

GAYLOR®

BOXES IN FIREWALLS

What are the requirements for installing electrical boxes in fire rated walls?

Per IBC 711.3.2:

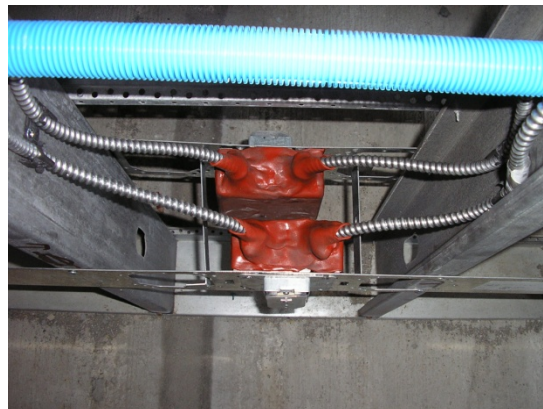
1. Steel boxes that do not exceed 16 square inches (4" x 4") may be installed provided the total area of openings does not exceed 100 square inches for any 100 square feet of wall area.
2. Boxes on opposite sides of a wall shall be separated as follows:
 - a. By a horizontal distance of not less than 24".
 - b. By a horizontal distance not less than the depth of the wall cavity where the wall cavity is filled with cellulose loose-fill or mineral fiber insulation. (Not standard fiberglass insulation)
 - c. By solid fire-blocking complying with section 716.2.1. (Not practical for back to back boxes)
 - d. By other listed materials and methods. (This would include fire stop pads inside boxes or outside that covered all 5 exposed sides)
3. Listed box assemblies that have been tested for use in fire rated assemblies can be used in accordance with their listing and instructions.

Per IBC 708.1 and 708.3:

Walls separating guestrooms in motels and hotels, corridor walls, walls between tenant spaces in malls and walls separating dwelling units are required to be one hour fire rated.

These rules would also apply to any wall required to be fire rated.

All items used in a rated penetration must have a rating of at least the rating of the wall.



References: 2000 International Building Code

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The interpretations expressed are those of the author and are intended to be a guideline only. They are based on the references listed. It is the responsibility of the reader to be sure this complies with the codes, standards, and specifications applicable to any given situation. Compliance with codes, standards, and specifications is the responsibility of the installer. Final interpretation is up to the local authority having jurisdiction.

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