



3.1 (13-64-020) Wood framing into masonry walls (3-4 hr. Fire Rated)

Questions have arisen regarding the acceptable method of framing wood floor members – solid joists and trusses – into load bearing masonry walls in townhouse buildings. These walls typically are required to provide a three-hour separation between units or three-hour protection in exterior walls. Similar questions have also arisen regarding wood framing into masonry walls which are required to have a four-hour rating.

Condition A- Framing members In-line

A three-hour fire separation can be provided between the ends of wood joists or trusses if the common bearing wall is expanded slag or pumice, of at least 10” nominal (9-5/8” actual) thickness, the joists bear on the wall at least 3” on each side, and 4” nominal (3-5/8” actual) separation is provided between the ends. The space between the ends shall be filled with 3-5/8” thick expanded slag or pumice* masonry units and the space around the joist or truss ends shall be slushed with mortar.

A four-hour separation can be provided similarly if the wall thickness is increased to 12” nominal (11-5/8” actual) and the separation between joist ends is at least 4-3/4”.

Condition B- Framing members Staggered

A three-hour separation can be provided in an 8” (7-5/8” actual) expanded slag or pumice* masonry wall if the separation between ends of joists or trusses measured diagonally provides 4” actual separation between ends and the intervening space is treated as described in Condition A.

A four-hour separation can be provided when the minimum distance between joist ends is 4-3/4” actual.

* Expanded slag or pumice as used above refers to aggregate type used in the concrete masonry unit.

3.2 (13-64-090) Exterior stairway serving 2nd floor of a single family residence

The code section (13-160-050)(o)(2) accepts an exterior stairway serving the second floor of a single-family residence, as part of the required exits from the third floor. The code section (13-160-050)(c) requires a second exit from the second floor of single-family residence with an area over 1500 sf. Furthermore, the addition of a second exit intrinsically improves the safety of a building and an exterior stair has the advantage of

moving the occupants immediately outside of the building. Therefore, an exterior stairway serving the second floor of a single-family unit shall be permitted

3.3 (13-56-300) Health clubs & fitness centers policy

This establishes values for assembly uses which are not specified in Table 13-56-310(b) to calculate occupancy.

In fitness centers and health clubs, the occupancy content for running tracks or for exercise areas primarily occupied by fixed equipment shall be calculated at 40 square feet per person (gross). Recreation areas (i.e., for aerobics, yoga, etc.) shall to be calculated at 20 sq. ft. per person, and locker rooms shall be calculated at 6 sq. ft. per person, net area (not including the floor area covered by lockers). Swimming pools shall be calculated at 15 sq. ft. per person, which is consistent with 77 IL. ADM. Code 820, the Illinois Swimming Pool and Bathing Beach Code, Section 820.200 (b), and pool deck areas shall be calculated at a rate of 50 square feet per person (gross). In accordance with Section 3(13-84-410), an occupancy sign shall be obtained and posted in each space, stating the maximum number of persons, which may occupy that area.

3.4 (13-56-300) Occupancy content - Residential roof decks

The floor area per person ratio to be used for residential roof decks is 20 sq. ft. per person, per Section (13-56-310). This is for residential roof decks, which are to be used only by the residents of the building.

Architects have tried to use the floor area per person ratio of 125 sq. ft. per person for these residential roof decks. This approach has not been acceptable.

Section (13-56-300) lists the floor area per person ratio to use for different occupancies for rooms or spaces IN A BUILDING. The Code does not list what ratio to use for a space, which is not in a building. The closest listed occupancy in Section (13-56-300) would be “recreation room”. Therefore, 20 sq. ft. per person will be used to determine occupancy for residential roof decks.

3.5 (13-56-310) Occupancy Content - Floor area per person

The occupancy content shall be based on the actual use of the room or space. It shall be determined by the dividing of the net floor area by the floor area per person established in Sections (13-56-310) and (13-56-320). The following numbers are provided to clarify the content of the table provided in the section (13-56-310):

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| 1. Seating areas with chairs and tables ----- | 15 sq ft per person |
| 2. Standing areas, dance floors ----- | 6 sq ft per person |
| 3. Conference rooms, lecture halls, classrooms ----- | 20 sq ft per person |
| 4. Kitchen, food preparation areas ----- | 100 sq ft per person |
| 5. Gymnasiums, Prayer halls with no seating, auditoriums without fixed seats,
Recreation rooms ----- | 20 sq ft per person |

6. Roof Decks -----	20 sq ft per person
7. Day care space with children under 2 years of age --	55 sq ft per person
8. Day care space with children 2 years and older -----	35 sq ft per person

3.6 (13-84-050)(c) Bathroom doors in school corridors

Section (13-80-030) requires all rooms in an institutional occupancy to be separated from the exit corridor by 1-hour fire-rated walls and fire rated doors.

There is no such code section for school/assembly occupancies requiring all rooms to be separated from the exit corridor.

School administrators are very concerned about the security threat to students that a door to a bathroom may present. School personnel require the visual advantage that a clear opening provides. Also, there is not much of a fire load in a bathroom as compared to a school classroom; hence the need for a door on a bathroom is not as apparent as it would be for a classroom.

Therefore, in order to work with the security concerns of school administrations, and since the code is not clearly requiring this separation, doors will not be required from bathrooms to the corridors in schools.

3.7 (13-56-080) & 3(13-56-090) Assembly occupancy - Classification

The occupancy content of the entire space including all rooms and/or floors that are under one management or ownership shall be summed up together for the determination of small or large assembly unit.

This interpretation does not apply to the Wrigleyville rooftop clubs.

3.8 (13-84-331) Automatic sprinkler system required in basement areas of night clubs or restaurant

Every existing and new building occupied as a nightclub or a restaurant with an occupancy count of more than 100 persons located in the basement shall be equipped with an approved automatic sprinkler system. The sprinkler system can be limited only to the basement level. The occupancy count shall be in accordance with the Section (13-56-300).

If the occupant load of the basement level is 100 persons or less, then a sprinkler system per this section is not required in the basement level.