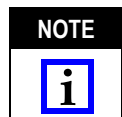


UNDERCARPET COMMUNICATIONS CABLE	LENGTH	PERFORMANCE LEVEL
1499119-1	76 m [250 ft]	Category 5e
1499119-5	30.5 m [100 ft]	
1499539-1	76 m [250 ft]	Category 6
1499539-5	30.5 m [100 ft]	

Figure 1

## 1. INTRODUCTION

Undercarpet 4-pair UTP cables shown in Figure 1 are used in undercarpet communications applications.



*Dimensions in this instruction sheet are in metric units [with U.S. customary units in brackets]. Figures are not drawn to scale.*

To obtain information on AMP NETCONNECT products, call PRODUCT INFORMATION at the number at the bottom of this page, or visit the AMP NETCONNECT website at [www.ampnetconnect.com](http://www.ampnetconnect.com).

Reasons for reissue of this instruction sheet are provided in Section 5, REVISION SUMMARY.

## 2. DESCRIPTION

The cable is provided on a reel that has a hole in the center. The cable unwinds with the printed side of the cable on top. The cable has a wing on each edge with twisted-pair conductors inside a center rib.

## 3. INSTALLATION PROCEDURE

**IMPORTANT:** It is recommended that a qualified technician install the undercarpet communications cable.

AMP NETCONNECT logo is a trademark of TE Connectivity.



*To avoid personal injury, ALWAYS DISCONNECT the electrical power before beginning work on any circuit.*

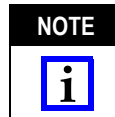
### 3.1. Planning

Before starting installation, understand the following:

- The communications cable should be installed after the power cabling system is installed and just prior to installing the carpet.
- Communications cable runs may cross the power cable top shield; however, the crossing should not occur where the power cable is tapped, spliced, or folded.
- Except at crossings, the communications cable should NOT run on top of the power cable top shield or run closer than 152.4 mm [6 in.] to the power cable top shield.
- DO NOT allow the communications cable to cross other communications cable.
- If possible, routing of the communications cable should be planned to avoid high traffic areas and areas under desk chairs.

### 3.2. Transition Box, Communications Transition Block, and Floor Fitting

Install the transition box, communications transition block, and floor fitting according to the instructions included with the product.



*Instruction sheet included with product is:*  
 408-10336 — Surface Mount Wall Transition Box  
 408-10412 — Flush Mount Wall Transition Box  
 408-3368 — Category 5e Communications Transition Block  
 408-10009 — Category 6 Communications Transition Block  
 408-3179 — Low-Profile Floor Fitting  
 408-8843 — Multimedia Dual Data Kit  
 408-3129 — Conductor Direct Connecting Receptacle (DCR) Kits

### 3.3. Prepare Floor Surface

Level or patch all uneven floor surfaces. Fill in and smooth all holes and cracks, and remove all projections, ensuring a smooth and continuous floor surface. Seal all porous floors.



*The communications cable must be installed onto a clean and level floor surface.*

### 3.4. Communications Cable

1. Cut a notch in the wall to allow the cable to radius to the floor.

2. Flex the wings of the cable while removing the cable from the reel.

3. From the distribution point (wall box or floor fitting), lay the cable on the floor with the printed side of the cable facing up and the bow of the cable pointing up. Refer to Figure 2, Detail A.

If more than two cable runs exit the distribution point, remove the inner wing of each cable, then place the cables side by side. See Figure 2, Detail A.

**NOTE** To remove the inner wing, use Cable Notcher Tool 1725698-1 (available separately) to cut a notch to the groove in the wing; then, flex the wing and tear it back slowly. **DO NOT** cut into the center rib containing the conductors. See Figure 2, Detail B.

4. Place hold-down tape over the cable area. See Figure 2, Detail A.

**NOTE** Hold-Down Tape 553481-1 is available separately.

5. Cross-tape as required along the cable run. Stretch the tape to remove any slack.

**NOTE** Spray Adhesive 553453-1 is available separately and may be used to aid in adhering the tape to the cable and floor surface.

6. If extra protection for the communications cable is desired, install Floor Preparation 554123-[ ] and Top Shield 553536-[ ] according to 408-3150; both are available separately.

**NOTE** The communications cable does not require a top shield or bottom shield; however, local inspection requirements and certain floor finishes are examples where extra protection for the cable would be desirable.

7. If the cable requires directional changes, proceed as follows:

- a. Using Cable Notcher Tool 1725698-1, notch the wings of the cable at 25.4-mm [1.0-in.] intervals. Make sure to remove all notched material. Refer to Figure 3, Detail A.

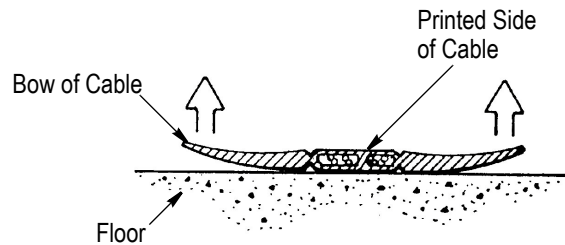
**CAUTION** DO NOT cut into the center rib of the cable containing the conductors.

- b. Bend the cable to form a gradual turn. Refer to Figure 3, Detail B for recommended length and radius. Cover the turn with hold-down tape to blend the profile of the cable at the notches.

