

Grabber Construction Products, Inc.

Design No. JWA/PH 60-06

Horizontal Floor/Ceiling Assembly, Single Penetrations

GrabberGard EFC and GrabberGard IFC

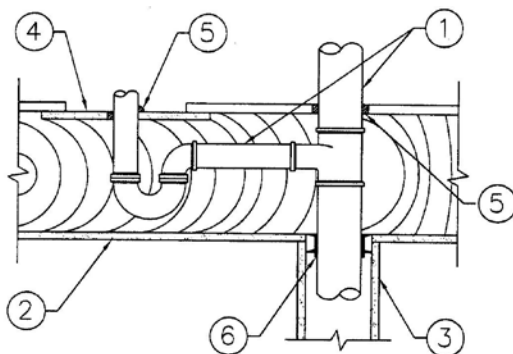
Test Standards: ASTM E814, UL 1479: Non-metallic Open and Closed Systems

ULC S115: Non-metallic Open and Closed Systems

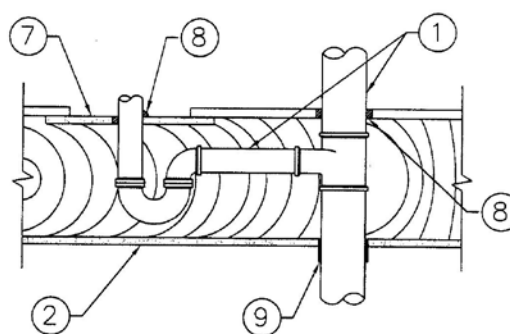
Test Furnace Internal Positive Pressure Differential – 50 Pa (0.20 in. of water) Minimum

Rating: 1 Hour

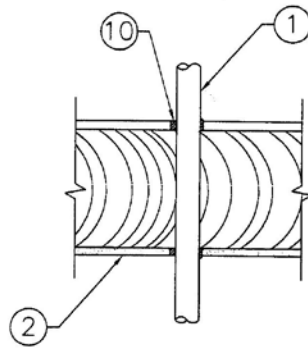
Penetrating Material & Size	Design Number	Max Hole Size	Annular Space	ASTM E-814		ULC S115-M95		
				"F"	"T"	"F"	"FH"	"FT"
ccABS or ABS pipe up to 3" w/ branch line up to 1-1/2"	A	4-1/8" 2-1/2"	1/2" 0" – 1/2"	N/A	N/A	1 hour	N/A	55 min
ccPVC or PVC pipe up to 3" w/ branch line up to 1-1/2"	A	4-1/8" 2-1/2"	1/2" 0" – 1/2"	1 hour	55 min	1 hour	1 hour	55 min
CPVC pipe up to 3" w/ branch line up to 1-1/2"	A	4-1/8" 2-1/2"	1/2" 0" – 1/2"	1 hour	55 min	1 hour	1 hour	55 min
XFR PVC (IPEX) pipe up to 3" w/ branch line up to 1-1/2"	A	4-1/2" 2-1/2"	1/2" 0" – 1/2"	1 hour	1 hour	1 hour	1 hour	1 hour
ccPVC Plastic pipe up to 3" w/ branch line up to 1-1/2"	B	4-1/8" 2-1/2"	1/2" 0" – 1/2"	1 hour	1 hour	1 hour	1 hour	25 min
CPVC pipe up to 3" w/ branch line up to 1-1/2"	B	4-1/8" 2-1/2"	1/2" 0" – 1/2"	1 hour	1 hour	1 hour	1 hour	25 min
XFR PVC (IPEX) pipe up to 3" w/ branch line up to 1-1/2"	B	4-1/2" 2-1/2"	1/2" 0" – 1/2"	1 hour	1 hour	1 hour	1 hour	1 hour
ccPVC or PVC pipe up to 1-1/2"	C	3"	1/4" – 1/2"	1 hour	1 hour	1 hour	1 hour	1 hour
CPVC pipe up to 1-1/2"	C	3"	1/4" – 1/2"	1 hour	1 hour	1 hour	1 hour	1 hour
ccABS or ABS pipe up to 1-1/2"	C	3"	1/4" – 1/2"	1 hour	1 hour	1 hour	1 hour	1 hour
Nonmetallic Rigid Conduit up to 1-1/2"	C	3"	1/4" – 1/2"	1 hour	1 hour	1 hour	1 hour	1 hour
ccPVC or PVC pipe up to 1-1/2"	D	3"	1/4" – 1/2"	1 hour	50 min	1 hour	1 hour	50 min
CPVC pipe to 1-1/2"	D	3"	1/4" – 1/2"	1 hour	50 min	1 hour	1 hour	50 min
ccABS or ABS pipe up to 1-1/2"	D	3"	1/4" – 1/2"	1 hour	1 hour	1 hour	1 hour	1 hour
Nonmetallic Rigid Conduit up to 1-1/2"	D	3"	1/4" – 1/2"	1 hour	1 hour	1 hour	1 hour	50 min



DESIGN A



DESIGN B

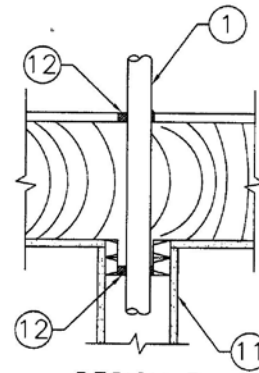


DESIGN C

1. **PENETRATING ITEM:** Main line to be centered in hole and branch line to be centered or offset in hole, see table above.
2. **FLOOR/CEILING ASSEMBLY:** 1 hour fire-rated ASTM E-119 or CAN/ULC S101 wood framed gypsum wallboard (GWB) floor/ceiling assemblies with or without concrete topping, having a min. depth of 10-3/4 in. (275mm).

