



Building Codes and Standards Unit - Plan Review Section

PLAN REVIEW POLICY

PR-03

Group I-3 Corridor Ratings

9/2015

Based on the 2015 Minnesota State Building Code

Background:

There is considerable confusion about the required fire-resistance rating of corridors in Group I-3 occupancies. In IBC Section 1018.1 and MN Rule 1305.1018 which amends IBC Table 1018.1, the required rating for a corridor in a sprinkled Group I-3 occupancy is indicated as one-hour, however footnote b refers the user to **IBC Section 408.8 - subdivision of resident housing areas**, for: "...a reduction in the fire-resistance rating." Herein lies the problem. IBC Section 408.8 does not make any reference to a reduction to the corridor rating, but instead may mandates smoke-tight construction of cells, dayroom and other common use area based on occupancy condition and travel distance.

Most detention and correctional facilities are licensed by state and federal authorities, which refer to the *NFPA Life Safety Code* as a basis of compliance. Under the 2012 Life Safety Code Section 22.3.8 Special Protection Features - Subdivision of Resident Housing Spaces and Table 22.3.8 we see that virtually identical language, including the title, however the biggest difference is that it is very clear from the table when the fire-resistance rating of the corridor may be reduced. 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. Requiring a fire-resistance rating in this portion 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. Since the International Building Code (IBC) is less restrictive in many respects than the Uniform Building Code (UBC), design professionals are asking if they may downgrade, disable, or remove features once required by the UBC as long as the regulated component now complies with the current code, the IBC. They are requesting this for several reasons: (1) To save time and money in having to maintain active fire protection features; (2) To save remodeling costs; and (3) For convenience, such as in having the ability in some cases to remove door closers.

Policy:

Since clearly the intent of the IBC was to duplicate the requirements of the Life Safety Code for the subdivision of residential housing spaces, NFPA 101- 2012 Table 22.3.8 shall be used as a basis for the requirements of IBC Section 408.8.

Table 22.3.8 Subdivision of Resident Housing Spaces

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 ≤ 50 ft. (≤15m) [†]	SR > 50 ft. (>15m) [†]	NR ≤ 50 ft. (≤15m) [†]	SR > 50 ft. (>15m) [†]
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 [‡]	0.85 ft. ² (0.08 m ²)	0.85 ft. ² (0.08 m ²)	0.85 ft. ² (0.08 m ²)	0.85 ft. ² (0.08 m ²), 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) and 8.5 (IBC Sec. 709) do not apply.

[†] Travel distance through the common space to the exit access corridor.

[‡] "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.² (0.08 m²). All openings are required to be 36 in. (91 cm) or less above the floor.

Note: To be used in accordance with the attached, "Plan Review Policies"