# VERSOLEIL OUTRIGGER SUNSHADE INSTALLATION INSTRUCTIONS FOR 1600 SYSTEM 1

THE FOLLOWING INSTRUCTIONS ARE FOR THE INSTALLATION OF THE KAWNEER VERSOLEIL OUTRIGGER SUNSHADE. USE THESE INSTRUCTIONS IN CONJUNCTION WITH 1600 SYSTEM 1 CURTAIN WALL INSTALLATION INSTRUCTIONS (162970).

#### FRAME ASSEMBLY

VERTICAL MULLIONS WILL BE LABELED AND MUST BE MATCHED TO SHOP DRAWINGS BEFORE PROCEEDING WITH ANY ASSEMBLY. FAILURE TO PROPERLY ORIENT OR POSITION THE VERTICAL MULLIONS WILL PROHIBIT INSTALLATION OF THE SUNSHADE.

#### **EXTERIOR COVERS**

WHEN USING 1" COVERS, THE SUNSHADE ANCHOR CLIP MUST BE INSTALLED BEFORE THE COVERS. THE SUNSHADE IS TO BE INSTALLED AFTER THE COVERS.

WHEN USING OPTIONAL 3-1/8" COVERS, THE SUNSHADE ANCHOR CLIP AND THE SUNSHADE MUST BE INSTALLED BEFORE INSTALLING THE COVERS.

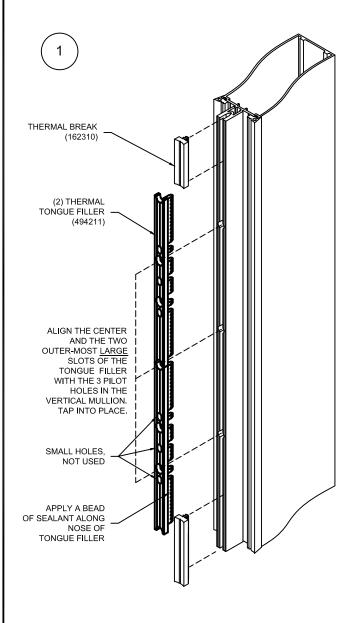
#### **INSTALL 162310 THERMAL BREAK**

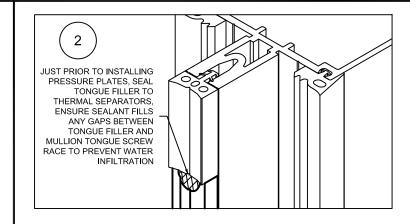
INSTALLATION OF THE THERMAL BREAK ON HORIZONTAL MEMBERS REMAINS UNCHANGED.

SUNSHADES REQUIRE THE USE OF TWO TONGUE FILLERS (494211) AT EVERY ANCHOR CLIP LOCATION. CHECK SHOP DRAWINGS FOR POSITION OF ANCHOR CLIPS. FOR EACH LOCATION OF AN ANCHOR CLIP, THE VERTICAL MULLION HAS BEEN PREPPED WITH THREE PILOT HOLES. RUN A BEAD OF SEALANT ALONG THE MULLION TONGUE FACE AND INTO THE SCREW BOSS AT EACH TONGUE FILLER LOCATION AND TAP TONGUE FILLER INTO PLACE. ALIGN THE CLEAR HOLES OF THE TONGUE FILLERS WITH THE THREE HOLES IN THE MULLION. ADJUST TONGUE FILLER UNTIL HOLES ARE IN THE PROPER ALIGNMENT. NOTE THAT SOME OF THE HOLES IN THE TONGUE FILLERS WILL NOT BE USED. TOOL EXCESS SEALANT. SEE DETAIL 1

INSERT THERMAL BREAK (162310) ALONG THE FULL LENGTH OF THE VERTICAL MULLION TONGUE AND BUTT TO TONGUE FILLER. SEE DETAIL 1. TRIM FLUSH AT TOP AND BOTTOM OF TONGUE FILLER. DO NOT OVERLAP.

JUST PRIOR TO INSTALLING PRESSURE PLATES, PULL BACK 162310 THERMAL SEPARATOR AT TOP AND BOTTOM OF TONGUE FILLERS AND RUN A BEAD OF SEALANT ACROSS THE TOP AND BOTTOM OF THE TONGUE FILLER TO SEAL TO THERMAL SEPARATORS. SEE DETAIL 2. BE SURE TO FILL THE GAP BETWEEN THE "NOSE" OF THE TONGUE FILLER AND THE GROOVE OF THE TONGUE. DO NOT ALLOW SEALANT TO CURE PRIOR TO INSTALLING PRESSURE PLATES.



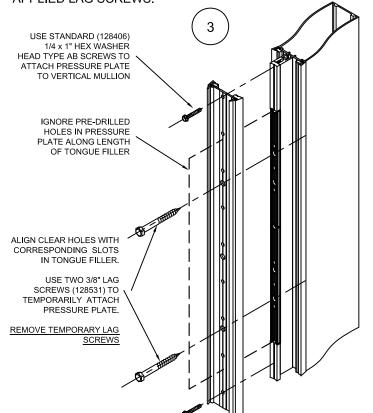


#### **INSTALL EXTERIOR PRESSURE PLATES**

PRESSURE PLATES WILL BE PREPPED FOR THE SUNSHADES PRIOR TO SHIPMENT TO THE JOB SITE. THE PREP WILL CONSIST OF THREE CLEAR HOLES PER SUNSHADE ATTACHMENT. CLEAR HOLES IN PRESSURE PLATE MUST BE ALIGNED WITH CORRESPONDING HOLES IN TONGUE FILLER AND MULLION. SEE DETAIL 3.

TO ENSURE ALIGNMENT, INSERT TWO 3/8" LAG SCREWS (125531) THROUGH THE CENTER OF THE CLEAR HOLES IN BOTH THE TOP AND BOTTOM POSITION AS TEMPORARIES (FINGER TIGHTEN).

INSTALL PRESSURE PLATES, FOLLOWING STANDARD 1600 SYSTEM 1 INSTALLATION INSTRUCTIONS, USING 1/4 x 1" HEX WASHER HEAD TYPE AB SCREWS (128406). USE ONLY PRE-DRILLED HOLES IN PRESSURE PLATE AND APPLY ONLY THROUGH THERMAL BREAK. **DO NOT SCREW INTO TONGUE FILLER** (494211). REFERENCE STANDARD 1600 SYSTEM 1 INSTALLATION INSTRUCTIONS. REMOVE TEMPORARILY APPLIED LAG SCREWS.



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# SUNSHADE ATTACHMENT, TYPICAL INTERMEDIATE

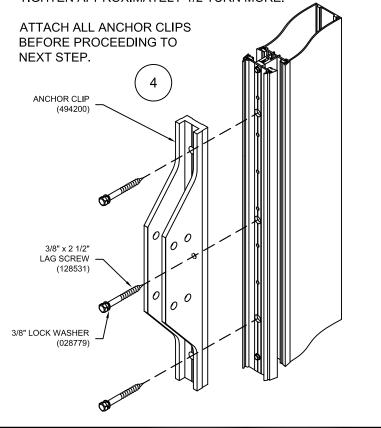
#### ATTACH ANCHOR CLIPS

ALIGN THE THREE CLEAR HOLES IN THE ANCHOR CLIP (494200) WITH THE THREE HOLES IN THE PRESSURE PLATE AND MULLION. ATTACH WITH THREE 3/8" x 2 1/2" LAG SCREWS (128531) AND WITH THREE LOCK WASHERS (028779). SEE DETAIL 4.

THE THREAD FORMING ACTION OF THE LAG SCREWS WILL CAUSE ADDITIONAL RESISTANCE AND REQUIRE EXTRA FORCE TO SEAT. APPLY A WAX LUBRICANT TO THE THREADS BEFORE PROCEEDING.

### NOTE: DO NOT INCREASE HOLE SIZE TO FACILITATE INSTALLATION.

TIGHTEN BOLTS TO A "SNUG" CONDITION AND COMPLETELY COMPRESS THE SPRING TYPE LOCK WASHERS. THEN TIGHTEN APPROXIMATELY 1/2 TURN MORE.





