

ONTARIO BUILDING CODE

9.10.5.1. Permitted Openings in Wall Membranes

- (1) Except as permitted in Sentences (2) and (4), a membrane forming part of an assembly required to have a fire-resistance rating shall not be pierced by openings into the assembly unless the assembly has been tested and rated for such openings.
- (2) A wall or ceiling membrane forming part of an assembly required to have a fire-resistance rating is permitted to be pierced by openings for electrical and similar service outlet boxes provided such outlet boxes are tightly fitted.
- (3) Where boxes referred to in Sentence (2) are located on both sides of walls required to provide a *fire-resistance* rating, they shall be offset where necessary to maintain the integrity of the *fire* separation.

9.10.9. Fire Separations Between Rooms and Spaces Within Buildings

9.10.9.1. Application

(1) This Subsection applies to fire separations required between rooms and spaces in buildings except between rooms and spaces within a dwelling unit.

9.10.9.2. Continuous Barrier

(1) Except as permitted in Article 9.10.9.3., a wall or floor assembly required to be a fire separation shall be constructed as a continuous barrier against the spread of fire.

(2) The continuity of a fire separation shall be maintained where it abuts another fire separation, a floor, a ceiling, a roof or an exterior wall assembly.

9.10.9.6. Penetration of Fire Separations

(1) Piping, tubing, ducts, chimneys, wiring, conduit, electrical outlet boxes and other similar service equipment that penetrate a required fire separation shall be tightly fitted or fire stopped to maintain the integrity of the separation.

(2) Penetrations of a firewall shall be sealed at the penetration by a fire *stop* that, when subjected to the fire test method in CAN/ULC-S115, "Fire Tests of Firestop Systems", has an FT rating not less than the fire-resistance rating for the fire separation.

ILLUSTRATED GUIDE TO THE BUILDING CODE

9.10.9.6. Penetration of Fire Separations

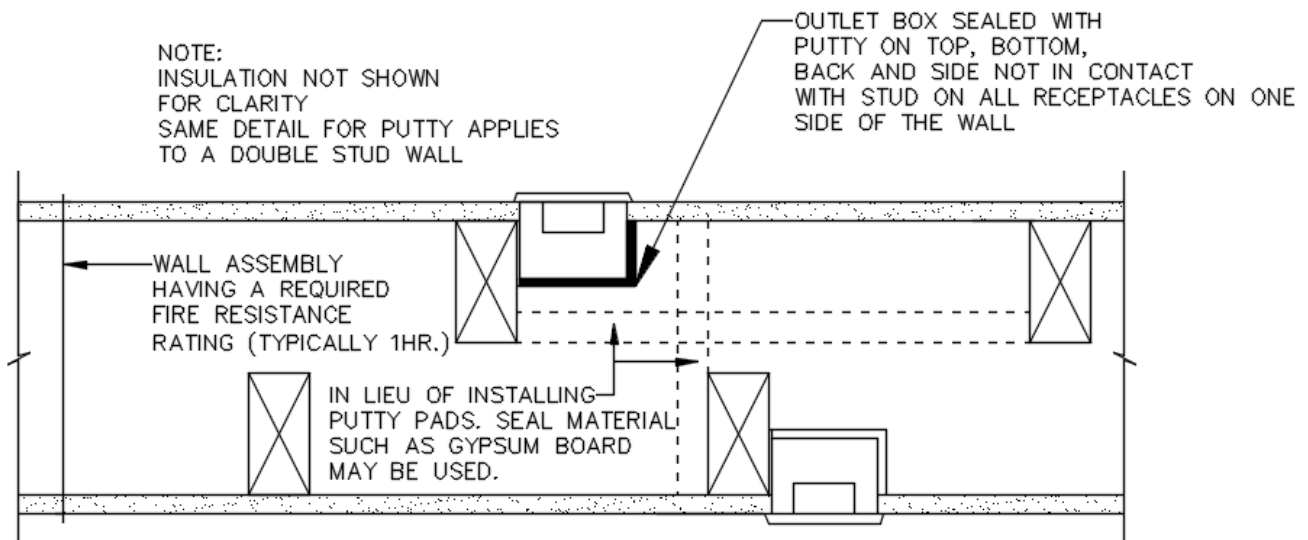
Service equipment such as pipes, ducts, electrical conduit and outlet boxes that penetrate a fire separation must be noncombustible, subject to the following exceptions:

- Combustible service equipment may be installed in fire separations which have been acceptably tested incorporating such equipment.
- Combustible wiring or group of wires not exceeding 25mm in diameter may penetrate a fire separation.
- Wiring in noncombustible conduit may penetrate a fire separation.
- Combustible outlet boxes with a face area not over 160cm² (a 4-gang box) may penetrate a fire separation.
- Combustible water pipes having maximum 30 mm diameters may penetrate a vertical fire separation provided the penetration is firestopped with a firestop system having a 'F' rating equivalent to the rating of the fire separation.

OBJECTIVE

The Building Code permits openings in a wall membrane forming part of a fire rated wall assembly as long as these openings such as electrical outlet boxes are tightly fitted around the membrane providing the fire rating. When the outlet boxes are located in the same stud space they shall be separated by a material such as gypsum board or a tightly fitted membrane such as approved Putty Pads to maintain the integrity of the fire separation of the wall assembly. Refer to the illustration below for details.

- Easily adheres to both metal and plastic outlet boxes and to the wood or metal stud.
- Can be used in residential and commercial applications.
- This product is acoustically rated to maintain the Sound Transmission Rating for the wall assembly according to (ASTM E 90-97) 49.
- Adhesion of this product has been tested to longevity of 30years.
- This product is best used where 2 outlets are in a single stud/cavity wall or 24inch and the outlets are offset from each other.



STAGGERED STUD WALL