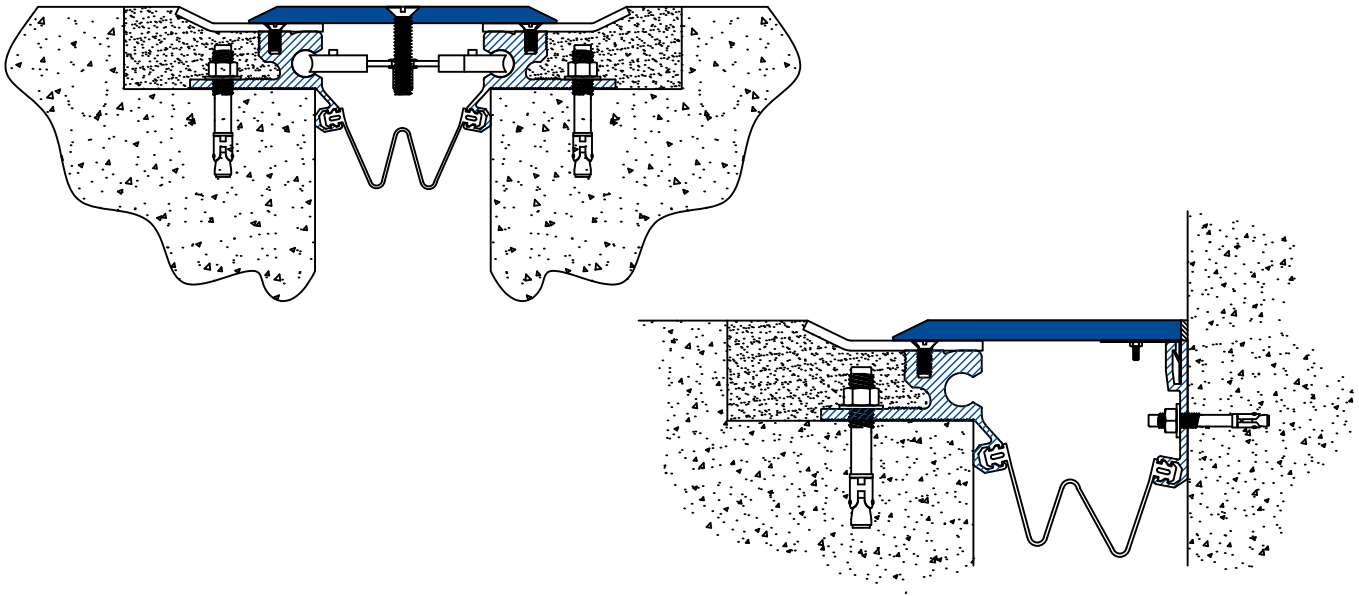


Installation Procedure

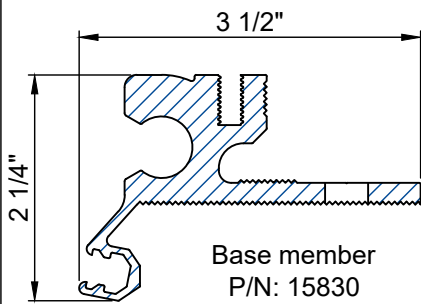


Wabo® SeismicSpan Traffic Series Model(s) "APX" and "APX-C" Horizontal Expansion Control Systems

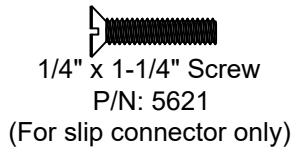
The following installation procedure is very important and must be fully understood prior to beginning any work. To ensure proper installation and performance of expansion joint system the following actions must be completed by the installing contractor. **Failure to do so will affect product warranty.**

- 1) Carefully read and understand installation procedure. Contact Emseal's Technical Service Department at (508) 836-0280 for product assistance.
- 2) Inspect all shipments and materials for missing or damaged components and hardware. Contact Customer Service at (508) 836-0280 with Emseal'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 Emseal shop drawings for project specific detailed information if Engineering services were purchased at time of order.

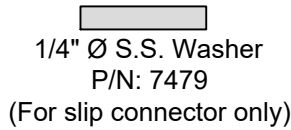
Standard components



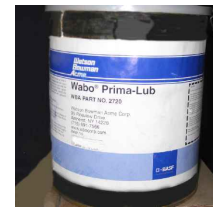
Base member
P/N: 15830



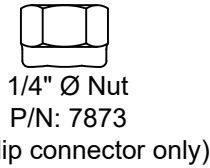
1/4" x 1-1/4" Screw
P/N: 5621
(For slip connector only)



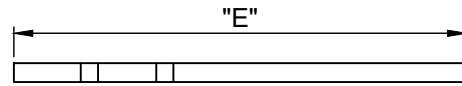
1/4" Ø S.S. Washer
P/N: 7479
(For slip connector only)



Adhesive Prima-Lub
P/N: 2720

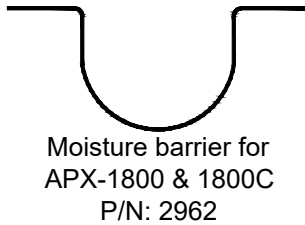


1/4" Ø Nut
P/N: 7873
(For slip connector only)

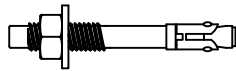


Slip Connector (1 per 50 feet)
(refer to chart for size and P/N)

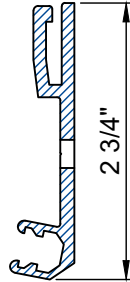
Model #	Part #	"E" dim.
APX-200	14042	4"
APX-400	14043	7"
APX-600	14044	10"
APX-800	14045	13"
APX-1000	14046	16"
APX-1200	14047	19"
APX-1500	14048	24"
APX-1800	14049	28"



Moisture barrier for
APX-1800 & 1800C
P/N: 2962



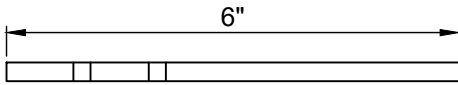
1/4" x 2 1/4" Hilti kwik bolt
P/N: 6587



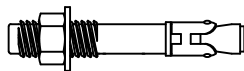
Corner Mount Bracket
P/N: 18044



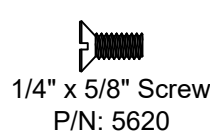
1/4" x 1" Self-Tapping Screw
P/N: 5634



1/4" Splice Bar
P/N: 14050
(Floor-Floor Conditions Only)



3/8" x 3" Hilti kwik bolt
P/N: 6591

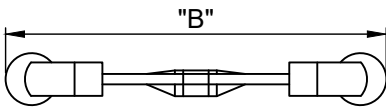


1/4" x 5/8" Screw
P/N: 5620



3/8" x 2" Screw
P/N: 5595

Components shown below vary in size depending on model of system



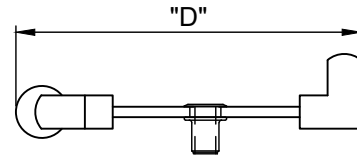
Seismic-Centering Bar
(refer to chart for size and P/N)

