You Should Know

The IEBC allowance of 50-percent openings in an exterior wall is independent of the fire separation distance, which is contrary to the percentage of openings based on IBC Table 705.8.

You Should Know

The IEBC allowance of unlimited unprotected openings in an exterior wall of an existing building completely sprinkler protected per NFPA 13 is independent of the fire separation distance, which is contrary to the percentage of openings based on IBC Table 705.8 for a new building with complete sprinkler protection per NFPA 13.

Exterior wall opening protectives

Openings in exterior walls must be protected as required by IBC Section 705.8 when there is a Change in Occupancy classification to a higher hazard based on IEBC Table 1011.6 (Figure 11-7). When openings are required to be protected because of their fire separation distance, the sum of the opening areas must not exceed 50 percent of the respective wall area on a per story basis. [Ref. 1011.6.3]

There are four exceptions to the requirement for rated opening protectives in fire-resistance-rated exterior walls as follows:

- Where IBC Table 705.8 allows openings in excess of 50 percent. In this instance, the percentage of protected openings is allowed to match the percentage permitted by the IBC for new construction,
- In residential buildings that are three stories or less in height and are located 3 feet (0.91 m) or more from a lot line,
- In buildings protected throughout with an automatic sprinkler system complying with NFPA 13 or
- When the Change of Occupancy classification is to an equal or lower hazard classification per IEBC Table 1011.6.



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FIGURE 11-7 Window and door protection.