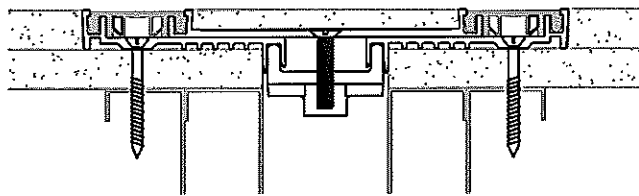
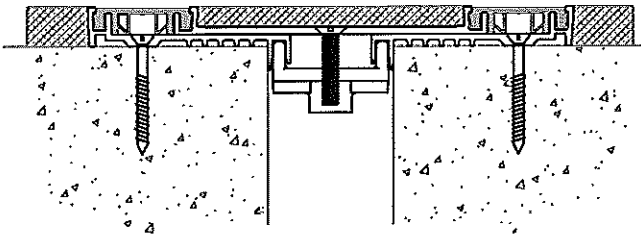




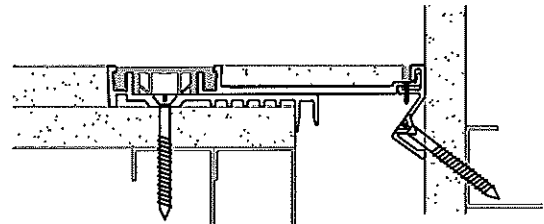
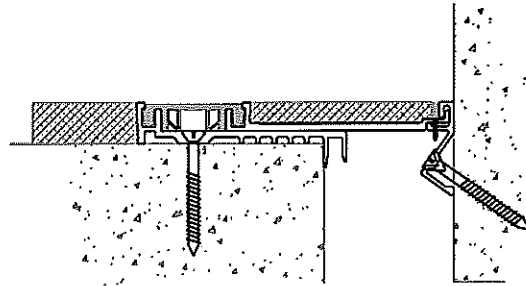
Installation Procedure

Watson Bowman Acme Corp. 95 Pineview Drive Amherst, NY 14228
phone: (716) 691-7566 fax: (716) 691-9239
website: www.wbacorp.com

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Model - TSF Floor Condition
See Sheets: 1-5 For
Installation of System



Model - TSF Corner Condition
See Sheets: 6-10 For
Installation of System

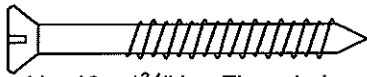
Wabo® TwinSeam Model(s) "TSF" & "TSF Corner"

Horizontal & Vertical Expansion Control Systems

The following installation procedure is very important and must be fully understood prior to beginning any work. To ensure proper installation and performance of expansion joint system the following actions must be completed by the installing contractor. Failure to do so will affect product warranty.

- 1) Carefully read and understand installation procedure. Contact WBA's Technical Service Department at (800) 677-4922 for product assistance.
- 2) Inspect all shipments and materials for missing or damaged components and hardware. Contact Customer Service at (800) 677-4922 with WBA's order number and invoice for prompt assistance.
- 3) Inspect substrate or adjacent construction for acceptance before beginning work. Report unacceptable construction to the project manager for scheduled repair work.
- 4) Review WBA shop drawings for project specific detailed information if Engineering services were purchased at time of order.

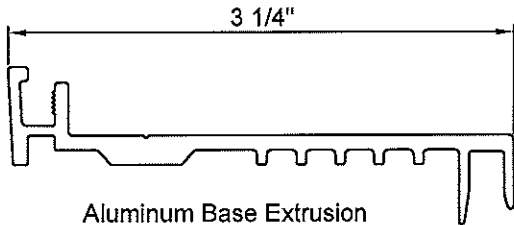
Standard Components For Floor Condition



No. 12 x 1 3/4" Lg. Threaded
Concrete Anchor
Part Number - 6530



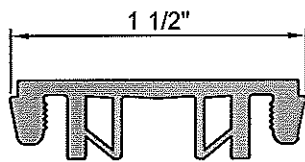
1/4" Dia. x 2" Lg. Stainless Steel
Flathead Screw
Part Number - 5682



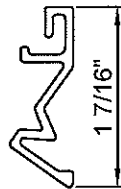
Aluminum Base Extrusion
Part Number - 20701



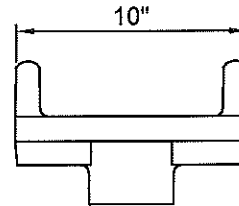
* No. 6 Screw
Part Number - 5719



Elastomeric Seal
P/N - 17101 (Black)
17102 (Gray)
17103 (Beige)
17104 (White)

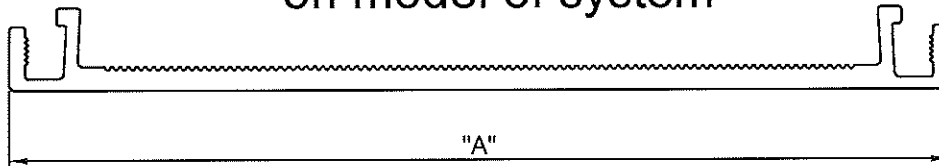


* Wall Mount Aluminum Extrusion
Part Number - 11206



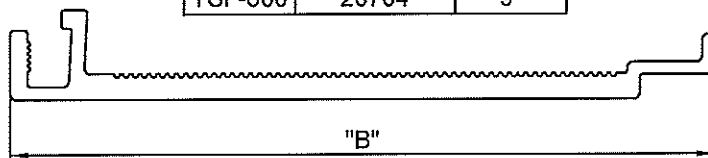
Seismic Centering Bar
Part Number - 11120

Components shown below vary in size depending
on model of system



Aluminum Slide Plate

Dimensional Chart		
Model	Part Number	"A"
TSF-200	20702	5"
TSF-400	20703	7"
TSF-600	20704	9"



* Aluminum Slide Plate

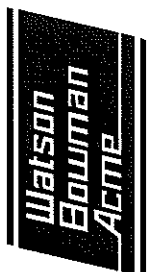
Dimensional Chart		
Model	Part Number	"B"
TSF-200C	20705	3.432"
TSF-400C	20706	5.432"
TSF-600C	20708	7.432"

* Components required for corner condition installation.

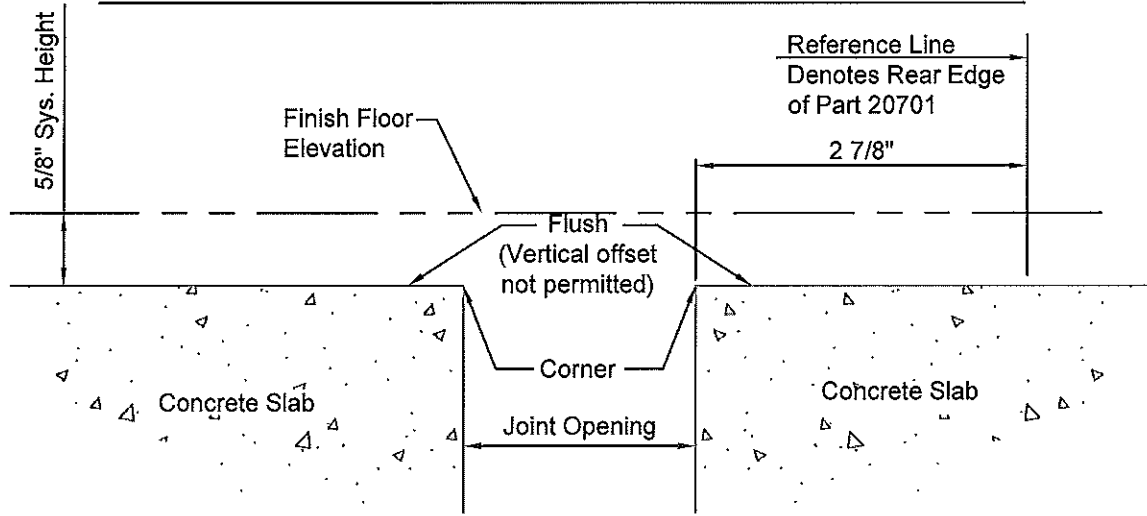
Watson Bowman Acme Corp.
95 Pineview Drive Amherst, NY 14228
phone: (716) 691-7566 fax: (716) 691-9239
website: www.wbacorp.com