Model #	P/N	"B" dim.
APX-200	15645	7 3/8"
APX-400	15645	7 3/8"
APX-600	15646	12 3/8"



Functional Seal
(refer to chart for size and P/N)

Model #	P/N
APX-200/200C	1181
APX-400/400C	1181
APX-600/600C	1175
APX-800/800C	1175
APX-1000/1000C	1176
APX-1200/1200C	1176
APX-1500/1500C	1177



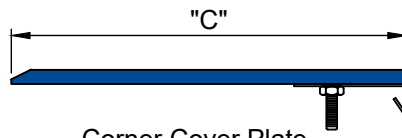
Seismic-Centering Bar
(refer to chart for size and P/N)

Model #	P/N	"D" dim.
APX-1000C	15650	12"
APX-1200C	15651	14"
APX-1500C	15652	16"
APX-1800C	15653	19"



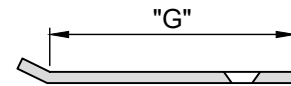
Seismic-Centering Bar
(refer to chart for size and P/N)

Model #	P/N	"F" dim.
APX-800	15632	18 3/8"
APX-1000	15632	18 3/8"
APX-1200	15633	22 3/8"
APX-1500	15634	26 3/8"
APX-1800	15667	32 3/8"



Corner Cover Plate
(refer to chart for size and P/N)

Model #	Aluminum P/N	"C" dim.
APX-200C	14024	2 7/8"
APX-400C	14025	5 3/8"
APX-600C	14026	7 7/8"
APX-800C	14027	10 3/8"
APX-1000C	14028	12 7/8"
APX-1200C	14029	15 3/8"
APX-1500C	14030	19 3/8"
APX-1800C	14031	22 7/8"



Base Extension Plate
(refer to chart for size and P/N)

Model #	P/n	"G" dim.
APX-200	14007	1 1/2"
APX-400	14008	2 1/2"
APX-600	14009	3 1/2"
APX-800	14010	4 1/2"
APX-1000	14011	5 1/2"
APX-1200	14012	6 1/2"
APX-1500	14014	8 1/4"
APX-1800	14013	9 1/2"



Cover Plate
(refer to chart for size and P/N)

Model #	Aluminum P/N	"A" dim.
APX-200	14000	4"
APX-400	14001	7"
APX-600	14002	10"
APX-800	14003	13"
APX-1000	14004	16"
APX-1200	14005	19"
APX-1500	14015	24"
APX-1800	14006	28"

Health & Safety

During the installation of any Sika Emseal product, appropriate personal protective items should be worn at all times, including but not limited to the following:

- Proper work clothing
- Safety glasses
- Safety boots
- Gloves
- Hard hat



Product components - **recommended** components



Wabo[®]Crete Parking Series Elastomeric Concrete with **Wabocrete II Part B Black**:
Part A (P/n: #14380H, Part B (black) (P/n #14381G) & Part C (P/n: #33138)



Wabo[®] Bonding Agent
Part A (P/N: 1931J, Part B (P/N 1933J)



WaboCrete[®] Elastomeric Concrete Non-Flow Additive
(for sloped, crowned or ramped surfaces) P/n: #14389
Add maximum one bag to one unit of Elastomeric Concrete

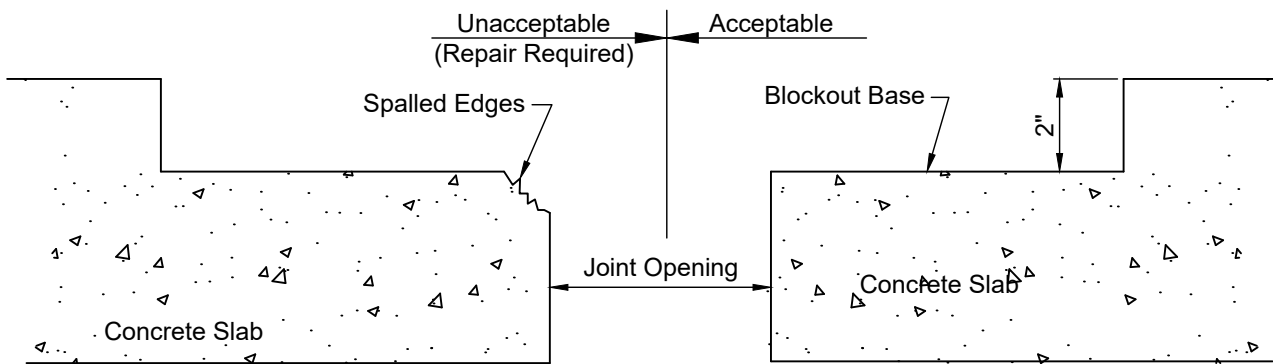


NEW SIKADUR 229 66lb Bag (30.0 KG)
(P/N: 33137) for broadcasting onto WaboCrete[®]
Parking Series Elastomeric Concrete exposed surface.

Pre-Installation Notes

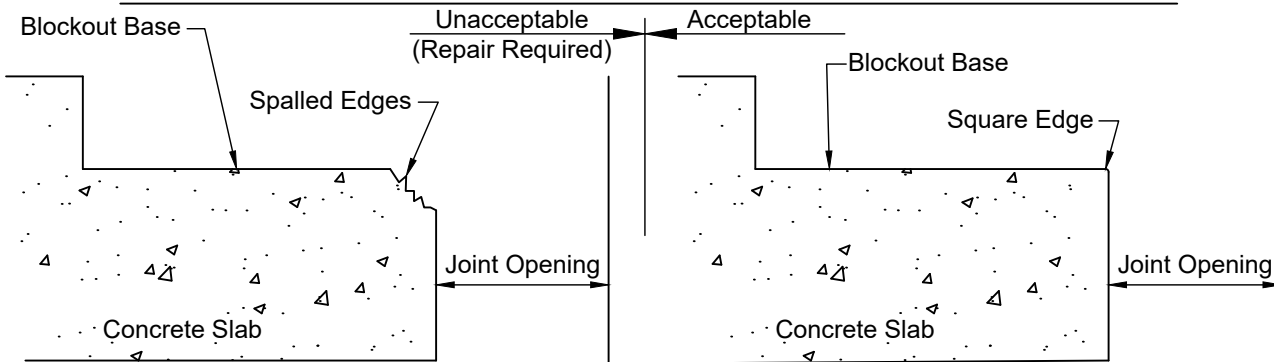
Concrete substrate must be clean (free of dirt, coatings, rust, grease, oil and other contaminants), sound and durable. New concrete must be fully cured (min. 14 days) and all laitance removed. Mask joint edges with duct tape & roofing paper to ensure a clean final appearance. Clean blockout with dry compressed air. (see Installation Step #1)

