

FIRE STOPPING JUNCTURE OF WALLS/SLAB/METAL DECK (CONTINUITY OF FIRE SEPARATIONS)

ONTARIO BUILDING CODE

3.1.7.1. Determination of Ratings

- (1) Except as permitted by Sentence (2) and Article 3.1.7.2., the rating of a material, assembly of materials or a structural member that is required to have a *fire-resistance rating*, shall be determined on the basis of the results of tests conducted in conformance with CAN/ULC-S101, "Fire Endurance Tests of Building Construction and Materials".

3.1.7.3. Exposure Conditions for Rating

- (1) Floor, roof and ceiling assemblies shall be rated for exposure to fire on the underside.
- (2) *Firewalls* and interior vertical *fire separations* shall be rated for exposure to fire on each side.
- (3) Exterior walls shall be rated for exposure to fire from inside the *building*.

3.1.8. Fire Separations and Closures

3.1.8.1. General Requirements

- (1) Any wall, *partition* or floor assembly required to be a *fire separation* shall,
 - (a) except as permitted by Sentence (2), be constructed as a continuous element, and
 - (b) as required in this Part, have a *fire-resistance rating* as specified.
- (2) Openings in a *fire separation* shall be protected with *closures*, shafts or other means in conformance with Articles 3.1.8.4. to 3.1.8.18. and Subsections 3.1.9. and 3.2.8.

OBJECTIVE

When a rated or unrated fire separation is required to divide one compartment from another, such as a masonry or gypsum board interior partition, the fire separation must be built as a continuous element, terminate at a slab, metal deck, or a roof deck, have a fire resistance rating as specified and have a smoke tight joint where it abuts a horizontal plane.

Since a fire separation wall is required to be rated for exposure to fire from each side, each wall side shall contribute to the fire resistance rating. For this reason, designers must select joint assemblies that have been tested for this purpose. The ULC listings can provide a variety of tested assemblies that can work even with the difficult condition of a vertical wall abutting a metal deck where the flutes are filled with tested material and all the joints sealed.