Installation procedure: TSF TwinSeam system

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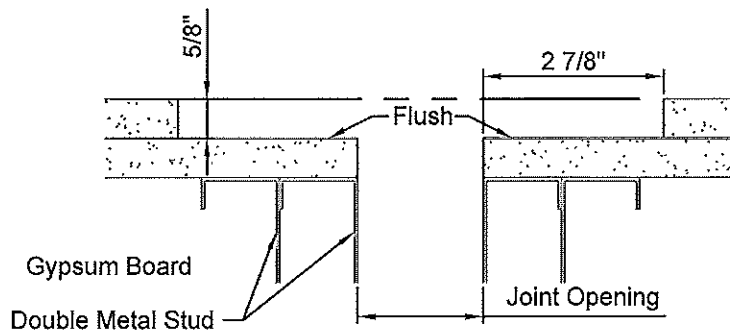


Installation Procedure For Floor Condition

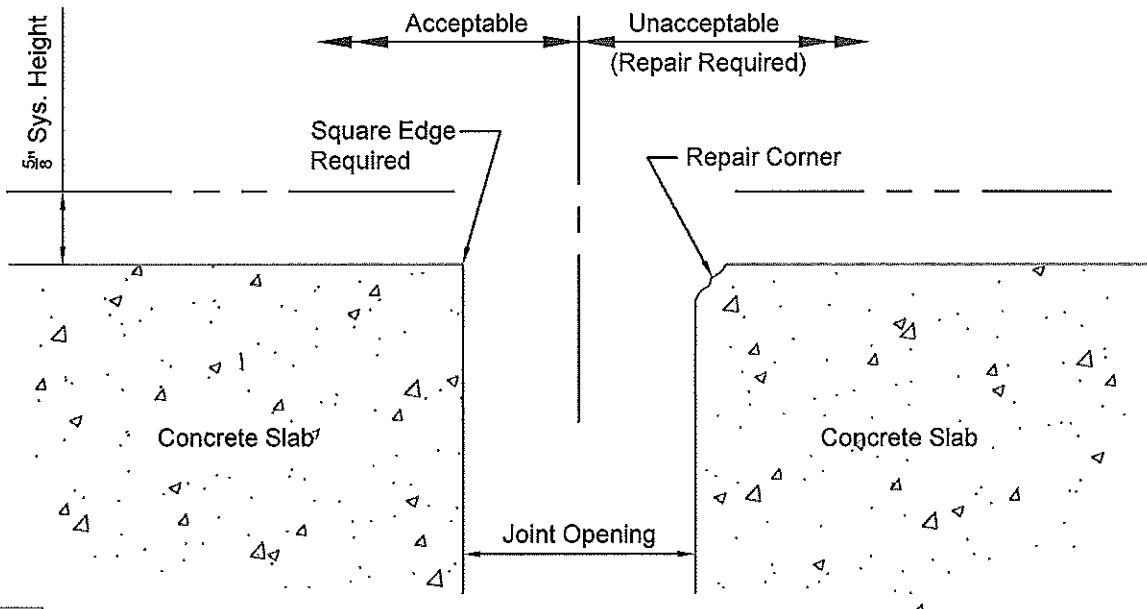


1A Floor - Prior to beginning work, installer shall inspect corners of concrete slab for acceptability. For repair (if required) refer to step 2, also, measure joint opening for proper size as called for on W.B.A. shop drawings or Cad detail.

Wall to Wall

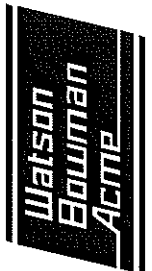


1B Wall - Prior to beginning work, installer shall inspect corners of Gypsum Board for acceptability.

