IBC: 1105.1.1, TABLE 1105.1.1

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2021 International Building Code

Revise as follows:

1105.1.1 Automatic doors. In facilities with the occupancies and building *occupant loads* indicated in Table 1105.1.1, *public entrances* that are required to be *accessible* shall have one door be either a full *power-operated* door or a *low-energy power-operated door*. Where the *public entrance* includes a vestibule, at least one door into and one door out of the vestibule shall meet the requirements of this section.

Exception: In mixed-use facilities, where the total building occupant load for the occupancies listed in the table is calculated as the sum of the ratios of the actual occupant load of each occupancy divided by the building occupant load threshold of each occupancy in Table 1105.1.1, and the sum of the ratios does not exceed 1, the requirements of Section 1105.1.1 do not apply. Where the sum of the ratios is equal to 1 or greater, the requirements of Section 1105.1.1 are applicable.

revised by committee modification to read: ... the sum of the ratios is less than 1, ...

TABLE 1105.1.1 PUBLIC ENTRANCE WITH POWER-OPERATED DOOR^a

OCCUPANCY	BUILDING OCCUPANT LOAD GREATER THAN
A-1, A-2, A-3, A-4	300
B, M, R-1	500

a. In mixed-use facilities where the total sum of the building occupant load is greater than those listed, the most restrictive building occupant load shall apply.

Staff Note: E119-21 and E120-21 addresses requirements in a different or contradicting manner. The committee is urged to make their intentions clear with their actions on these proposals.

Reason Statement: The intent of this proposal is to replace the footnote (a) to Table 1105.1.1 with an exception to 1105.1.1. Footnote "a" was added to Table 1105.1.1 by E115-18, Public Comment 2. The reason from the proponent for this public comment was that the table did not address mixed occupancies.

The effect of the existing footnote with "most restrictive occupant load shall apply" is that a hotel (Group R-1) that offers breakfast (Group A-2), an exercise room or a swimming pool (Group A-3) as an amenity would be required to provide automatic doors with an occupant load of 300 instead of 500. Another example would be a retail store (Group M) that includes a small coffee shop or fast food establishment (Group A-2).

In addition, the footnote could be read to apply to all mixed use buildings that include one of the occupancies listed and other occupancies not listed in the table. For example: an apartment building (Group R-2) with a one or two-person on-site rental office (Group B), could be required to provide automatic doors.

The proposed exception text is borrowed from 508.4.2 – allowable building area – and revised to be applicable to the application. This would allow for a balanced approach. This would balance the two occupant loads rather than using the most restrictive.

Example:

Hotel with small restaurant, pool or exercise room:

A-3 (75 /300 occupants) + R-1 (350 /500 occupants) = .0.25 + 0.7 = 0.95

IBC **508.4.2** Allowable building area. In each *story*, the *building area* shall be such that the sum of the ratios of the actual *building area* of each separated occupancy divided by the allowable *building* area of each separated occupancy shall not exceed 1.

This proposal is submitted by the ICC Building Code Action Committee (BCAC). BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at BCAC.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

There may be a reduction in the cost of construction. For mixed-use buildings, the requirement for automatic door openers at doors required to be accessible may be "triggered" at a slightly higher building occupant load depending on how the original footnote "a" is interpreted, applied, and enforced.