



SUBSTITUTION REQUEST

(After the Bidding/Negotiating Phase)

Project: _____ Substitution Request Number: _____

 From: _____
 To: _____ Date: _____

 A/E Project Number: _____
 Re: _____ Contract For: _____

Specification Title: _____ Description: _____
 Section: _____ Page: _____ Article/Paragraph: _____

Proposed Substitution: _____
 Manufacturer: _____ Phone: _____
 Address: _____
 Trade Name: _____ Model No.: _____
 Installer: _____ Phone: _____
 Address: _____

History: New product 1-4 years old 5-10 years old More than 10 years old

Differences between proposed substitution and specified product: _____

Point-by-point comparative data attached — REQUIRED BY A/E

Reason for not providing specified item: _____

Similar Installation:

Project: _____ Architect: _____
 Address: _____ Owner: _____
 _____ Date Installed: _____

Proposed substitution affects other parts of Work: No Yes; explain _____

Savings to Owner for accepting substitution: _____ (\$ _____).

Proposed substitution changes Contract Time: No Yes [Add] [Deduct] _____ days.

Supporting Data Attached: Drawings Product Data Samples Tests Reports _____

SUBSTITUTION REQUEST

(After the Bidding/Negotiating Phase — Continued)

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
 - Same warranty will be furnished for proposed substitution as for specified product.
 - Same maintenance service and source of replacement parts, as applicable, is available.
 - Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
 - Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
 - Proposed substitution does not affect dimensions and functional clearances.
 - Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
 - Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.
-

Submitted by: _____

Signed by: _____

Firm: _____

Address: _____

Telephone: _____

Attachments:

A/E's REVIEW AND ACTION

- Substitution approved - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
- Substitution approved as noted - Make submittals in accordance with Specification Section 01 25 00 Substitution Procedures.
- Substitution rejected - Use specified materials.
- Substitution Request received too late - Use specified materials.

Signed by: _____ Date: _____

Additional Comments: Contractor Subcontractor Supplier Manufacturer A/E
 Other:

EFA-Series Flooring System

Interior Joints (Floor)

FEATURES

MINIMAL SIGHT LINE Integrates with floor material and handles substrate offset.

SURFACE MOUNT No blackout is required. Simply anchor to subfloor.

DETAILS

MATERIAL 6063-T5 Aluminum, Meets ASTM B221

FINISH Mill

MOVEMENT

- Thermal: Horizontal and Vertical

MOUNTING Surface

JOINT SIZE 2 to 3 inches

LENGTH 10 Linear Feet

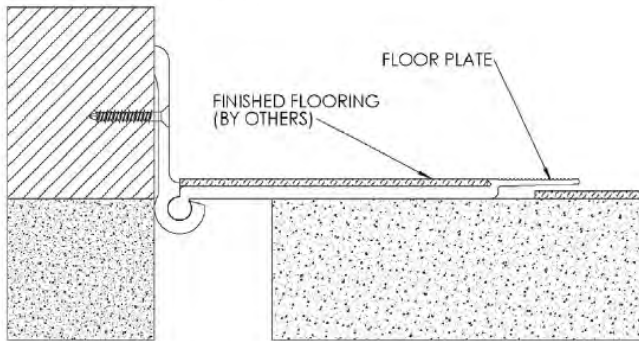
LOAD Pedestrian and Light Cart

INSTALLATION Floor

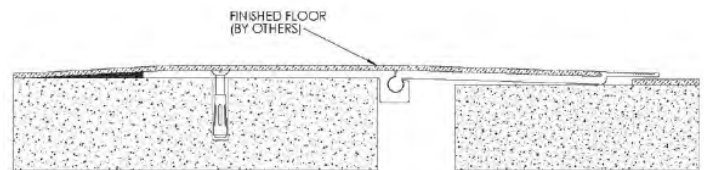
OPTIONS Moisture barrier, fire barrier



FLOOR-TO-CORNER



FLOOR-TO-FLOOR



MODELS

MODEL	APPLICATION	JOINT SIZE AT MEAN T°F	EXPOSED SIGHT LINE	INFILL HEIGHT	TOTAL MOVEMENT
EFA150-125	Floor to Floor	3" (76mm)	1.5" (38mm)	0.125" (3mm)	1.25" (32mm)
EFA150-250	Floor to Floor	3" (76mm)	1.5" (38mm)	0.25" (6mm)	1.25" (32mm)
EFA150-375	Floor to Floor	3" (76mm)	1.5" (38mm)	0.375" (10mm)	1.25" (32mm)
EFA150-125W	Floor to Wall	3" (76mm)	1.5" (38mm)	0.125" (3mm)	1.25" (32mm)
EFA150-250W	Floor to Wall	3" (76mm)	1.5" (38mm)	0.25" (6mm)	1.25" (32mm)
EFA150-375W	Floor to Wall	3" (76mm)	1.5" (38mm)	0.375" (10mm)	1.25" (32mm)



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Website: www.eriemetal.com
E-Mail: sales@eriemetal.com

EFA150-Series Installation Instructions

ALUMINUM HINGED FLOORING SYSTEM – SINGLE WING INFILL APPLICATION

MODEL(S): EFA150/EFA150w

EFA150 Floor to Floor Cover System



GENERAL DESCRIPTION

The Single Wing Hinged Flooring Infill System is designed with a hinged cover to accommodate horizontal and vertical thermal movement. This surface mounted system is designed to integrate with carpet and VCT flooring to provide a minimal sight line.

Introduction + Safety

GENERAL SAFETY PRECAUTIONS Improper selection, installation, or use can cause personal injury or property damage. It is solely the responsibility of the user, through their own analysis, to select products suitable to the specific application requirements, ensure proper maintenance and use as intended. Follow local, state, and federal regulations for proper installation and operation requirements.

