

Fire Protection Products

3M™ Fire Barrier Cast-In Devices and Adapters

Technical Data Sheet

November / 2021

Product Description

3M™ Fire Barrier Cast-In Devices for Metal Pipes and 3M™ Fire Barrier Cast-In Devices for Plastic Pipes (3M™ MCID, 3M™ PCID) consist of a one-piece plastic body assembly used primarily in new construction. The devices are designed to accommodate concrete floor thicknesses from 2-1/2 in. (64 mm) up to 8 in. (203 mm). 3M™ Fire Barrier Cast-In Devices (3M™ MCID, 3M™ PCID) can accommodate a single or multiple metallic or non-metallic pipe size ranging from nominal 1-1/2 in. (48.3 mm actual) up to 6 in. (168.3 mm actual) diameter.

3M™ Fire Barrier Cast-In Devices (3M™ MCID, 3M™ PCID) can accommodate diverse applications when combined with the following accessories:

3M™ Fire Barrier Cast-In Height Adapter

Accommodates concrete floor thickness greater than 8 in.

3M™ Fire Barrier Cast-In Metal Deck Adapter

Accommodates concrete over fluted metal deck assemblies

3M™ Fire Barrier Cast-In Tub Box Adapter

Accommodates a tub/shower or other plumbing piping assembly in conjunction with the 2 in. MCID or PCID.

Product Features

- Available for plastic and metal pipes
- Adjustable body with the use of pliers
- Accommodates concrete floor thicknesses as thin as 2-1/2 in. (64mm)
- Facilitates pipe installation from top or bottom side
- Red color. Easy to identify as a firestop device
- Color coded caps to allow for identification: black for metal, white for plastic
- Tested in accordance with ASTM E814/UL 1479 and CAN/ULC-S115
- Reduces labor time

Applications

3M™ Fire Barrier Cast-In Devices for Metallic Pipes and 3M™ Fire Barrier Cast-In Devices for Plastic Pipes (3M™ MCID, 3M™ PCID) are used to firestop metallic and non-metallic penetrating items through concrete floor assemblies rated up to 3 Hr.

3M™ Fire Barrier Cast-In Devices (3M™ MCID, 3M™ PCID) may be applied to drain, waste and vented (open) or process/supply (closed) pipe systems. See manufacturer's instruction sheet supplied with each device and reference third party tested and listed systems for exact type of pipes covered and hourly ratings.

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3M™ Fire Barrier Cast-In Place Devices and Adapters

Specifications

Installation shall be in strict accordance with manufacturer's written instructions, as shown on approved shop drawings. When properly installed, these through-penetration firestops prevent the spread of fire, smoke and toxic gases, helping maintain the original fire resistance rating of the construction assembly that has been penetrated.

3M™ Fire Barrier Cast-In Devices shall be used in conjunction with 3M™ Fire Barrier Cast-In Device Adapters. 3M™ Fire Barrier Cast-In Devices and Adapters shall be listed by independent test agencies such as UL, Intertek, or FM and shall be tested under the pass/fail requirements of ASTM E814 (UL 1479) Standard Test Method for Fire Tests of Penetration Firestop Systems or CAN/ULC-S115 Standard Method of Fire Tests of Firestop Systems. Suitability for the intended application should be determined prior to installation.

Performance and Typical Physical Properties

Colors Available Red

Body Material Linear low-density polyethylene (LLDPE)

Device and Accessory Names	Pipe Size	Device for Metal Pipes	Device for Plastic Pipes	Height Adaptor	Metal Deck Adaptor	Tub Box
	2 inch	2MCID	2PCID	2HA	2MDA	2TB
	3 inch	3MCID	3PCID	3HA	3MDA	-
	4 inch	4MCID	4PCID	4HA	4MDA	-
	6 inch	6MCID	6PCID	6HA	6MDA	-

