



## BXUVC.M516 Fire-resistance Ratings

[Page Bottom](#)

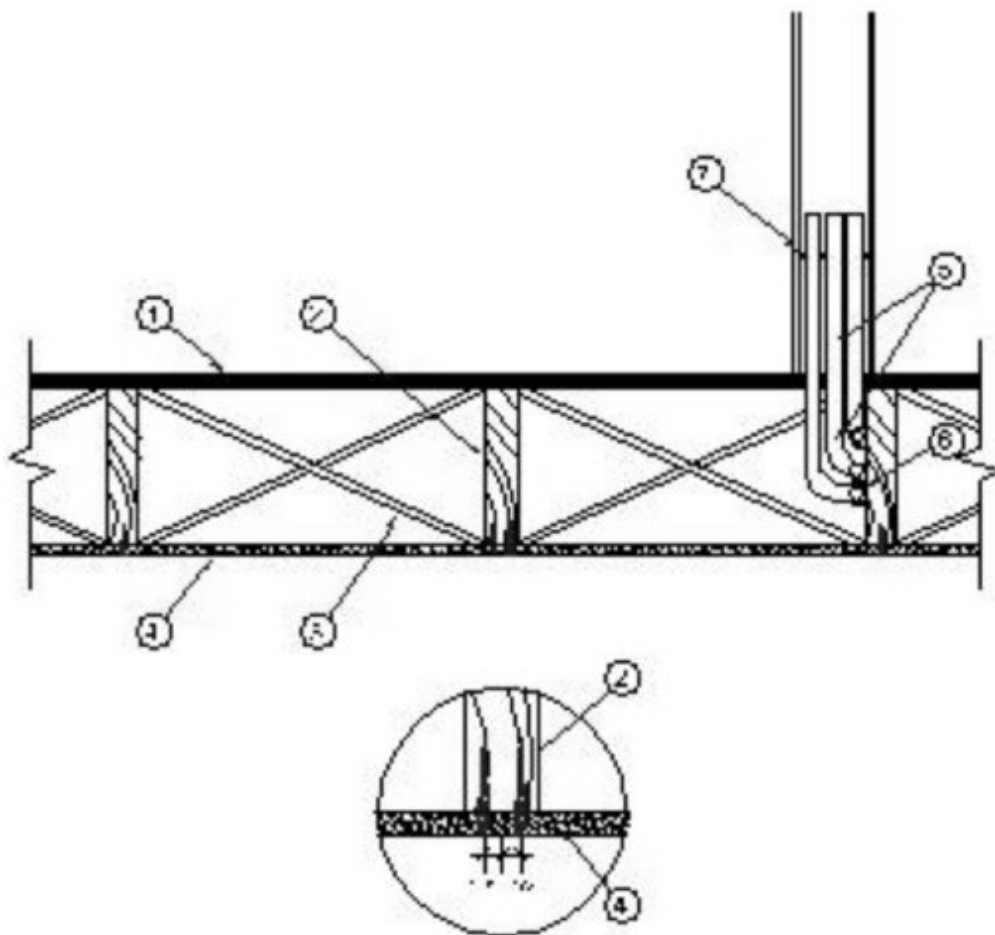
### Fire-resistance Ratings

[See General Information for Fire-resistance Ratings](#)

## Design No. M516

January 30, 2013

**Unrestrained Assembly Rating - 1 h**



**Combustible Construction**

**(Finish Rating - 27 minutes)**

1. **Flooring System** — The flooring system shall consist of one of the following:

- (a) **Subflooring** — Minimum 12 mm thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.
- (b) **Vapor Barrier** — Nominal 0,25 mm thick commercial rosin-sized building paper.
- (c) **Finish Flooring** — Minimum 15 mm thick plywood, minimum grade "Underlayment" or "Single Floor". Face grain of plywood to be perpendicular to the joists with joints staggered.

2. **Wood Joists** — Minimum 38 mm by 235 mm, spaced 406 mm OC and effectively firestopped in accordance with the Building Code.

3. **Cross Bridging** — Minimum 19 mm by 64 mm or minimum 38 mm by 235 mm solid blocking.