Please read the complete instructions carefully before beginning any work. To ensure proper installation and performance of the product, the following actions must be completed by the installing contractor. Failure to do so will affect product warranty.

Transportation + Storage

- Inspect all shipments and materials for missing or damaged components and hardware.
- Material must be stored in a clean, dry location.

Preparation

- Locate the packing slip(s) and/or shop drawings.
- Verify that all products listed on the packing slip included in the package.
- Check the products for damage. If products are damaged, report a freight claim immediately and leave the products in their packaging. If you sign for products without reporting damage, you waive your right to a freight claim and will be responsible for replacement costs.
- Read the instructions thoroughly before beginning installation.



Tool List

- Tape measure
- Phillips
- Hex screwdriver
- Slotted Drivers for Anchors
- Levels
- Awls
- Rubber mallet
- Wooden block
- Trowel
- Chop saw to cut product to length
- Electric drill with 3/8” masonry bit
- Broom & dustpan or vacuum

Included with the expansion joint system:

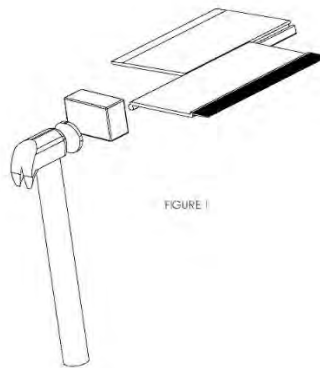
- Sleeve anchors, 3/8”

Pre-Installation

1. Ensure that the floor is smooth and level. High spots should be ground down and low spots filled in. Make sure the floor is clean by sweeping and/or vacuuming.

INSTALLATION

1. Cut and fit expansion joints to required length, if installing more than one piece lay out entire run to insure proper alignment. The cover plates will need to be assembled. This is done by applying a lubricant to the half round protuberance on the male cover plate and sliding it into the round channel on the female cover plate. The cover plates may need to be forced together by pounding the plate from the end using a rubber mallet and a block of wood. **Figure 1**



2. Position the cover plate into the expansion joint with the channel area of the female cover plate placed tight against the inside of the expansion joint. The concrete on the male cover plate side of the floor should be marked $5/8$ " from the offset in the male cover plate. This is where the flooring should end on this side of the expansion joint. **See Figure 2**

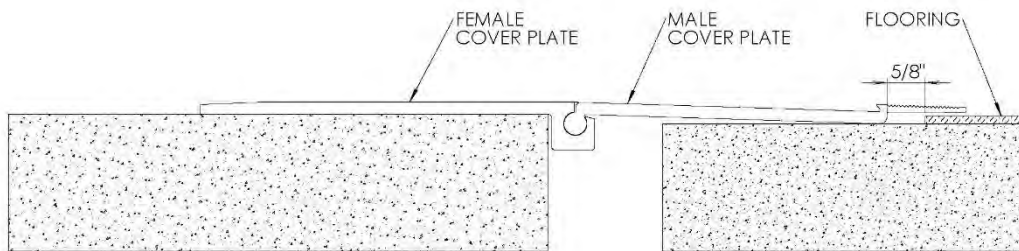


FIGURE 2

3. Install the cover plate by marking the hole locations in the female cover plate on both ends and drilling a $3/8$ " hole into the concrete and attaching the cover plate with the supplied $3/8$ " sleeve anchor. Follow anchor manufacturer's recommendations for proper anchor installation. Once the two end anchors are installed, the rest of the hole locations can be drilled and attached with the sleeve anchors. **See Figure 3**

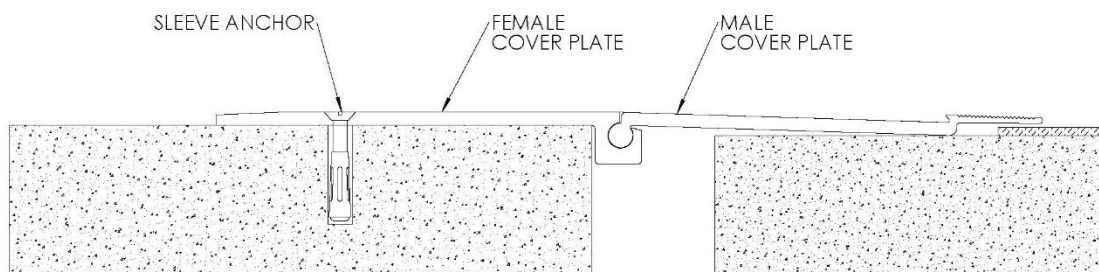


FIGURE 3

- Flash patch (by others) on anchored side and feather back 3” to 6” to assure a smooth transition. **See Figure 4**

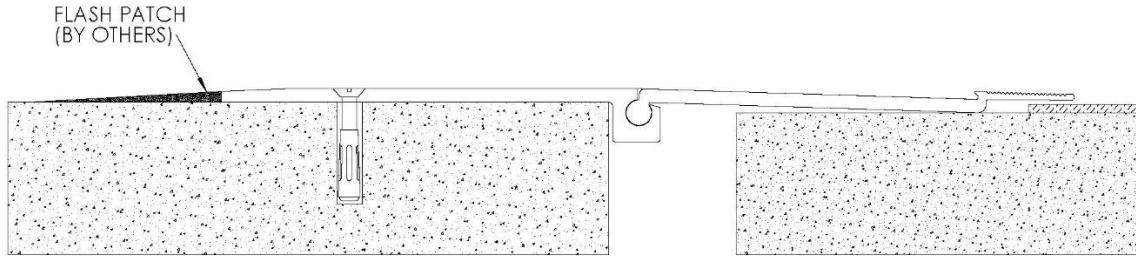


FIGURE 4

- Finished flooring (by others) can now be installed on the anchored side of the expansion joint. The finished flooring should butt tightly against the raised wing portion of the cover plate. **See Figure 5**