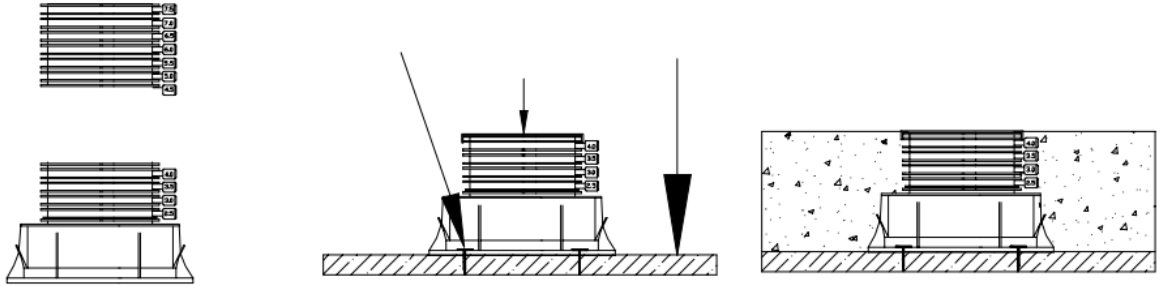
Installation Techniques

Equipment: 3M™ Fire Barrier Cast-In Devices and Adapters may be installed using the following tools: nails, wood or metal screws, pliers, reciprocating saw (3M™ Fire Barrier Cast-In Metal Deck Adapter only), oxyacetylene torch or similar device (3M™ Fire Barrier Cast-In Metal Deck Adapter only). See installation details below.

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3M™ Fire Barrier Cast-In Place Devices and Adapters

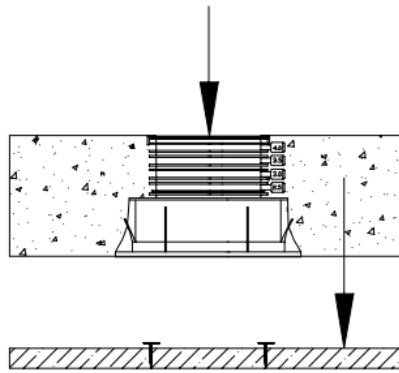
3M™ Fire Barrier Cast-In Devices (3M™ MCID, 3M™ PCID)



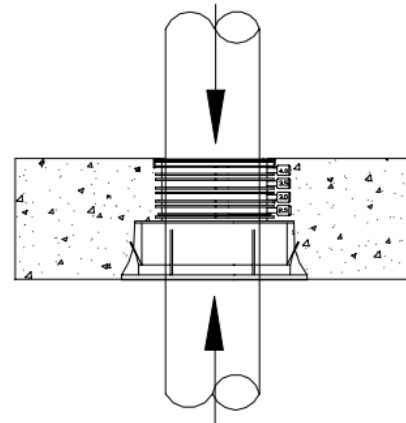
Step 1: Adjust to concrete pour depth

Step 2: Place, attach and cap

Step 3: Pour concrete



Step 4: Remove form and knock out cap

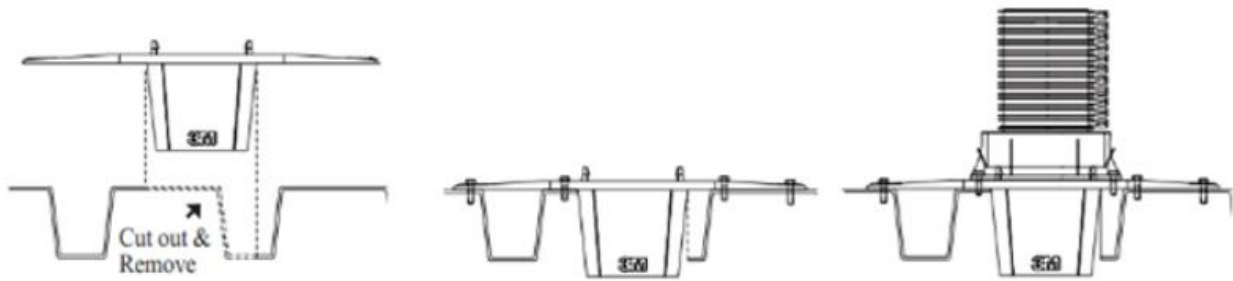


Step 5: Install pipe

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3M™ Fire Barrier Cast-In Place Devices and Adapters