Installation Procedure



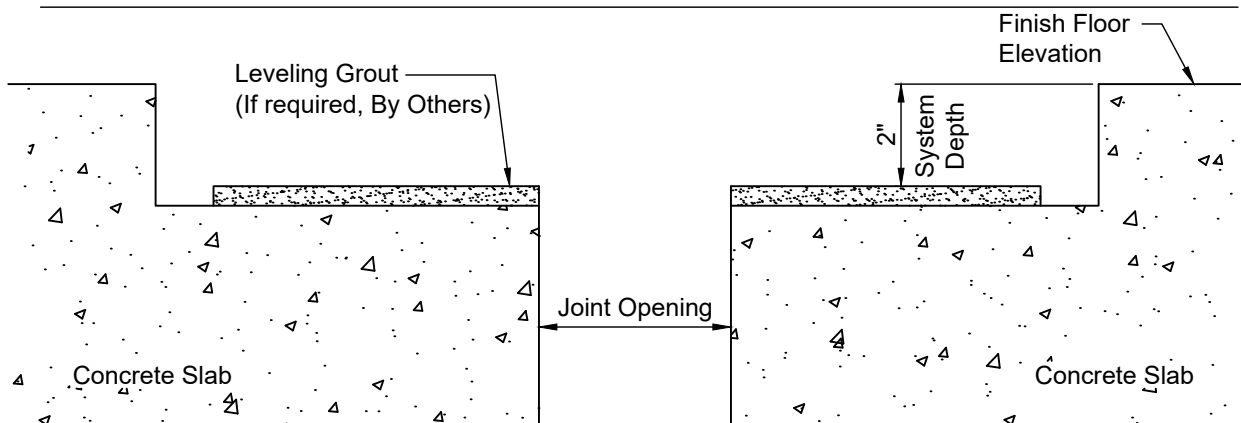
Model #	J.O.	Model #	J.O.
APX-200	2"	APX-1000	10"
APX-400	4"	APX-1200	12"
APX-600	6"	APX-1500	15"
APX-800	8"	APX-1800	18"

1 Prepare concrete block out for installation of Wabo®SeismicSpan Expansion Control System. Deficiencies in block out base and spalled edges must be corrected prior to beginning work. **Note:** Utilizing concrete repair material, repair corner of concrete slab following manufacturers written instructions.



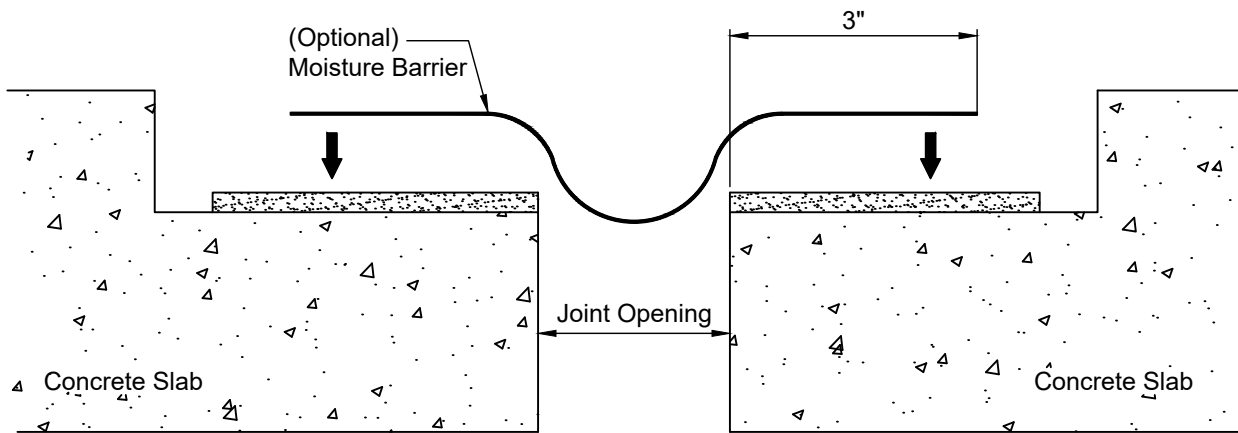
Model #	J.O.	Model #	J.O.
APX-200C	2"	APX-1000C	10"
APX-400C	4"	APX-1200C	12"
APX-600C	6"	APX-1500C	15"
APX-800C	8"	APX-1800C	18"

1A **Corner Condition:** Prepare concrete block out for installation of Wabo®SeismicSpan Expansion Control System. Deficiencies in block out base and spalled edges must be corrected prior to beginning work. **Note:** Utilizing concrete repair material, repair corner of concrete slab following manufacturers written instructions.



Prepare concrete blockout for installation of expansion joint. Variations in block out dimensions must be corrected prior to beginning work.

2 **Note:** Leveling grout usually not required if blockout was formed true and level to satisfy expansion joint system depth.



3

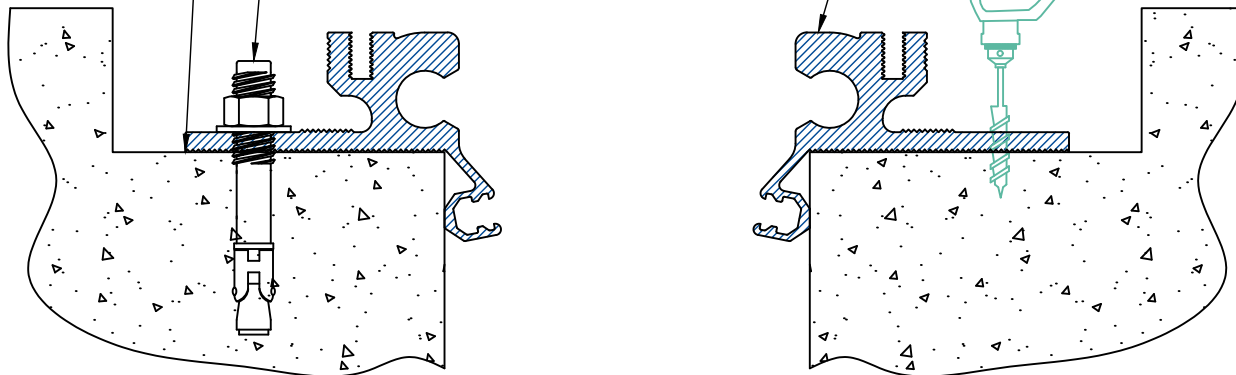
(APX-1800 & APX-1800C)

Install Moisture Barrier. Maintain proper overlap onto blockout base and temporarily affix with Duct Tape.

Silicone sealant location (typ)

3/8" x 3" Hilti kwik bolt (P/n: 6591) Spaced at 18" O.C.

