance with 2025 NFPA 13R (comply with 2025 CFC Section 903.3.1.2.1):

1. **Balconies/Terrances/Patios.** When balconies, terraces and patios are provided, regardless of the deck dimensions, sprinklers are required that cover the entire deck when the conditions in Section I items 3A, 3B, 3E, 4 and 5B are present.

2. **Sprinkler Deflector Elevation.** The minimum listed sprinkler deflector elevation per 2025 NFPA 13 below the exterior projection must be maintained or as otherwise permitted per the 2025 CFC Section 903.3.1.2.1 for sidewall sprinklers.