■ 4. **Gypsum Board** — (CKNXC). 15.9 mm thick, 1220 mm wide gypsum board installed with long dimension perpendicular to joists with end joints located under bottom of joists. End joints in adjacent rows shall be staggered on adjacent joists. Gypsum board secured with 8d cement coated common nails spaced 150 mm OC along the edges and in the field. Nails located 13 mm from butted end joints.

**CGC INC** — Types C, AR, WRC.

■ 5. **Non-Metallic Plumbing Components** — (CEYDC). Nominal 6mm, 10 mm, 13mm, 16mm, 19mm, 25 mm, 32 mm, 38 mm and 50 diameter tubing attached to joists with plastic, steel or copper hangers (Item 6), spaced maximum 1015 mm OC. The minimum spacing between the bottom of tubing and the top or backside of the gypsum board shall be 75 mm. The tubing shall penetrate the floor through a sill plate and into a stud cavity of a wall. The maximum amount of tubing shall be 0.31 kg of tube per meter length of joist cavity.

**BOW PLASTICS LTD** — Types SuperPex, Oxypex, Bow CPVC FlowGuard Gold, Bow Superflo CPVC

**HEATLINK GROUP INC** — Types Purelink PEXa, Heatlink PEXa, Purelink Plus

**IPEX INC** — Type CPVC AquaRise

**REHAU CONSTRUCTION L L C** — Types RaupeX Non-barrier PE-Xa, RaupeX O2-barrier PE-Xa, RaupeX UV-Shield PE-Xa, MUNICIPEX

**VANGUARD PIPE & FITTINGS LTD** — Types Vanex, CanPLUMB, CanPEX, CanFLEX, Vanex Plus, Vanex BPEX, Vanex Barrier, CanRAY, Vanex/ViegaPex Ultra, Canpex UV Plus and Canpex UV+

6. **Fasteners** — Nominal 12 mm to 25 mm wide perforated steel or copper straps, or steel or copper U or C shaped brackets with a radius conforming to the outer circumference of the tube to be supported. Plastic fastener supplied by tubing manufacturer may also be used. Fasteners to be nailed to the wood joists using minimum 25 mm long nails.

■ 7. **Fill Void or Cavity Material - Sealant** — (XHJZC). Minimum 10 mm thickness of fill material applied within the annulus, flush with top surface of the sill plate. Prior to the application of the sealant, 10 mm thickness of 64 kg/m<sup>3</sup> mineral wool insulation shall be installed in the annular space and recessed by 10 mm from the top surface of the sill plate. Maximum annular space between tube and edge of opening shall be 6 mm. Tubing (Item 5) intended as a process or supply plumbing component.

**3M COMPANY 3M FIRE PROTECTION PRODUCTS** — Type CP 25W+.

8. **Finishing System** — (Not shown) —Joint compound, applied in two coats to joints and nail-heads. Nominal 50 mm wide paper tape embedded in first layer of compound over all joints.

Last Updated on 2013-01-30

[Questions?](#)

[Print this page](#)

[Terms of Use](#)

[Page Top](#)

Copyright © 2013 Underwriters Laboratories of Canada Inc.

When the UL Leaf Mark is on the product, or when the word "Environment" is included in the UL Mark, please search the [UL Environment database](#) for additional information regarding this product's certification.

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under ULC's Follow-Up Service. Only those products bearing the ULC Mark should be considered to be Listed and covered under ULC's Follow-Up Service. Always look for the Mark on the product.

ULC permits the reproduction of the material contained in the ULC Online Directories subject to the following conditions: 1. The Guide Information, Designs and/or Listings (files) must be presented in their entirety and in a non-misleading manner, without any manipulation of the data (or drawings). 2. The statement "Reprinted from the ULC Online Directories with permission from Underwriters Laboratories of Canada Inc." must appear adjacent to the extracted material. In addition, the reprinted material

must include a copyright notice in the following format: "Copyright © 2013 Underwriters Laboratories of Canada Inc."

An independent organization working for a safer world with integrity, precision and knowledge.