VERSOLEIL OUTRIGGER SUNSHADE 1600 SYSTEM 1

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#### **ASSEMBLING THE SUNSHADES**

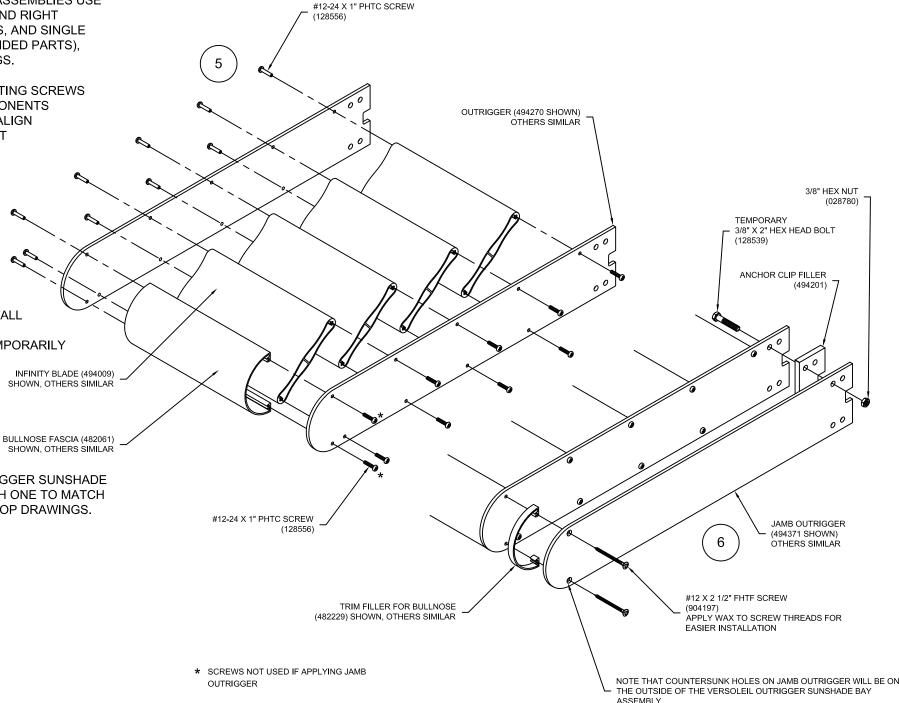
VERSOLEIL OUTRIGGER SUNSHADE BAY ASSEMBLIES USE SCREW SPLINE JOINERY. LAYOUT LEFT AND RIGHT OUTRIGGERS (JAMBS AT INSIDE CORNERS, AND SINGLE MULLION 90° OUTSIDE CORNERS ARE HANDED PARTS), BLADES, AND FASCIA PER SHOP DRAWINGS. SEE DETAILS 5 AND 6.
USING #12-24 x 1" PAN HEAD THREAD CUTTING SCREWS (128556), JOIN BLADES AND FASCIA COMPONENTS TO ONE OUTRIGGER. DO NOT TIGHTEN. ALIGN THE OPPOSITE OUTRIGGER AND CONNECT PARTS SIMILARLY. TIGHTEN BOTH SIDES.

NOTE: END ASSEMBLY REQUIRES A JAMB OUTRIGGER TO BE ATTACHED BEFORE INSTALLATION. USING #12 x 2 1/2" FLAT HEAD THREAD FORMING SCREWS (904197) AND APPROPRIATE TRIM FILLER, JOIN JAMB OUTRIGGER TO BAY ASSEMBLY. TIGHTEN UNTIL FULLY SEATED AND FLUSH WITH THE SURFACE OF THE JAMB OUTRIGGER. INSTALL ANCHOR CLIP FILLER (494201) USING (1) 3/8" x 2" HEX HEAD BOLT (128539) AND TEMPORARILY ATTACH (1) 3/8" HEX NUT (028780) TO SECURE JAMB OUTRIGGER DURING INSTALLATION. SEE **DETAIL 6. CHECK SHOP** DRAWINGS TO DETERMINE

SPECIFIC JAMB CONDITION

BEFORE PROCEEDING.

ASSEMBLE ALL OF THE VERSOLEIL OUTRIGGER SUNSHADE BAY ASSEMBLIES AND MARK OR TAG EACH ONE TO MATCH CORRESPONDING UNIT AS SHOWN ON SHOP DRAWINGS.



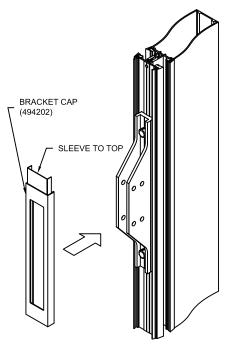
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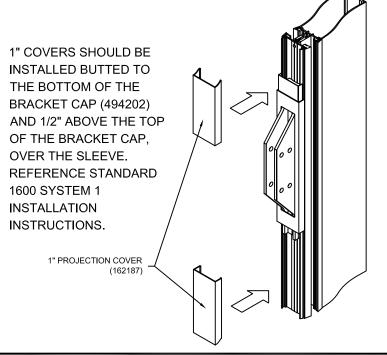
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#### **INSTALL 1" COVERS AT INTERMEDIATE MULLION LOCATIONS**



NOTE: OPTIONAL 3 1/8"
COVERS WILL BE
INSTALLED AFTER THE
VERSOLEIL OUTRIGGER
SUNSHADE BAY
ASSEMBLIES. REFER TO
PAGE 05 FOR
INSTALLATION DETAILS.

BRACKET CAP (494202) SHOULD BE SNAPPED INTO PLACE AT EACH ANCHOR CLIP LOCATION. CENTER ON ANCHOR CLIP.





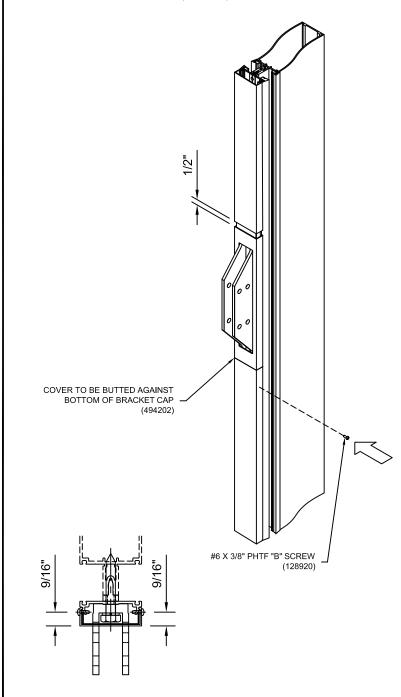
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PIN VERTICAL COVER 2" BELOW BUTT JOINT WITH BRACKET CAP (494202). DRILL A Ø0.106 (#36 DRILL) HOLE THROUGH COVER AND PRESSURE PLATE LEG AND FASTEN WITH A #6 X 3/8" PHTF "B" FASTENER (128920).



WHEN VERSOLEIL OUTRIGGER SUNSHADES ARE INSTALLED ON THE FOLLOWING CORNER APPLICATIONS, COVER INSTALLATION IS THE SAME AS FOR INTERMEDIATE MULLION LOCATIONS:

DOUBLE MULLION 90° OUTSIDE CORNER DOUBLE MULLION 90° INSIDE CORNER DOUBLE MULLION 135° OUTSIDE CORNER **DOUBLE MULLION 135° INSIDE CORNER** 

#### **INSTALLING THE SUNSHADES**

ARRANGE THE SUNSHADE BAY ASSEMBLIES ON THE CONSTRUCTION SITE ACCORDING TO THEIR CORRESPONDING POSITION ON THE BUILDING. CHECK AGAINST SHOP DRAWINGS.

INSTALLATION CAN TAKE PLACE LEFT TO RIGHT OR RIGHT TO LEFT AS WELL AS TOP TO BOTTOM OR BOTTOM TO TOP (IN MULTIPLE STORY INSTALLATIONS). DEPENDING ON HOISTING METHOD, DETERMINE THE ORDER MOST APPROPRIATE FOR YOUR INSTALLATION. THE FOLLOWING INSTRUCTIONS WILL DEMONSTRATE A ONE-STORY INSTALLATION, RIGHT TO LEFT.

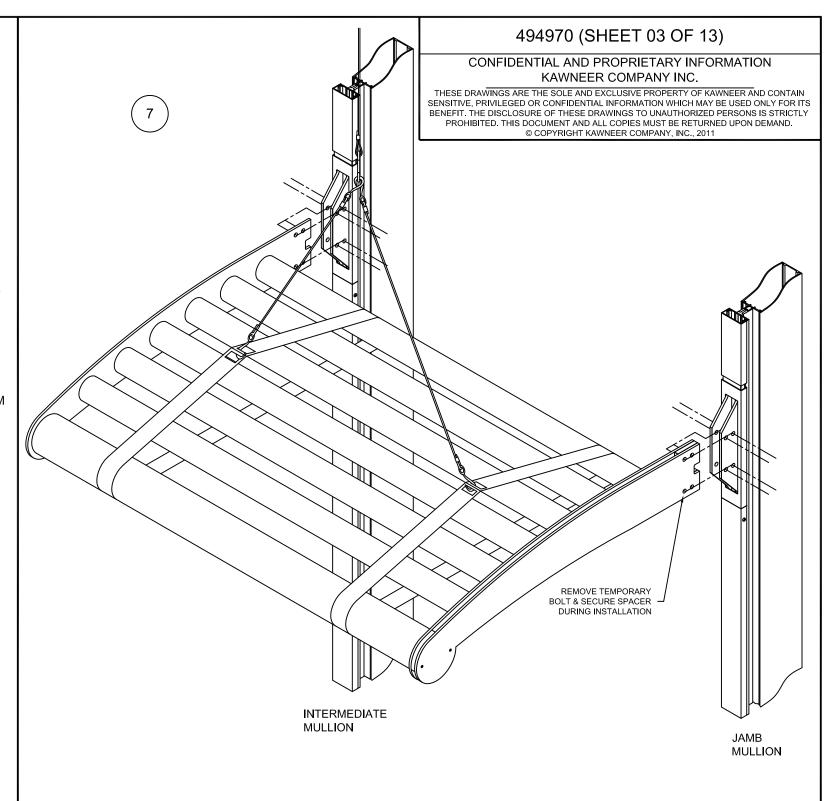
#### A. INSTALL FIRST BAY ASSEMBLY

HOIST AND POSITION THE FIRST SUNSHADE BAY ASSEMBLY UNTIL THE FOUR CLEAR HOLES ON BOTH OUTRIGGERS ALIGN WITH THE CORRESPONDING HOLES IN THE ANCHOR CLIPS. THE OUTRIGGERS SHOULD BE POSITIONED ON THE INSIDE OF THE ANCHOR CLIP. SEE DETAILS 7 AND 8. END ASSEMBLY WILL REQUIRE TEMPORARY FASTENER AT ANCHOR CLIP FILLER TO BE REMOVED JUST PRIOR TO ANCHORING. HOLD SPACER IN PLACE TO PREVENT IT FROM FALLING OUT OF POSITION.

