



Staggered Townhouses 45 Minute Fire Resistance Rated Wall

The Building Standards Department issues Builder Tips as part of our customer service program. They are designed to provide an improved understanding of the Building Code and to reduce the costs associated with correcting infractions. Please contact your area building inspector for further information or call the Building Standards Department at 905.475.4848 extension 2189

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

- (a) test methods described in Part 3,
 - (b) MMAH Supplementary Standard SB-2, “Fire Performance Ratings”, or
 - (c) MMAH Supplementary Standard SB-3, “Fire and Sound Resistance Tables”
- (See Note A-9.10.3.1.(1))

9.10.15.5. Construction of Exposing Building Face of Houses

(1) Except as provided in sentences (1.1), (2), (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.

(1.1) Sentence (1) does not apply where

- (a) the limiting distance is not less than 1.2 m,
- (b) the limiting distance is less than 1.2 m but not less than 0.6 m, 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, provided that the exposing building face has a fire-resistance rating of not less than 45 min and is clad with noncombustible material.



(2) Except as provided by Sentences (4) and (5) where the limiting distance is less than 0.6 m, the exposing building face and exterior walls located above the exposing building face that enclose an attic or roof space shall have a fire-resistance rating of not less than 45 min, and

(a) the cladding shall be metal or noncombustible cladding installed in accordance with Section 9.20, 9.27, or 9.28., (See Note A-9.10.14.5.(1)),

(b) the cladding shall

(i) conform to Subsection 9.27.12.,

(ii) be installed without furring members over gypsum sheathing at least 12.7 mm thick or over masonry,

(iii) has a flame-spread rating not more than 25 when tested in accordance with Sentence 3.1.12.1.(2), and

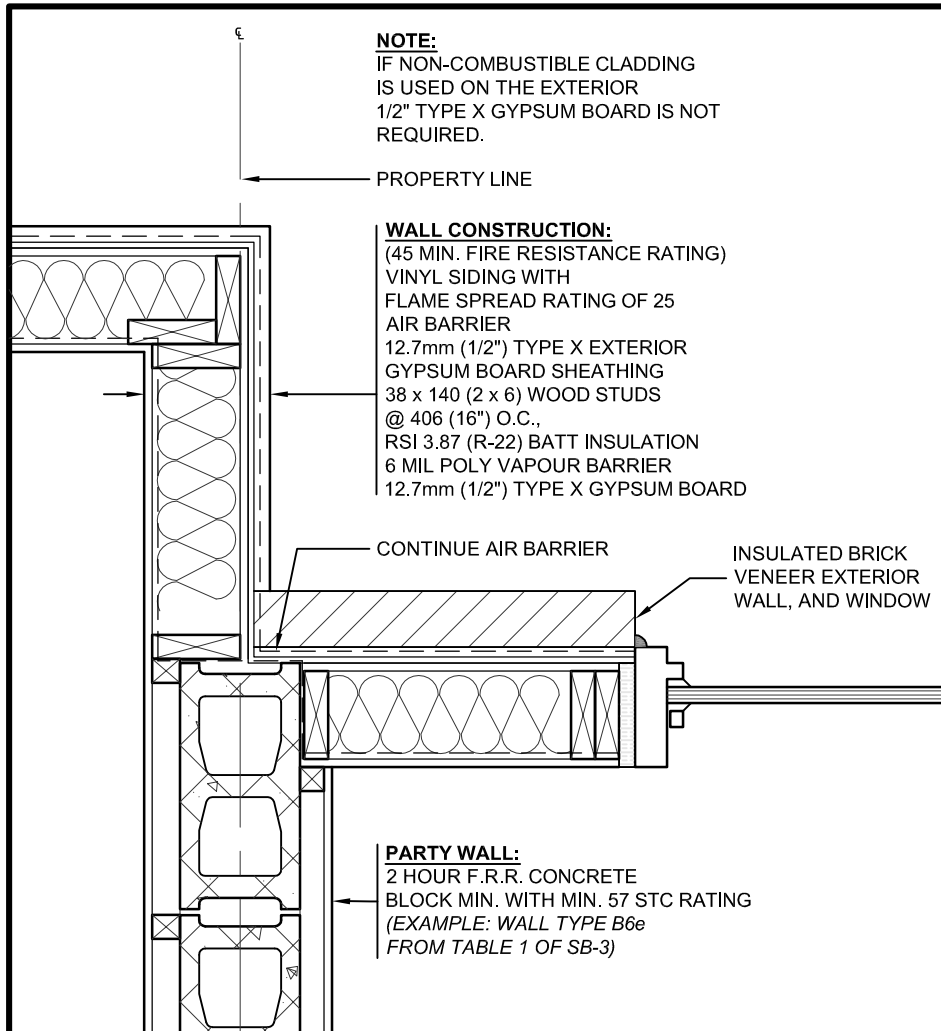
(iv) not exceed 2 mm in thickness exclusive of fasteners, joints and local reinforcements, or

(c) the wall assembly shall comply with Clause 3.1.5.5.(1)(b) when tested in conformance with CAN/ULC-S134, “Standard Method of Fire Test of Exterior Wall Assemblies”.

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 (3/32 in) thick and is installed over sheathing paper and 12.7 mm (½ in) exterior gypsum sheathing. Vinyl sidings meeting the above requirements have been tested and are labeled. Refer also to Builder Tip No. 40.



PLAN DETAIL