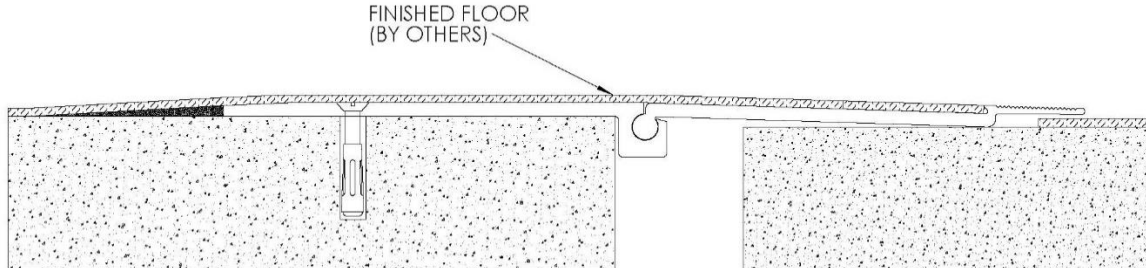
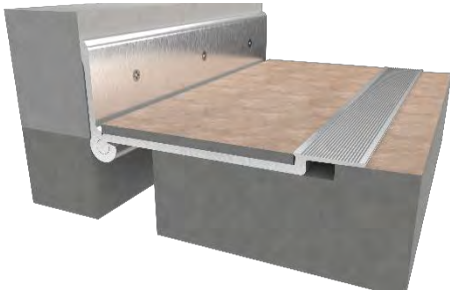


FIGURE 5

EFA150w Floor to Wall Cover System



GENERAL DESCRIPTION

EMS' FA150w Hinged Interior Cover System is designed to match the EFA150 cover plate in floor to wall applications.

Tool List

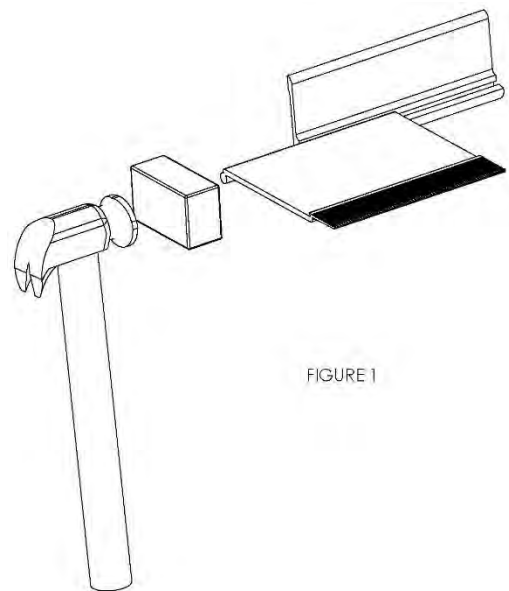
- Tape measure
- Phillips
- Hex screwdriver
- Slotted Drivers for Anchors
- Levels
- Awls
- Rubber mallet
- Wooden block
- Chop saw to cut product to length
- Electric drill with 5/32" standard/masonry bit
- Broom & dustpan or vacuum

Preinstallation

1. Ensure that the floor is smooth and level. High spots should be ground down and low spots filled in. Make sure the floor is clean by sweeping and/or vacuuming.

INSTALLATION

1. Cut and fit expansion joints to required length, if installing more than one piece, lay out entire run to insure proper alignment. The floor plate will need to be assembled with the wall plate. This is done by applying a lubricant to the half round protuberance on the floor plate and sliding it into the round channel on the wall plate. The plates may need to be forced together by pounding the plate from the end using a rubber mallet and a block of wood. **See Figure 1**



2. Position the cover system into the expansion joint with the wall plate placed tight against the wall and the floor plate sitting level on the floor. The concrete on the floor plate side of the floor should be marked 5/8" from the offset in the floor plate. This is where the flooring should end on this side of the expansion joint. **See Figure 2**

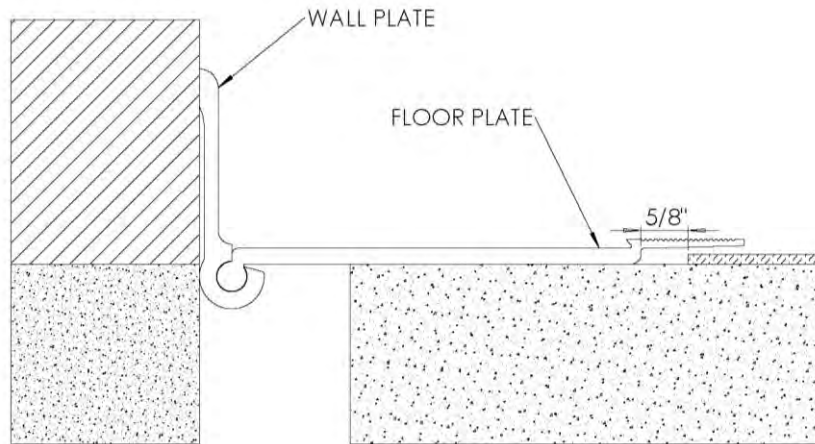


FIGURE 2

3. Install the cover system by attaching it to the wall through the predrilled holes in the wall plate with appropriate fasteners (by others) for the wall type. Make sure the floor plate is level and resting on floor. The two ends of the wall plate should be installed first and then fasten through the rest of the predrilled holes in the wall plate. **See Figure 3**

