

Common Code Defects

Code Defects

IBC CHAPTER 3 USE AND OCCUPANCY

How to determine the separation requirements?

- Seeing what Occupancy classification you have
- Verify the minimum construction type allowable for occupancy classification and building size , design and location. (Section 503/601)
- Looking at major factors to considered in occupancy classification.
- Multiple Occupancy (section 302) .

MAJOR FACTORS TO CONSIDER IN OCCUPANCY CLASSIFICATION

The below are the six most important factors to consider in occupancy classification. Other minor factors (Not Listed) may also be considered.

- *AMOUNT OF COMBUSTIBLE MATERIALS*
- *HIGH FLAMMABILITY, EXPLOSIVE, OR HEALTH HAZARD CONTENTS*
- *OCCUPANT LOAD (DENSITY)*
- *FAMILIARITY OF THE BUILDING*
- *MOBILITY OF THE OCCUPANTS*
- *ALERTNESS OF THE OCCUPANTS*

See example on page 2 for a typical problem in working separation requirements.

OCCUPANCY CLASSIFICATION

- Group A – Assembly Section 303. (A-1 to A-5)
- Group –B – Business Section 304
- Group – E – Educational Section 305
- Group – F – Factory/Industrial Section 306
- Group – H – High Hazard Section 307. (H-1 to H-5)
- Group – I – Institutional Section 308. (I-1 to I-4)
- Group – M – Mercantile Section 309
- Group – R – Residential Section 310. (R-1 to R-4)
- Group – S – Storage Section 311. (S-1 And S-2)
- Group – U – Utility and Miscellaneous section 312

MULTIPLE OCCUPANCIES CLASSIFICATION

- **Incidental Use Areas – Governed by Table 302.1.1 – exception within a dwelling unit.**
- **Accessory use Areas – Except for Group H and Exclusive of Incidental use areas as defined in Table**

302.1.1 – 10% of the floor area and not governed by the height and areas limitations in Chapter 5 except for the primary occupancy of the building or structure.

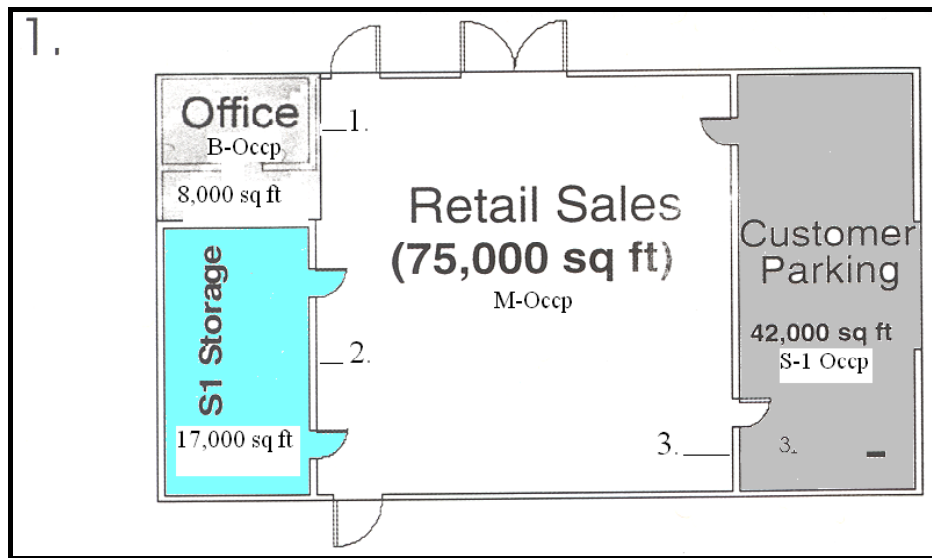
- **Mix Occupancies – Except for Group H – governed by Table 302.1.1 and the provisions in Section 508.**
- **Non-Separated Use – the entire Building must meet the most restrictive of the requirements as to height, area, type of construction, and fire protection systems for every portion of the building classified as to use.**
- **Separated Uses – Every portion of the building shall be individually classified as to use and shall be completely separated from adjacent areas by fire barrier walls or horizontal assemblies where applicable with a rating as per table 302.3.3 . Each fire area shall comply with the code based on the use of that space. For each floor the fire area shall be limited to the ratio of the floor area of each use divided by the allowable area for each use. This ratio shall not exceed 1. Exceptions; for residential Occupancies and Garages and a reduction of the fire resistance **required tin table 302.3.3. For Automatic Sprinkler Systems.****



EXAMPLE 1.

SEPARATION REQUIREMENTS FOR EACH USE

- TOTAL BLDG SQ FT. 142,000
- CONSTRUCTION TYPE- I-B SPRINKLERED
 1. 0 HOUR REQUIRED PER SECTION 302.2.
 2. 3-HOUR REQUIRED FROM TABLE 302.3.3. WITH EXCEPTION (1) FOR SPRINKLER, 302.3.3 WHICH WOULD REDUCE IT TO 2 HOUR SEPARATION
 3. 3-HOUR REQUIRED FROM TABLE 302.3.3. WITH EXCEPTION (1) FOR SPRINKLER, 302.3.3. WHICH WOULD REDUCE TO 2-HOUR SEPARATION.



Disclaimer: There may be other ways to comply with the Code. If so, you are not required to use this method to comply with the Code. You may want to investigate other options, or consult with a design professional identifying an equally code compliant solution.

End Notes

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