



Fire Barrier

Ultra PPD Plastic Pipe Device

Installation Instructions



These instructions are based on product performance per ASTM E 814 (UL 1479) fire tests. Classified for a maximum 1, 2, and 3 hour rated gypsum wallboard assemblies, 1 and 2 hour floor/ceiling assemblies and up to 3 hour concrete floors and walls by UL for through-penetration firestop device file R9269(N)90G8.

Penetration Firestop Device for 1½, 2, 3, 4 inch (38 mm, 5 cm, 7,6 cm, 10 cm) PVC, ccPVC, CPVC, ABS, ccABS, FRPP, and PVDF Plastic Pipe Through Gypsum, Concrete or Block Walls, Floor/Ceiling and Chase Wall Assemblies. For other plastic pipe types and hourly ratings, consult the current UL Fire Resistance Directory.

1. Examination

- A. Determine if PPD will fit the pipe application and determine the required number of anchors. See Table 1.
- B. Determine if the annular space between the pipe and the edge of the opening is between χ inch (3 mm) and ¼ inch (6 mm). The annular space must be χ inch (3 mm) minimum to allow the Ultra Fast Anchor Strap to slide through. See Alternate Anchor Methods Below. Also, If the annular space is greater than ¼ inch (6 mm), the PPD cannot be used. See UL Fire Resistance Directory for other applications.

- C. Review current UL Fire Resistance Directory for additional application details.

2. Alternate Anchor Methods

- A. If the annular space does not allow for using the Ultra Fast Anchor use one of the following anchor methods.
- B. Gypsum Wall or Floor/Ceiling Assemblies: Secure the PPD to the anchoring surface with steel hollow wall anchors (pullout strength 75 lbs. [16.9 N] minimum) and minimum 1¼ inch (32 mm) diameter steel

washers. Anchor all mounting tabs.

- C. Chase Wall Assemblies: Secure the PPD to the header plate with ¼ inch (6 mm) by 2 inch (5 cm) long steel screws with minimum ¾ inch (19 mm) diameter steel washers. Anchor all mounting tabs.

- D. Concrete Walls of floors: Use traditional masonry fasteners (minimum pullout strength of 75 lbs. [16.9 N]) in all anchor tabs.

3. PPD Installation Using Ultra Fast Anchor Straps (supplied separately)

- A. Assemble PPD and Ultra Fast Anchor Strap. (Figure 1)
 1. Position the PPD with anchor tabs up.
 2. Position the Ultra Fast Anchor Strap with the large end up and the spring tab facing to the outside of the PPD body.
 3. Slide the narrow end of the Ultra Fast Anchor Strap through the stamped slot in the top of body, through fire stop layers, and out bottom slot in the PPD. Install the number of straps required according to Table 1.
- B. Open the PPD and fit around the pipe. (Figure 2)

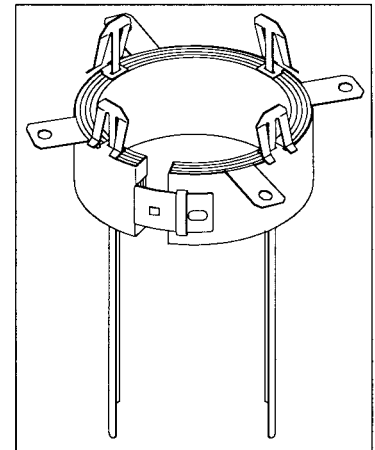


Figure 1: Assemble PPD & Ultra Fast Anchor

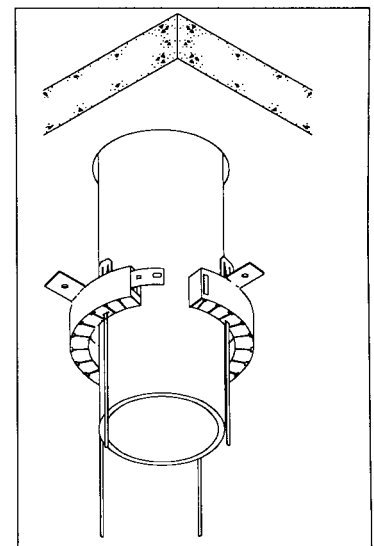


Figure 2: Open PPD and fit around pipe.

Table 1 - PPD Size and Number of Anchors

Plastic Pipe Device	Plastic Pipe Size	Number of Ultra Anchors
1½ inches (38 mm)	1½ inch (38 mm)	2
2 inches (5 cm)	2 inch (5 cm)	2
3 inches (7,6 cm)	3 inch (7,6 cm)	3
4 inches (10 cm)	4 inch (10 cm)	4

C. Close the PPD to the *first* locking position only by sliding the metal tab into the raised belt loop and position the PPD 2 inches (5 cm) from the wall or substrate surface. (Figure 3)

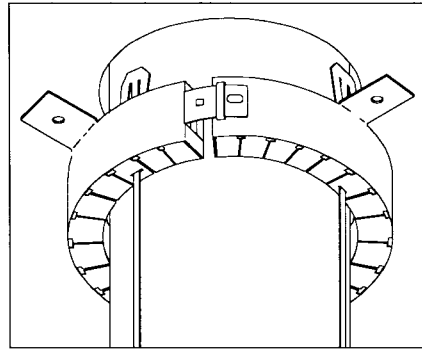


Figure 3: Close PPD to first tab and position

D. Slide the Ultra Fast Anchor Straps through the annular space between the pipe and edge of the opening until they catch the opposite edge of the opening. (Figure 4 & 8)

