

RPDpass® Installation Practices

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005-014 Instruction, Intrabuilding Installation of Fiber Optic Cable

005-065 Instruction, Corning ClearCurve® Rugged/Compact Drop Cable

1. General

This document describes the procedure for handling Corning RPDpass® indoor multidwelling unit (MDU) cable assembly (Figure 1). Specifically the document addresses packaging, placement, cable assembly load into hardware, cable access, and preparation for termination and testing.

These instructions are intended as guidelines only, as each installation will be influenced by local conditions and customer requirements. The installer should be experienced with the basics of fiber optics.

As with any fiber optic cable installation, proper planning is of paramount importance. Fiber optic cable installers must always follow the following basic cable placement considerations:

- Ensure there is sufficient slack in the system. The amount of slack as well as slack location will be dependent upon individual system designs.
- Monitor tension — since this product is hand placed, do not exceed 25 lb tension in either pulling the pre-connectorized end or the raw cable end.
- Do not exceed the bend radius — RPDpass indoor MDU cable assemblies have ClearCurve® fiber and the 6 fiber and 12 fiber cable structure can be coiled as low as 0.5-in diameter.

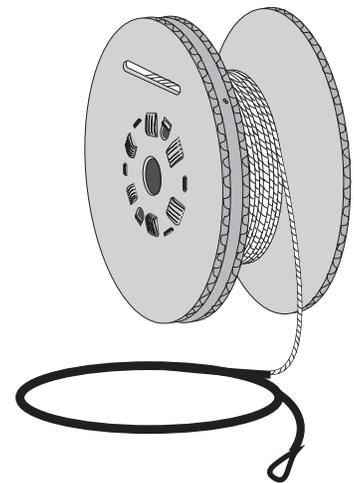


Figure 1

2. Precautions

This section provides safety precautions which should be observed when working with RPDpass indoor MDU cable assemblies. These practices may change, or may not be suitable in a specific situation, and so are suggested guidelines only. Your company’s safety precautions and practices take precedence over any conflicting recommendations given in this document.



CAUTION: Before starting any cable installation, all personnel must be thoroughly familiar with all applicable Occupational Safety and Health Act (OSHA) regulations, the National Electrical Safety Code (NESC), state and local regulations, and company safety practices and policies. Failure to do so can result in life-threatening injury to employees or the general public.



WARNING: To reduce the chance of accidental injury:

- a) All personnel involved in the cable placement must be thoroughly familiar with the operation of any equipment and construction apparatus being used.
- b) Inspect all equipment (ladders, etc.) for defects and replace if found in unsound condition.
- c) Use only company-approved equipment for lighting, heating, and other operations.
- d) Arrange or secure any material on a ladder so that it cannot fall. Materials and equipment should not unnecessarily impede pedestrian traffic.



WARNING: Never look directly into the end of a fiber that may be carrying laser light. Laser light can be invisible and can damage your eyes. Viewing it directly does not cause pain. The iris of the eye will not close involuntarily as when viewing a bright light. Consequently, serious damage to the retina of the eye is possible. Should accidental eye exposure to laser light be suspected, arrange for an eye examination immediately.



WARNING: DO NOT use magnifiers in the presence of laser radiation. Diffused laser light can cause eye damage if focused with optical instruments. Should accidental eye exposure to laser light be suspected, arrange for an eye examination immediately.

3. Tools and Materials

The following tools and materials are required for this procedure:

- Scissors
- Electrical vinyl tape
- #10 screw
- Black pulling mesh (provided with product)
- Pull line
- Cable termination tools if connectorizing the living unit ends

4. Planning and Preparation

Prior to placing the RPDpass® MDU cable assembly inside the building:

- Conduct a survey of the cable route.
- Inspect the wall penetrations and conduit and ensure a pull line is placed.
- Verify that the molding system is installed to support the cable assembly.
- Check work prints and ensure that the proper length, count is installed per floor.

5. RPDpass MDU Cable Assembly Packaging

The cable assembly is packaged with plastic recyclable reels and comes in lengths of 50 to 500 ft on a reel. The pre-connectorized ends are on top of the reel and are housed inside of protective pulling mesh grip.

6. Cable Assembly Installation

Step 1: Position the reel in the hallway outside the telecommunications closet.

Step 2: Tie the pull-line onto the black mesh pulling grip of the cable assembly.

Step 3: Coordinate the hand pulling of pre-connectorized end into the closet and to the fiber distribution terminal — pull sufficient slack to store the cable and assemblies inside the hardware, typically ~ 5 ft.

Step 4: If the FDT is mounted, remove the electricians tape from the black mesh pulling grip and save to secure the raw end of the cable. If not, route into the room and store the assembly on the wall in safe keeping in preparation to load.

Step 5: Load the connectors into the appropriate connector field of the terminal.

Step 6: Pay the reel down the hallway and lay it inside the molding system.

NOTE: *If multiple cable assemblies are required per floor, ensure the correct count is placed in the correct molding system per the work order print.*

Step 7: Upon reaching the last living unit, pull enough slack to reach at least 10 ft past the unit.

Step 8: Take the left over black mesh pulling grip and slide over the raw end of the cable. Pull with enough force to remove the slack in the molding system and secure to the inside of the molding system track.

Step 9: Reclose all molding system components.

7. Cable Termination at Living Unit

Step 1: Check the work print and determine which fiber is to service the living unit.

Step 2: Inspect the molding system and look for the connector adapter or follow company guidelines on where to position the SCAPC adapter. (Typically, it will be over the door.)

Step 3: From this location, mark the cable with electrical tape and mark again 8 ft down the field side.

Step 4: Using a pair of scissors, cut the polyester binders one at a time at the field side end and push back to the CO side tape.

NOTE: *There are two binders wrapped clockwise and counter clockwise around the bundle.*

Step 5: At the field side end, cut the appropriate number unit, unwind and bring to the floor for termination.

Step 6: Follow the appropriate termination method to place an SCAPC connector onto the cable end.

Step 7: Route into the SCAPC adapter inside the molding or inside the Adapter housing.

8. Post Installation/Inspection

Step 1: Perform a walk through to ensure that the molding system is properly closed and secure.

Step 2: Inspect the fiber distribution terminal and ensure that the connectors from the RPDpass® MDU cable assembly are connected to the appropriate ports and are to the work print drawings.

Step 3: Remove of all spent plastic reels and dispose of properly.

9. Optical Testing

- Follow company guidelines to assure that the horizontal plant is installed to specification.
- Typically, one-way OTDR traces taken at 1310 nm and 1550 nm from the terminal out will measure insertion loss and reflectance of the RPDpass MDU cable assembly and will verify continuity to the cable end.