

# Construction Codes and Licensing – Building Plan Review

## PLAN REVIEW POLICY

**PR-03      Group I-3 Corridor Ratings      12/2023**

*2020 Minnesota State Building Code*

### **Background:**

There is considerable confusion about the required fire-resistance rating of corridors in Group I-3 occupancies. IBC Section 1020.1, the required rating for a corridor in a fully sprinkled Group I-3 occupancy is indicated as one-hour, however footnote “b” refers the user to IBC Section 408.8 for a reduction in the fire-resistance rating for this occupancy. Here in lies the confusion; IBC Section 408.8 does not make any reference to a reduction to the corridor rating, but instead requires smoke-tight partitions in sleeping areas, and any contiguous day room, group activity space, or other common spaces where residents are housed based on occupancy condition and travel distance.

Most detention and correctional facilities are licensed by state and federal authorities, which refer to the NFPA 101 Life Safety Code as a basis of compliance. Under NFPA 101 - 2012 Life Safety Code Section 22.3.8 Special Protection Features - Subdivision of Resident Housing Spaces and Table 22.3.8 we see the same separation requirements based on the use condition and travel distance as in the IBC. It becomes clear by comparing the two documents that the intent of the IBC was to mirror the Life Safety Code for the requirements, however, it was lost in the translation or by way of formatting. Requiring a fire-resistance rating in the resident housing spaces of these facilities places a large financial burden on the owner/operator of the facility, as well as making it difficult to maintain visual security in a space that inmates spend the majority of their time.

### **Policy:**

Since the intent of the IBC was to duplicate the requirements of the Life Safety Code for the subdivision of residential housing area(s), NFPA 101-2012 Table 22.3.8 shall be used as a basis for the requirements of IBC Section 408.8. Note: The provisions of the IBC Section 408.8 and NFPA 101 – 2012 Table 22.3.8 are specific to the corridor separation for resident housing area(s) only and does not supersede other fire resistance rating required from other provisions. The resident housing area(s) utilizing this reduction must be separated from the required fire resistance rated corridor(s) in order to maintain corridor continuity pursuant to IBC Section 1020.6. All corridors located outside of the resident housing area(s) shall be one-hour fire-resistance rated in accordance with IBC Table 1020.1 and comply with IBC Section 1020 as applicable. NFPA 101 Life Safety Code is not a substitution for compliance to the MSBC.

Table 22.3.8 Subdivision of Resident Housing Spaces (provided for reference only)

Feature	Use Condition			
	II	III	IV	V
Room to room separation	NR	NR	NR	SR
Room face to corridor separation	NR	NR	NR	SR
Room face to common space separation	NR	NR      SR ≤ 50 ft.   > 50 ft. (≤15m) <sup>†</sup> (>15m) <sup>†</sup>	NR      SR ≤ 50 ft.   > 50 ft. (≤15m) <sup>†</sup> (>15m) <sup>†</sup>	SR
Common space to corridor separation	NR	NR	NR	SR
Total openings in solid room face where room face is required to be smoke resistance or fire rated <sup>‡</sup>	0.85 ft. <sup>2</sup> (0.08 m <sup>2</sup> )	0.85 ft. <sup>2</sup> (0.08 m <sup>2</sup> )	0.85 ft. <sup>2</sup> (0.08 m <sup>2</sup> )	0.85 ft. <sup>2</sup> (0.08 m <sup>2</sup> ), where meeting one of the following: (1) Kept in closed position, except when used by staff, (2) closable from inside, (3) Provided with smoke control

NR: No requirement

SR: Smoke resistant  
Notes: 1. Door openings in partitions required to be smoke resistant (SR) in accordance with Table 22.3.8 shall be substantial doors of construction that resists the passage of smoke. Latches and door closers shall not be required on cell doors.

2. Under Use Condition II, Use Condition III, or Use Condition IV, a space subdivided by open construction (any combination of grating doors and grating walls or solid walls) is permitted to be considered one room if housing not more than 16 persons. The perimeter walls of such space are required to be of smoke-resistant construction. Smoke detection is required to be provided in such space. Under Use Condition IV, common walls between sleeping areas within the space are required to be smoke resistant, and grating doors and fronts are permitted to be used. Under Use Condition II and Use Condition III, open dormitories are permitted to house more than 16 persons as permitted by other sections of this chapter.

3. Where barriers are required to be smoke resistant (SR), the provisions of 8.4 (IBC Sec. 710 Smoke Partitions) and 8.5 (IBC Sec. 709 Smoke Barriers) do not apply.

<sup>†</sup> Travel distance through the common space to the exit access corridor.

<sup>‡</sup> "Total openings in solid room face" includes all openings (e.g. undercuts, food passes, grilles), the total of which shall not exceed 0.85 ft.<sup>2</sup> (0.08 m<sup>2</sup>). All openings are required to be 36 in. (91 cm) or less above the floor.

**Note: To be used in accordance with "Plan Review Policy General Use, Document"**