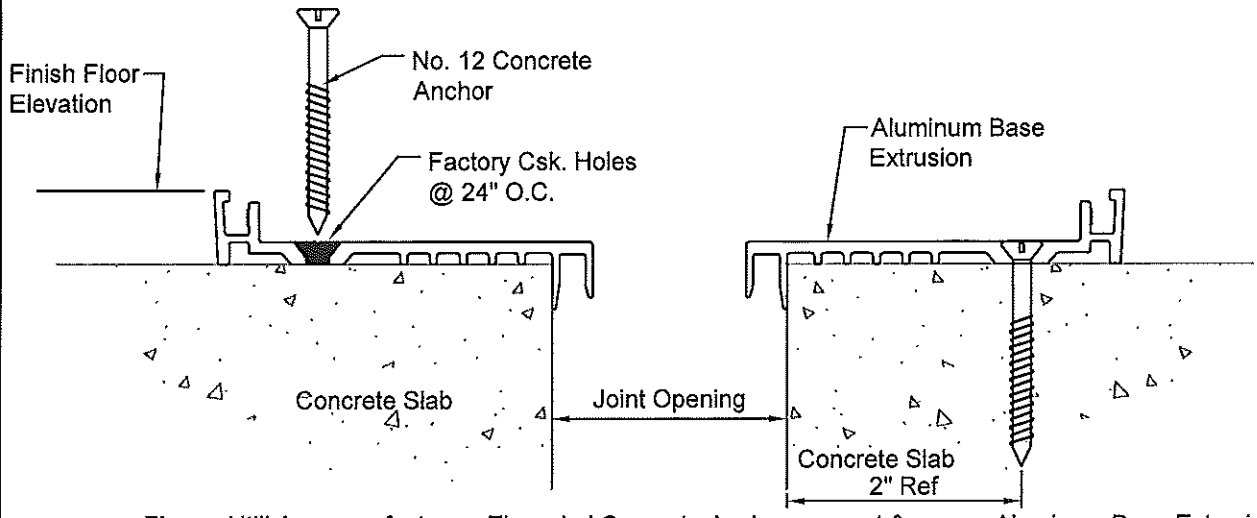


2 UTILIZING concrete repair material, repair corner of concrete slab following manufacturers written instructions.

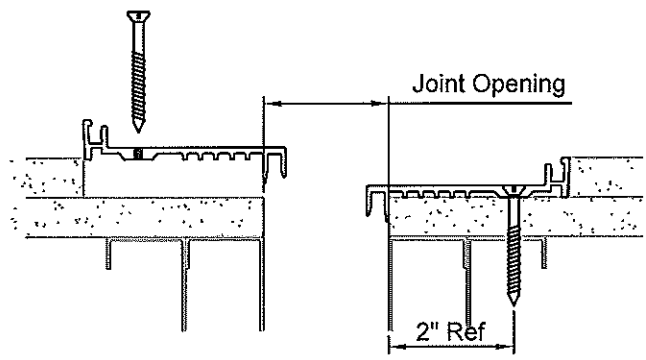
Installation procedure: TSF TwinSeam system
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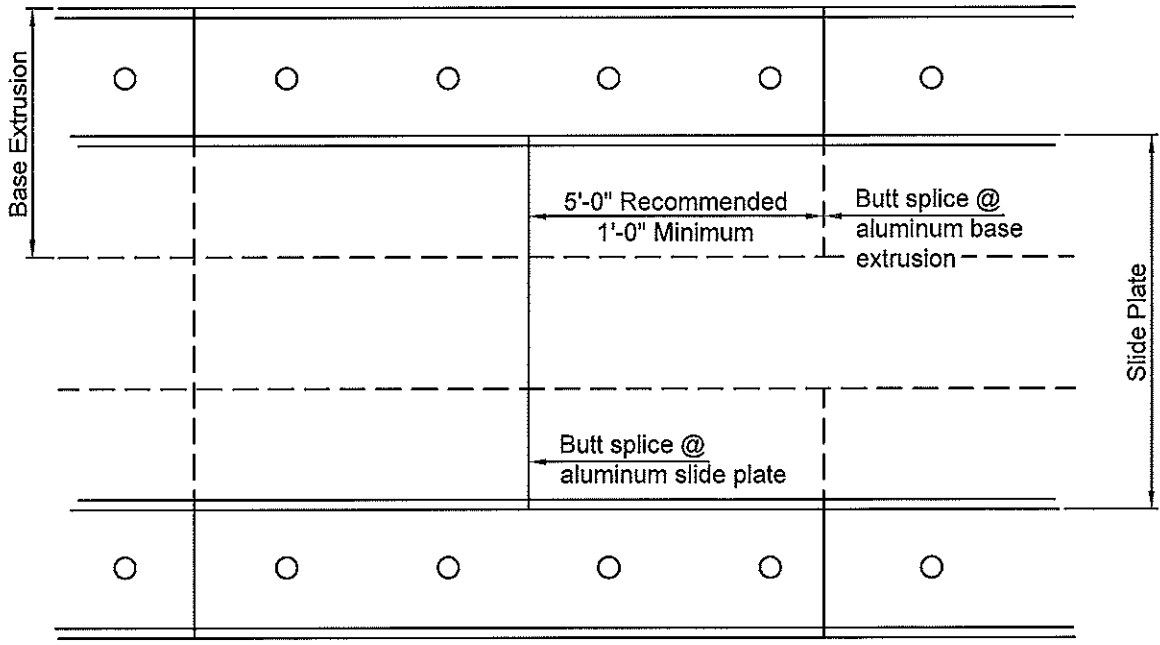
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 website: www.wbacorp.com



3A **Floor** - Utilizing manufacturers Threaded Concrete Anchors, mount & secure Aluminum Base Extrusion to concrete slab.
 - Butt all ends tight between standard lengths of aluminum base extrusion.
Note: Drill Holes for concrete anchors by utilizing 5/32" Carbide Masonry Drill Bits.

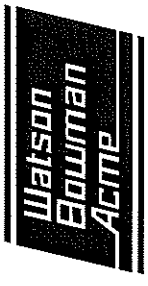


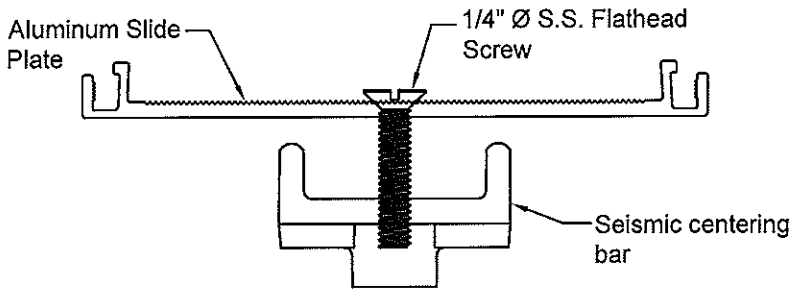
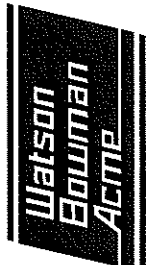
3B **Wall** - Utilizing manufacturers Threaded Concrete Anchors, mount & secure Aluminum Base Extrusion to wall construction and metal stud. Butt all ends tight between standard lengths of aluminum base extrusion.
Note: Since construction is not concrete installer may continue to utilize supplied anchor if substrate is Wood, Plastic or Thin Metal. In such case, predrilling hole is typically not required.



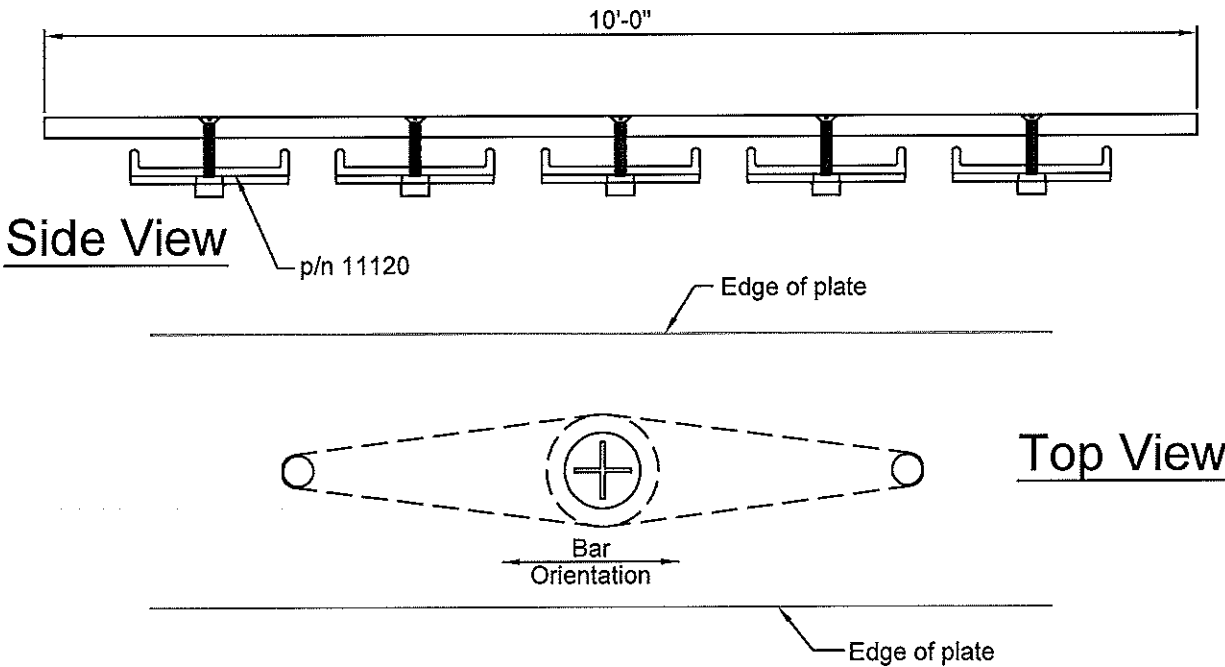
4 Stagger all splices in accordance with detail illustrated above to provide a stronger assembly and durable installation.