DESIGN A

3. **WALL ASSEMBLY:** Rated or non-rated metal or wood framed gypsum wallboard (GWB) wall assemblies.
4. **FIRESTOP SYSTEM COMPONENT 1:** One layer of nominal 5/8 in. (16mm) Type X gypsum wallboard, insert securely fastened with drywall screws on 4 in. (100mm) on center (oc) to reduce tub drain hole sizes up to 12 in. x 16 in. (300mm x 400mm).
5. **FIRESTOP SYSTEM COMPONENT 2:** Grabber Construction Products, Inc. – GrabberGard EFC* or GrabberGard IFC* fully filling the annular space to the full depth of the membrane. On 0 in. to 1/4 in. (6mm) annular space, a min. 1/2 in. (12mm) diameter bead of sealant must be placed around penetrating item.
6. **FIRESTOP SYSTEM COMPONENT 3: For ccABS, ABS, PVC, ccPVC or CPVC Pipe Only:** PFP Partners – Wrap Strip WS1* to be installed around



DESIGN D

penetrants and centered in membrane such that there is the same distance above and below membrane surface. Min. two layers installed in the annular space between the pipe and header plate. Aluminum foil tape to be installed around circumference of the outer wrap strip and pipe assembly for securing wrap strips in place.

- 6a. **FIRESTOP SYSTEM COMPONENT 3: For XFR PVC Pipe Only:** PFP Partners – Wrap Strip WS1* to be installed around penetrants and centered in membrane such that there is the same distance above and below membrane surface. Min. four layers installed in the annular space between the pipe and header plate. Aluminum foil tape to be installed around circumference of the outer wrap strip and pipe assembly for securing wrap strips in place.

DESIGN B

7. **FIRESTOP SYSTEM COMPONENT 1:** One layer of nominal 5/8 in. (16mm) Type X gypsum wallboard insert securely fastened with drywall screws on 4 in. (100mm) oc to reduce tub drain hole sizes up to 12 in. x 16 in. (300mm x 400mm).
8. **FIRESTOP SYSTEM COMPONENT 2:** Grabber Construction Products, Inc. – GrabberGard EFC* or GrabberGard IFC* fully filling the annular space to the full depth of the membrane. On 0 in. to 1/4 in. (6mm) annular space, a min. 1/2 in. (12mm) diameter bead of sealant must be placed around penetrating item.



9. FIRESTOP SYSTEM COMPONENT 3: PFP Partners – Wrap Strip WS1* to be installed around penetrants and centered in membrane such that there is the same distance above and below membrane surface. Min. two layers installed in the annular space between the pipe and ceiling membrane. Aluminum foil tape to be installed around circumference of the outer wrap strip and pipe assembly for securing wrap strips in place.

9a. FIRESTOP SYSTEM COMPONENT 3: For XFR PVC Pipe Only: PFP Partners – Wrap Strip WS1* to be installed around penetrants and centered in membrane such that there is the same distance above and below membrane surface. Min. four layers installed in the annular space between the pipe and header plate. Aluminum foil tape to be installed around circumference of the outer wrap strip and pipe assembly for securing wrap strips in place.

DESIGN C

10. FIRESTOP SYSTEM COMPONENT 1: For PVC, ccPVC or CPVC Pipe Only – Grabber Construction Products, Inc. – GrabberGard EFC* or GrabberGard IFC* fully filling the annular space to the full depth of the membrane. On 0 in. to 1/4 in. (6mm) annular space, a min. 1/2 in. (12mm) diameter bead of sealant must be placed around penetrating item.

10a. FIRESTOP SYSTEM COMPONENT 1: For ABS or ccABS Pipe Only – Grabber Construction Products, Inc. – GrabberGard IFC* fully filling the annular space to the full depth of the membrane. On 0 in. to 1/4 in. (6mm) annular space, a min. 1/2 in. (12mm) diameter bead of sealant must be placed around penetrating item.

DESIGN D

11. WALL ASSEMBLY: Rated or non-rated, metal or wood framed gypsum wallboard (GWB) wall assemblies.

12. FIRESTOP SYSTEM COMPONENT 1: Grabber Construction Products, Inc. – GrabberGard EFC* or GrabberGard IFC* fully filling the annular space to the full depth of the membrane. Fill header and sill plate contained in wall assembly min. 5/8 in. (16mm) depth. On 0 in. to 1/4 in. (6mm) annular space, a min. 1/2 in. (12mm) diameter bead of sealant must be placed around penetrating item.

*WH Labeled Component