### NOTE:

VERSOLEIL OUTRIGGER SUNSHADE BAYS TO BE **INSTALLED AFTER 1" COVERS.** 

**VERSOLEIL OUTRIGGER SUNSHADE BAYS TO BE** INSTALLED BEFORE OPTIONAL 3 1/8" COVERS. SEE PAGE 05 FOR OPTIONAL 3 1/8" COVER INSTALLATION.



IMPORTANT NOTE: THE HOISTING METHOD SHOWN IS FOR ILLUSTRATION PURPOSES ONLY. BE SURE TO FIRMLY SECURE THE SUNSHADE SO THAT IT CANNOT TILT, SLIDE OR SLIP FROM HOISTING STRAPS AND CHECK SAFETY GUIDELINES OF HOISTING EQUIPMENT BEFORE PROCEEDING.

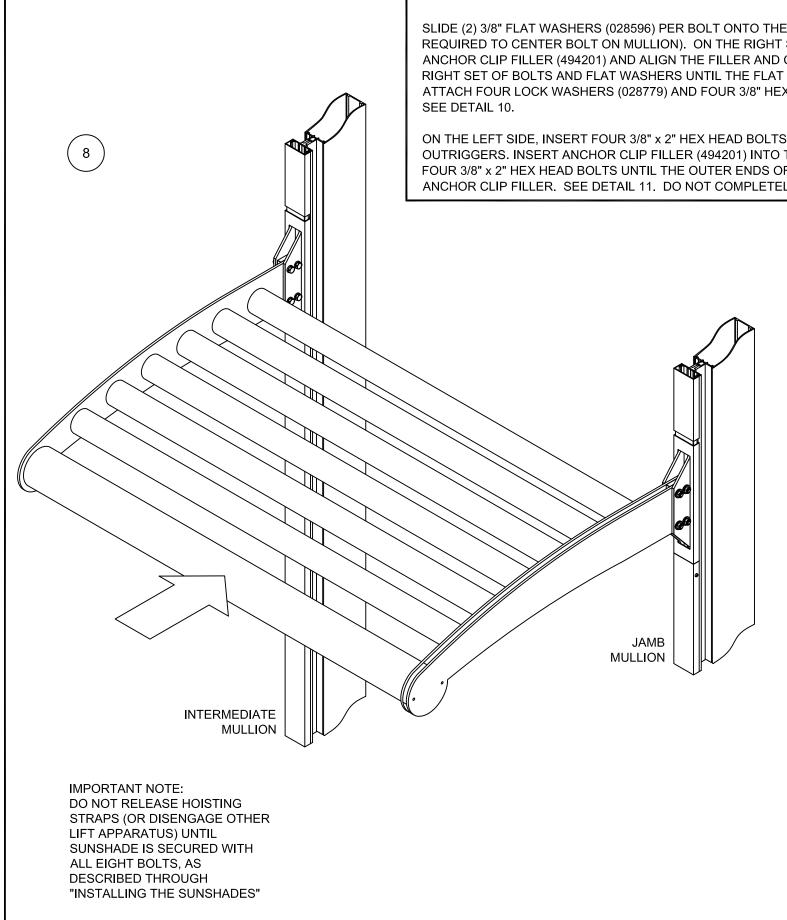


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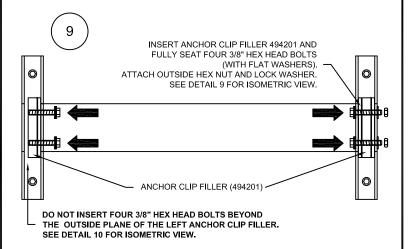
**INSTALLATION INSTRUCTIONS** 

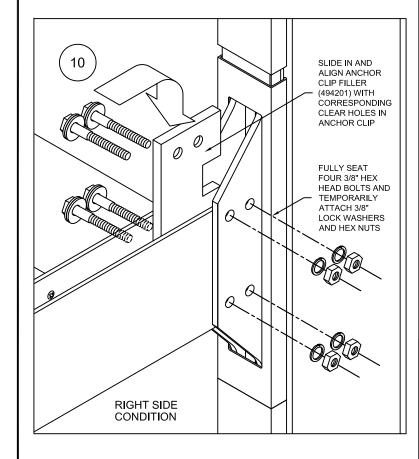


SLIDE (2) 3/8" FLAT WASHERS (028596) PER BOLT ONTO THE 3/8" x 2" HEX HEAD BOLTS (128539) (NOTE: (2) WASHERS ARE REQUIRED TO CENTER BOLT ON MULLION). ON THE RIGHT SIDE (END ASSEMBLY), REMOVE THE TEMPORARY FASTENER AT ANCHOR CLIP FILLER (494201) AND ALIGN THE FILLER AND OUTRIGGER WITH THE ANCHOR CLIP. COMPLETELY SEAT THE RIGHT SET OF BOLTS AND FLAT WASHERS UNTIL THE FLAT WASHERS CONTACT THE SURFACE OF THE ANCHOR CLIP. ATTACH FOUR LOCK WASHERS (028779) AND FOUR 3/8" HEX NUTS (028780) TO THE RIGHT SET OF BOLTS. FINGER TIGHTEN. SEE DETAIL 10.

ON THE LEFT SIDE, INSERT FOUR 3/8" x 2" HEX HEAD BOLTS WITH FLAT WASHERS INTO ANCHOR CLIP AND THROUGH THE OUTRIGGERS. INSERT ANCHOR CLIP FILLER (494201) INTO THE CENTER OF THE ANCHOR CLIP AND CONTINUE INSERTING THE FOUR 3/8" x 2" HEX HEAD BOLTS UNTIL THE OUTER ENDS OF THE BOLTS ARE FLUSH WITH THE OUTSIDE SURFACE OF THE ANCHOR CLIP FILLER. SEE DETAIL 11. DO NOT COMPLETELY SEAT AND DO NOT ATTACH THE SECOND SET OF HEX NUTS.

TIGHTEN NUTS AT RIGHT SIDE. (DO NOT OVER TIGHTEN BOLTS. TIGHTEN TO A SNUG POSITION ENSURING THE SPRING TYPE LOCK WASHERS ARE COMPRESSED. THEN TIGHTEN APPROXIMATELY 1/2 TURN MORE).



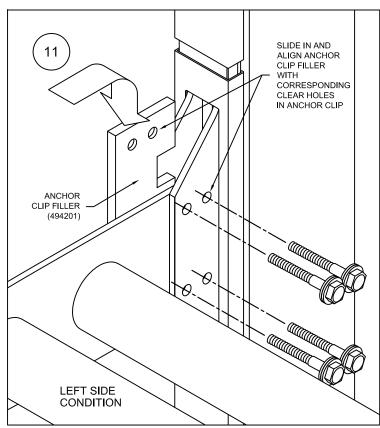


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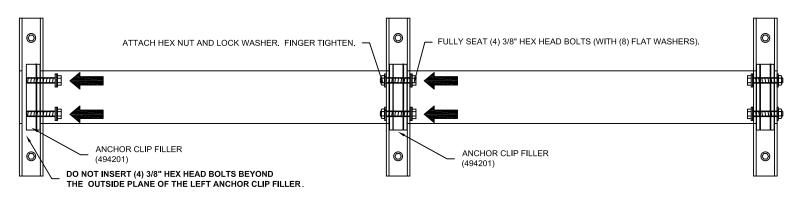
#### **B. INSTALL SECOND BAY ASSEMBLY**

NOTE: THE FOLLOWING INSTRUCTIONS APPLY TO THE BALANCE OF ALL INTERMEDIATE BAY ASSEMBLY INSTALLATIONS.

HOIST AND POSITION SUNSHADE BAY ASSEMBLY UNTIL THE (4) CLEAR HOLES OF THE OUTRIGGERS ALIGN WITH THE CORRESPONDING HOLES IN THE ANCHOR CLIPS. THE RIGHT SIDE SHOULD BE RELATIVELY TIGHT SINCE THE ANCHOR CLIP SPACER IS ALREADY IN POSITION. ON THE RIGHT SIDE, COMPLETELY SEAT THE (4) 3/8" HEX HEAD BOLTS AND (8) FLAT WASHERS (THROUGH THE OUTRIGGER AND ANCHOR CLIP). APPLY (4) LOCK WASHERS (028779) AND (4) HEX NUTS (028780) AND FINGER TIGHTEN. SEE BELOW.

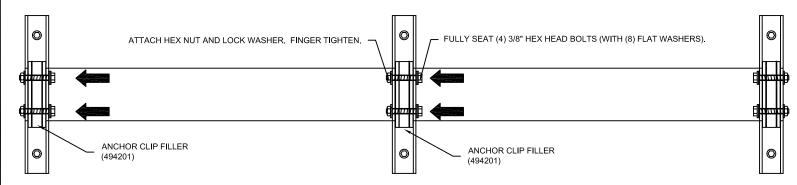
ON THE LEFT SIDE, ALIGN AND INSERT AN ANCHOR CLIP FILLER (494201) INTO THE CENTER OF THE ANCHOR CLIP AND PARTIALLY SEAT ANOTHER SET OF (4) 3/8" x 2" HEX HEAD BOLTS AND (8) FLAT WASHERS. RUN BOLTS THROUGH ASSEMBLY UNTIL THE OUTER ENDS OF THE BOLTS ARE FLUSH WITH THE OUTSIDE SURFACE OF THE ANCHOR CLIP FILLER. DO NOT COMPLETELY SEAT AND DO NOT ATTACH THE SECOND SET OF HEX HEAD NUTS. SEE DETAIL BELOW.

