FCIA Apprenticeship Manual

Creating a reproducible education for the Firestop/Containment Worker

We are looking for volunteer contractors to contribute step by step photos of firestop systems installation

Each contributing contractor will receive recognition for their work

Please watermark your contributions
Provide beginning to end photos of real conditions

For this example measure the wrap strip for the tuck-in
Apply 3 mil foil tape to the wrap strip

Cut the wrap strip to fit the circumference of the pipe
Ensure that the foil tape secures the wrap strip in place.

Insert the wrap strip into the opening.
Verify the recess depth of the wrap strip tuck-in

Confirm the annular space
Tool the sealant to ensure proper adhesion and to eliminate gaps, bubbles, pin-holes, etc.

Apply the sealant to the depth required by the system details.
Penetrations in precast hollow core decks must be firestopped with specific systems designed for precast hollow core units or as stated in the UL directory. Where not specified, firestop systems utilizing caulk, sealant, putty, or spray materials installed over a mineral wool or ceramic blanket may be installed in hollow core floors, provided that (1) the thickness of the hollow core floor is equal to or greater than the minimum concrete thickness specified in the system (2) the maximum size of the opening is 7" in diameter or 7" by 7" and (3) any cores of the precast concrete units penetrated as a result of the firestop system are sealed with a minimum of 4" od firmly packed 4pcf mineral wool or ceramic fiber blanket, concrete, mortar, or grout. Additionally firestop systems using a firestop device or wrap strips/steel collar installed around penetrant beneath the floor may be installed in hollow core floor provided that (1) the thickness of the hollow core floor is equal or greater than the minimum thickness specified in the system, and (2) the maximum size of the opening is 7" in diameter or 7" by 7".

**IMAGE**  | **TITLE**  | **CAPTION**  | **DESCRIPTION**
--- | --- | --- | ---
IMG 1  | 2" PVC pipe  | typical 2"pvc pipe penetration  | Penetrations in precast hollow core decks must be firestopped with specific systems designed for precast hollow core units or as stated in the UL directory. Where not specified, firestop systems utilizing caulk, sealant, putty, or spray materials installed over a mineral wool or ceramic blanket may be installed in hollow core floors, provided that (1) the thickness of the hollow core floor is equal to or greater than the minimum concrete thickness specified in the system (2) the maximum size of the opening is 7" in diameter or 7" by 7" and (3) any cores of the precast concrete units penetrated as a result of the firestop system are sealed with a minimum of 4" od firmly packed 4pcf mineral wool or ceramic fiber blanket, concrete, mortar, or grout. Additionally firestop systems using a firestop device or wrap strips/steel collar installed around penetrant beneath the floor may be installed in hollow core floor provided that (1) the thickness of the hollow core floor is equal or greater than the minimum thickness specified in the system, and (2) the maximum size of the opening is 7" in diameter or 7" by 7".
IMG 2  | Wrap strip  | C-AJ-2351 requires 1 layer of wrap strip  | Manufacturer requires 1 layer of wrap strip around this 2" pipe. Place wrap strip around pipe to determine length of wrap strip needed.
IMG 3  | Wrap strip  | cut to length  | While holding wrap strip in place around pipe cut to desired length to fit the circumference of the pipe.
IMG 4  | Secure wrap strip  | Wrap strip held in place with aluminum foil tape.  | Wrap strip to be installed around outer circumference of penetrant with ends butted and held in place with aluminum foil tape.
IMG 5  | Install wrap strip  | Install wrap strip  | Place wrap strip around pipe and secure with tape. In this application the 90° elbow provides a minor obstacle during insertion. This process is slightly more difficult. Here the installer wraps the pipe as he inserts the wrap strip once he has it in he butts the ends and secures the tape.
IMG 6  | Wrap strip installed  | Wrap strip installed  | Completed wrap strip installation.
IMG 7  | Confirm annular space  | measure annulus  | By measuring the annular space to confirm that system requirements are met you insure the quality of the installation.
IMG 8  | Confirm depth of wrap strip  | Measure the recessed depth of the inserted wrap strip.  | By measuring the depth of the inserted wrap strip recessed into the opening you can insure the systems requirement of ½".
IMG 9  | Sealant  | Sealant and tooling required  | System C-AJ-2351 specifies ½" depth of sealant. Sealant must be tooled to insure adequate adhesion to the penetrant and the adjacent sub-straight and to eliminate air pockets.
IMG 10  | Completed application  | finished install  | Completed installation of C-AJ-2351 Flamesafe firestop assembly.
IMG 11  | UL System # C-AJ-2351  | Firestop assembly guide UL C-AJ-2351  | UL Classified system C-AJ-2351 used in this application.
IMG 12  | Label & Verification forms  | Quality control documentation.  | When installing labels make sure to fill out labels completely and accurately. Affix label as close to penetration as possible. Verification forms are used to help installer clearly record information about specific penetrations to provide evidentiary documentation relating to proper application.

Prepared By: Gary Hamilton
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You can now create specific folders in your main folder.
Type in Title and Description and ‘Create Folder’
Locate and open the newly created folder.
Click on ‘Upload’ to put your files in the folder.
Click ‘Add Files’
The ‘Add Files’ button will open your computers files/folders so you can locate the files you want to upload.
Locate the folder on your computer where your files are
You can select individual files or select ALL.

After selecting files click ‘Open’.
Your files will appear in the upload folder.

Click ‘Upload’ and wait for the files to transfer.
This is what the folder will look like when completed
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Bob Hasting, FCIA Apprenticeship Chair

Want to submit step by step pictures?

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