

Wisconsin Commercial Building Inspector Certification
Chapter IBC 7 Practice Questions

Answer Key 7

Navigating the Wisconsin Commercial Building Code skill practice sheet. Find the Wisconsin Commercial Building Code section number associated with each of the key words.

Chapter 7

In buildings equipped throughout with an automatic sprinkler system, the maximum allowable area of **unprotected openings** shall be the same as the tabulated limitations for **protected openings**.

The maximum area of unprotected exterior wall openings with a fire separation distance of 17 feet is **25%**.

Where a fire wall serves as an exterior wall for a building and separates buildings having different roof levels, such wall shall terminate at a point not less than **30 inches** above the lower roof level.

Fire walls shall be continuous from exterior wall to exterior wall and shall extend at least **18 inches** beyond the exterior surface of the exterior walls.

Exterior wall intersections at fire walls that form an angle equal to or greater than **180 degrees** do not need exterior wall protection.

Each opening through a fire wall shall not exceed **120 square feet**.

Where combustible members frame into hollow walls or walls of hollow units, hollow spaces shall be solidly filled for the full thickness of the wall and for a distance not less than **4 inches**.

Fire protection is not required at the bottom flange of lintels, shelf angles and plates, spanning not more than **6 feet**.

Fire doors located in common walls separating sleeping units in Group R-1 shall be permitted without **automatic or self closing devices**.

Ducts and air transfer openings permitted in fire walls in accordance with Section 705.11 shall be protected with listed **fire dampers**.

In combustible construction, **fireblocking** shall be installed to cut off concealed draft openings and shall form an effective barrier between floors, between a top story and a **roof or attic space**.

Section **720** contains prescriptive details of fire-resistance-rated building elements.

The minimum required equivalent thickness for 2-hour fire resistance of hollow brick , unfilled is **3.4 inches**.

The time assigned to 5/8 inch gypsum wall board is **30 minutes**.

Under calculated fire resistance, where minimum 1-hour fire resistance is required, connectors and fasteners shall be protected from fire exposure by **1 ½ inches** of wood.

Where a **shaft enclosure** does not extend to the roof deck, it shall be enclosed at the top with construction of the same rating as the shaft, but not less than the floor penetrated.

The annular space between the wall membrane and the electrical box shall not exceed **1/8 inch**.

Where a fire-resistance-rating is not required at a spandrel wall protection shall still be required at the **intersection between the spandrel wall and floor**.

Openings in fire barriers shall be limited to a maximum aggregate width of **25 percent** and the maximum area of any single opening shall not exceed **156 square feet**.

Penetrations into an exit enclosure or an exit passageway shall be allowed only when permitted by **Section 1020.1.2** or **1021.5** respectively.

Shaft enclosures shall have a fire-resistance-rating of not less than **2 hours** where connecting four stories or more.

Where the floor assembly separates mixed occupancies, the assembly shall have a fire-resistance-rating of not less than that required by **Section 508.3.2**.

Floor fire door assemblies shall be labeled and **permanently affixed**, specifying the **manufacturer**, test standard and **fire-resistance rating**.

A listed **smoke damper** designed to resist the passage of smoke shall be provided at each point a duct penetrates a corridor enclosure required to have smoke and draft controlled doors.