AT RIGHT SIDE, MAKE MINOR ADJUSTMENTS HORIZONTALLY TO ALIGN ALL THE SUNSHADES WHILE TIGHTENING BOLTS AT THE ANCHOR CLIPS. (DO NOT OVER TIGHTEN BOLTS. TIGHTEN TO A SNUG POSITION ENSURING THE SPRING TYPE LOCK WASHERS ARE COMPRESSED. THEN TIGHTEN APPROXIMATELY 1/2 TURN MORE).



#### C. INSTALL FINAL BAY ASSEMBLY

ON THE FINAL BAY INSTALLATION (END ASSEMBLY), REMOVE THE TEMPORARY FASTENER AT ANCHOR CLIP FILLER (494201) AND ALIGN THE FILLER WITH THE ANCHOR CLIP AND COMPLETELY SEAT THE SET OF (4) BOLTS AND (8) FLAT WASHERS. APPLY (4) LOCK WASHERS (028779) AND (4) HEX NUTS (028780) AND FINGER TIGHTEN. SEE DETAIL BELOW.



MAKE MINOR ADJUSTMENTS HORIZONTALLY TO ALIGN ALL THE SUNSHADES WHILE TIGHTENING BOLTS AT THE ANCHOR CLIPS. (DO NOT OVER TIGHTEN BOLTS. TIGHTEN TO A SNUG POSITION ENSURING THE SPRING TYPE LOCK WASHERS ARE COMPRESSED. THEN TIGHTEN APPROXIMATELY 1/2 TURN MORE).

# INSTALLING OPTIONAL 3 1/8" COVERS AT INTERMEDIATE MULLION LOCATIONS

INSTALL THE COVERS FROM THE BOTTOM OF THE ELEVATION UP. ALIGN THE LOWER COVER ON THE MULLION WITH THE 1.013" X 6" NOTCH AT THE TOP AND ENGAGE COVER. THE SPLICE SLEEVE (162566) MUST BE SET INTO SEALANT AT THE TOP OF THE LOWER COVER ABOVE THE SUNSHADE, AFTER THE LOWER COVER HAS BEEN ENGAGED.

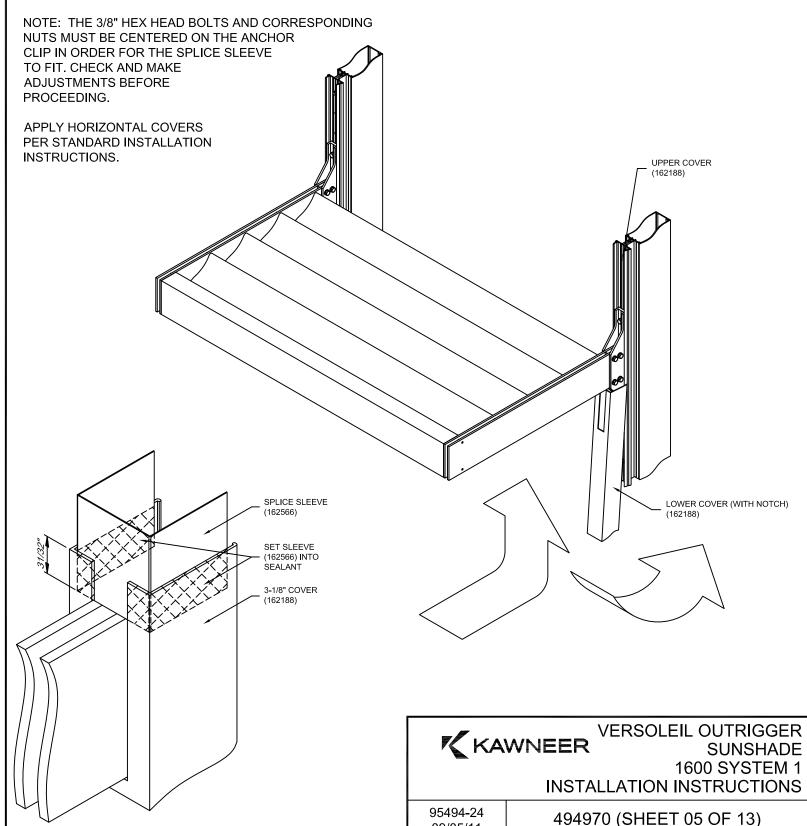
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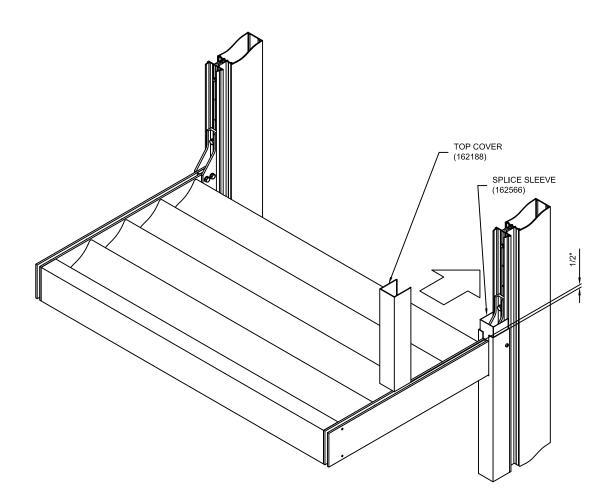
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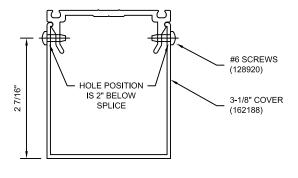


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ALIGN THE UPPER COVER WITH THE MULLION, ABOVE THE OUTRIGGERS, AND SPLICE SLEEVE ON THE LOWER COVER, LEAVING A 1/2" EXPANSION SPLICE BETWEEN THE UPPER AND LOWER COVERS. ENGAGE AS PER STANDARD 1600 SYSTEM 1 INSTALLATION INSTRUCTIONS.



AT ALL VERTICAL COVER LOCATIONS, PIN BOTH HALVES OF THE VERTICAL COVERS. DRILL A .106" DIAMETER HOLE (#36 DRILL) 2" BELOW THE SPLICE AND 2 7/16" FROM THE OUTSIDE SURFACE OF THE COVER. INSTALL #6 x 3/8" PAN HEAD SCREWS (128920).



### **SUNSHADE ATTACHMENT - CORNERS**

#### **ASSEMBLING THE CORNER SUNSHADES**

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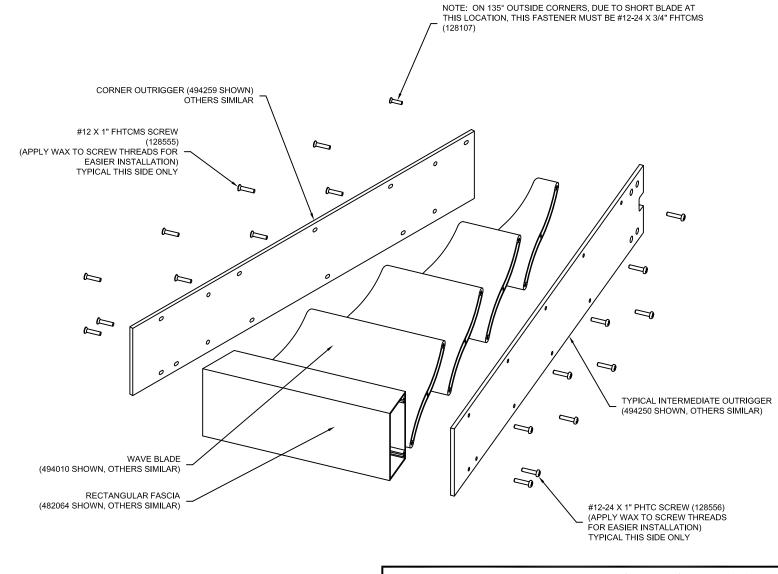
VERSOLEIL OUTRIGGER SUNSHADE BAY ASSEMBLIES

USE SCREW SPLINE JOINERY. LAYOUT LEFT AND RIGHT OUTRIGGERS (INSIDE CORNERS AND SINGLE MULLION 90° OUTSIDE CORNERS ARE HANDED PARTS), BLADES, AND FASCIA PER SHOP DRAWINGS. SEE BELOW.

USING #12-24 X 1" FLAT HEAD THREAD CUTTING SCREWS (128555), JOIN BLADES AND FASCIA TO CORNER OUTRIGGER - DO NOT TIGHTEN COMPLETELY. USING #12-24 x 1" PAN HEAD THREAD CUTTING SCREWS (128556), JOIN BLADES AND FASCIA COMPONENTS TO TYPICAL INTERMEDIATE OUTRIGGER. TIGHTEN SCREWS ON BOTH SIDES.

NOTE: WHEN ASSEMBLING 135° OUTSIDE CORNER, THE USE OF A #12-24 X 3/4" FHTCMS (128107) FASTENER IS REQUIRED AT THE INNER-MOST BLADE DUE TO THE LENGTH OF THE BLADE AT THIS LOCATION. SEE BELOW.

ASSEMBLE ALL OF THE VERSOLEIL OUTRIGGER SUNSHADE BAY ASSEMBLIES AND MARK OR TAG EACH ONE TO MATCH CORRESPONDING UNIT AS SHOWN ON SHOP DRAWINGS.