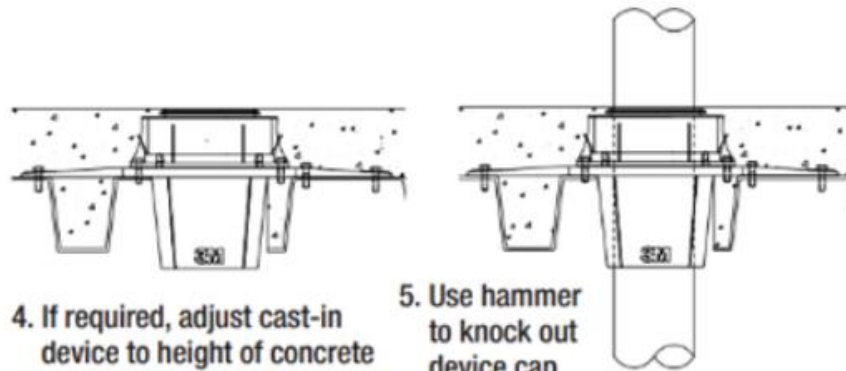
3M™ Fire Barrier Cast-In Metal Deck Adapter



1. Cut opening in deck and remove cut section of deck such that metal deck adaptor can sit flush on deck

2. Secure metal deck Adaptor to metal deck

3. Snap cast-in device onto metal deck adaptor



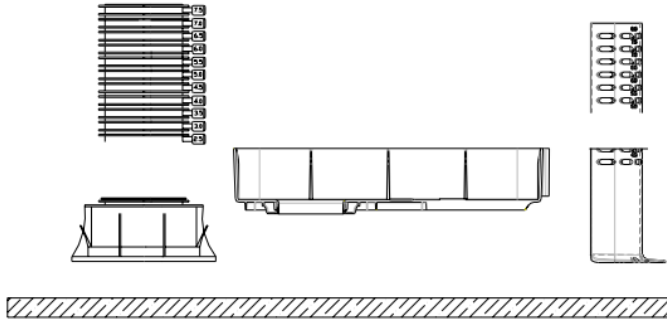
4. If required, adjust cast-in device to height of concrete pour (by hand or with pliers)

5. Use hammer to knock out device cap and install penetrant to complete assembly

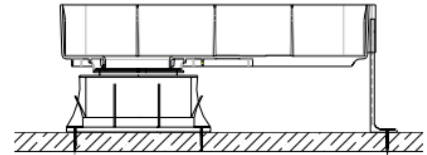
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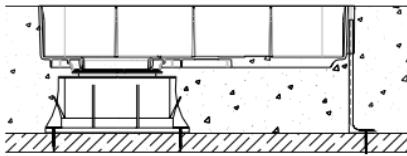
3M™ Fire Barrier Cast-In Tub Box Adapter



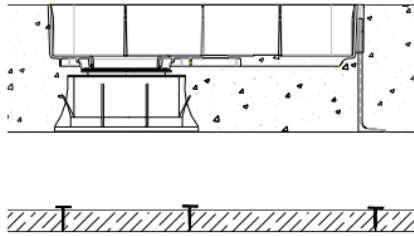
Adjust CID and tub box leg



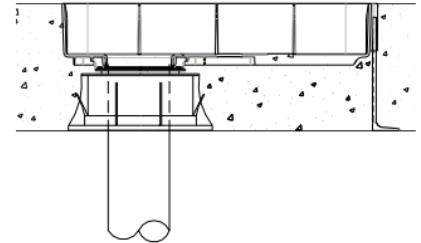
Attach leg to TB and CID to TB, position and attach assembly



