MODEL FB22 3"-4" FLOOR FIRE BARRIER INSTALLATION INSTRUCTIONS



IMPORTANT INFORMATION

Prior to the commencement of Installation all materials MUST be inspected for Damage. Any damage must be reported to Construction Specialties as soon as possible, so that replacement materials may be furnished without delay.

All work must be completed as per Architect's Approved "Shop Drawings", and in accordance with these Installation Instructions. When installation is complete, all materials must be protected from damage until the Architect's FINAL INSPECTION. All materials should be arranged in the order that they are to be installed. All hardware required for each portion of the work should be placed with the appropriate materials.

Please review all Approved Shop Drawings and this Document to familiarize yourself with all the details and components of this assembly.

IMPORTANT: READ THROUGH ALL INSTRUCTIONS PRIOR TO STARTING INSTALLATION





Construction Specialties*

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General Instructions:

ALWAYS WEAR GLOVES when handling and cutting the barrier.

Before beginning installation, review the architectural drawings and approved Construction Specialties Inc. shop drawings to familiarize yourself with the joint cover models and locations.

Check all of the joint cover components to confirm that the correct joint cover model and size have been received. Also, check for materials that may have been damaged during shipping. Report all incorrect and/or damaged components to CS at 800-233-8493.

Read through all the steps of these instructions prior to beginning work.

TOOLS:

The following tools may be needed for installation of the 2FB22 fire barrier: - Fabric or Leather Work Gloves - Dusk Mask - Permanent Marker

- Measuring Tape

- Utility Knife

Model designating - 2FB22 Floor 3"-4" (Nominal Joint Width) <u>FB22 Nomenclature</u> Example: 2FB22 - F4 Hour rating \leftarrow Joint size Fire Barrier Family

INSTALLATION NOTES



1.) The FB22 floor Fire Barrier components are:

- a. 1/8" thick ceramic paper layer 25 LF rolls (3" joint 14" wide, 4" joint 16" wide)
- b. 2 rolls of 1/2" thick ceramic blanket 25 LF rolls (3" joint 6" and 10" wide, 4" joint 7" and 12" wide)
- c. Fiberglass insulation block 25 LF sticks (3" joint has 6 layers, 4" joint has 7 layers)
- d. High temperature silicone
- e. Foil Tape
- 2.) If job has wall fire barrier, FB22 floor fire barrier must be installed first and must extend into wall opening deep enough for wall fire to to set on top.
- 3.) If the job has any Fire Barrier Transitions start by installing the transitions before the straight run lengths of the Fire Barrier. A Transition is an area where the Fire Barrier changes direction (a 90° corner, a 90° Up horizontal to vertical condition, a "T" or Crossover section etc.).
- 4.) If insulation blocks have splits in material, see the supplemental instructions on page 9.

STEP 1

INSTALLATION OF FIRE BARRIER CERAMIC PAPER

- Note: The Ceramic Paper is a thin, 1/8" material thickness, foiled white blanket. Surface Preparation - Make sure concrete faces are clean and free of dust and contaminates that would interfere with adhesion of silicone.
- 1.1) Unroll Ceramic Paper roll at joint edge, fold in half without creasing, install into the joint space aligning top edge with concrete slab and temporarily tape in place. (Fig. 1A)
- 1.2) Pull Ceramic Paper to one side and apply 3/8" silicone bead to exposed concrete edge approximately 2" down from top of slab. (Fig. 1B-1C) Note: 3/8" silicone bead based on smooth joint surfaces. Rough joint walls may require larger bead to insure contact/adhesion.
- 1.3) Release ceramic paper and set in silicone bead, align paper with top edge of slab and tape in place for silicone to cure. (Fig. 1D) Repeat for other side.

















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2.1) Unroll Narrow Ceramic Blanket Roll along the joint with foil facing down, fold in half without creasing and center in bottom of the joint space. (Fig. 2A)



(Fig. 2A)

STEP 3 WIDE ROLL CERAMIC BLANKET INSTALLATION

3.1) Unroll Wide Ceramic Blanket roll along the joint with foil facing down, fold in half without creasing and center in joint overtop the installed narrow blanket. (Fig. 3A-3B)





(Fig. 3A)

(Fig. 3B)

STEP 4

INSULATION BLOCK INSTALLATION

Note: Insulation Blocks are provided with 45° beveled ends, starting end lengths need to be cut square.

- 4.1) To aid in installation optional onsite customer fabricated metal insertion angles can be used to help to funnel the Insulation Block into the joint. Place the metal angle into the joint with one leg against the insulation blanket and the other leg sitting on the slab surface. (Fig. 4A)
- **For Alternate Block installation method without using fabricated metal insertion angles see Alternate instructions on next page.