Installation procedure: TSF TwinSeam system
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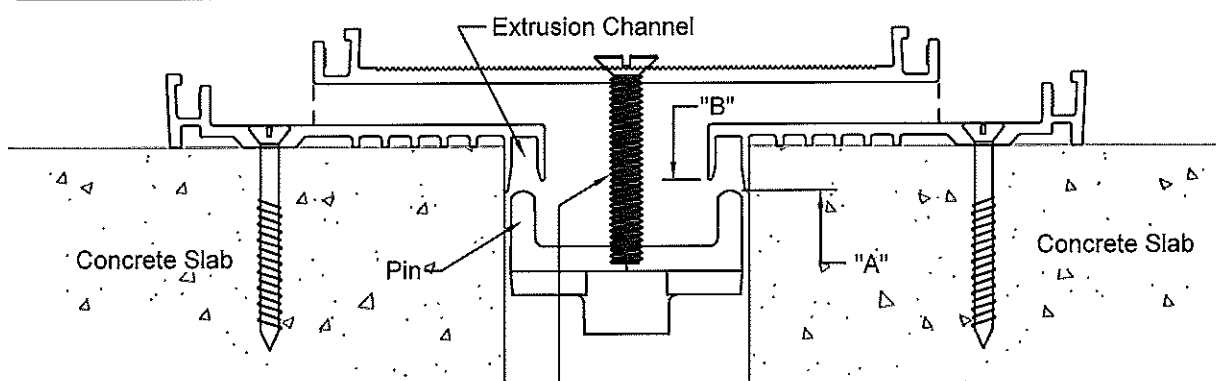




5 Insert S.S. Flathead Screw into Aluminum Slide plate and Seismic Centering bar. Partially thread screw through centering bar by allowing bar 2-3 full turns after engagement.



6 Step 5 must be complete for all seismic centering bars that will be utilized to secure a standard 10 foot section of slide plate. Centering bars must be oriented parallel to edge of plate to allow for proper insertion into opening and base extrusion channel.

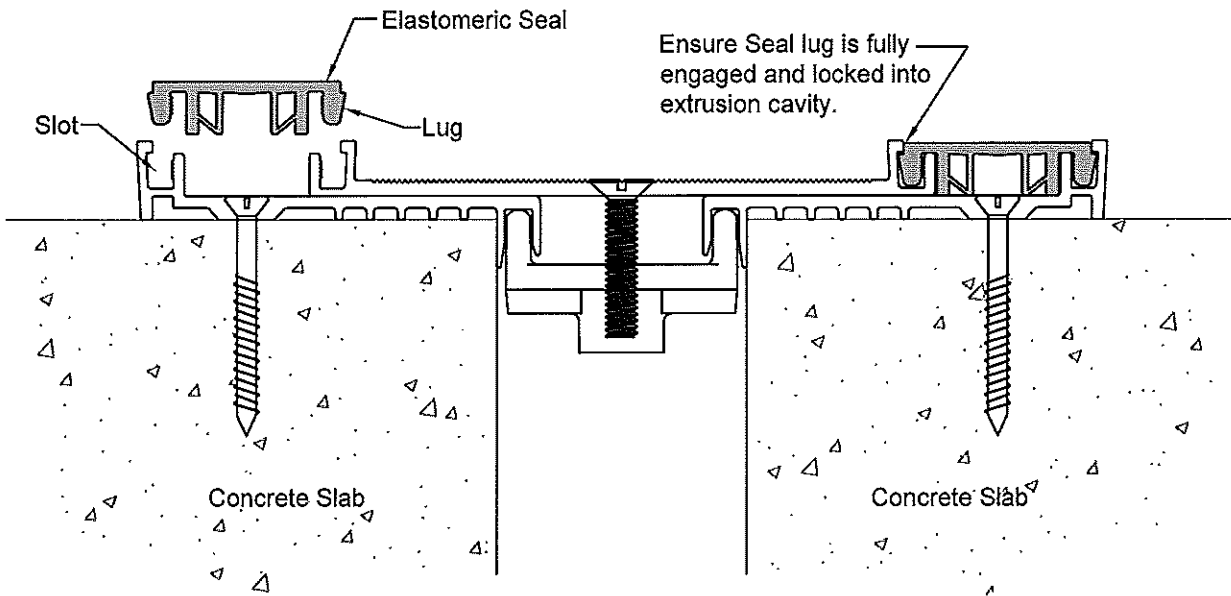


FINAL TORQUE SETTINGS
15 Inch Lbs. *

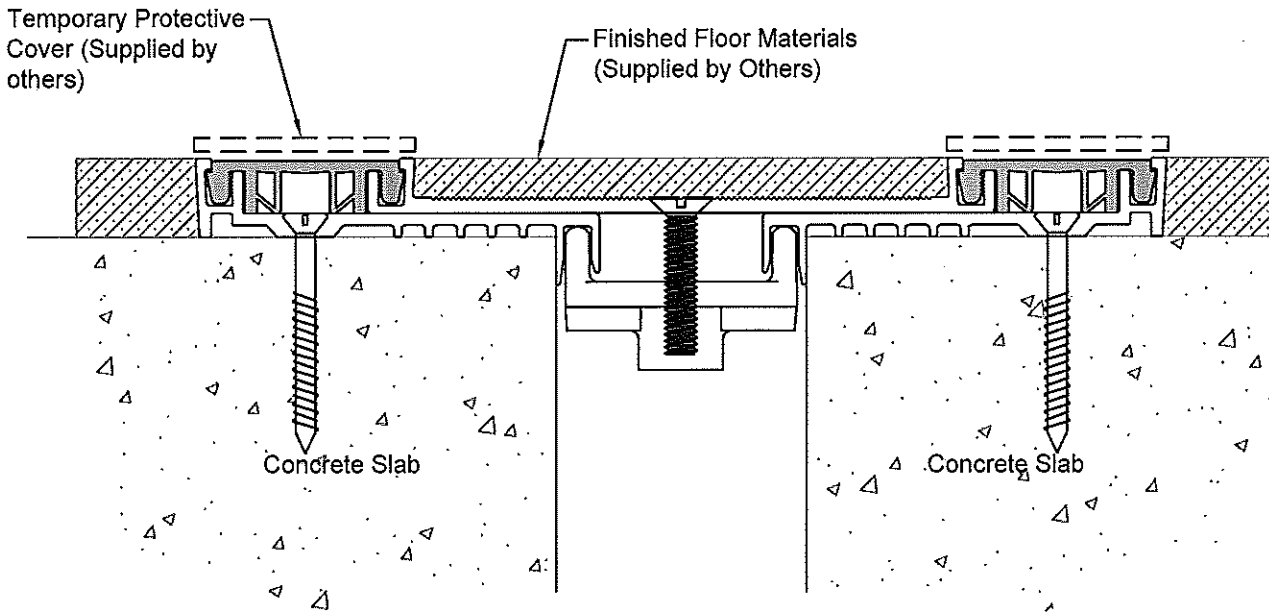
Center and lower slide plate into opening. Reference point "A" must be lower than point "B" to permit proper installation. Turn screw clockwise to rotate centering bar permitting alignment of pins directly below extrusion channel. With continuous motion, thread screw allowing vertical engagement between pin and channel. Visually inspect for proper engagement prior to final tightening of screws.

7 Utilizing inch-lbs clicker torque wrench, make final adjustment on all screws.
Installation Tip: Calibrate battery operated drill/driver to proper inch-lb setting. Periodically inspect for proper torque setting utilizing clicker wrench.
CAUTION: Over tightening of screws may **VOID** warranty.