Aluminum base extrusion



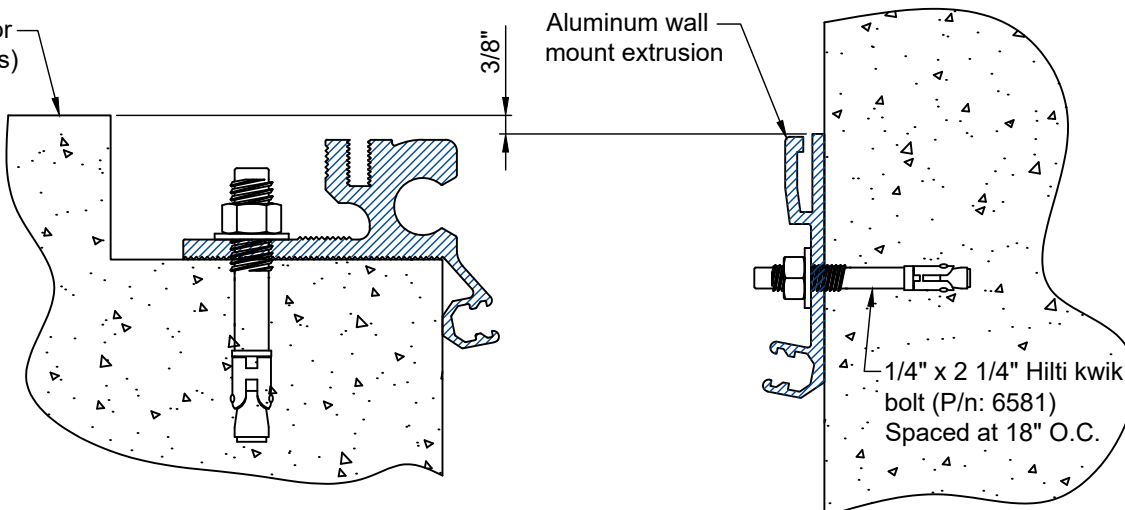
4

Place and adjust aluminum base members into blockouts. Mark anchor locations and follow Hilti recommendations for proper anchor installation. Prior to anchoring base members into place, apply a continuous bead of sealant (by others) onto blockout and at butt ends of aluminum base members. Place and anchor base member.

Finish floor (By Others)

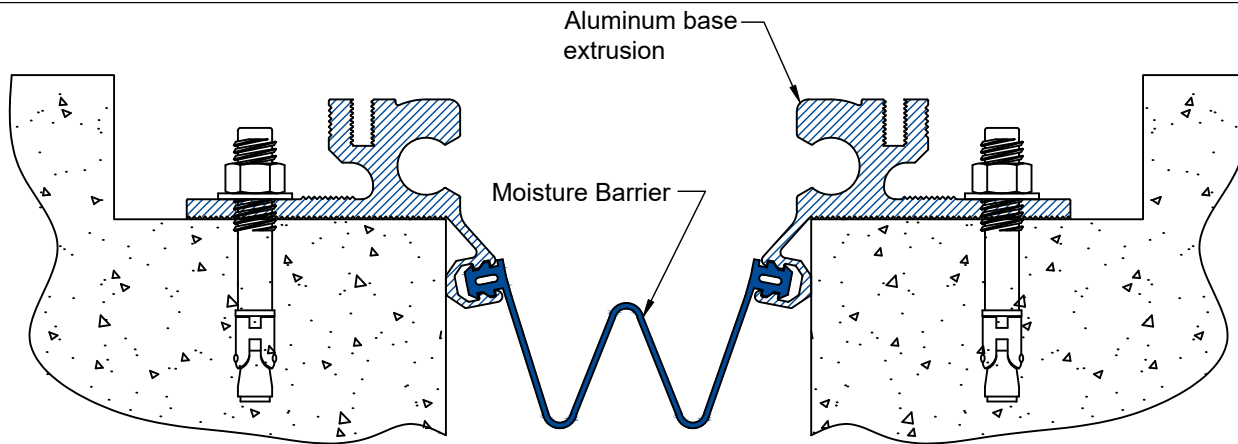
3/8"

Aluminum wall mount extrusion

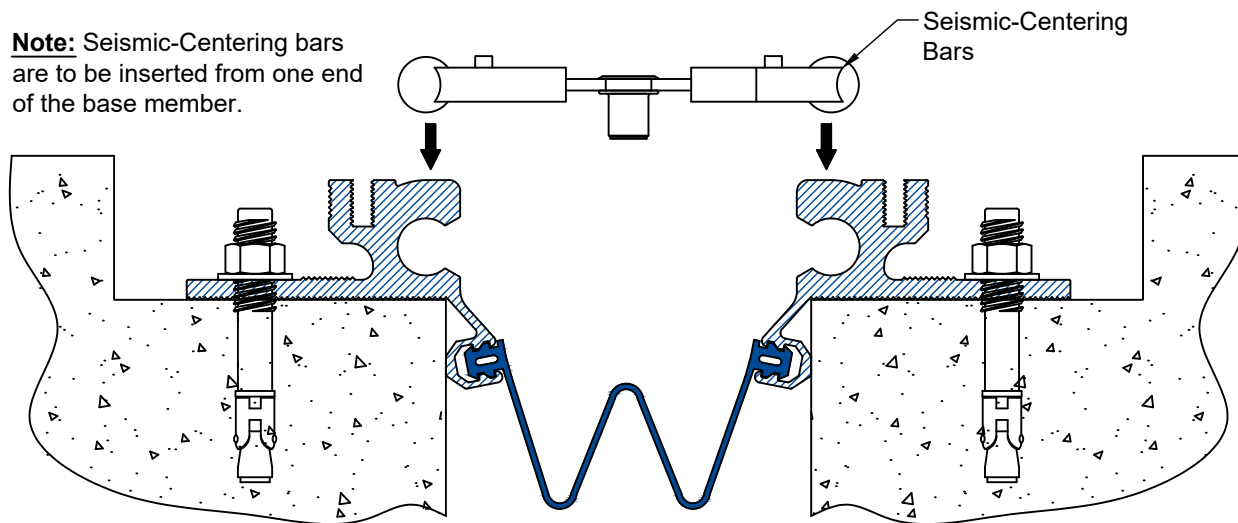


5

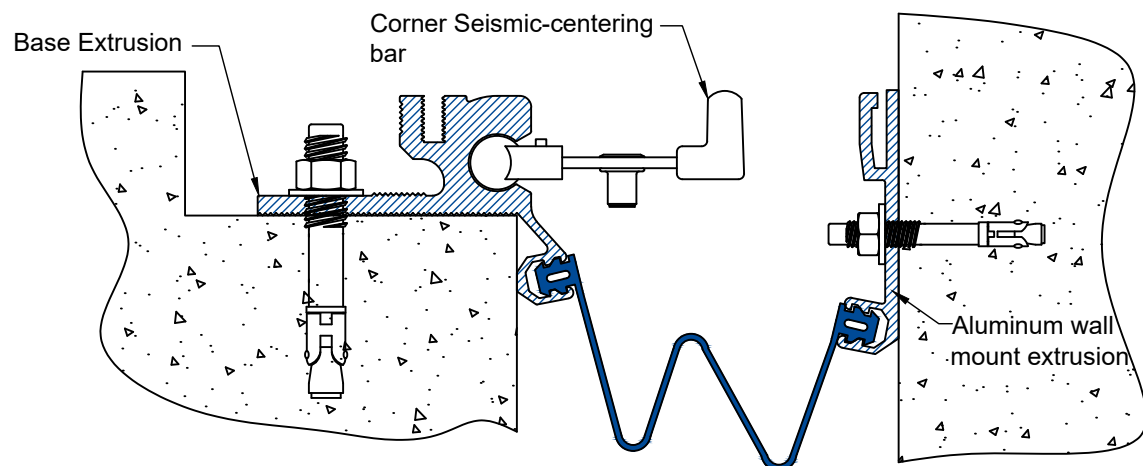
Place and adjust aluminum wall mount bracket into blockouts. Mark anchor locations and follow Hilti recommendations for proper anchor installation. Prior to anchoring wall mount brackets into place, apply a continuous bead of sealant (by others) onto blockout and at butt ends of aluminum wall mount brackets. Place and anchor wall mount bracket.