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### ATTACH ANCHOR CLIPS AT 90° SINGLE MULLION OUTSIDE **CORNER LOCATIONS**

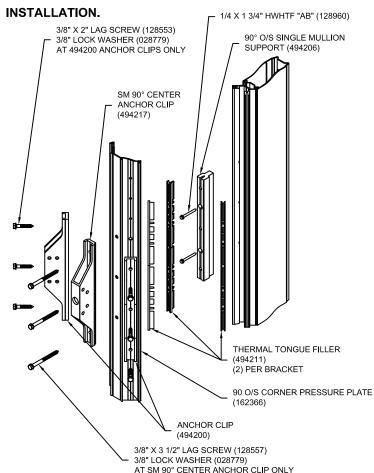
NOTE: OPTIONAL 3 1/8" COVERS WILL BE INSTALLED AFTER THE VERSOLEIL OUTRIGGER SUNSHADE BAY ASSEMBLIES. REFER TO PAGE 11 FOR INSTALLATION DETAILS.

1" COVERS MUST BE INSTALLED AFTER THE ANCHOR CLIPS HAVE BEEN INSTALLED.

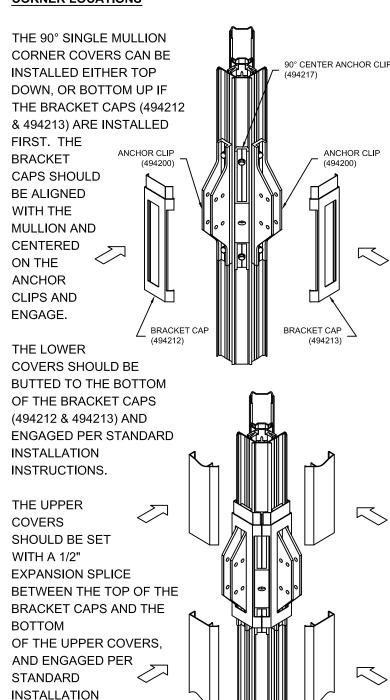
THE 90° O/S SINGLE MULLION SUPPORT (494206) IS TO BE INSTALLED USING TWO 1/4 X 1 3/4" HWHTF "AB" SCREWS (128960). AFTER INSTALLATION, RUN A BEAD OF SEALANT INSIDE THE SINGLE MULLION SUPPORT (AND TONGUES OF MULLION AT BRACKET LOCATIONS), ALIGN LARGE SLOTS IN THERMAL TONGUE FILLER (494211) WITH LARGE MOUNTING HOLES IN THE SINGLE MULLION SUPPORT AND TAP INTO PLACE. ADJUST TONGUE FILLER UNTIL LARGE SLOTS ARE IN PROPER ALIGNMENT WITH SINGLE MULLION SUPPORT MOUNTING HOLES. SEAL AROUND TONGUE FILLER SPLICES AND INSTALL CORNER PRESSURE PLATE IN ACCORDANCE WITH STANDARD INSTALLATION INSTRUCTIONS.

AFTER PRESSURE PLATES ARE INSTALLED, APPLY ANCHOR CLIPS AS SHOWN BELOW. TIGHTEN BOLTS TO A "SNUG" CONDITION AND COMPLETELY COMPRESS THE SPRING TYPE LOCK WASHERS. THEN TIGHTEN APPROXIMATELY 1/2 TURN MORE.

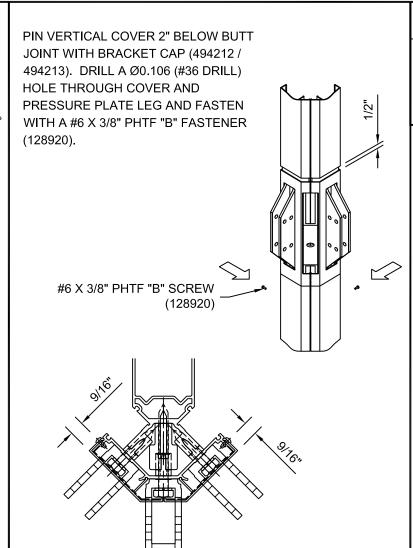
# NOTE: DO NOT INCREASE HOLE SIZE TO FACILITATE



#### **INSTALLING 1" COVERS AT 90° SINGLE MULLION OUTSIDE CORNER LOCATIONS**



INSTRUCTIONS.



CONTINUE INSTALLING COVERS AS DESCRIBED IN PREVIOUS STEPS.

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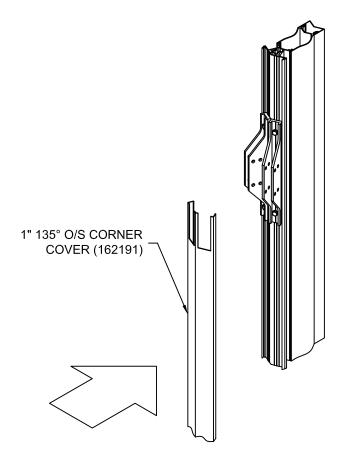
### INSTALLING ANCHOR CLIPS AND 1" COVERS AT 135° SINGLE **MULLION OUTSIDE CORNER LOCATIONS**

NOTE: OPTIONAL 3 1/8" COVERS WILL BE INSTALLED AFTER THE VERSOLEIL OUTRIGGER SUNSHADE BAY ASSEMBLIES. REFER TO PAGE 11 FOR INSTALLATION DETAILS.

INSTALL (2) ANCHOR CLIPS SIMILAR TO 90° SINGLE MULLION OUTSIDE CORNER WITHOUT CENTER CLIP.

COVERS SHOULD BE INSTALLED AFTER THE ANCHOR CLIPS HAVE BEEN INSTALLED.

THE COVER BELOW THE ANCHOR CLIP SHOULD BE SNAPPED INTO PLACE FIRST.



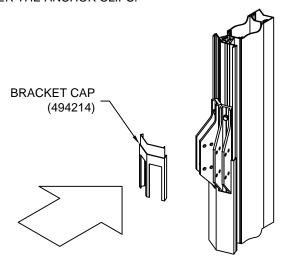


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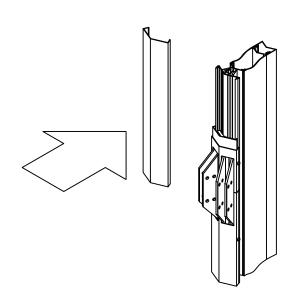
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BRACKET CAP (494214) SHOULD BE SNAPPED INTO PLACE, OVER THE ANCHOR CLIPS.

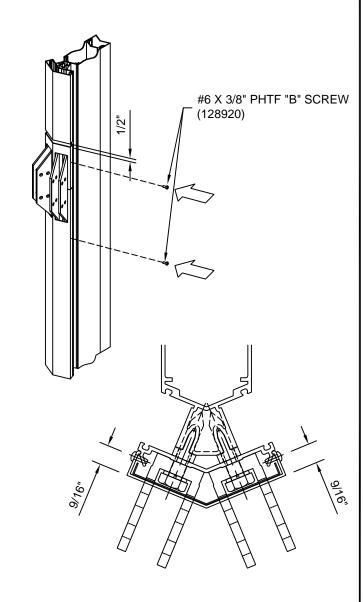


THE COVER ABOVE THE ANCHOR CLIP SHOULD BE SNAPPED INTO PLACE, LEAVING A 1/2" EXPANSION JOINT.



PIN VERTICAL COVER 7" BELOW BUTT JOINT WITH BRACKET CAP (494214). DRILL A Ø0.106 (#36 DRILL) HOLE THROUGH COVER AND PRESSURE PLATE LEG AND FASTEN WITH A #6 X 3/8" PHTF "B" FASTENER (128920).

PIN BRACKET CAP (494214) 2" BELOW 1/2" SPLICE. DRILL A Ø0.106 (#36 DRILL) HOLE THROUGH CAP AND PRESSURE PLATE LEG AND FASTEN WITH A #6 X 3/8" PHTF "B" FASTENER (128920).



### INSTALLING ANCHOR CLIPS AND 1" COVERS AT 135° DOUBLE **MULLION OUTSIDE CORNER LOCATIONS**

INSTALL ANCHOR CLIPS AND 1" COVERS SIMILAR TO TYPICAL INTERMEDIATES.

### **INSTALLING THE SUNSHADE AT 90° SINGLE MULLION OUTSIDE CORNERS**

IF THE SUNSHADE APPLICATION INCLUDES AN OUTSIDE CORNER, CONTINUE TO INSTALL SUNSHADES AS PREVIOUSLY DESCRIBED APPROACHING THE OUTSIDE CORNER CONDITION.

A) MOVE ONE CORNER BAY INTO THE "OUTER" ANCHOR CLIP. ATTACH OUTRIGGER TO ANCHOR CLIP (494200) USING 3/8"-16 X 2" BOLTS (128539), 3/8" FLAT WASHERS (028596), 3/8" LOCK WASHERS (028779) AND 3/8" HEX NUTS (028780). TIGHTEN BOLTS AT 494200 ANCHOR CLIP TO A "SNUG" CONDITION AND COMPLETELY COMPRESS THE SPRING TYPE LOCK WASHERS, THEN TIGHTEN APPROXIMATELY 1/2 TURN MORE.