* Armstrong Torque wrench #64-031 used to verify settings.

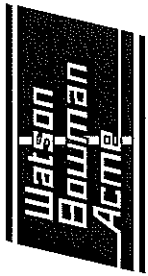


8 Insert Elastomeric Seal into slots of Aluminum Base Extrusion and Aluminum Slide plate, exercising care not to damage Elastomeric Seal.



9 Install finish flooring material. For flooring applications refer to sheet 11.
Note: Installing contractor shall cover and protect finished expansion joint assembly from damage during installation of finished floor materials. The expansion joint assembly is a finished product. Damage to expansion joint finishes and components **ARE** excluded from warranty.

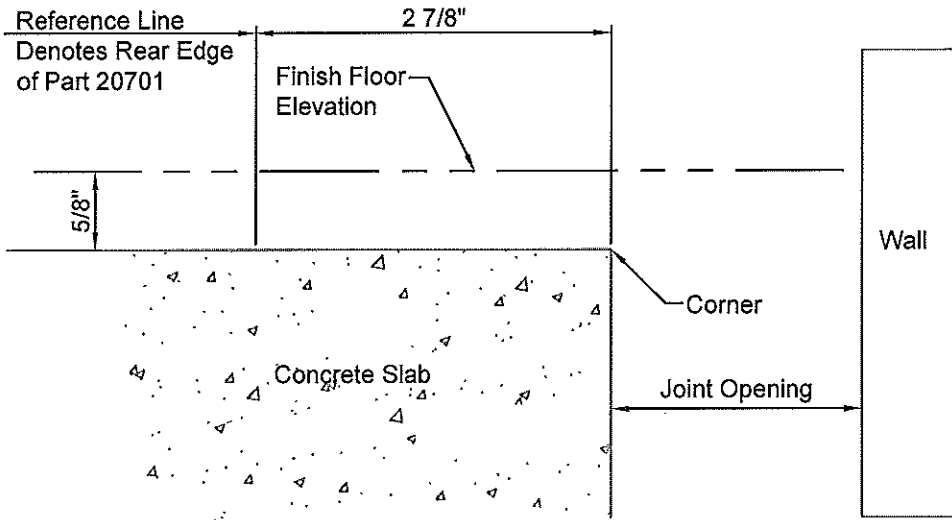
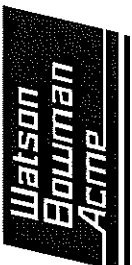
Installation procedure: TSF TwinSeam system
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Installation Procedure For Corner Condition

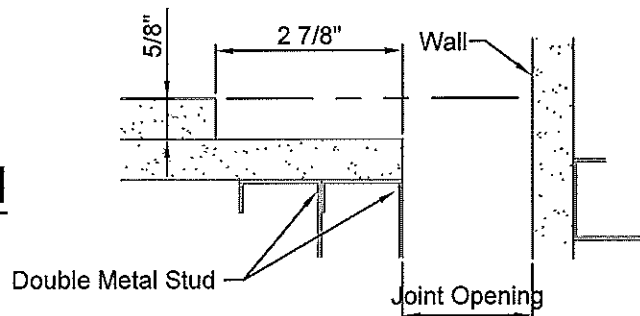
Installation procedure: TSF TwinSeam system

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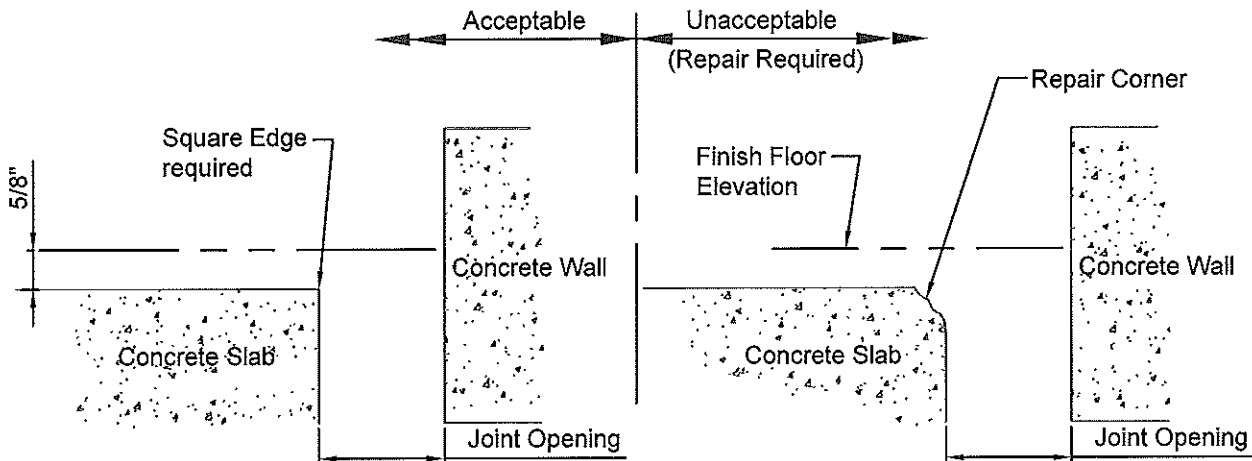


1A Floor - Prior to beginning work, installer shall inspect corners of concrete slab for acceptability. For repair (if required) refer to step 2, also, measure joint opening for proper size as called for on W.B.A. shop drawings or Cad detail.

Wall to Wall



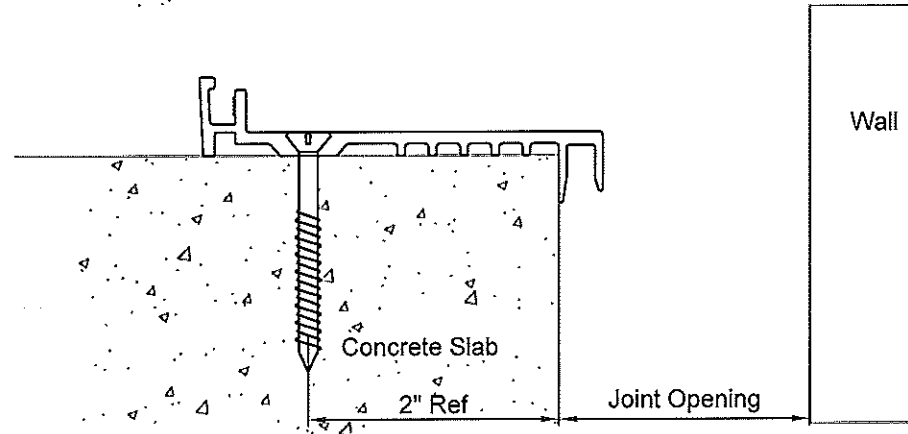
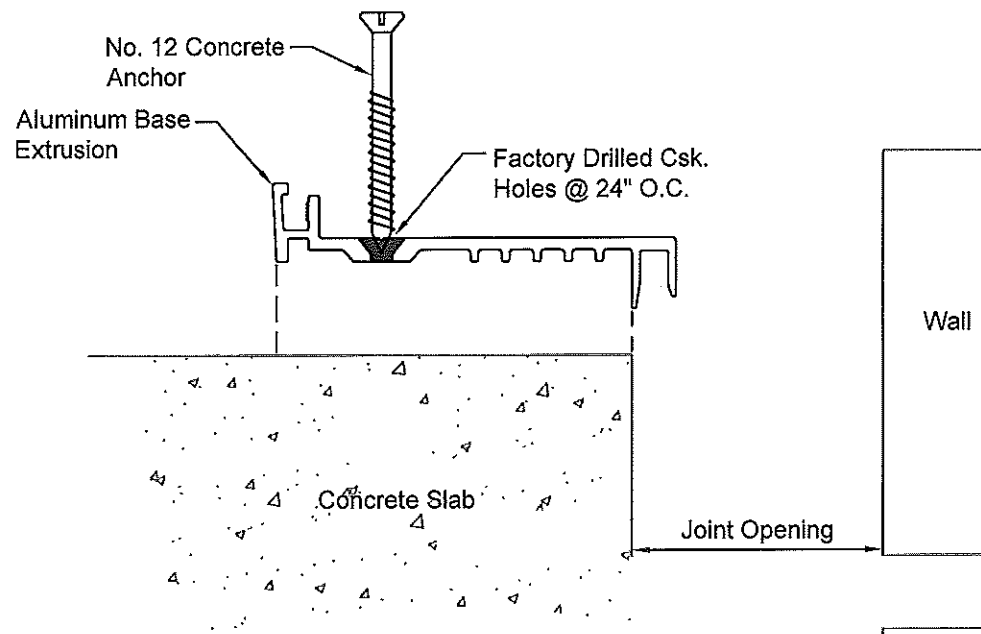
1B Wall - Prior to beginning work, installer shall inspect corners of Gypsum Board for acceptability.