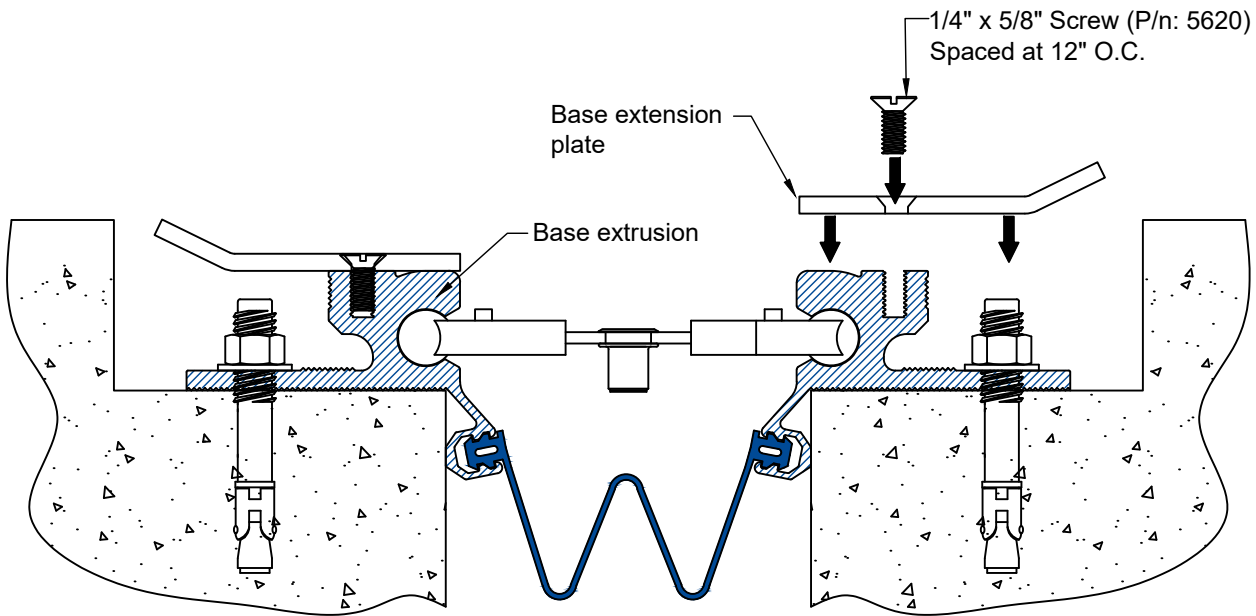
6 Install moisture barrier utilizing supplied Wabo Prima-Lub adhesive.
Note: On custom projects, a sheet good style moisture barrier may be utilized. Refer to Step 3 if applicable.



Note: Seismic-Centering bars are to be inserted from one end of the base member.
7 As work progresses with placement of base members, install Seismic-centering bars by sliding the sphered ends of the bars into and through the circular cavity of the base members. Set at an approximate spacing of 18" O.C. Ensure that the "TOP" indicator is facing up and that bars are in same orientation.



7A **APX-1000C - APX-1800C**
 Slide in Corner Seismic-centering Bar into cavity of base extrusion as shown above. Seismic-Centering bar shall be spaced at 18" O.C.

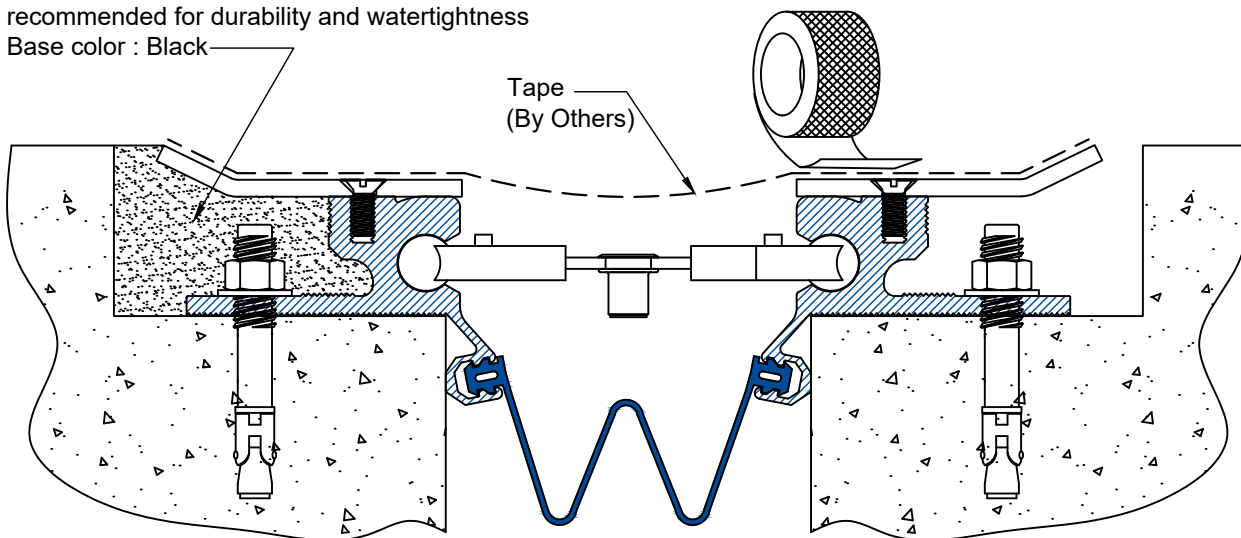


8

Utilizing Base Extension plate and 1/4" x 5/8" screws install extension plate to base extension. To ensure that the screws do not strip the cavity in base extension - Do not overtighten.