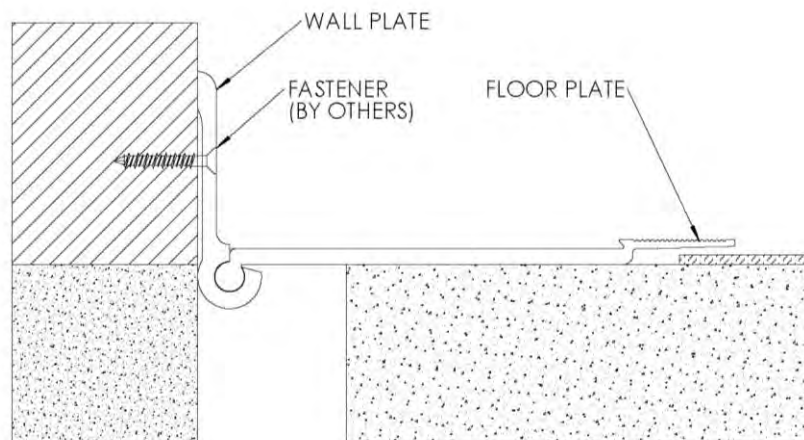


FIGURE 3

4. Finished flooring can now be install on the top face of the floor plate up the offset.

See Figure 4

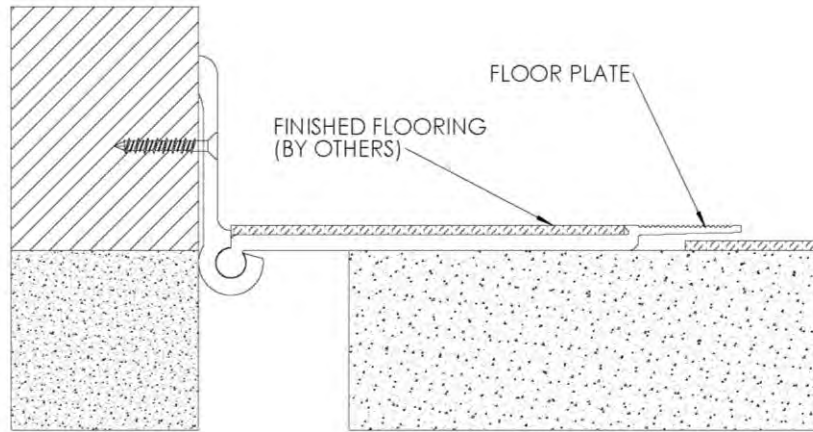


FIGURE 4



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SPECIFICATION

Section 07 95 13

Erie Metal Specialties, Interior Architectural Systems

Model "EFA150" Series Hinged Aluminum Cover Plate

Hinged Horizontal Cover Plate Systems

PART 1 - GENERAL

1.01 Work Included

- A. The work shall consist of furnishing and installing expansion joints in accordance with the details shown on the plans and the requirements of the specifications. The joints are proprietary designs utilizing preformed metal components and anchors.
- B. Related Work
 - Cast-in-place concrete
 - Miscellaneous and ornamental metals
 - Flashing and sheet metal

1.02 Submittals

- A. Template Drawings -Submit typical expansion joint cross-section indicating pertinent dimensioning, general construction, component connections, and anchorage methods.

1.03 Product Delivery, Storage and Handling

- A. Deliver products in each manufacturer's original, intact, labeled containers and store under cover in a dry location until installed. Store off the ground, protect from weather and construction activities.

1.04 Acceptable Manufacturer

- A. All joints shall be supplied by; Erie Metal Specialties, Inc. • 13311 Main Road • Akron • New York • 14001 • Phone (716) 542-3991 • Fax (716) 542-3996 • sales@eriemetal.com • www.eriemetal.com .
- B. Alternate manufacturers and their products will be considered, provided they meet the design concept and are produced of materials that are equal to or superior to those called for in the base product specification.
- C. Any proposed alternate systems must be submitted and receive approval 21 days prior to the bid. All post bid submittals will not be considered. This submission shall be in accordance with MATERIALS AND SUBSTITUTIONS.



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-Any manufacturer wishing to submit for prior approval must provide the following:

A working 6" sample of the proposed system with a letter describing how system is considered superior to the specified system.

A project proposal drawing that illustrates the recommended alternate system installed in the floor construction that is specific to the project. Typical catalog cut sections will not be considered.

A Verifiable list of prior installations showing prior and successful experience with the proposed systems.

Any substitution products not adhering to all specification requirements within, will not be considered.

1.05 Quality Assurance

- A. Manufacturer: Shall have a minimum ten (10) years experience specializing in the design and manufacture of Architectural Expansion Control Systems.

PART 2 - PRODUCT

2.01 General

Provide horizontal expansion control system that accommodates two directional thermal movement. Profiles shall incorporate an integral hinge feature to accommodate vertical movement or uneven slab conditions.

2.02 Components and Materials

- A. Aluminum Extrusions – Material to conform to properties of ASTM B221; alloy 6005-T5 or 6063-T6.
- B. Moisture Protection (if required) – Provide EPDM sized to accommodate opening width and movement.
- C. Anchorage - Provide minimum ¼" diameter concrete expansion anchor at maximum 18" c.c. spacing to secure aluminum cover to floor slab.
 - 1) Corner Condition Wall Mount Profile
 - 2) Anchor to be supplied by installing contractor. Anchor type to be determined by wall construction.
- D. Fire Barrier Assembly - Designed to provide the required fire endurance rating, minimize passage of smoke and accommodate dynamic movement without stress or degradation to its components. Test



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system in maximum joint width incorporating a field splice. Supply Erie Metal Specialties Fire Barrier System as governed by joint opening, test requirements and fire rating.