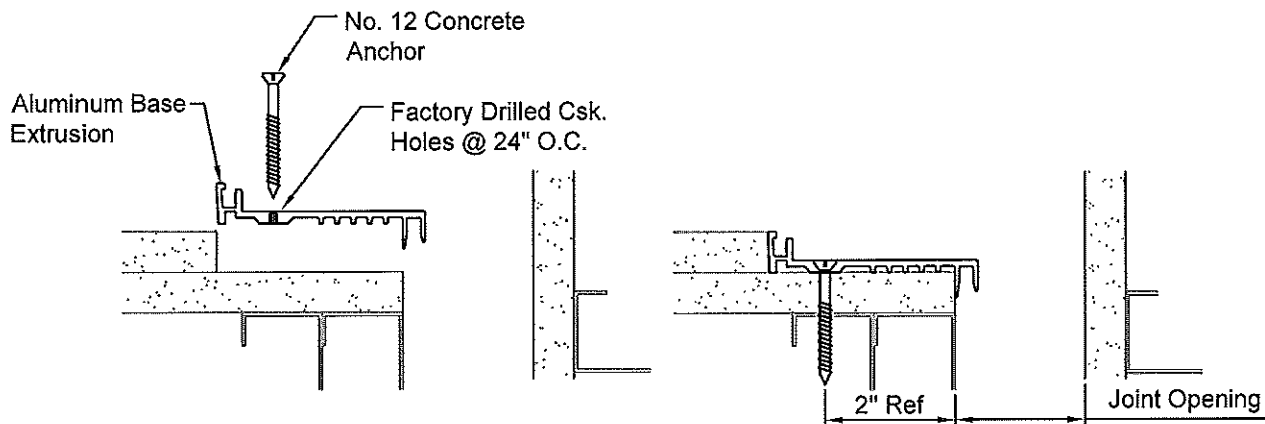
2 UTILIZING concrete repair material, repair corner of concrete slab following manufacturers written instructions.

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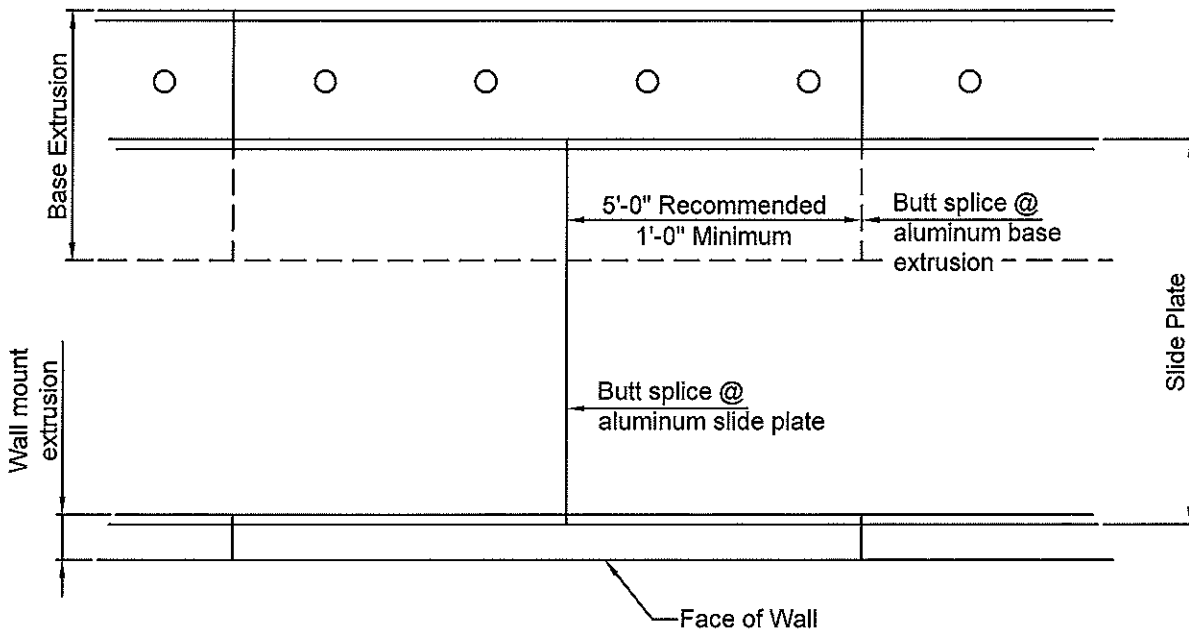
Installation procedure: TSF TwinSeam system
Watson Bowman Acme Corp. reserves the right to amend or withdraw any information contained herein without notice and will not be responsible for any inaccuracy or ambiguity of any information contained herein.



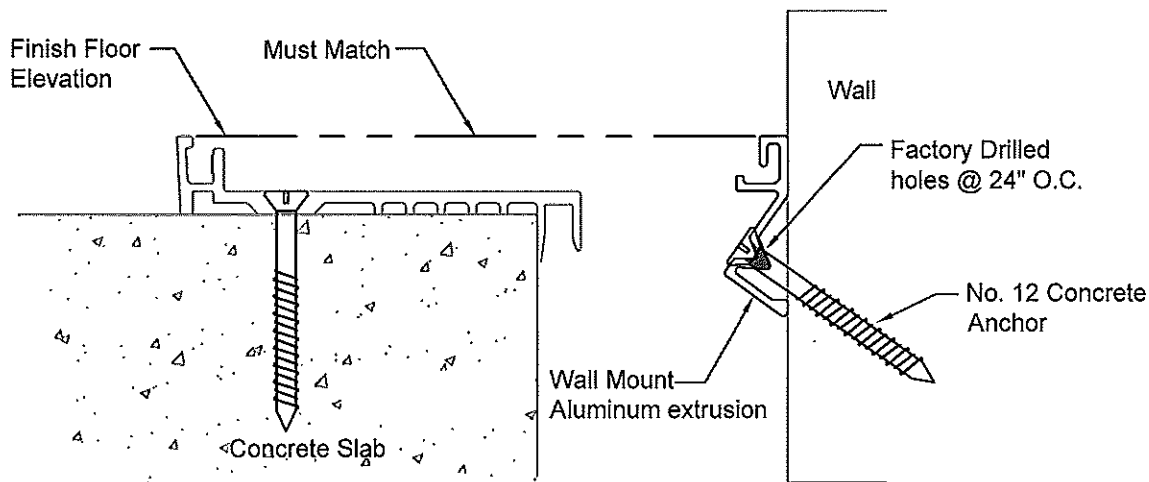
3A **Floor** - Utilizing manufacturers Threaded Concrete Anchors, mount & secure Aluminum Base Extrusion to concrete slab.
- Butt all ends tight between standard lengths of aluminum base extrusion.
Note: Drill Holes for concrete anchors by utilizing 5/32" Lg Carbide Masonry Drill Bits.