Optional:

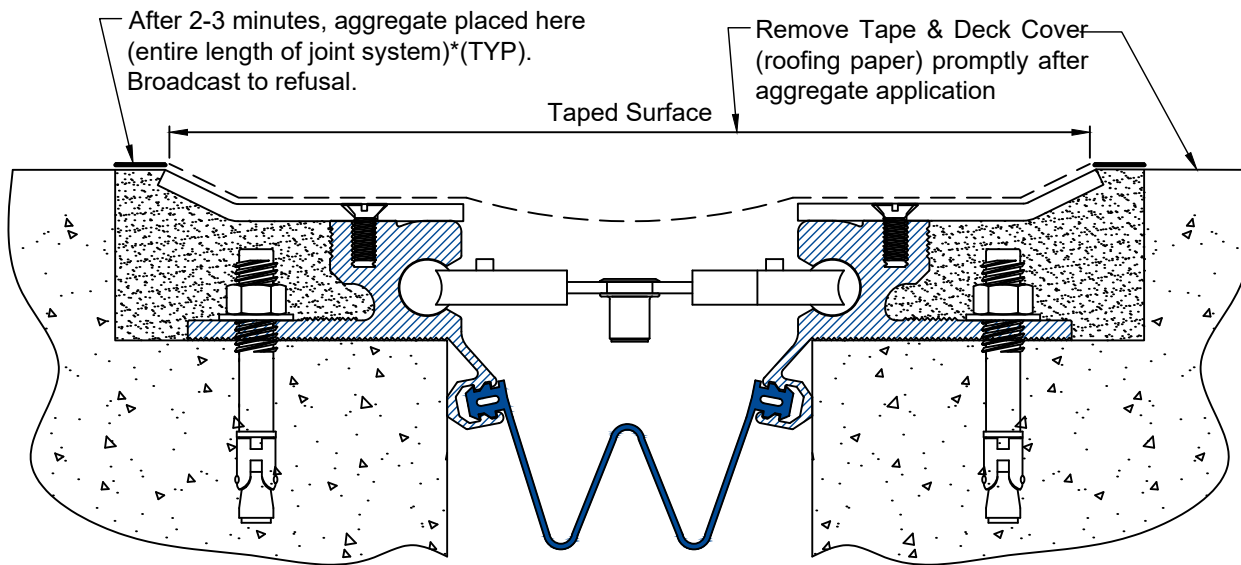
WaboCrete® Parking Series Blockout Infill recommended for durability and watertightness
Base color : Black



9

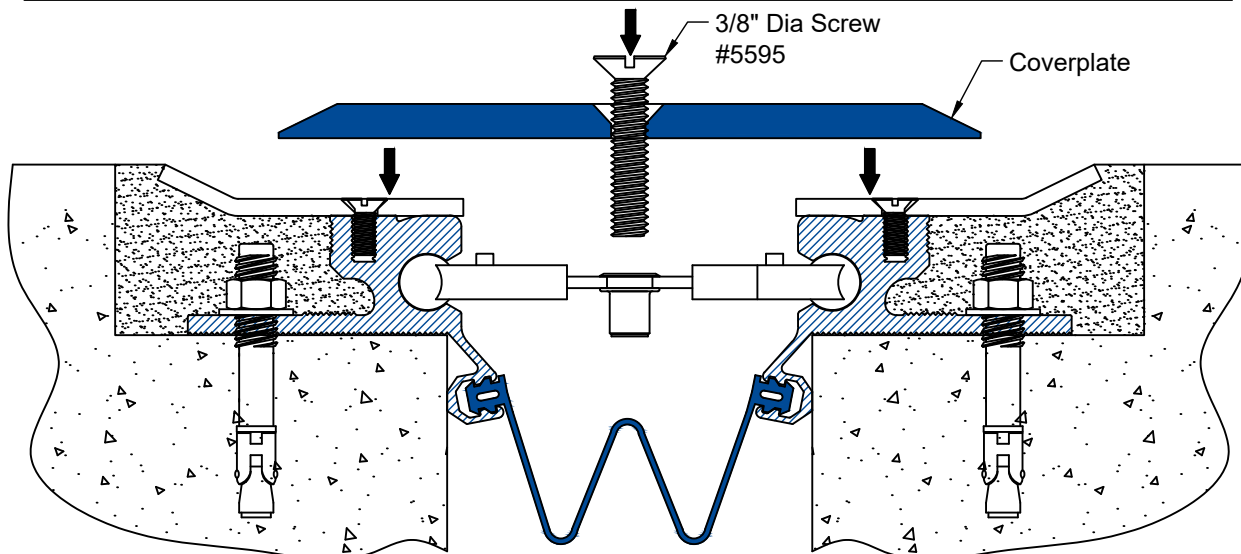
Tape and protect exposed surfaces during placement of filler material. Fill blockout with WaboCrete® Parking Series or equivalent for infill material. Remove tape immediately after concrete placement.

WaboCrete® Parking Series Note: DO NOT mix partial units of WaboCrete® Parking Series Elastomeric Concrete. Thoroughly stir Part B, scraping the can before pouring entire contents of Part B into a clean 5 gallon plastic bucket. Add Part A and mix both components with a 3/4" Low RPM drill equipped with large grout paddle for 30 seconds and until well blended. Add aggregate component to the liquid material and mix until all aggregate is coated (Approx. 1.5 minutes). Pour WaboCrete® Parking Series Elastomeric Concrete mix flush to the top of the seal bulkhead and adjacent existing surface. The material will flow and self-level. Lightly trowel surface to a smooth finish. If desired, solvent (i.e. Xylene, Toluene) can be used while troweling and for cleanup of tools. After 2-3 minutes, broadcast aggregate to refusal (medium grit). This enhances WaboCrete® Parking Series Elastomeric Concrete skid-resistance. Remove tape from top of seal immediately after installation of WaboCrete® Parking Series Elastomeric Concrete is completed.



9A

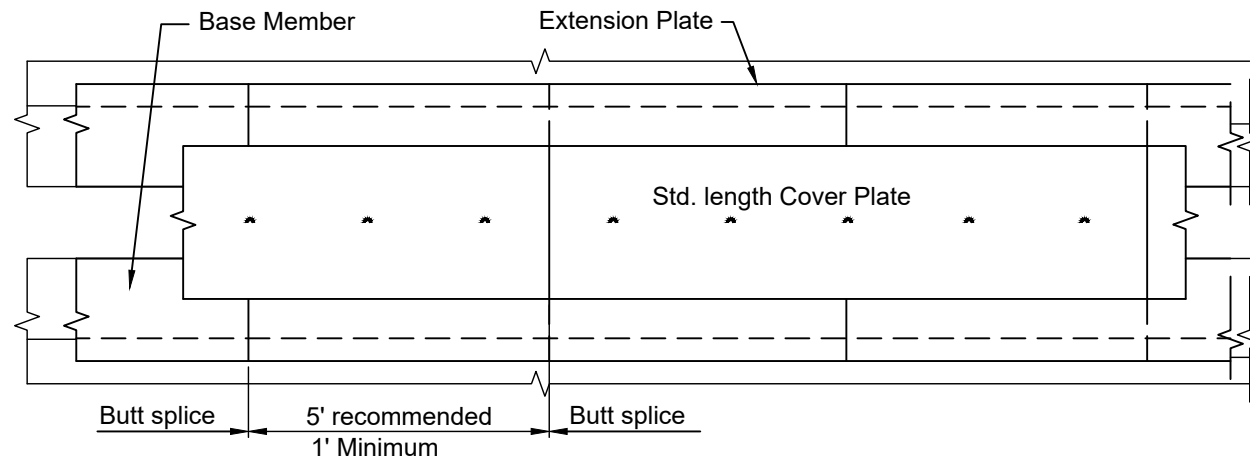
Apply aggregate as required, both sides of joint opening - entire length of joint system.