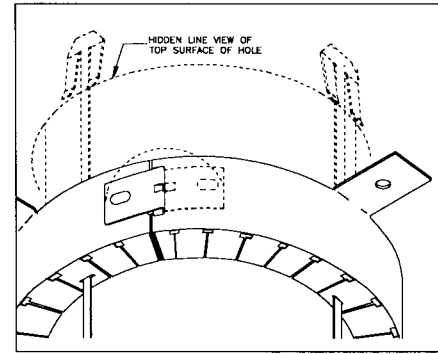


Figure 4: Slide straps through, PPD flush, lock, secure

E. Slide the PPD flush against the substrate surface and close PPD to final locking position on latch, then bend latch tab completely over to secure. (Figure 4)

F. Pull down on Ultra Fast Anchor Straps until spring tab comes in contact with opposite edge of the opening. Using pliers pull anchor strap approximately 1/2 inch (13 mm) and at the same time put a half twist in the strap and then bend the strap over the PPD body. (Figure 5)

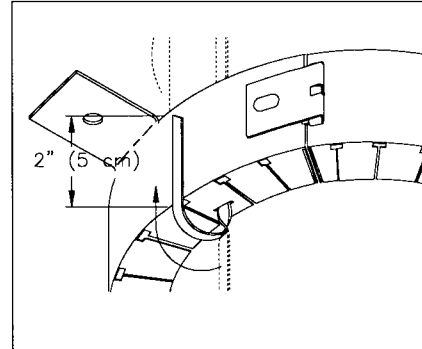


Figure 5: Pull down straps, twist and wrap around

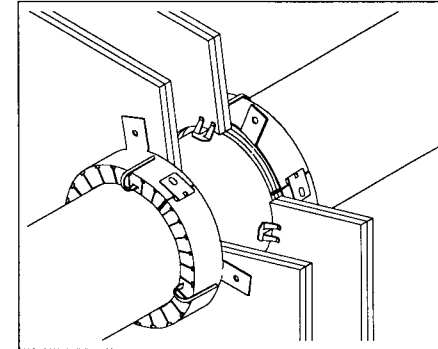


Figure 6: Gypsum wall or hollow CMU application

G. The length of excess strap will vary depending on the thickness of the substrate (ie. gypsum or hollow CMU versus solid concrete). The excess strap can be cut off if desired. Remaining strap length must be a minimum 2 inch (5 cm) after bending the strap over the PPD body. (Figure 5)

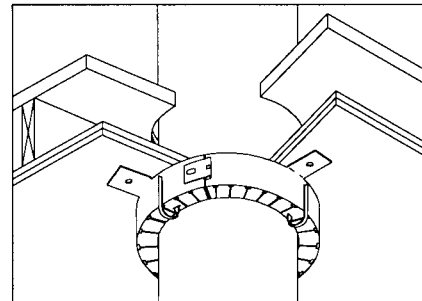


Figure 7: Gypsum floor/ceiling assembly

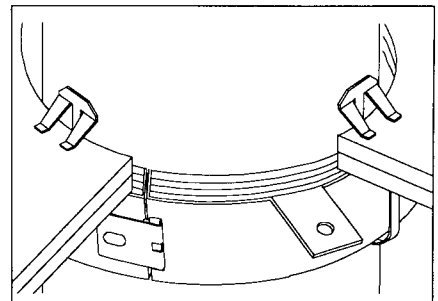


Figure 8: Top view of installed ultra fast anchor strap

4. Wall Applications

A. The PPD must be installed on both sides of a wall. Repeat the above steps to install the second PPD. (Figure 6)

B. The Ultra Fast Anchors cannot be used on solid concrete or solid block walls because the anchors will interfere with installation of the PPD on the opposite side of the wall. Instead, use traditional masonry fasteners (minimum pullout strength of 75 lbs. [16.9 N]) in all anchor tabs.

Important Notice to Purchaser: LIMITATION OF REMEDIES AND LIABILITY: If the 3M product is proved to be defective, THE EXCLUSIVE REMEDY, AT 3M'S OPTION SHALL BE TO REFUND THE PURCHASE PRICE OF OR REPAIR OR REPLACE THE DEFECTIVE 3M PRODUCT. 3M SHALL NOT OTHERWISE BE LIABLE FOR LOSS OR DAMAGES, WHETHER DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO, LOSS OF PROFITS, INVESTMENT, GOODWILL OR BUSINESS OPPORTUNITY), REGARDLESS OF THE LEGAL THEORY ASSERTED, INCLUDING NEGLIGENCE, CONTRACT WARRANTY OR STRICT LIABILITY.

3M

Specified Construction Products Department

3M Center 207-1S-02
St. Paul, MN 55144-1000
(800) 328-1687

MCS 147613
Printed in U.S.A.

© 3M 1998 98-0400-4925-0 July 1998