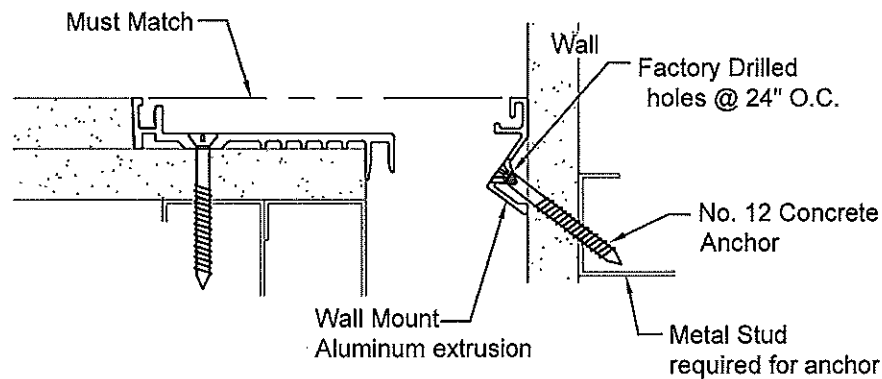
3B **Wall** - Utilizing manufacturers Threaded Concrete Anchors, mount & secure Aluminum Base Extrusion to wall construction & metal stud.
- Butt all ends tight between standard lengths of aluminum base extrusion.
Note: Since construction is not concrete installer may continue to utilize supplied anchor if substrate is Wood, Plastic or Thin Metal. In such case, predrilling hole is typically not required.



4 Stagger all splices in accordance with detail illustrated above to provide a stronger assembly and durable installation.

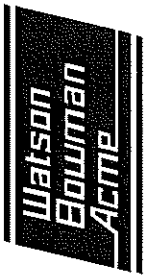


5A **Floor** - Utilizing manufacturers Threaded Concrete Anchors, mount & secure Aluminum Base Extrusion to concrete slab.
- Butt all ends tight between standard lengths of aluminum base extrusion.
Note: Drill Holes for concrete anchors by utilizing $\frac{5}{32}$ " Lg Carbide Masonry Drill Bits.



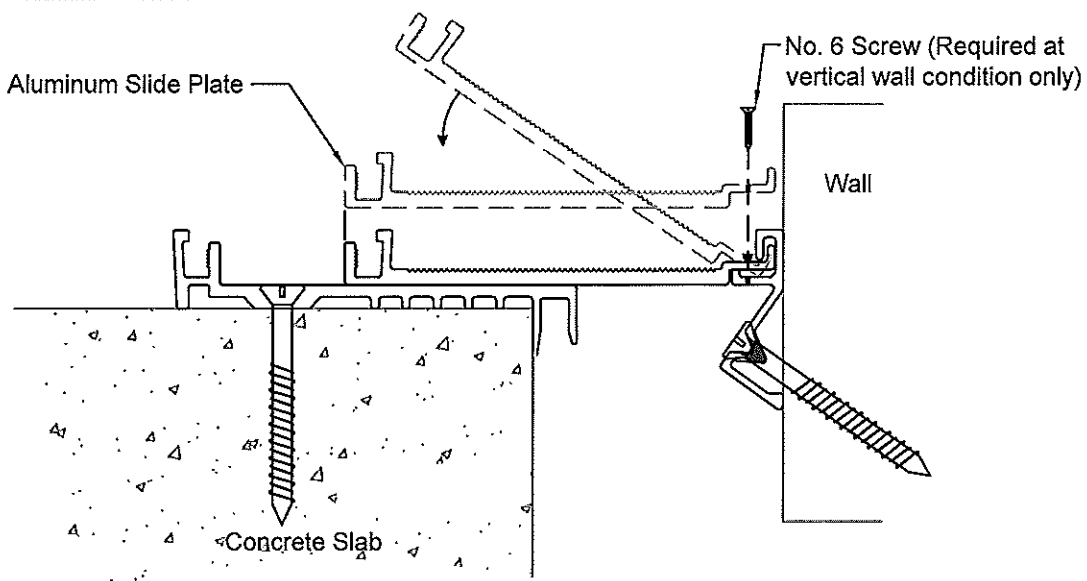
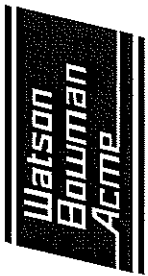
5B **Wall** - Utilizing manufacturers Threaded Concrete Anchors, mount & secure Wall Mount Aluminum Extrusion to wall construction & metal stud.
- Butt all ends tight between standard lengths of aluminum base extrusion.
Note: Since construction is not concrete installer may continue to utilize supplied anchor if substrate is Wood, Plastic or Thin Metal. In such case, predrilling hole is typically not required.

Installation procedure: TSF TwinSeam system
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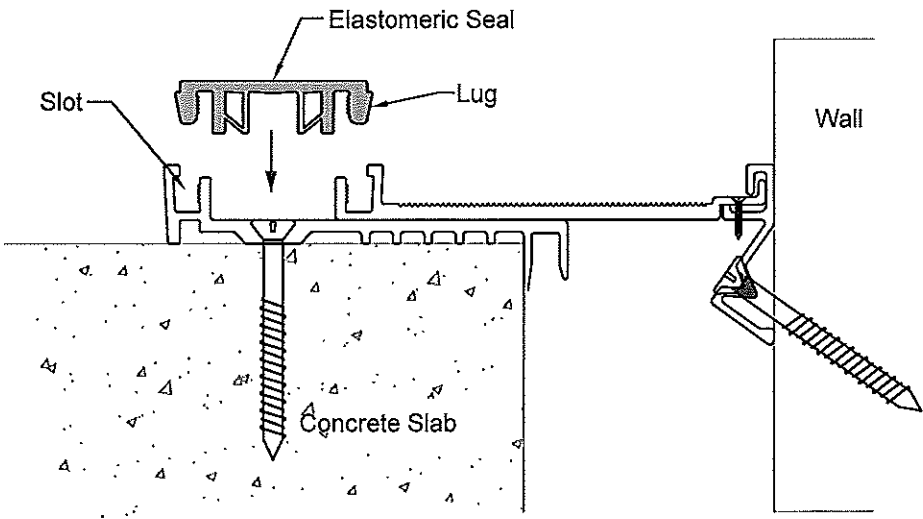