- E. Concrete Slab Repair(recommended)-Utilize manufacturer single component rapid strength repair mortar meeting the following data requirements.

Compressive strength, psi (ASTM C 109)

2 hours	1,500
24 hours	4,500
7 days	8,000
28 days	9,000

2.03 Fabrication

- A. Extrusions to be shipped in standard 10 ft. lengths and shall be cut to length on jobsite where required. Profiles shall be miter cut in the field to conform to directional changes unless otherwise contracted with expansion joint manufacturer.
- B. Anchor holes for corner condition wall mount profile shall be countersunk and field drilled by installing contractor at 12" o.c.
- C. Fire Barriers - Ship manufacturer's standard assembly for the required hourly rating. Fire barrier shall be miter cut in the field to accommodate changes in direction.

2.04 Finishes

- A. All Profiles
 - 1. Standard - Aluminum extrusions shall be supplied in mill finish.

PART 3 - EXECUTION

3.01 Installation

- A. Verify that project conditions are suitable for proper installation of system.
- B. Protect all expansion joint component parts from damage during installation and placement of finish floor materials and thereafter until completion of structure
- C. Joint systems shall be installed in strict accordance with the manufacturer's typical details and instructions along with the advice of their qualified representative.

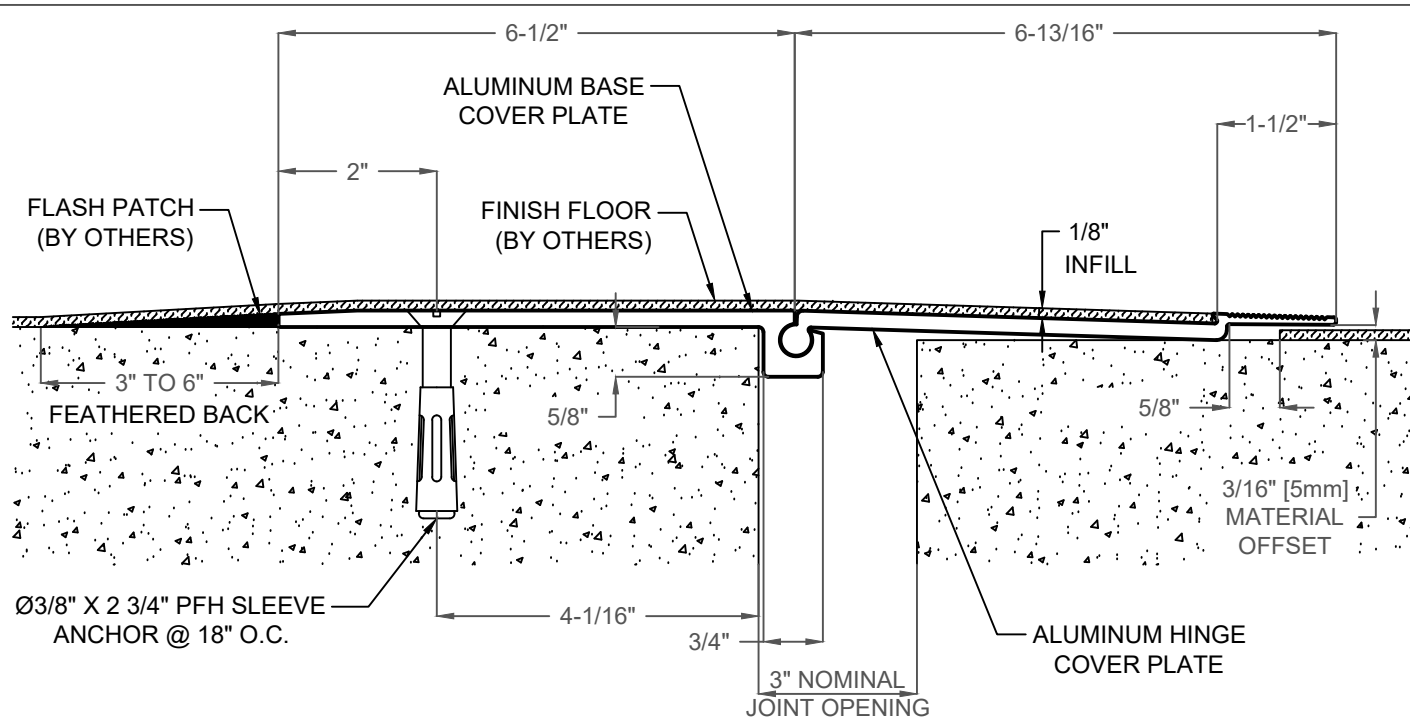


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D. Anchor holes for corner condition wall mount profile shall be countersunk and field drilled by installing contractor at 12" o.c.

3.02 Clean and Inspect

A. Upon completing installation, the contractor shall clean all exposed metal surfaces with a suitable cleaner that will not harm or attack the finish. Contact manufacturer should questions arise regarding suitability of any cleaner type prior to its use.



