

SECTION 27 05 29
HANGERS AND SUPPORTS FOR COMMUNICATIONS SYSTEMS

Part 1 General

1.1 Summary

1.1.1 This section shall govern the products and installation of hangers and supports for communications systems.

1.2 Related Documents

1.2.1 The latest versions of the following codes, standards, and guidelines shall be followed. Bring to the immediate attention of CCS if construction documents or conditions differ from requirements in codes, standards, guidelines and specifications.

1.2.2 The following codes, as required by law:

Ontario Electrical Safety Code (OESC)

Ontario Building Code (OBC)

1.2.3 The following standards:

TIA-569-C Commercial Building Standard for Telecommunications Pathways and Spaces

NECA/BICSI-568-2006, Standard for Installing Commercial Building Telecommunications Cabling

1.2.4 The following best practices:

BICSI, Telecommunications Distribution Methods Manual (TDMM)

BICSI, Information Transport Systems Installation Methods Manual (ITSIMM)

Part 2 Product

2.1 Non-Continuous Supports (J-Hooks/Cable Hooks)

2.1.1 Cable hooks shall:

1. Be listed by a NRTL for installation into a plenum space.

2. Be specifically designed for telecommunications cables.

3. Bear a surface of sufficient width to comply with required bend radii of high Performance cables

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4. Have flared edges to prevent damage while installing cables.
 5. Include a top latch to keep cable within the hook. The cable retainer strap shall be removable and reusable for use in air handling spaces.
- 2.2 Manufacturer shall be:
1. Erico, Cablecat Series
 2. Panduit, J-Pro Series
 3. Or approved equivalent

Part 3 Execution

- 3.1 General
- 3.1.1 Follow all manufacturers' instructions.
 - 3.1.2 Coordinate with all other trades prior to installation.
 - 3.1.3 All telecommunications cabling not routed through conduit or cable tray shall be supported every 60" or less.
 - 3.1.4 Telecommunications cables shall not be supported by any other trades, and shall be fully-supported by independent methods.
- 3.2 Non-Continuous Supports (J-Hooks/Cable Hooks)
- 3.2.1 Cable hooks shall not be supported by ceiling grid support wires.
 - 3.2.2 Where support wires are used, independent support wires shall be attached to the structural ceiling (above floor deck) on one end and to the suspended ceiling grid on the other end. The prior is meant to carry the load, the latter is meant to act as a "sway control".
 - 3.2.3 Size cable hooks to allow for a maximum of 25% capacity to facilitate future installation of cables.
 - 3.2.4 Cable hooks shall be installed such that cable slack between supports is a minimum of 6" above ceilings.
 - 3.2.5 Where telecommunications cabling is being supported with cable hooks, provide a cable hook at every change in direction.
 - 3.2.6 Cable hooks shall be installed in a conveniently accessible location.
 - 3.2.7 Identify to site supervisor, and resolve issues with any location where cable pathways fail to meet separation clearances as detailed in this document, prior to start of cable path installation.
 - 3.2.8 Maintain the following clearances from electrical and heat sources when installing J-Hooks for data/telephone cables.

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Item	Minimum Separation Distances		
	(<2kVA)	(2-5kVA)	(>5kVA)
Unshielded power lines or electrical equipment in proximity to open or non-metallic pathway.	127 mm (5"(in))	305 mm (12"(in))	610 mm (24"(in))
Unshielded power lines or electrical equipment in proximity to a grounded metal conduit pathway.	64 mm (2.5"(in))	152 mm (6"(in))	305 mm (12"(in))
Power lines enclosed in a grounded metal conduit (or equivalent shielding) in proximity to a grounded metal conduit pathway.	---	76 mm (3"(in))	152 mm (6"(in))
Motors	1.2 m (4'-0")		
Transformers	1.2 m (4'-0")		
Conduit and cables used for electrical distribution less than 1kV	0.3 m (1'-0")		
Conduit and cables used for electrical distribution greater than 1kV	1.0 m (3'-0")		
Fluorescent Luminaires	300 mm (12")		
Pipes (gas, oil, water, etc.)	120 mm (5")		
HVAC (equipment, ducts, etc.)	150 mm (6")		
Coax (CATV/CCTV)	Separate conduits or metallic divider in cable tray (do not run Cat6A and coax in same pathways)		

End of Section 27 05 29