



Electrical Wires and Cables

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

3.1.4. Combustible Construction

3.1.4.3. Wires and Cables (See Appendix A)

3.1.5. Noncombustible Construction

3.1.5.21. Wires and Cables

3.1.5.25. Wires in Computer Room Floors

3.6.4.3. Plenum Requirements

9.34.1.5. Wiring and Cable

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. 21494. The accompanying table describes the most commonly used cables and wires and their permitted use in a building or type of building.

[Cable Standards Reference Guide - Conwire](#)



	TYPE OF BUILDING CONSTRUCTION	LOCATION IN THE BUILDING	CABLE SUBSTITUTE	AFTERNATE TO FT RATING
F T 1	COMBUSTIBLE AND NONCOMBUSTIBLE CONSTRUCTION	ANYWHERE IN THE BUILDING, EXCEPT IN CELING PLENUMS	FT4, FT6, MPP, CMP, MPR, CMR, MPG, CMG, MP, CM, CMX, OR CMH	LOCATED IN TOTALLY ENCLOSED NON-COMBUSTIBLE RACEWAYS, MASONRY WALLS OR CONCRETE SLABS
		COMMUNICATION CABLES IN COMPUTER ROOMS		NO ALTERNATIVES
F T 4	NONCOMBUSTIBLE CONSTRUCTION	ANYWHERE IN THE BUILDING, INCLUDING COMPUTER ROOM FLOORS	FT6, MPP, CMP, MPR, CMR, MPG, OR CMG	LOCATED TO TOTALLY ENCLOSED NON-COMBUSTIBLE RACEWAYS, MASONRY WALLS, OR CONCRETE SLABS.
F T 6	COMBUSTIBLE AND NONCOMBUSTIBLE CONSTRUCTION	CONCEALED SPACE BETWEEN CEILING AND FLOOR OR 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.