10

Align hole in cover with seismic-centering bar threaded insert. Secure cover plate to the seismic-centering bars with the 3/8" x 2" lg machine screws provided. Do not over tighten.

Note: To assure that threads do not loosen, apply Loctite Thread adhesive to threads of the 3/8" Dia screw before securing cover plate to seismic-centering bars.

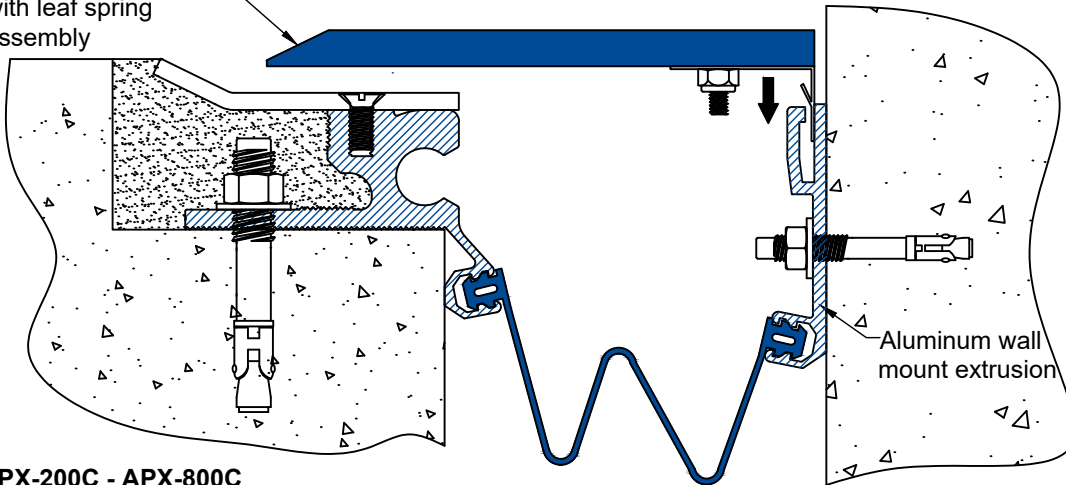


Plan of staggered joints.

10A

Center aluminum panel over opening, aligning the holes for the self-centering bars over the previously installed bars. Maintain butt splice spacing as shown.

Corner Coverplate with leaf spring assembly



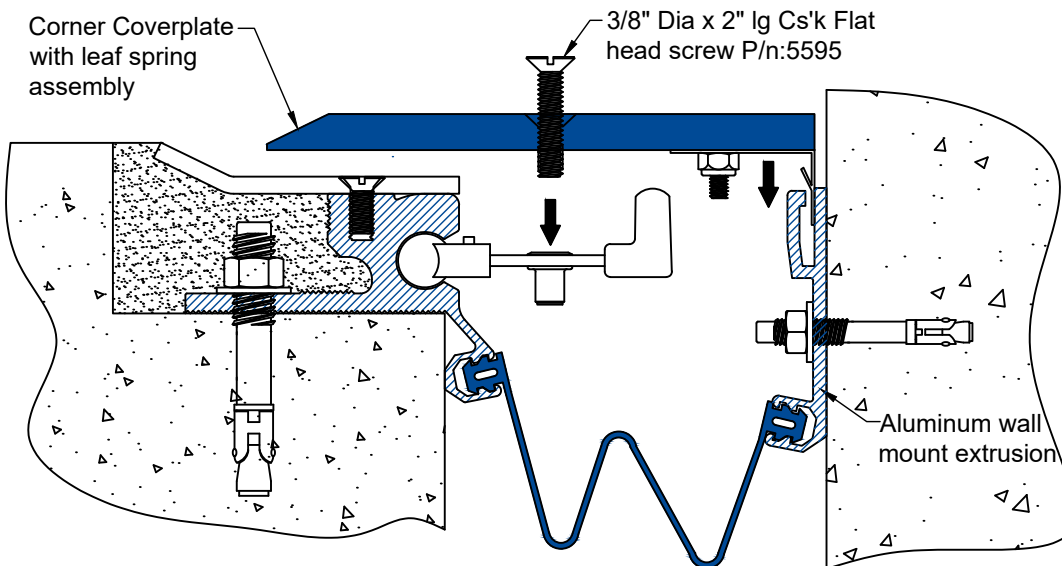
Aluminum wall mount extrusion

11

APX-200C - APX-800C

Insert and snap lock Corner cover plate with leaf spring assembly into Wall Mount Extrusion.

Corner Coverplate with leaf spring assembly



3/8" Dia x 2" lg Csk Flat head screw P/n:5595

Aluminum wall mount extrusion

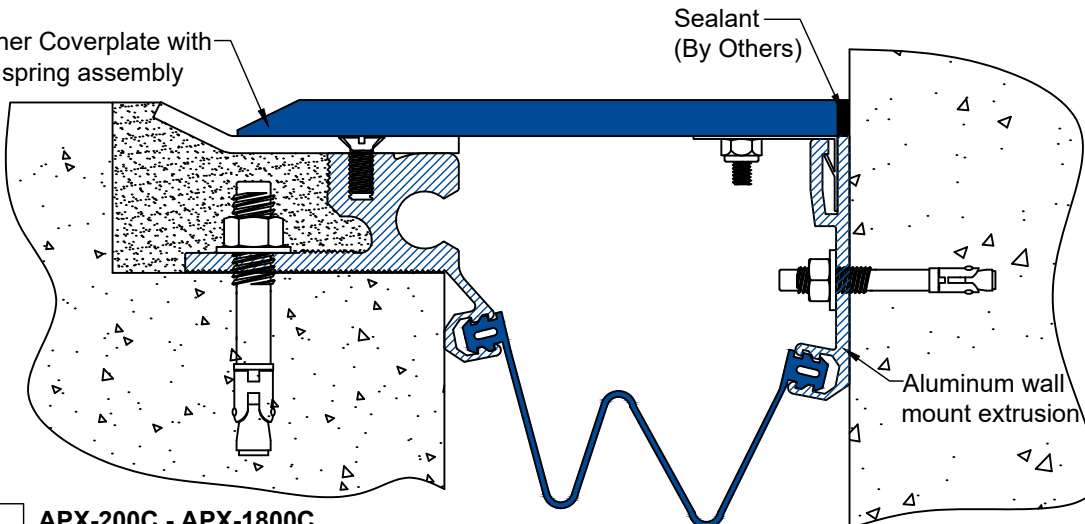
11A

APX-1000C - APX-1800C

Insert and snap lock Corner cover plate with leaf spring assembly into Wall Mount Extrusion. Align pre-drilled holes in slide plate with threaded insert in Seismic-Centering bars. Secure with 3/8" x 2" csk Flathead screws. Tighten to create measurable tension in the bar. Do not overtighten.