ATTACH CORNER OUTRIGGER TO SINGLE MULLION 90° CENTER ANCHOR CLIP (494217) USING 3/8"-16 X 1" BOLTS (028969) AND 3/8" LOCK WASHERS (028779). TIGHTEN ALL BOLTS AT SM 90° CENTER ANCHOR CLIP TO A SNUG POSITION ENSURING THE SPRING SEE BELOW FOR CENTER ANCHOR CLIP DETAILS TYPE LOCK WASHERS ARE

\*\*DO NOT EXCEED 100 IN-LBS OF TORQUE\*\*

B) INSTALL SECOND CORNER BAY IN THE SAME MANNER AS THE FIRST.

COMPRESSED.

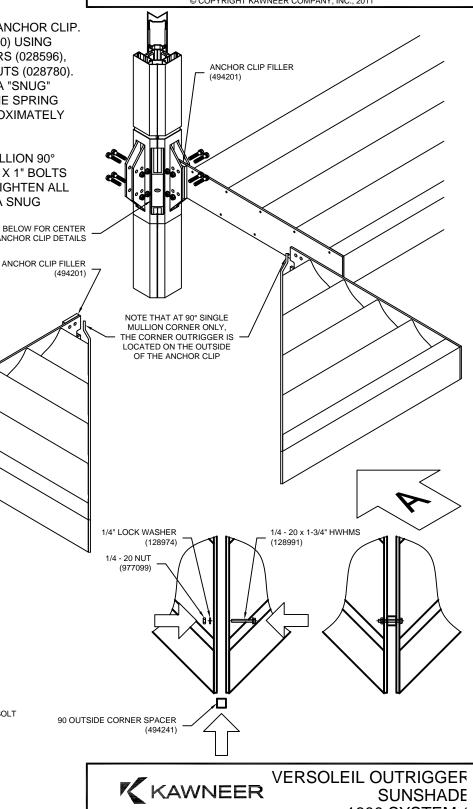
C) INSERT 90 OUTSIDE CORNER SPACER (494241) BETWEEN CORNER **OUTRIGGERS AND SECURE** USING (1) 1/4-20 X 1 3/4" HWHMS, (1) LOCK WASHER (128974), AND (1) 1/4-20 HEX NUT (977099).

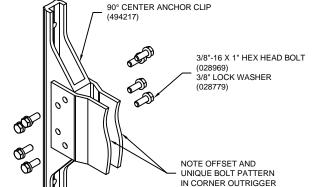
D) CONTINUE INSTALLING SUNSHADES AS DESCRIBED IN PREVIOUS STEPS.

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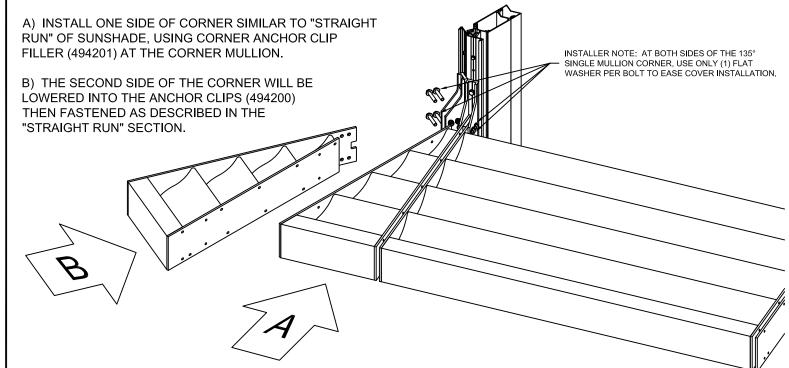
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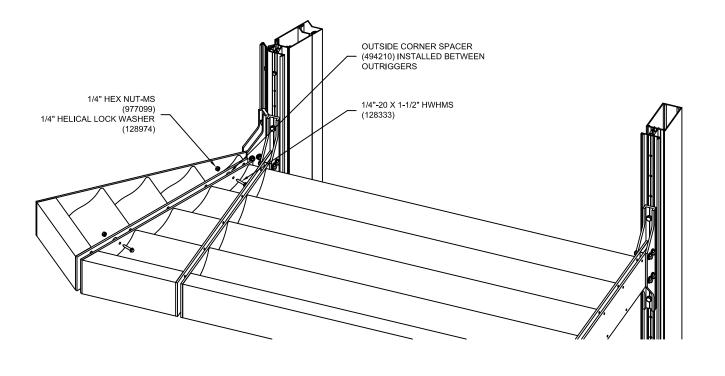
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# INSTALLING THE SUNSHADE AT 135 ° SINGLE MULLION OUTSIDE CORNERS

IF THE SUNSHADE APPLICATION INCLUDES AN OUTSIDE CORNER, CONTINUE TO INSTALL SUNSHADES AS PREVIOUSLY DESCRIBED APPROACHING THE OUTSIDE CORNER CONDITION.



- C) SECURE FIRST CORNER SUNSHADE ASSEMBLY TO SECOND SUNSHADE ASSEMBLY USING 1/4"-20 x 1-1/2" HWHMS (128333), OUTSIDE CORNER SPACER (494210), 1/4" HELICAL LOCK WASHER (128974), AND 1/4"-20 HEX NUT-MS (977099) AT (6) LOCATIONS FOR 36" DEPTH SUNSHADE OR (4) LOCATIONS FOR 30" DEPTH SUNSHADE.
- D) CONTINUE INSTALLING SUNSHADES AS DESCRIBED IN PREVIOUS STEPS.



### INSTALLING THE SUNSHADE AT 90° & 135 ° DOUBLE MULLION INSIDE CORNERS

IF THE SUNSHADE APPLICATION INCLUDES AN INSIDE CORNER, CONTINUE TO INSTALL SUNSHADES AS PREVIOUSLY DESCRIBED APPROACHING THE INSIDE CORNER CONDITION.

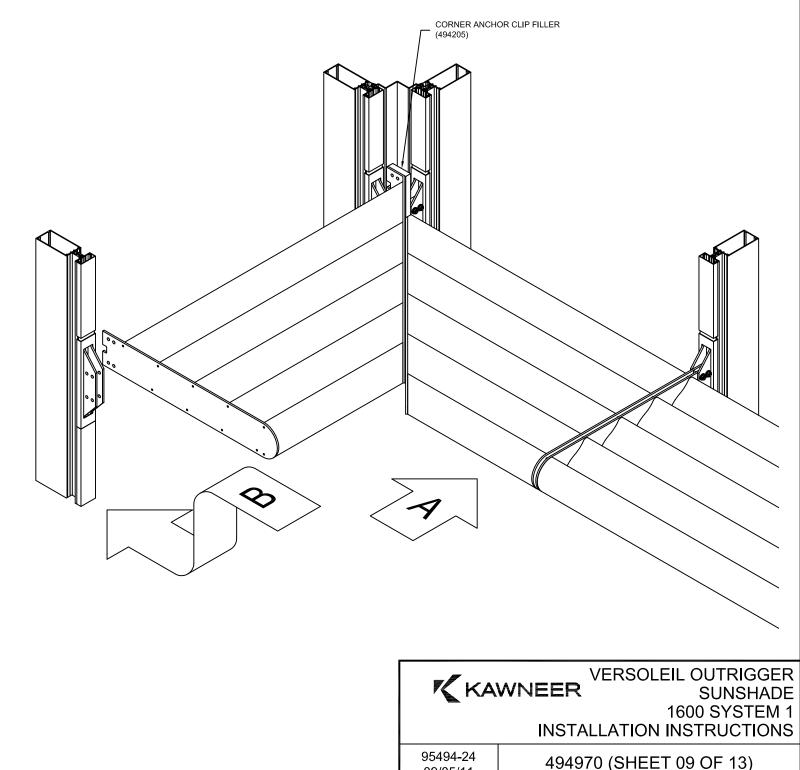
### 494970 (SHEET 09 OF 13)

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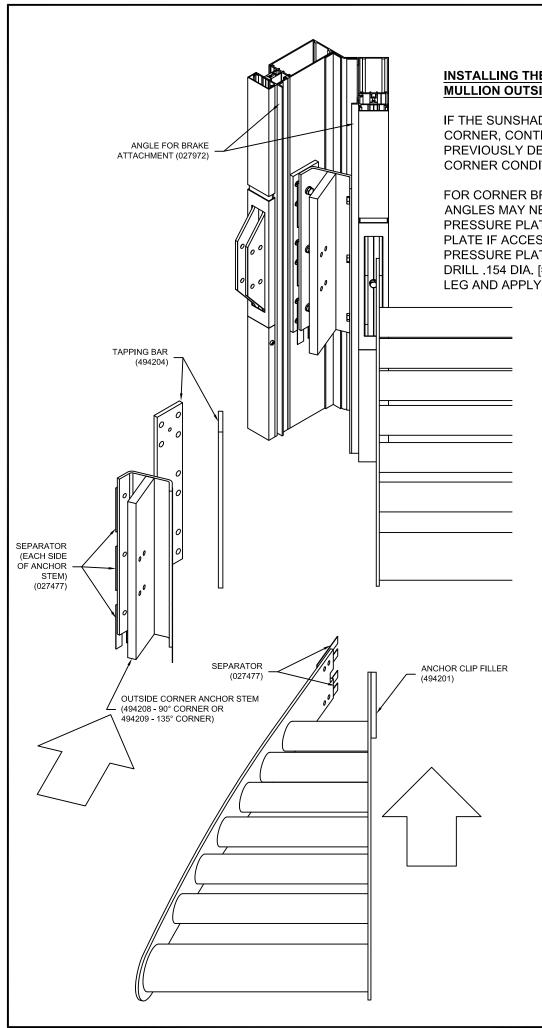
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- A) INSTALL ONE SIDE OF CORNER SIMILAR TO "STRAIGHT RUN" OF SUNSHADE, USING CORNER ANCHOR CLIP FILLER (494205) AT THE CORNER MULLION.
- B) THE SECOND SIDE OF THE CORNER WILL BE LOWERED INTO THE ANCHOR CLIPS (494200) THEN FASTENED AS DESCRIBED IN THE "STRAIGHT RUN" SECTION, USING THE CORNER ANCHOR CLIP FILLER (494205) AT THE CORNER MULLION.
- C) CONTINUE INSTALLING SUNSHADES AS DESCRIBED IN PREVIOUS STEPS.