(Fig. 4A)

4.2) Position Insulation Block having one side of the material resting slightly to the inside of the joint. Pinch the back end of the Insulation Block so that it begins to funnel into the joint, at the same time pushing down into the joint to seat. Work down along the length of the material as you continue to pinch and push the Insulation Block into place. Remove metal angles as you apply a slight downward pressure on the Insulation Block to keep it seated in place. (Fig. 4B-4D)









(Fig. 4B)

STEP 4 (ALTERNATE)

WIDE ROLL CERAMIC BLANKET & INSULATION BLOCK INSTALLATION

- Note: Alternate Wide Roll Ceramic Blanket and Insulation Block installation method can be used in place of installation using onsite fabricated metal insertion angles.
- ALT 1) Unroll the Wide Roll of Ceramic Blanket along the joint edge with foil facing down. Place the Insulation block approximately 1" down from the top edge of the Ceramic Paper. Compress the Insulation Block and wrap the Ceramic Blanket around the 3 sides. (Fig. ALT 1 ALT 3)
- ALT 2) Position the compressed wrapped Ceramic Paper and Blanket so that one side of the material is resting slightly to the inside of the joint. Pinch the back end of the wrapped Insulation Block so that it begins to funnel into the joint. At the same time push the wrapped insulation block down into the joint to seat. Work down along the length of the material as you continue to pinch and pinch and push the Insulation Block into place. (Fig. ALT 4)



(Fig. ALT 1)



(Fig. ALT 2)



(Fig. ALT 3)



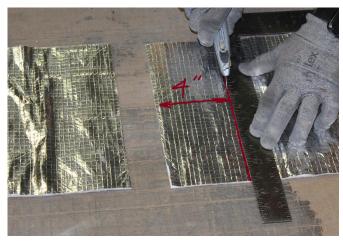
(Fig. ALT 4)

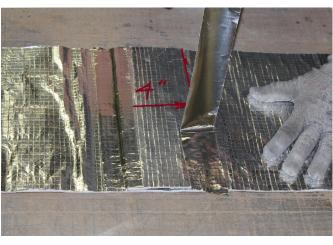
STEP 5 SPLICING FB22 INSTALLATION

Note: All components of the FB22 are supplied in 25' LF lengths. For longer lengths of FB22 use the following instructions to splice two or more sections together. *<u>It is important to Stagger, offset by a minimum of 12</u>", all splices of Ceramic Paper, Insulation Blankets and Insulation Block. Splices between components should not be at the same location or align vertically with each layer. See below example.

Ceramic paper		<u> </u>
Ceramic blanket		
Ceramic blanket	<u> </u>	
Insulation Block		<u> </u>

5.2) To splice the Ceramic Paper cut off 4" of the next Ceramic Paper roll length. Butt together the two lengths, taping with the supplied foil tape. On the opposite side of the Ceramic Paper center the 4" wide cut off piece over the spliced seam and tape in place. (Fig. 5A - 5B)

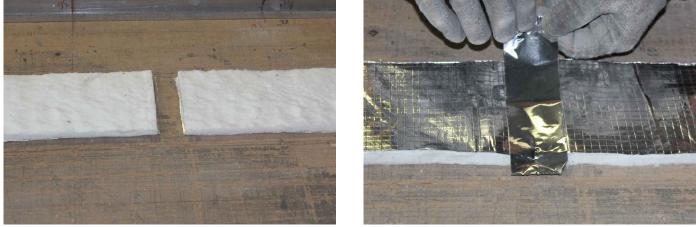




(Fig. 5A)



5.2) To splice additional lengths of Narrow and/or Wide rolls of Ceramic Blanket lay each blanket segment flat, butt the two sections together and tape the foil side using the supplied foil tape. (Fig. 5C-5D)

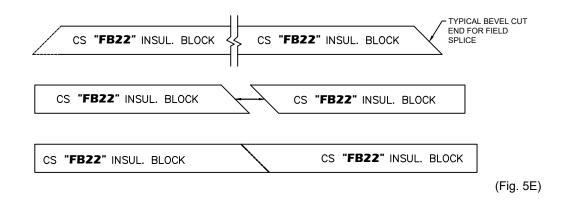




(Fig. 5C)

STEP 5 CON'T

5.3 The Insulation Block is provided in lengths with 45° cut ends, butt together the bevel cut ends to provide enough for the entire run. (Fig. 5E)

