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features shall be permitted to project into the required width not more than $1^{1}/_{2}$ inches (38 mm) on each side.

Exception: Projections are permitted in corridors within Group I-2 Condition 1 in accordance with Section 407.4.3.

Handrails are not required along corridors, level aisles, exit passageways and exit corridors; however, if provided, Section 1014.8 would be applicable. Handrails are sometimes provided along the hallways in hospitals or nursing homes to aid the residents. Bumper guards along the walls are not handrails.

Items such as baseboards, chair rails, pilasters, etc., are limited to protruding over the *required* width of the corridor a maximum of $1^{1}l_{2}$ inches (38 mm); however, once again, Section 1003.3.3 would be applicable when the corridor was wider than required.

The exception is in recognition of a situation unique to nursing homes (Group I-2, Condition 1). Section 407.4.3 includes allowances for furniture in corridors to address the need of patients needing a place to sit to rest as well as the new style of design that emphasizes the residential aspects of the environment.

1005.7.3 Protruding objects. Protruding objects shall comply with the applicable requirements of Section 1003.3.

❖ This section is a reminder that protruding objects are applicable when looking at encroachments into a confined path of travel. The difference, however, is that door and other projections are applied to the required minimum width, while protruding object provisions apply to paths of travel even when wider than required.

SECTION 1006 NUMBER OF EXITS AND EXIT ACCESS DOORWAYS

1006.1 General. The number of *exits* or *exit access doorways* required within the *means of egress* system shall comply with the provisions of Section 1006.2 for spaces, including *mezzanines*, and Section 1006.3 for *stories*.

The criteria in this section to determine the number of ways to leave rooms or spaces (including mezzanines) and stories are based on an empirical judgment of the associated risks.

1006.2 Egress from spaces. Rooms, areas or spaces, including *mezzanines*, within a *story* or *basement* shall be provided with the number of *exits* or access to *exits* in accordance with this section.

This section dictates the minimum number of paths of travel an occupant is to have available to avoid a fire incident in the occupied room or space. While providing multiple egress doorways from every room is unrealistic, a point does exist where alternative egress paths must be provided based on the number of occupants at risk, the distance any one occupant must travel to reach a doorway and the relative hazards associated with the occupancy of the space. Generally, the number of egress doorways required from any room or space coincides with the occupant load threshold criteria set forth for the minimum number of exits required from a story (see Section 1006.3).

1006.2.1 Egress based on occupant load and common path of egress travel distance. Two exits or exit access doorways from any space shall be provided where the design occupant load or the common path of egress travel distance exceeds the values listed in Table 1006.2.1.

Exceptions:

- 1. In Group R-2 and R-3 occupancies, one *means of egress* is permitted within and from individual *dwelling units* with a maximum *occupant load* of 20 where the *dwelling unit* is equipped throughout with an *automatic sprinkler* system in accordance with Section 903.3.1.1 or 903.3.1.2 and the *common path of egress travel* does not exceed 125 feet (38 100 mm).
- 2. Care suites in Group I-2 occupancies complying with Section 407.4.
- This section dictates the minimum number of paths of travel an occupant is to have available to avoid a fire incident in the occupied room or space. While providing multiple egress doorways from every room is unrealistic, a point does exist where alternative egress paths must be provided based on the number of occupants at risk, the distance any one occupant must travel to reach a doorway and the relative hazards associated with the occupancy of the space. Generally, the number of egress doorways required from any room or space coincides with the occupant load threshold criteria set forth for determining the minimum number of exits required from a story (see Section 1006.3).

The limiting criteria in Table 1006.2.1 for rooms or spaces permitted to have a single exit access doorway are based on an empirical judgment of the associated risks.

If the occupants of a room are required to egress through another room, as permitted in Sections 1004.1.1.1 and 1016.2, the rooms are to be combined to determine if multiple doorways are required from the combined rooms. For example, if a suite of offices shares a common reception area, the entire suite with the reception area must meet both the occupant load and the travel distance criteria. The same logic would hold true for a space with a mezzanine (see Section 1004.1.1.2).

It should be noted that where two doorways are required, the remoteness requirement of Section 1007.1 is applicable.