FLOOR-TO-FLOOR SINGLE WING INFILL HINGED SYSTEM

EXPOSED FINISH: MILL

HORIZONTAL MOVEMENT: +/- 5/8" [16mm]

VERTICAL MOVEMENT (@ 3" NOM. J.O.): + 1/8" [4mm], - 1 5/8" [41mm]

STOCK LENGTHS: 10'-0"

INFILL: 1/8" [3mm]

PRODUCT	Application	Joint Size @ Mean T°F	Exposed Sight Line	Infill Height	Total Movement IN (MM)
EFA150-125	Floor-Floor	3.00" (76)	1.50" (38)	0.125" (3)	1.25" (32)

NO.	Description	Date	By

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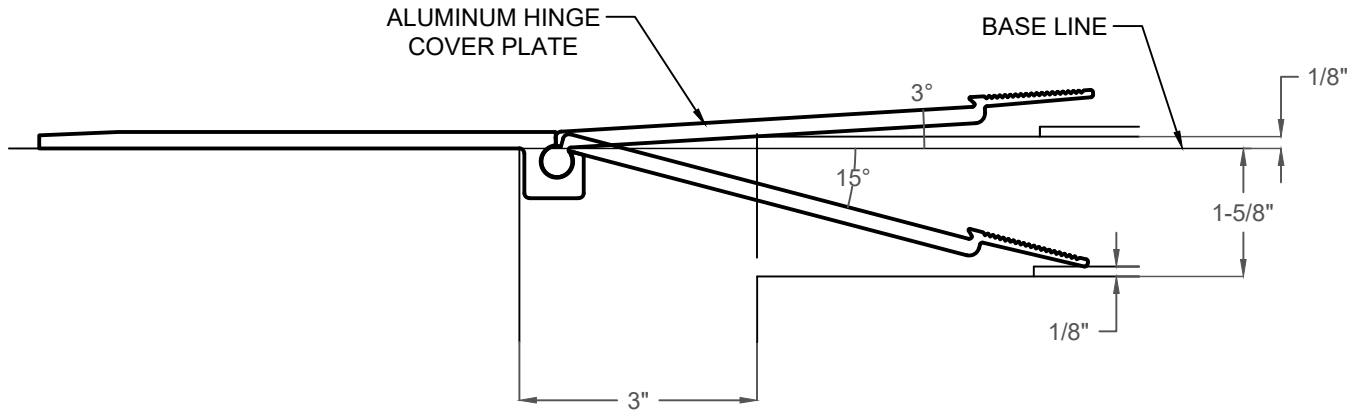


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PROJECT:

TITLE: EFA150-125 Single Wing Infill Hinged System

Detailed by:	Date:
BAF	10/21/17
Checked by:	Date:
SLP	10/21/17
Scale:	EMS Job #:
NTS	
Sheet No.:	Drawing No.:
1 of 1	EFA150125



EFA150-125 VERTICAL MOVEMENT

FLOOR-TO-FLOOR SINGLE WING INFILL HINGED SYSTEM

EXPOSED FINISH: MILL
 HORIZONTAL MOVEMENT: +/- 5/8" [16mm]
 VERTICAL MOVEMENT (@ 3" NOM. J.O.): + 1/8" [4mm], - 1 5/8" [41mm]
 STOCK LENGTHS: 10'-0"
 INFILL: 1/8" [3mm]

PRODUCT	Application	Joint Size @ Mean T°F	Exposed Sight Line	Infill Height	Total Movement IN (MM)
EFA150-125	Floor-Floor	3.00" (76)	1.50" (38)	0.125" (3)	1.25" (32)

NO.	Description	Date	By
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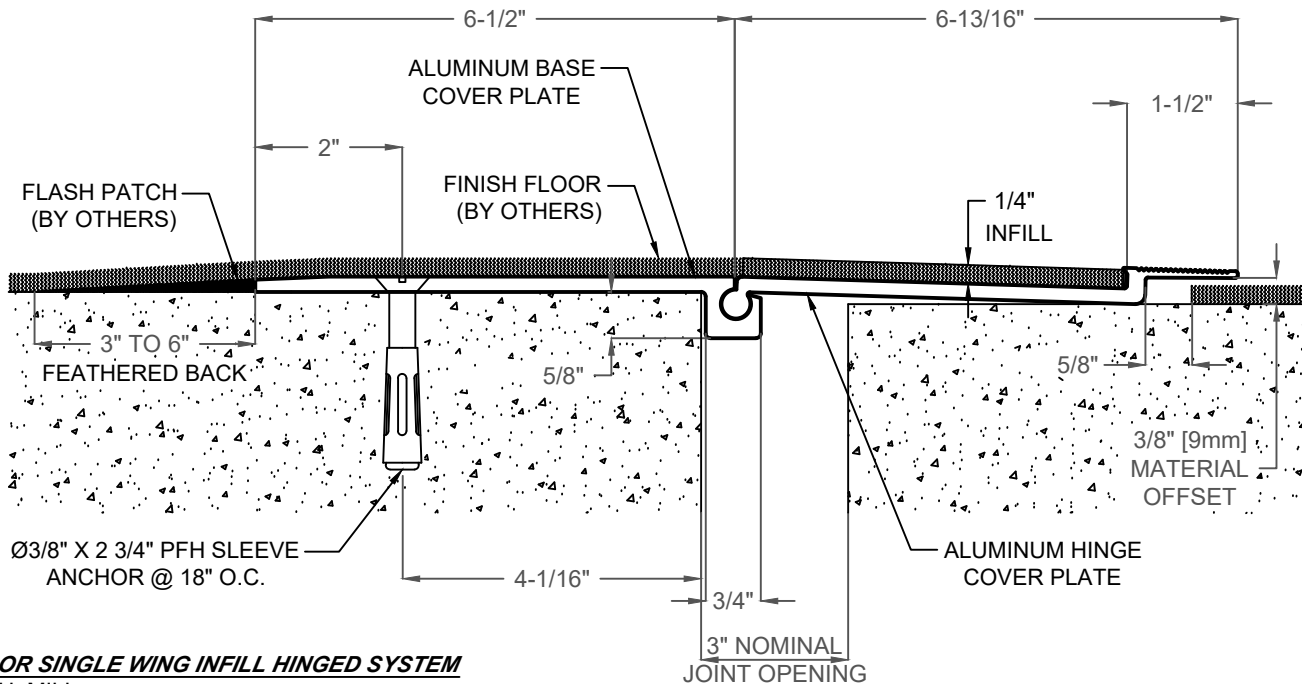