09/05/11



INSTALLING THE SUNSHADE AT 90° & 135 ° DOUBLE MULLION OUTSIDE CORNERS

IF THE SUNSHADE APPLICATION INCLUDES AN OUTSIDE CORNER, CONTINUE TO INSTALL SUNSHADES AS PREVIOUSLY DESCRIBED APPROACHING THE OUTSIDE CORNER CONDITION.

FOR CORNER BRAKE CLOSURE ATTACHMENT, 027972 ANGLES MAY NEED TO BE PRE-APPLIED TO THE PRESSURE PLATE PRIOR TO INSTALLING PRESSURE PLATE IF ACCESS IS TOO TIGHT TO MATCH DRILL PRESSURE PLATE. REFERENCE SHOP DETAILS. MATCH DRILL .154 DIA. [#23 DRILL] HOLES IN PRESSURE PLATE LEG AND APPLY WITH 128407 #10 x 7/16" PH SCREWS.

USING PRE-DRILLED MOUNTING HOLES, INSTALL A TAPPING BAR (494204) ON EACH CORNER MULLION USING 1/4"-20 X 3/4" FHMS (128925). INSTALL OUTSIDE CORNER ANCHOR STEM (494208 - 90° CORNER; 494209 - 135° CORNER) USING 3/8"-16 X 1" BOLT (028969), 3/8" LOCK WASHER (028779) AND SEPARATORS (027477) BETWEEN STEEL ANCHOR STEM AND ALUMINUM TAPPING BARS. TIGHTEN 3/8" BOLTS TO A "SNUG" CONDITION ENSURING SPRING TYPE LOCK WASHERS ARE COMPLETELY COMPRESSED.

INSTALL ONE SIDE OF CORNER SIMILAR TO "STRAIGHT RUN" OF SUNSHADE, ATTACHING TO ANCHOR CLIP (494200) AND OUTSIDE CORNER ANCHOR STEM (494208 - 90° CORNER; 494209 - 135° CORNER) USING 3/8"-16 X 2" BOLT (128539), 3/8" FLAT WASHER (028596), 3/8" LOCK WASHER (028779), 3/8" HEX NUT (028780) AND SEPARATOR (027477) BETWEEN STEEL ANCHOR STEM AND ALUMINUM OUTRIGGER.

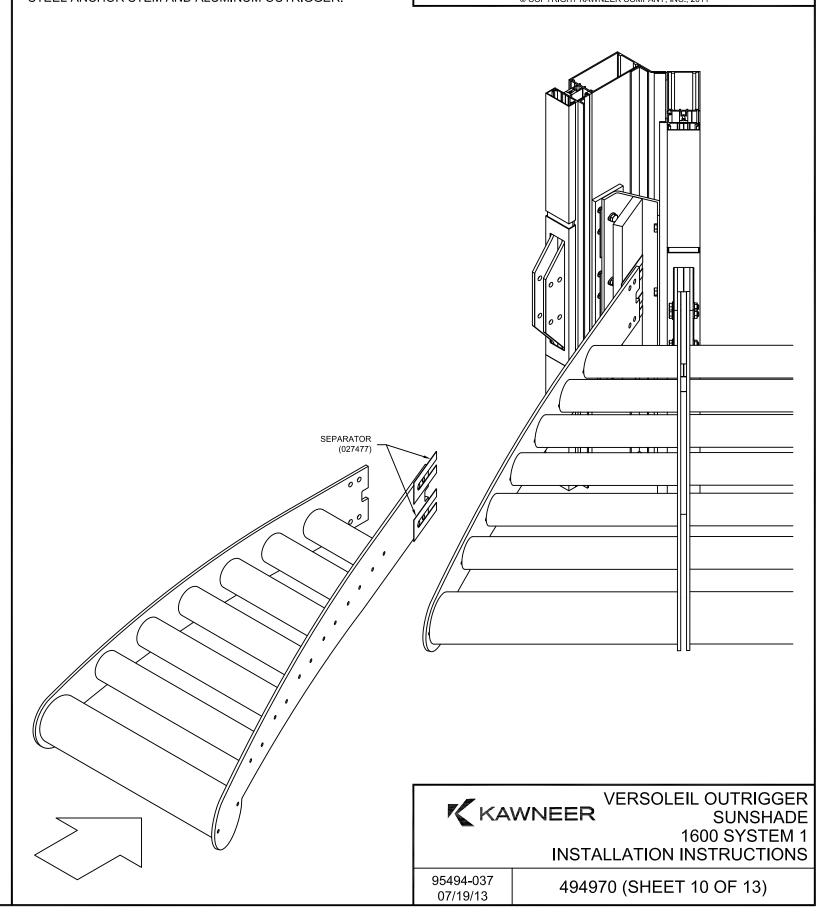
INSTALL SECOND SIDE OF CORNER IN THE SAME MANNER AS THE FIRST, ATTACHING TO ANCHOR CLIP (494200) AND OUTSIDE CORNER ANCHOR STEM (494208 - 90° CORNER; 494209 - 135° CORNER) USING 3/8"-16 X 2" BOLT (128539), 3/8" FLAT WASHER (028596), 3/8" LOCK WASHER (028779), 3/8" HEX NUT (028780) AND SEPARATOR (027477) BETWEEN STEEL ANCHOR STEM AND ALUMINUM OUTRIGGER.

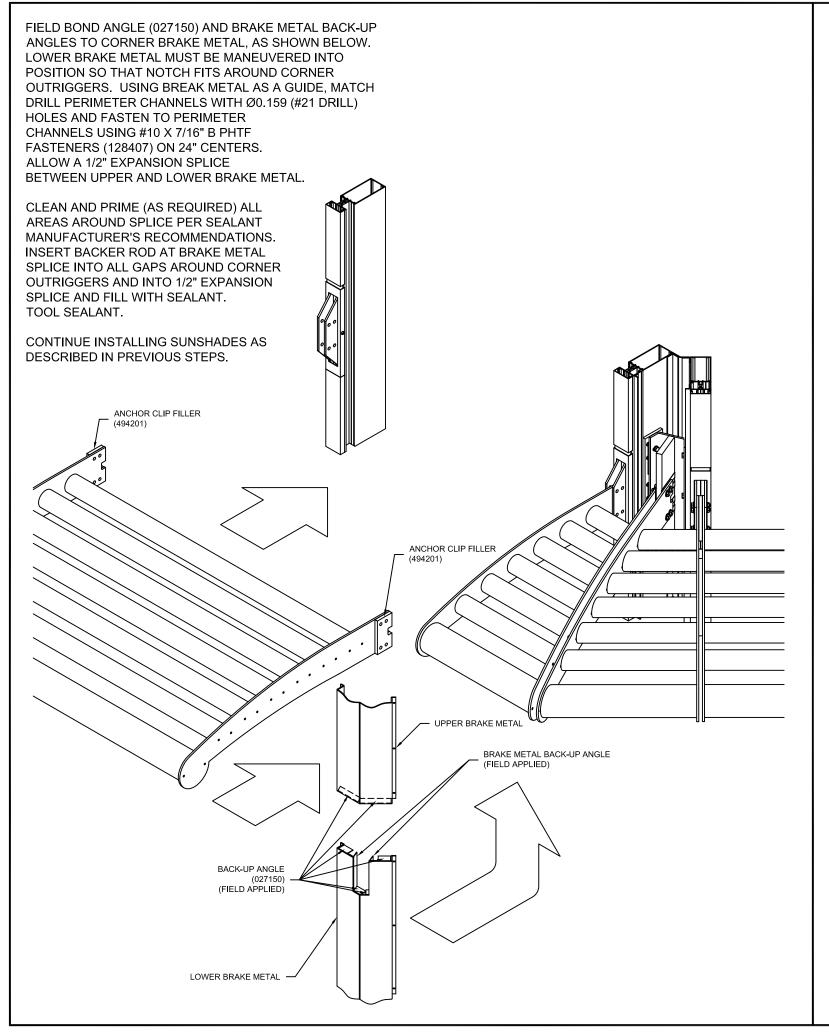
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# INSTALLING OPTIONAL 3 1/8" COVERS AT SINGLE MULLION 90° OUTSIDE CORNERS

THE 90° SINGLE MULLION OUTSIDE CORNER COVERS HAVE BEEN SPLIT INTO AN UPPER PIECE AND A LOWER PIECE, AND MUST BE INSTALLED FROM THE BOTTOM OF THE ELEVATION UP. THE TOP OF THE LOWER COVER IS NOTCHED. ALIGN THE COVER ON THE MULLION WITH THE NOTCH FACING UP. THE LOWER COVERS SHOULD BE MANEUVERED INTO POSITION AND SNAPPED IN PLACE. FIELD BOND THE SPLICE SLEEVE (162570) TO THE TOP OF THE LOWER COVERS.

