- (3) Fire alarm cables Part III of Article 760
- (4) Optical fiber cables Part V of Article 770
- N 722.10 Hazardous (Classified) Locations. Class 4 cables shall be permitted to be used in hazardous (classified) locations where specifically permitted by other articles of this Code.
- N 722.12 Uses Not Permitted. Class 4 cables shall not be permitted for any applications that are not part of a Class 4 system.

Exception: Use of Class 4 cable for other applications shall be permitted if the cable has been listed as suitable for the other applications.

N 722.21 Access to Electrical Equipment Behind Panels Designed to Allow Access. Access to electrical equipment shall not be denied by an accumulation of cables that prevents removal of panels, including suspended ceiling panels.

Excess accumulation of wires and cables, often due to improper installation, can limit access to electrical equipment by preventing the removal of access panels and ceiling tiles. To safely service, rearrange, or install electrical equipment, the worker must have an accessible work space. See Exhibit 722.1.

## See also

**300.11(B),** which permits the use of support wires and approved fittings that are independent of the suspended ceiling support wires

## N 722.24 Mechanical Execution of Work.

N (A) General. Cables shall be installed in a neat and workmanlike manner. Cables installed exposed on the surface of ceilings and sidewalls shall be supported by the building structure in such a manner that the cable will not be damaged by normal building use. Such cables shall be secured by hardware, including straps, staples, hangers, listed cable ties identified for securement and support, or similar fittings, designed and installed so as not to damage the cable. The installation shall conform to 300.4 and 300.11.

A bushing shall be installed where cables emerge from raceway used for mechanical support or protection in accordance with 300.15(C).

Nonmetallic cable ties and other nonmetallic cable accessories used to secure and support cables in other spaces used for environmental air (plenums) shall be listed as having low smoke and heat release properties in accordance with 300.22(C).

Informational Note No. 1: See NFPA 90A-2021, Standard for the Installation of Air-Conditioning and Ventilating Systems, for discrete combustible components.

Informational Note No. 2: Paint, plaster, cleaners, abrasives, corrosive residues, or other contaminants could result in an undetermined alteration of cable properties.

Cable must be attached to or supported by the building structure by cable ties, straps, clamps, hangers, and so forth.

The installation method must not damage the cable. In addition, the location of the cable should be carefully evaluated to ensure that activities and processes within the building do not cause damage to the cable. See Exhibit 722.1.

Section 300.4(D) requires protection of cables that are installed on or in framing members. Such cables are required to be installed in a manner that protects them from nail or screw penetration. This section permits attachment to baseboards and non-load-bearing walls, which are not structural components.

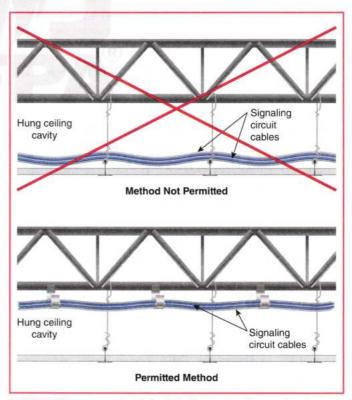
**N(B)** Support of Cables. Cables shall not be strapped, taped, or attached by any means to the exterior of any conduit or other raceway as a means of support.

Exception No. 1: Class 2 circuit conductors or cables shall be permitted to be installed as permitted by 300.11(C)(2).

Exception No. 2: Overhead (aerial) spans of optical fiber cables shall be permitted to be attached to the exterior of a raceway-type mast intended for the attachment and support of such cables.

N(C) Circuit Integrity (CI) Cable. Circuit integrity (CI) cable shall be supported at a distance not exceeding 610 mm (24 in.). Cable shall be secured to the noncombustible surface of the building structure. Cable supports and fasteners shall be steel.

N722.25 Abandoned Cables. The accessible portion of abandoned cables shall be removed. Where cables are identified



**EXHIBIT 722.1** Incorrect cable installation (upper diagram) and correct method (lower diagram).