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PROJECT:

TITLE: EFA150-125 Single Wing Infill Hinged System - Vertical Movement Detail

Detailed by:	Date:
BAF	10/21/17
Checked by:	Date:
SLP	10/21/17
Scale:	EMS Job #:
NTS	
Sheet No.:	Drawing No.:
1 of 1	EFA150125



FLOOR-TO-FLOOR SINGLE WING INFILL HINGED SYSTEM

EXPOSED FINISH: MILL

HORIZONTAL MOVEMENT: +/- 5/8" [16mm]

VERTICAL MOVEMENT (@ 3" NOM. J.O.): + 1/8" [4mm], - 1 9/16" [40mm]

STOCK LENGTHS: 10'-0"

INFILL: 1/4" [6mm]

PRODUCT	Application	Joint Size @ Mean T°F	Exposed Sight Line	Infill Height	Total Movement IN (MM)
EFA150-250	Floor-Floor	3.00" (76)	1.50" (38)	0.25" (6)	1.25" (32)

NO.	Description	Date	By
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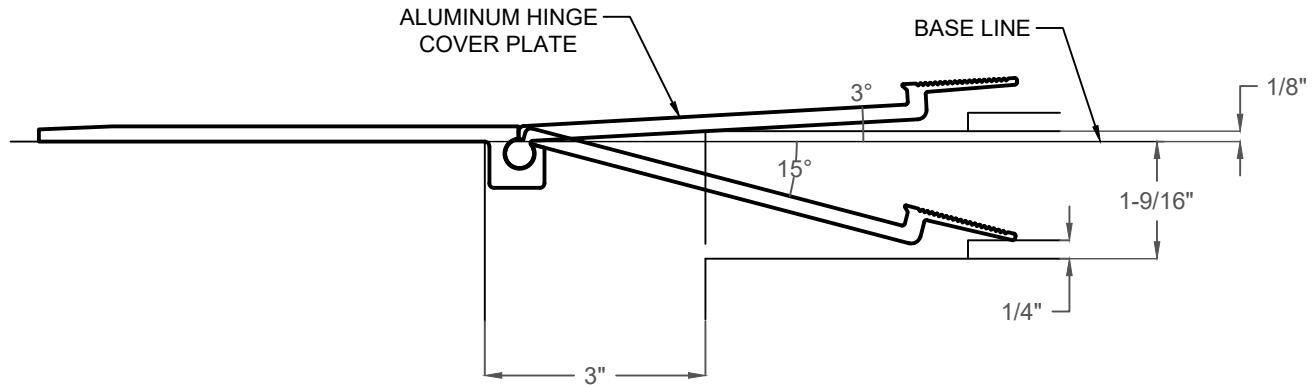


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PROJECT:

TITLE: EFA150-250 Single Wing Infill Hinged System

Detailed by:	Date:
BAF	10/21/17
Checked by:	Date:
SLP	10/21/17
Scale:	EMS Job #:
NTS	
Sheet No.:	Drawing No.:
1 of 1	EFA150250



EFA150-250 VERTICAL MOVEMENT

FLOOR-TO-FLOOR SINGLE WING INFILL HINGED SYSTEM

EXPOSED FINISH: MILL

HORIZONTAL MOVEMENT: +/- 5/8" [16mm]

VERTICAL MOVEMENT (@ 3" NOM. J.O.): + 1/8" [4mm], - 1 9/16" [40mm]

STOCK LENGTHS: 10'-0"

INFILL: 1/4" [6mm]

PRODUCT	Application	Joint Size @ Mean T°F	Exposed Sight Line	Infill Height	Total Movement IN (MM)
EFA150-250	Floor-Floor	3.00" (76)	1.50" (38)	0.25" (6)	1.25" (32)

NO.	Description	Date	By
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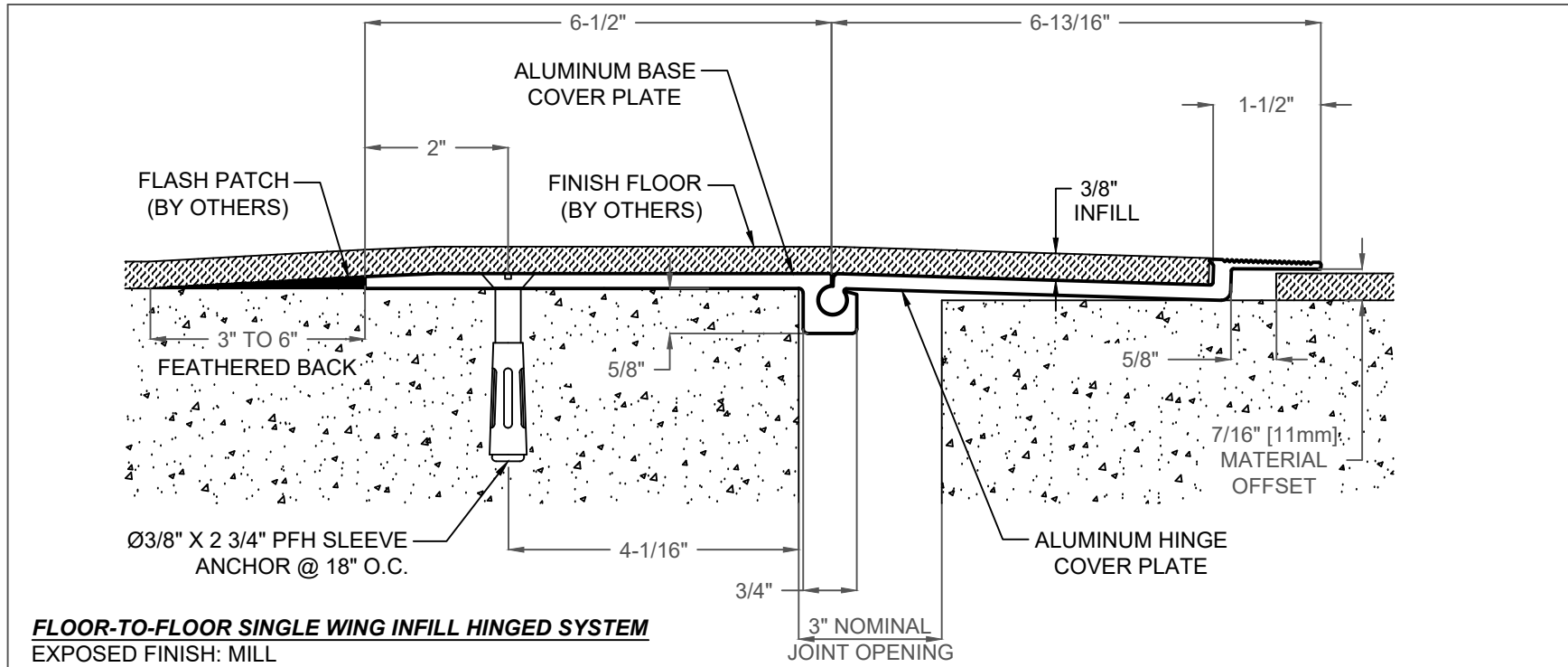