Pour concrete



Remove form

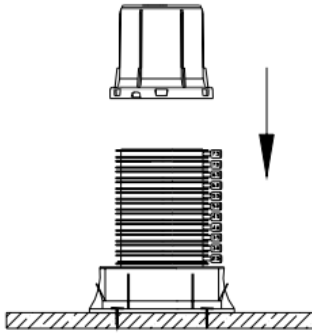


Install pipe - complete assembly

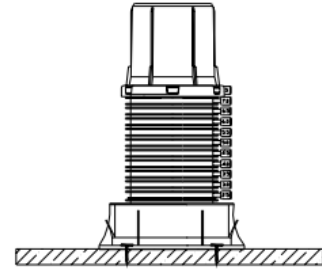
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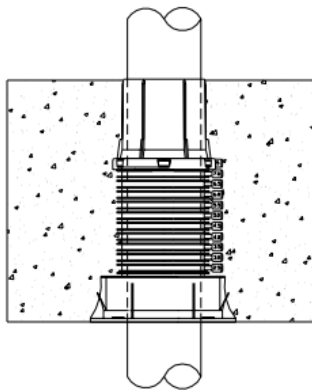
3M™ Fire Barrier Cast-In Height Adapter



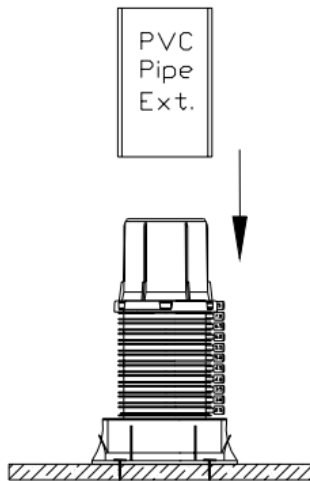
Position CID and line up slot and arrow on height adjuster with tab on CID



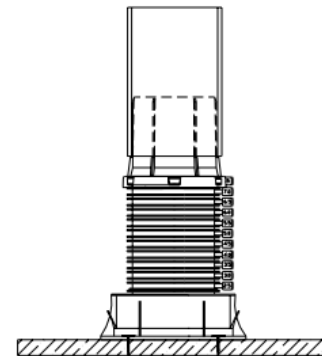
Snap height adjuster onto CID



Completed 12 in. pour



PVC extension for concrete greater than 12 in. thick.



CID with height adjuster and PVC extension ready for 16 inch concrete pour

Limitations: It is recommended that 3M™ Fire Barrier Cast-In Devices and Adapters are applied when the product is at a temperature between 40°F (4°C) and 110°F (43°C). It is recommended that 3M™ Fire Barrier Cast-In Devices and Adapters be applied when the ambient air temperature is 32°F (0°C) or higher.

For optimal results, 3M™ Fire Barrier Cast-In Devices and Adapters must be installed before concrete is poured.

Consult a 3M Authorized Fire Protection Products Distributor Sales Representative for applicable UL, cUL, ULC, Intertek or other third-party drawings and system details

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3M™ Fire Barrier Cast-In Place Devices and Adapters

Maintenance	No maintenance is expected to be required when 3M™ Fire Barrier Cast-In Place Devices and Adapters are installed in accordance with manufacturer's installation instructions. Once installed, if 3M™ Fire Barrier Cast-In Place Devices and Adapters are damaged, the following procedure will apply, damaged device must be removed and replaced with new product.
Storage and Shelf Life	3M™ Fire Barrier Cast-In Devices and Adapters should be stored indoor in dry conditions. It is recommended that the product remains in heated storage above 40°F (4°C) prior to installation. 3M™ Fire Barrier Cast-In Devices and Adapters shelf life is indefinite when stored indoor in dry conditions above 40°F (4°C) and below 100°F (38°C).
Availability	Available from 3M Authorized Fire Protection Products Distributors. For additional technical and purchasing information, call 1-800-328-1687 or visit 3M.com/firestop.
Safe Handling	Consult Safety Data Sheet prior to handling and disposing of 3M™ Fire Barrier Cast-In Devices and Adapters.
Technical Information	The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.
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