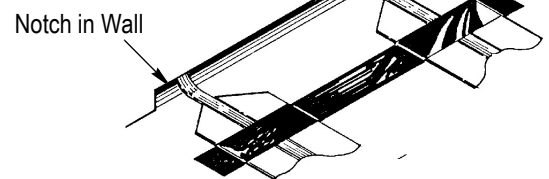
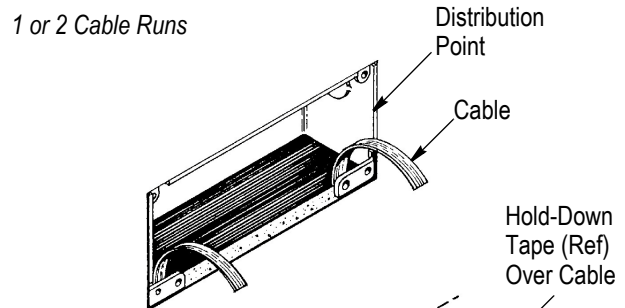
**CAUTION** DO NOT fold the cable. Cable must be notched and cable bends must be gradual.

**Detail A**

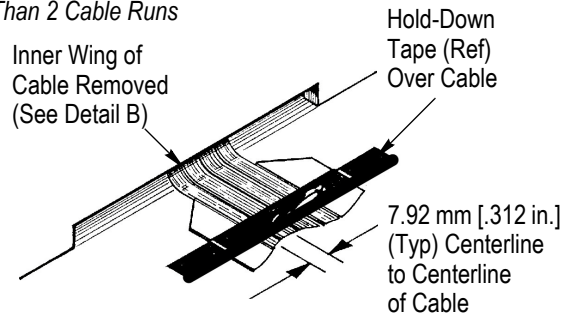
**Orienting Communications Cable**



**Laying Communications Cable**



**More Than 2 Cable Runs**



**Detail B**

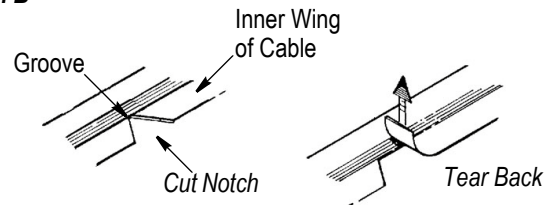
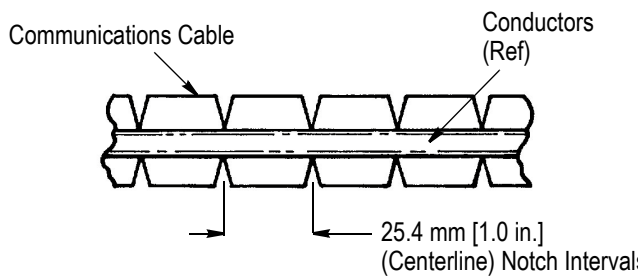


Figure 2

8. Terminate the cable to the transition block and floor fitting outlet according to the instructions included with the product.

**Detail A**



**Detail B**

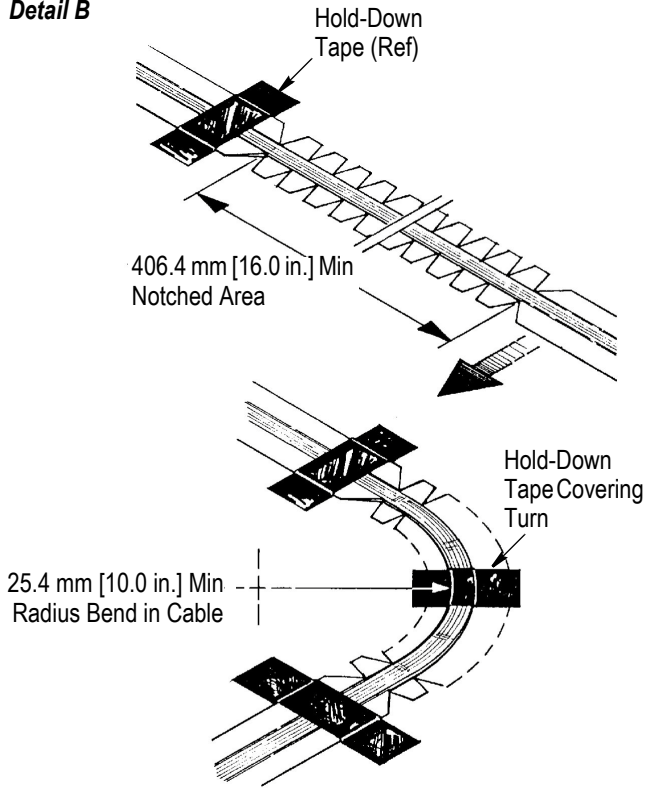


Figure 3

**4. REPLACEMENT AND REPAIR**

The undercarpet communications cable is not repairable. DO NOT use any defective or damaged cable.

**5. REVISION SUMMARY**

Revisions to this instruction sheet include:

- Changed company logo
- Added undercarpet communications cabling, 4-pair, UTP, and cable part numbers to title of instruction sheet
- Removed UL reference from Section 1
- Modified Figures 1 and 4 and Sections 2, 3, and 4 and combined Sections 3 and 4
- Removed Figures 2 and 6
- Added Paragraphs 3.1 and 3.2
- Removed centerline spacing from Figure 2, Detail A
- Replaced Section 5 with Step 6 of Paragraph 3.4