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PROJECT:

TITLE: EFA150-250 Single Wing Infill Hinged System - Vertical Movement Detail

Detailed by:	Date:
BAF	10/21/17
Checked by:	Date:
SLP	10/21/17
Scale:	EMS Job #:
NTS	
Sheet No.:	Drawing No.:
1 of 1	EFA150250



FLOOR-TO-FLOOR SINGLE WING INFILL HINGED SYSTEM

EXPOSED FINISH: MILL

HORIZONTAL MOVEMENT: +/- 5/8" [16mm]

VERTICAL MOVEMENT (@ 3" NOM. J.O.): + 1/8" [4mm], - 1 11/16" [42mm]

STOCK LENGTHS: 10'-0"

INFILL: 3/8" [10mm]

PRODUCT	Application	Joint Size @ Mean T°F	Exposed Sight Line	Infill Height	Total Movement IN (MM)
EFA150-375	Floor-Floor	3.00" (76)	1.50" (38)	0.375" (10)	1.25" (32)

NO.	Description	Date	By
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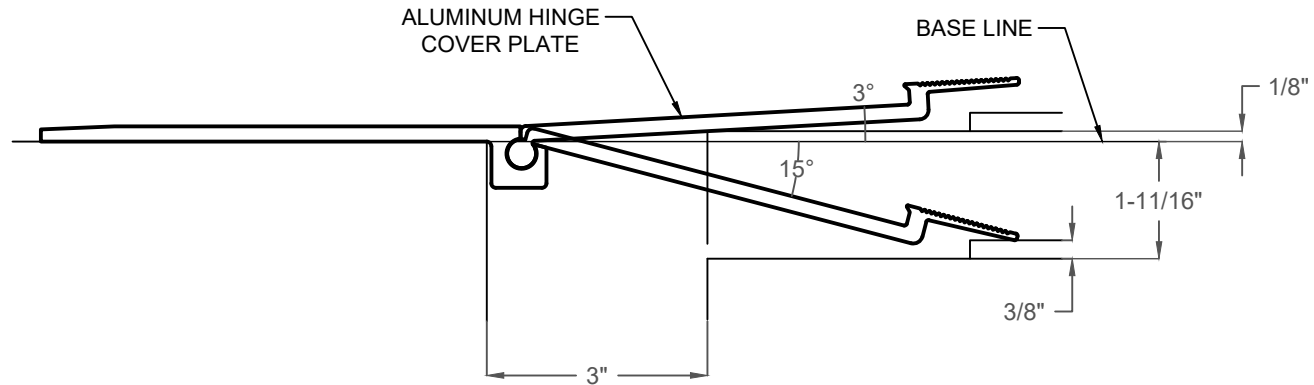


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PROJECT:

TITLE: EFA150-375 Single Wing Infill Hinged System - Vertical Movement Detail

Detailed by:	Date:
BAF	10/21/17
Checked by:	Date:
SLP	10/21/17
Scale:	EMS Job #:
NTS	
Sheet No.:	Drawing No.:
1 of 1	EFA150375



EFA150-375 VERTICAL MOVEMENT

FLOOR-TO-FLOOR SINGLE WING INFILL HINGED SYSTEM

EXPOSED FINISH: MILL

HORIZONTAL MOVEMENT: +/- 5/8" [16mm]

VERTICAL MOVEMENT (@ 3" NOM. J.O.): + 1/8" [4mm], - 1 9/16" [40mm]

STOCK LENGTHS: 10'-0"

INFILL: 3/8" [10mm]

PRODUCT	Application	Joint Size @ Mean T°F	Exposed Sight Line	Infill Height	Total Movement IN (MM)
EFA150-375	Floor-Floor	3.00" (76)	1.50" (38)	0.375" (10)	1.25" (32)

NO.	Description	Date	By

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PROJECT:

TITLE: EFA150-375 Single Wing Infill Hinged System - Vertical Movement Detail

Detailed by: BAF	Date: 10/21/17
Checked by: SLP	Date: 10/21/17
Scale: NTS	EMS Job #:
Sheet No.: 1 of 1	Drawing No.: EFA150375