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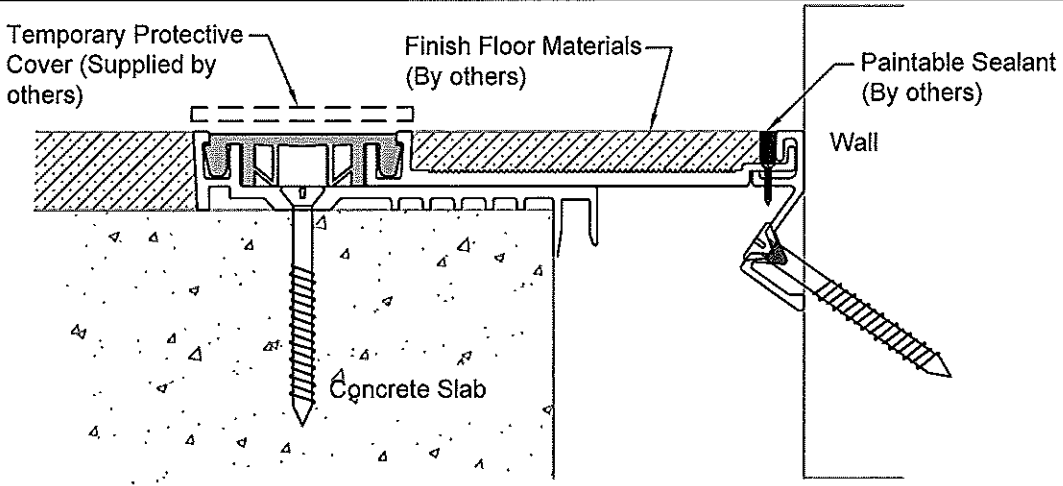
Installation procedure: TSF TwinSeam system
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6 Mount & secure Aluminum Slide Plate to Wall Mount Aluminum Extrusion. Utilize No. 6 Screw at vertical wall installation to maintain contact of slide plate to wall surface. Butt all ends tight between standard lengths of aluminum base extrusion.



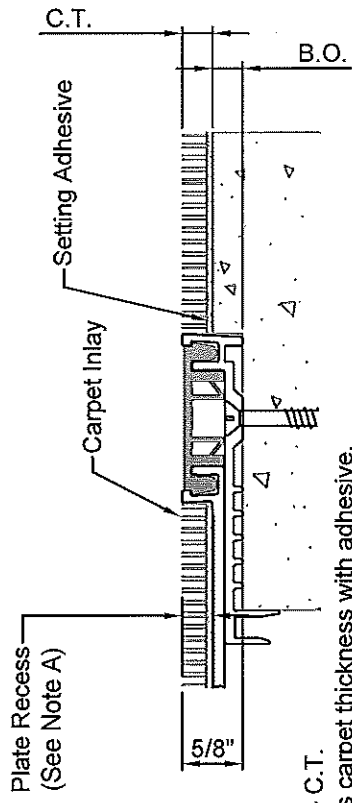
7 Insert Elastomeric Seal into slots of the Aluminum Base Extrusion and Aluminum Slide plate, exercising care not to damage Elastomeric Seal.



8 Install finish flooring material. For flooring applications refer to sheet 10.
Note: Installing contractor shall cover and protect finished expansion joint assembly from damage during installation of finished floor materials. The expansion joint assembly is a finished product. Damage to expansion joint finishes and components **ARE** excluded from warranty.

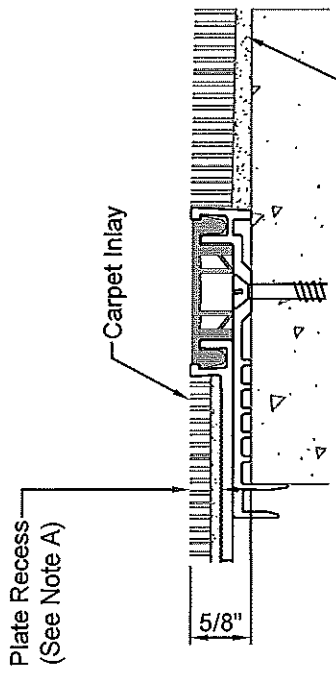
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Installation procedure: TSF TwinSeam system
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- * B.O. = 5/8" - C.T.
- * C.T. denotes carpet thickness with adhesive.
- * No B.O. required for 5/8" thick carpet.

"A" Carpet Detail
(Minimal Blockout)

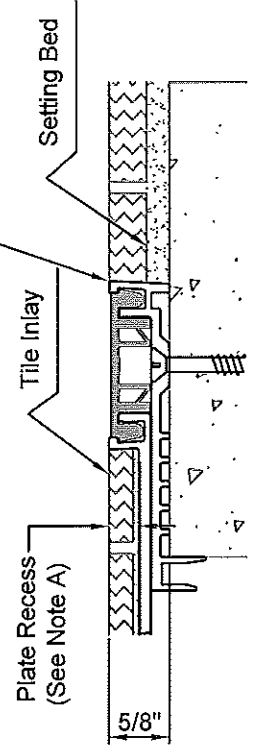


- * Taper patch material away from expansion joint.
- * Thickness of patch dependent on carpet thickness.
- * No patch required for 5/8" thick carpet.

"D" Alternate Carpet Detail
(No Blockout)

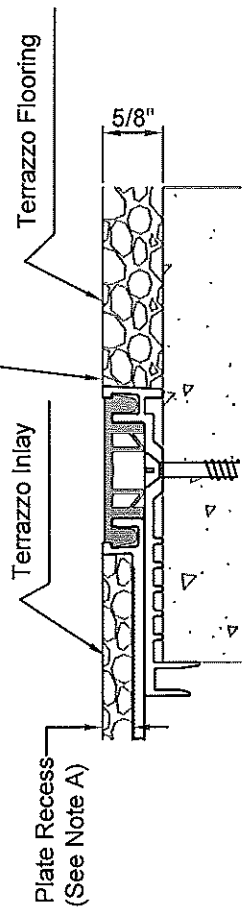
Note A: Plate Recess
* 9/32" @ TSF, TSF-C 200,400
* 5/16" @ TSF, TSF-C 600

Proper Method For Termination of Tile
To Be Determined By Installing Contractor

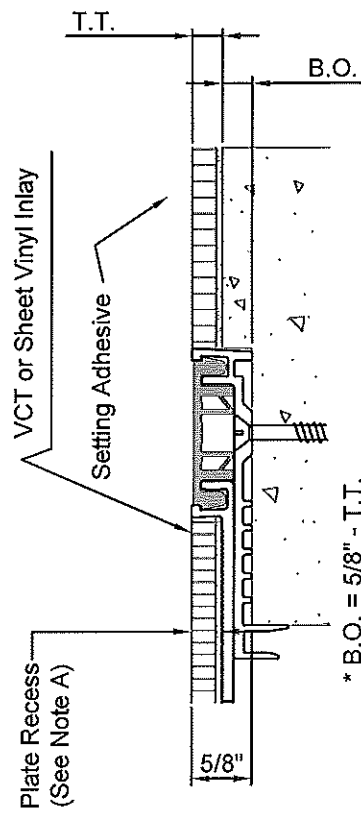


"B" Tile Detail

Proper Method For Termination of Terrazzo
To Be Determined By Installing Contractor



"C" Terrazzo Detail



- * B.O. = 5/8" - T.T.
- * T.T. denotes tile thickness with adhesive.

"E" 1/8" VCT or Sheet Vinyl Detail
(Minimal Blockout)