

Communications Cabling Policy

Wisconsin Department of Administration Division of Facilities Development (DFD)

11/07/16

I. General

This policy applies to all Division of Facilities Development (DFD) projects.

Communications cabling, including copper twisted pair, coaxial, and fiber optic cables installed within State buildings shall meet or exceed listing requirements of the National Electrical Code (NEC) Article 800 or 770 as applicable for the cable type(s) specified. Cable listing categories include General Purpose (e.g. CM, OFN), Riser (e.g. CMR, OFNR) and Plenum (e.g. CMP, OFNP). Cable construction and materials shall be as required to meet the specified listing.

All cabling shall be UL listed.

II. Determination of Cable Listing Requirements

Listing requirements for communications cabling on DFD projects depends on the cable path and the degree of certainty in identifying ducts, plenums and other spaces used for environmental air through which the cable may pass.

1. All cables installed in vertical runs and penetrating one or more floor, or cables installed in vertical runs in a shaft shall be listed as "Riser" (e.g. CMR, OFNR) or permitted substitutes and installed per NEC Articles 800 or 770, as applicable. Such cables which also may pass through a plenum space shall comply with the requirements which follow.
2. In a building where plenum spaces are widespread, all communications cables (except those solely in a riser) shall be rated for installation in a plenum unless they are installed in steel conduit.
3. In a building with limited plenum spaces and those spaces can all be accurately identified:
 - a. Communications cables listed as General Purpose or Riser (or permitted substitutes) can be used in identified non-plenum spaces so long as none of the cable route passed through a plenum space.
 - b. Communications cables listed as General Purpose or Riser can be used in plenum spaces if they are encased in steel conduit.
 - c. Communications cables passing through any plenum space and not encased in steel conduits, must be plenum rated for their entire length.
4. In a building with even minimal plenum spaces, but where all such spaces cannot be accurately identified, all communications cabling must be listed for installation in a plenum (e.g. CMP, OFNP, CATVP).
5. In a building confirmed as having no plenums air-return spaces, all communication cables can be listed as General Purpose or Riser (as applicable) or permitted substitutes.

III. Identification of Plenum Spaces

Responsibility for the identification of plenum spaces depends on the nature of the project.

1. For a new building(s), the identification of all plenum spaces is the responsibility of the Mechanical Systems (HVAC) consultant. The mechanical consultant, electrical and communications consultants, and the project Architect/Engineer are to insure that such spaces are clearly identified on the project electrical and telecommunications bid drawings.
2. For an existing building(s), the project Architect/Engineer is responsible for identifying the location of all plenum spaces and clearly identifying them on the project electrical/communications drawings.
3. For an existing building(s) where a State agency is installing cabling, identification of plenum spaces is the responsibility of a staff Architect/Engineer or HVAC tradesperson in responsible charge of health and safety issues related to the building.