The common path of travel is the distance measured from the most remote point in a space to the point in the exit path where the occupant has access to two required exits in separate directions. The distance limitations are applicable to all paths of travel that lead out of a space or building where two exits are required. An illustration of this distance is found in

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to two or more exits is required. See Section 1021.2 for travel limitations for single-exit one-, two- and three-story buildings and Section 1015.1 for spaces with one exit.

Note a indicates if the travel distance increase is based on an NFPA 13 or NFPA 13R sprinkler system being provided throughout the building, whichever is applicable to that occupancy. Where a Group R-4 occupancy can use an NFPA 13D system, the travel distance is indicated in the "without sprinkler system" column. The table does not currently provide information for a Group R-3 occupancy with an NFPA 13D system. Note b is a general reminder for special requirements for sprinklers in Group H.

The reference in Note c to Section 1029.8 is to allow for the unique common path of travel requirements in spaces with assembly seating, such as in a lecture room or sports facility.

Note d is a reference to the common path of travel provisions specific to Group I-2 care rooms and suites that are specifically addressed in Section 407.4.

As indicated in Note e, while Group R-3 dwellings are typically only required to have one exit (see 1006.2.1 Exception 1 and Section 1006.3.2, Exception 5), there can be a situation where a Group R-3 unit is included in a mixed-use building. In these situations, the travel distance limitations for common

path of travel in the table are applicable.

Note f is an allowance for the common path of travel in an open parking garage to be 100 feet (30 480 mm) when the occupant load is greater than 30 and there is no sprinkler system provided. This is in recognition of the minimal possibility of smoke accumulation due to the openness requirements and the low fuel loads for open parking garages.

1006.2.1.1 Three or more exits or exit access doorways. Three exits or exit access doorways shall be provided from any space with an occupant load of 501 to 1,000. Four exits or exit access doorways shall be provided from any space with an occupant load greater than 1,000.

❖ Large facilities with high occupant loads are required to have more than two exits leading from each story. This is so that at least one exit will be available in case of a fire emergency and to increase the likelihood that a large number of occupants can be accommodated by the remaining exits when one exit is not available. Section 1005.5 specifies that the loss of one exit must not reduce the available exit capacity by more than 50 percent. This is reiterated in Sections 1029.2 and 1029.3 for spaces with assembly seating with more than 300 occupants. Exits should be separated in accordance with Section 1007.1.2. While an equal distribution of exit capacity among all the exits is not required, a proper design would con-

TABLE 1006.2.1
SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY

| OCCUPANCY | MAXIMUM OCCUPANT LOAD OF SPACE | MAXIMUM COMMON PATH OF EGRESS TRAVEL DISTANCE (feet) | | |
|-----------------------------|-----------------------------------|--|----|-----------------------------------|
| | | Without Sprinkler System (feet) Occupant Load | | – With Sprinkler System (feet) |
| | | | | |
| | | A ^c , E, M | 49 | 75 |
| В | 49 | 100 | 75 | 100° |
| F | 49 | 75 | 75 | 100 ^a |
| H-1, H-2, H-3 | 3 | NP | NP | 25 ^b |
| H-4, H-5 | 10 | NP | NP | 75 ^b |
| I-1, I-2 ^d , I-4 | 10 | NP | NP | 75ª |
| I-3 | 10 | NP | NP | 100ª |
| R-1 | 10 | NP | NP | 75ª |
| R-2 | 10 | NP | NP | 125ª |
| R-3 ^e | 10 | NP | NP | 125ª |
| R-4 ^e | 10 | 75 | 75 | 125ª |
| S_{t} | 29 | 100 | 75 | 100ª |
| U | 49 | 100 | 75 | 75ª |

For SI: 1 foot = 304.8 mm.

NP = Not Permitted.

- a. Buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2. See Section 903 for occupancies where *automatic sprinkler systems* are permitted in accordance with Section 903.3.1.2.
- b. Group H occupancies equipped throughout with an automatic sprinkler system in accordance with Section 903.2.5.
- c. For a room or space used for assembly purposes having *fixed seating*, see Section 1029.8.
- d. For the travel distance limitations in Group I-2, see Section 407.4.
- e. The length of common path of egress travel distance in a Group R-3 occupancy located in a mixed occupancy building or within a Group R-3 or R-4 congregate living facility.
- f. The length of common path of egress travel distance in a Group S-2 open parking garage shall be not more than 100 feet.

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