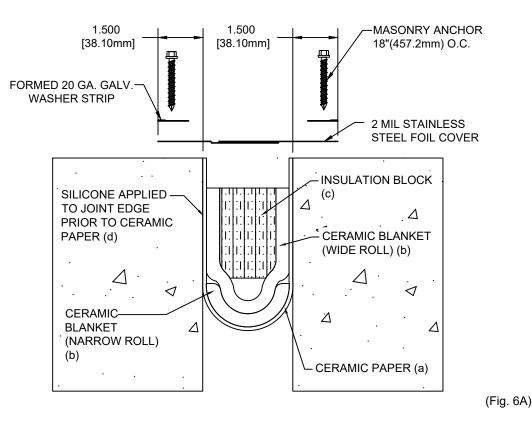


STEP 6 SSF WITH FB22 FLOOR FIRE BARRIER

SSF-FB22 FLOOR INSTALLATION

Note: Stainless Steel Foil Cover is only required where indicated on approved CS shop drawings. The Stainless Steel Foil Cover to be folded to the profile as indicated and any additional lengths folded in the same direction.

- 6.1) Begin installation of the Stainless Steel Foil Cover by placing a length of the Cover over the joint. Cut the Stainless Steel Foil Cover to length as needed.
- 6.2) Align one edge of the Foil Cover 1 1/2" from the edge of the joint (the edge of the Stainless Steel Foil Cover and the edge of the joint should be parallel). Install the Washer Strip, aligning the end with the Stainless Steel Foil edge. Fasten in place, 18' O.C., with the supplied fasteners per the manufacturer's guidelines. (Fig. 6A)
- 6.3) Repeat this installation procedure for the opposite side of the joint and for all additional lengths of Stainless Steel Foil Cover.

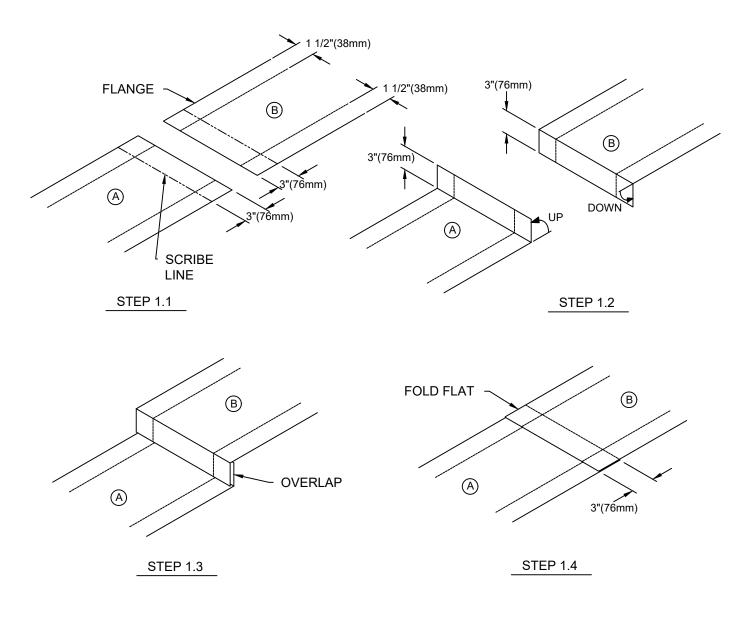


STEP 6 CONT SSF WITH FB22 FLOOR FIRE BARRIER

SSF SPLICING INSTALLATION

Note: When longer lengths of Stainless Steel Foil Cover is required, lengths may be spliced together as instructed. To create a Field Splice it may be best to leave extra on the two lengths and trim the run length after the splice is created.

- 6.4) Position the ends of the two lengths of Stainless Steel Foil to be spliced near each other. Measure in 3" from the end and scribe a folding line on the surface of each piece.
- 6.5) Using a straight edge as a guide, fold the end of length "A" up at 90° and the end of length of "B" down at 90°.
- 6.6 Place piece "B" over piece "A" so the folded, 3" lengths overlap.
- 6.7) Fold the overlapping 3" legs of both pieces flat so that they interlock to form an overlapping splice.



SUPPLEMENTAL INSTRUCTIONS

SPLIT INSULATION BLOCKS

Note: It is possible for Insulation Blocks to arrive with split layers due to folding and packaging. Splitting of the layers is acceptable up to 50% of the material width (Fig. X1). If splitting has occurred beyond acceptable limits (Fig. X2), the split area can be removed by measuring back 6" each direction (Fig. X3a) from the separated area, cutting at 45° (Fig. X3b) and butting insulation blocks together (Fig. X3c) per the standard splice method described in STEP 5.



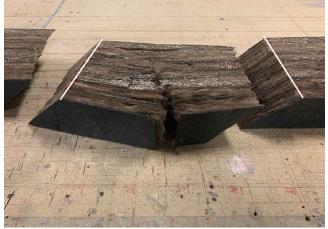
(Fig. X1)



(Fig. X2)



(Fig. X3a)







(Fig. X3c)

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