

STAGGERED TOWNHOUSES 45 MINUTE FIRE RESISTANCE RATED WALL

ONTARIO BUILDING CODE

9.10.3.1 Fire-Resistance and Fire-Protection Ratings

- (1) Where a fire-resistance rating or a fire protection rating is required in this Section for an element of a building, such rating shall be determined in conformance with the test methods described in Part 3, or in accordance with MMAH Supplementary Standard SB-2, "Fire Performance Ratings", or MMAH Supplementary Standard SB-3, "Fire and Sound Resistance of Building Assemblies".

9.10.15.5. Construction of Exposing Building Face of Houses

- (1) Except as provided in Sentences (2) to (4) and (6), each exposing building face and any exterior wall located above an exposing building face that encloses an attic or roof space shall be constructed in conformance with Subsection 9.10.8.,
- (a) for the exposing building face as a whole, or
 - (b) for any number of separate portions of the exposing building face.
- (2) Sentence (1) does not apply where,
- (a) the limiting distance is not less than 1.2 m (3 ft 11 in),
 - (b) the limiting distance is less than 1.2 m (3 ft 11 in) but not less than 0.6 m (23 $\frac{5}{8}$ in), provided that the exposing building face has a fire-resistance rating of not less than 45 min, or
 - (c) the limiting distance is less than 0.6 m (23 $\frac{5}{8}$ in), provided that the exposing building face has a fire-resistance rating of not less than 45 min and is clad with non-combustible material.

- (3) Where the limiting distance is less than 0.6 m (23 $\frac{5}{8}$ in), cladding on the exposing building face and on exterior walls located above the exposing building face that encloses an attic or roof spaces need not be non-combustible, provided that the cladding,
- (a) conforms to Subsection 9.27.12.,
 - (b) is installed without furring members over not less than 12.7 mm ($\frac{1}{2}$ in) thick gypsum sheathing or over masonry,
 - (c) has a flame-spread rating not more than 25 when tested in accordance with Sentence 3. 1. 12.1.(2), and
 - (d) is not more than 2 mm ($\frac{3}{32}$ in) in thickness exclusive of fasteners, joints and local reinforcements.

OBJECTIVE

Sentence 9.10.3.3.(2) of the Building Code requires exterior walls to be rated for exposure to fire from the inside of the building.

Sentence 2.3.5.(2) of Supplementary Standard SB-2 requires exterior wall assemblies that are rated from the inside to have an outer membrane consisting of sheathing and exterior cladding with spaces between the studs filled with insulation conforming to CAN/ULC-S702, "Mineral Fibre Thermal Insulation for Buildings" with a mass not less than 1.22 Kg/m² of wall surface. Using the SB-2 Standard, the required 45 minute rating and header rating are determined. Vinyl siding is permitted if it meets the flame spread rating of 25 or less and is not more than 2 mm ($\frac{3}{32}$ in) thick and is installed over sheathing paper and 12.7 mm ($\frac{1}{2}$ in) exterior gypsum sheathing. Vinyl sidings meeting the above requirements have been tested and are labeled.

Refer also to Builder Tip No. 40.

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NOTE:
 IF NON COMBUSTIBLE CLADDING IS
 USED ON THE EXTERIOR
 1/2" TYPE X GYPSUM BOARD IS NOT
 REQUIRED

