

## Builder Tip

Issue No: 16 Issued May 1996 Revised March 2015 Updated to 2012 Building Code

## **ELECTRICAL WIRES AND CABLES**

## ONTARIO BUILDING CODE

- 3.1.4. Combustible Construction
- 3.1.4.3. Wires and Cables (See Appendix A)
- 3.1.5. Noncombustible Construction
- 3.1.5.18. Wires and Cables
- 3.1.5.21. Wires in Computer Room Floors
- 3.6.4.3. Plenum Requirements
- 9.34.1.5. Wiring and Cables

## **OBJECTIVE**

The Ontario Building Code requires electrical wires and cables with combustible insulation jackets or sheathing to be tested in conformance with CSA C22.2 No. 0.3 "Test Method For Electrical Wires and Cables" Standard.

The most common cables used in computer room floors and ceiling plenums are marked FT1, FT4, and FT6, which are referenced in the Building Code. Many other cables with markings CMH, MPG, CMG, MPP and CMP are being used more often for use in the above applications. These cables are tested to CSA C22.2 No. 0.3 and referenced in the Standard CSA C. 22.2 No. 214-94. The accompanying table describes the most commonly used cables and wires and their permitted use in a building or type of building.

	TYPE OF BUILDING CONSTRUCTION	LOCATION IN THE BUILDING	CABLE SUBSTITUTE	ALTERNATIVE TO FT RATING
F T 1	Combustible and Noncombustible Construction	Anywhere in the building, except in ceiling plenums	FT4, FT6, MPP, CMP, MPR, CMR, MPG, CMG, MP, CM, CMX, or CMH	Located in totally enclosed non- combustible raceways, concealed spaces in walls or concrete slabs
		Communication cables in computer floors		No alternatives
F T 4	Noncombustible Construction	Anywhere in the building, including computer room floors	FT6, MPP, CMP, MPR, CMR, MPG, or CMG	Located in totally enclosed noncombustible raceways, concealed spaces in walls, concrete slabs or 1 hour fire separated service room.
F T 6	Combustible and Noncombustible Construction	Concealed space between ceiling and floor or ceiling and roof used as a plenum	FT6, MPP or CMP	FT4 for single conductor electrical wire and cables. Located in totally enclosed noncombustible raceways