



**February 15, 2022**

Please be advised that BICSI has recently published a technical change to the Information Technology Systems Installation Methods Manual (ITSIMM), 8<sup>th</sup> edition.

The change is to Chapter 5's Table 5.1 on page 5-7. It is clearly marked with a revision bar to the immediate right of the change, and the date of the change is in the footer at the bottom of the page. Table 5.1 has been revised to correct cable pulling tension values, and add additional applicable cable types with related maximum tensile load during installation and minimum bend radii both during and post-installation. The ITSIMM 8<sup>th</sup> edition curriculum has also been updated to reflect this change, as well as the exam database. Please print the page and insert it into your existing manual.

Because the ITSIMM 8<sup>th</sup>'s pages are double-sided, there are two pages in this erratum. The second page does not have changes, but please print both pages as one double-sided page. This will allow you to do a page-for-page changeout in your manual (we want you to be able to pull out your old double-sided page and replace it with the new double-sided page, in this case page 5-7 and 5-8).

If you have any questions, please e-mail me at [chammersley@bicsi.org](mailto:chammersley@bicsi.org).

Thank you:

A handwritten signature in black ink that reads "Clarke W. Hammersley".

Clarke W. Hammersley  
BICSI Director of Publications

**Installation Planning, continued**Table 5.1  
Cable bend radii

Cable type and installation details	Maximum tensile load (during installation)	Minimum inside bend radii while subjected to	
		Maximum tensile load (during installation)	No tensile load (after installation)
Inside plant cable with 2 or 4 fibers installed in Cabling Subsystem 1	220 N (50 lbf)	50 mm (2 in)	25 mm (1 in)
Inside plant cable with more than 4 fibers	Per manufacturer	Twenty times the cable outside diameter	Ten times the cable outside diameter
Indoor/outdoor cable with up to 12 fibers	1335 N (300 lbf)	Twenty times the cable outside diameter	Ten times the cable outside diameter
Indoor/outdoor cable with more than 12 fibers	2670 N (600 lbf)	Twenty times the cable outside diameter	Ten times the cable outside diameter
Outside plant cable	2670 N (600 lbf)	Twenty times the cable outside diameter	Ten times the cable outside diameter
Drop cable installed by pulling	1335 N (300 lbf)	Twenty times the cable outside diameter	Ten times the cable outside diameter
Drop cable installed by directly buried, trenched, or blown into ducts	445 N (100 lbf)	Twenty times the cable outside diameter	Ten times the cable outside diameter
Balanced twisted-pair copper cable (includes both 4-pair category and multi-pair [e.g., 25-pair] premise cable types)	110 N (25 lbf)	Twenty times the cable outside diameter	Ten times the cable outside diameter
Flexible coaxial cable	Per manufacturer	Ten times the cable outside diameter	Six times the cable outside diameter
Semi-rigid coaxial cable	1440 N (324 lbf)	Ten times the cable outside diameter	Five times the cable outside diameter

NOTE: Cable manufacturers may state pulling and bending radii requirements that differ from the information provided above. The ICT installer should always verify and observe the manufacturer's requirements for any particular cable type prior to installation and follow the most restrictive values provided.

The minimum cable bend radius must be verified prior to determining which tools will be needed on the job as additional tools may be required to maintain the proper radius during the pull (e.g., pulleys, wheels, additional personnel).

## Safety Procedures

The safety of everyone involved is important, including the building occupants, cabling team members, and other contractors on the work site.

Installers must participate in their company safety programs, follow company policies and practices, and be capable of providing basic first aid. To help ensure a safe installation, the cable puller must follow safety procedures in several areas.

NOTE: See Chapter 3: Safety and Professionalism for more detailed information.

Communication with coworkers is an essential part of every cable placement. Each person involved in the pull should have a designated responsibility. Everyone should be prepared to alert the person in charge of pulling the cable about possible safety concerns, problems, and situations that are wasting time or materials.

In this instance, communication consists of two major components—the means to communicate (e.g., radios, intercoms, other electronic devices) and a commonly understood set of commands.

Terms such as “back,” “forward,” and “the other way” can mean different things to people standing apart on a work site. Ensure that the placement crew agrees upon a standard set of commands, the methods to be employed, and the responsibility of each person for communications.

### Clear Designation of Work Areas

Before work begins, it is important to secure the area to restrict access to authorized personnel only. Safety cones, yellow tape, and folding A-frame signs may be used for this purpose. If the area of work is near a door or hallway corner, the markers should give oncoming pedestrians adequate warning of a hazard. In addition, work areas should never be left unattended if they present a hazard (e.g., floor systems, ceiling systems with open access panels or equipment). Remove caution markers as soon as the work is complete. If the markers are left and people realize the work is finished, the warnings may be ignored. This could cause an accident in the future when a real danger exists.

### Proper Use of Tools and Equipment

All tools must be examined regularly to ensure that they are in safe working condition. Cabling installation involves a variety of tools and equipment that prevent safety risks. To help prevent accidents, manufacturers require users to be certified for use of certain tools (e.g., powder-actuated tools). However, even a simple tool can present a safety risk. For example, hand tools must be checked to ensure that wooden or plastic handles are free of splinters, sharp-edged cuts, or other surface damage that could injure an installer’s hand.

IMPORTANT: Carefully follow the manufacturer’s instructions when mounting, securing, and using potentially dangerous mechanical equipment for cable pulling (e.g., tuggers, cable wheels, cable brakes). Do not set up or operate this equipment without first receiving adequate training.