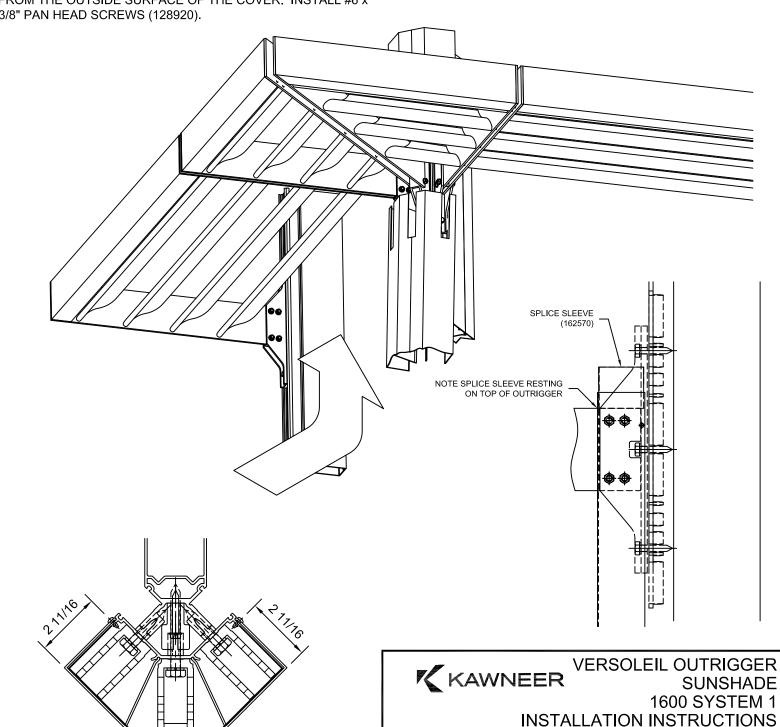
PIN BOTH HALVES OF THE VERTICAL COVERS. DRILL A  $\emptyset$ 0.106" HOLE (#36 DRILL) 2" BELOW THE SPLICE AND 2 11/16" FROM THE OUTSIDE SURFACE OF THE COVER. INSTALL #6 x 3/8" PAN HEAD SCREWS (128920).

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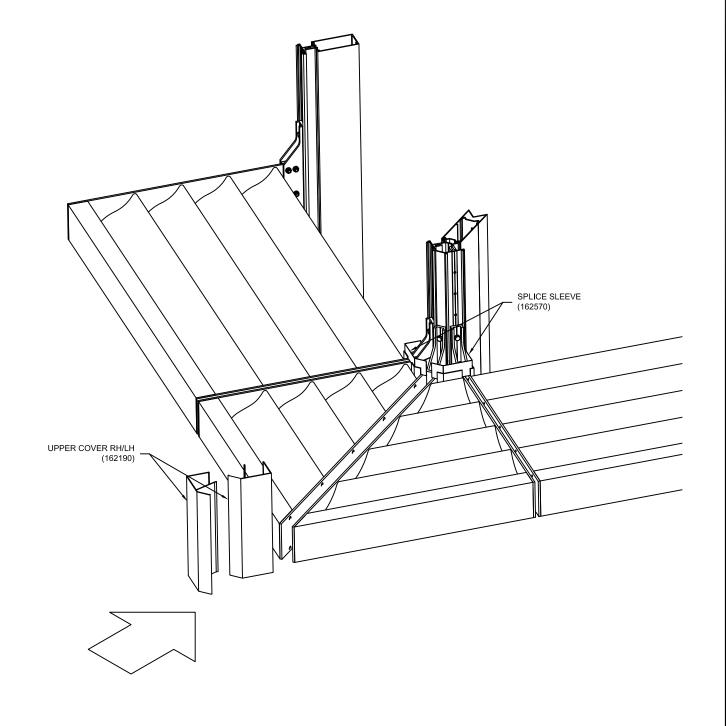
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THE UPPER COVERS SHOULD BE MANEUVERED INTO POSITION, AND OVER THE SPLICE SLEEVES, LEAVING A 1/2" SPLICE BETWEEN THE LOWER COVER AND THE UPPER COVER. THE UPPER COVERS SHOULD BE ENGAGED PER STANDARD INSTALLATION INSTRUCTIONS.

NOTE: THE 3/8" HEX HEAD BOLTS AND CORRESPONDING NUTS MUST BE CENTERED ON THE ANCHOR CLIP IN ORDER FOR THE SPLICE SLEEVE TO FIT. CHECK AND MAKE ADJUSTMENTS BEFORE PROCEEDING.

APPLY HORIZONTAL COVERS PER STANDARD INSTALLATION INSTRUCTIONS.



# INSTALLING OPTIONAL 3 1/8" COVERS AT SINGLE MULLION 135° OUTSIDE CORNERS

IF THE SUNSHADE APPLICATION INCLUDES A SINGLE MULLION 135° OUTSIDE CORNER, CONTINUE TO INSTALL SUNSHADES AS PREVIOUSLY DESCRIBED APPROACHING THE OUTSIDE CORNER CONDITION.

THE 135° SINGLE MULLION CORNER COVERS CAN BE INSTALLED EITHER TOP DOWN OR BOTTOM UP IF THE BRACKET CAP (494216) IS INSTALLED FIRST. THE BRACKET CAP (494216) SHOULD BE ALIGNED WITH THE MULLION AND SLID DOWN OVER THE OUTRIGGERS, ALLOWING THE BRACKET CAP TO

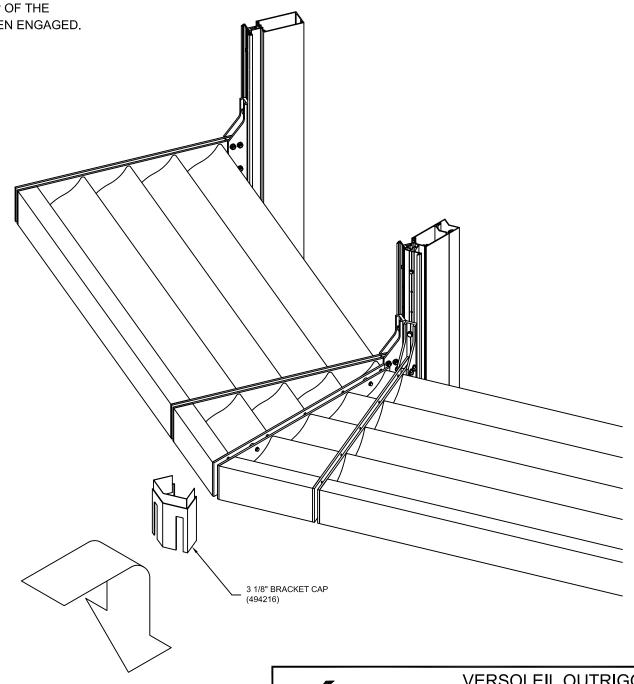
ALLOWING THE BRACKET CAP TO
REST ON THE TOP OF THE
OUTRIGGERS, THEN ENGAGED.

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VERSOLEIL OUTRIGGER
SUNSHADE
1600 SYSTEM 1

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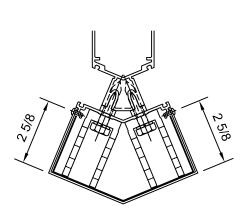
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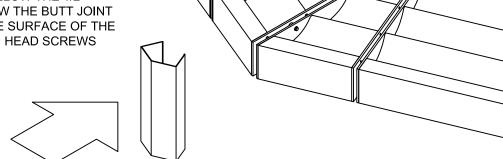
THE LOWER COVER SHOULD BE BUTTED TO THE BOTTOM OF THE BRACKET CAP (494216) AND ENGAGED PER STANDARD INSTALLATION INSTRUCTIONS.

THE UPPER COVER SHOULD BE SET WITH A 1/2" EXPANSION GAP BETWEEN THE BRACKET CAP (494216) AND THE UPPER COVER, AND ENGAGED PER STANDARD INSTALLATION INSTRUCTIONS.

CONTINUE INSTALLING SUNSHADE **COVERS AS DESCRIBED IN** PREVIOUS STEPS.



PIN THE VERTICAL COVERS AND CAPS. DRILL A Ø0.106" HOLE (#36 DRILL) 2" BELOW THE 1/2" **EXPANSION SPLICE & 2" BELOW THE BUTT JOINT** AND 2 5/8" FROM THE OUTSIDE SURFACE OF THE COVER. INSTALL #6 x 3/8" PAN HEAD SCREWS (128920).



### INSTALLING OPTIONAL 3 1/8" COVERS ON 90° & 135° DOUBLE MULLION OUTSIDE & INSIDE CORNERS

WHEN DEEP COVERS ARE USED WITH THE VERSOLEIL OUTRIGGER SUNSHADE, THE COVERS WILL BE FACTORY PREPPED AND SHIPPED READY TO INSTALL. DOUBLE MULLION CORNER COVERS WILL BE INSTALLED IN THE SAME MANNER AS FOR INTERMEDIATE MULLIONS.

NOTE: DOUBLE MULLION 90° AND 135° CORNER COVERS WILL HAVE A RH/LH BOTTOM COVER, REFER TO APPROVED SHOP DRAWINGS TO DETERMINE PROPER ORIENTATION OF NOTCHES.

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VERSOLEIL OUTRIGGER 1600 SYSTEM 1 **INSTALLATION INSTRUCTIONS** 

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