Note: To assure that threads do not loosen, apply Loctite Thread adhesive to threads of the 3/8" Dia screw before securing cover plate to seismic-centering bars.

Corner Coverplate with leaf spring assembly



Sealant (By Others)

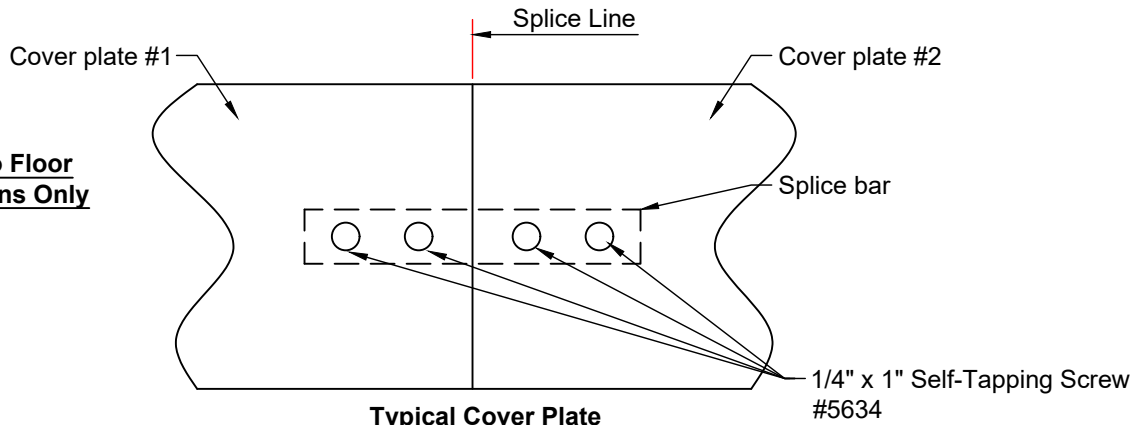
Aluminum wall mount extrusion

11B

APX-200C - APX-1800C

After Corner cover plate has been installed, apply a bead of sealant (By Others) along wall and edge of cover plate as shown above.

**Floot to Floor
Conditions Only**

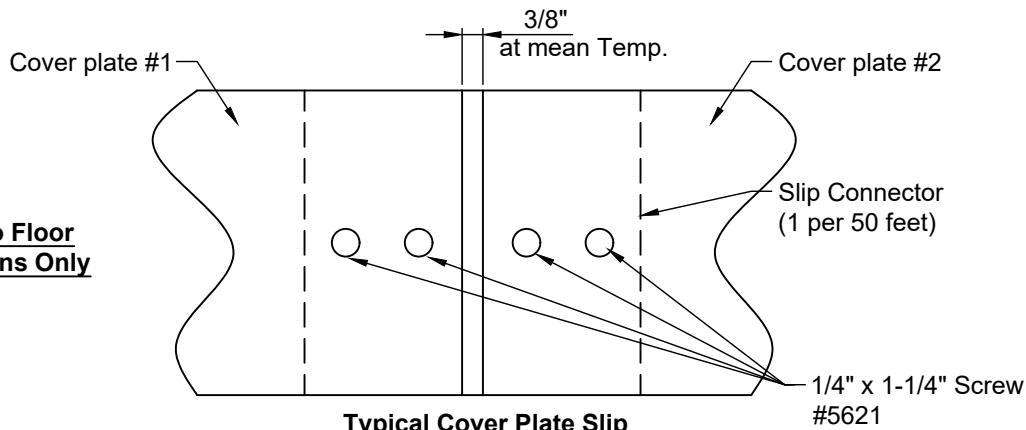


**Typical Cover Plate
Splice Detail**

12

At cover plate splice line attach one side of splice bar to the bottom side of cover plate with 1/4" x 1" screws. After one side has been fastened, field match drill holes in splice bar utilizing a .228" dia drill bit allowing the cover plate as a template. After splice bar has been field drilled, install 1/4" x 1" screws to fasten splice bar to cover plate.

**Floot to Floor
Conditions Only**



**Typical Cover Plate Slip
Connector Detail**

12A

At every 50 ft splice line location, attach one side of slip connector to the bottom side of cover plate with 1/4" x 1-1/4" screws. After one side has been fastened, using 1/4" x 1-1/4" screws fasten cover plate into slip connector through the holes already pre drilled in coverplate.

Recommended Equipment for WaboCrete® Mixing

- Abrasive blasting Equipment
- 3/4" Heavy Duty Drill (1 hsp - Low RPM)
- 3/8" Hand Drill
- (2) Jiffy mixing paddles
- (1) Large Paddle (4" to 6")
- (1) Small Paddle (2")
- (1) Roll of 15lb Roofing Paper
- (2) Clean 5 gallon plastic buckets
- (4) Clean 1 gallon plastic buckets (For bonding agent)
- (8) 2" disposable paint brushes (For Bonding agent)
- Rubber gloves
- (8) 2" Margin trowels
- Misc. hand tools and extension cords

Yield Calculations for WaboCrete® Parking Series:

- One unit of WaboCrete® Parking Series Elastomeric Concrete will yield .60 cu. ft.
- One unit of WaboCrete® Parking Series = One US half gallon Part A, One gallon Part B, and one 60 lb Container of aggregate. the formula for calculating volume is: (length in feet x width in inches x depth in inches) / 86.4 = Number of units of WaboCrete® Parking Series needed to complete the job.

Curing of WaboCrete® Parking Series Elastomeric Concrete:

WaboCrete® Parking Series Elastomeric Concrete is an ambient cure material. Cure times are therefore, temperature dependant. Suggested cure times are listed below:

- | | | |
|-------------------|----------------------|--------------------|
| Cure Time: | 21° - 32°C(70°-90°F) | - 1 to 1 1/2 Hours |
| (Open to Traffic) | 10° - 21°C(50°-70°F) | - 1 1/2 to 2 Hours |
| | 4° - 10°C(40°-50°F) | - 2 to 3 Hours |

Sloped Conditions:

1. Premix Part B for 20 seconds (Scraping sides and bottom of can)
2. Pour Part B into clean empty 5 gallon bucket
3. Pour into Part A
4. Add Non-Flow additive, blend for 30 seconds
5. Add Part C and mix for 1.5 minutes
6. Pour into blockout and work WaboCrete® Parking Series with trowel into sloped condition until it sets up and stays in sloped position.

Notes:

All blockout width shall be 2x greater than the depth.

All yields are approximate and do not include allowance for uneven blockouts, waste etc..

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www.emseal.com

Rev. 1.1 10-01-2024



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