## VERSOLEIL OUTRIGGER SUNSHADE INSTALLATION INSTRUCTIONS FOR 1600 SYSTEM 5

THE FOLLOWING INSTRUCTIONS ARE FOR THE INSTALLATION OF THE KAWNEER VERSOLEIL OUTRIGGER SUNSHADE. USE THESE INSTRUCTIONS IN CONJUNCTION WITH 1600 SYSTEM 5 CURTAIN WALL INSTALLATION INSTRUCTIONS (166970).

### 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.

## SUNSHADE ATTACHMENT, TYPICAL **INTERMEDIATES**

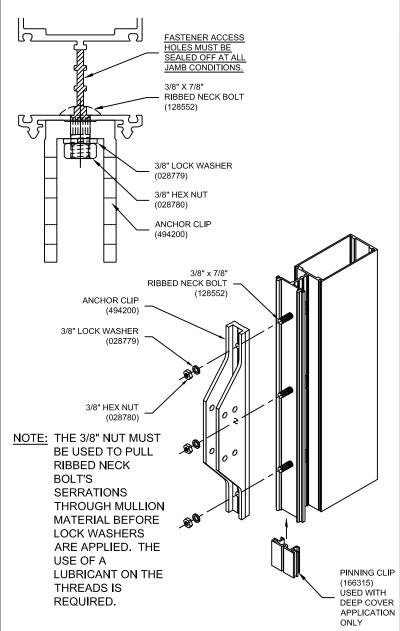
### ATTACH ANCHOR CLIPS

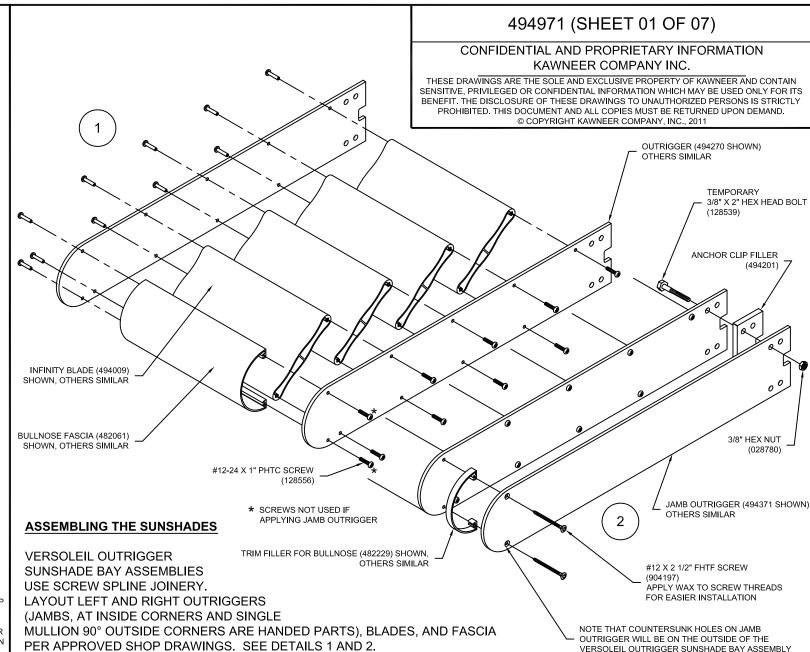
ALIGN THE THREE CLEAR HOLES IN THE ANCHOR CLIP (494200) WITH THE THREE HOLES IN THE MULLION AND ATTACH WITH THREE 3/8-16 x 7/8" ROUND HEAD RIBBED NECK CARRIAGE BOLTS (128552), LOCK WASHERS (028779) AND 3/8" NUTS (028780) AS SHOWN.

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

**INSTALL DEEP COVER PINNING CLIP (166315)** APPROXIMATELY 1/2" BELOW EACH ANCHOR CLIP. CRIMP INTO PLACE AT CLIP BOTTOM.

ATTACH ALL ANCHOR CLIPS AND PINNING CLIPS BEFORE INSTALLING SUNSHADES.





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 2. 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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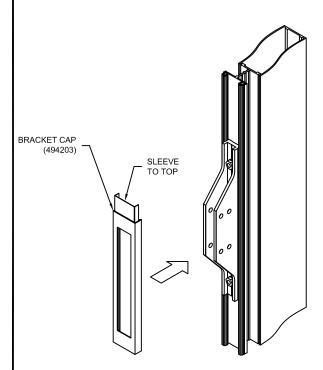
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### **INSTALLING 1" COVERS AT INTERMEDIATE MULLION LOCATIONS**

NOTE: OPTIONAL 3 1/8" COVERS WILL BE INSTALLED AFTER THE VERSOLEIL OUTRIGGER SUNSHADE BAY ASSEMBLIES. REFER TO PAGE 04 FOR INSTALLATION DETAILS.

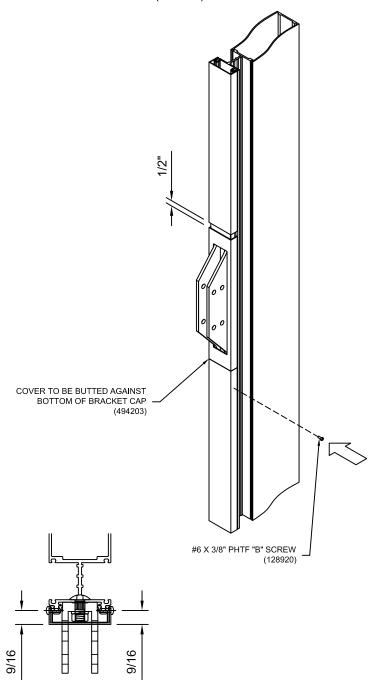
BRACKET CAP (494203) SHOULD BE SNAPPED INTO PLACE AT EACH ANCHOR CLIP LOCATION. CENTER ON ANCHOR



1" COVERS SHOULD BE INSTALLED BUTTED TO THE BOTTOM OF THE BRACKET CAP (494203) AND 1/2" ABOVE THE TOP OF

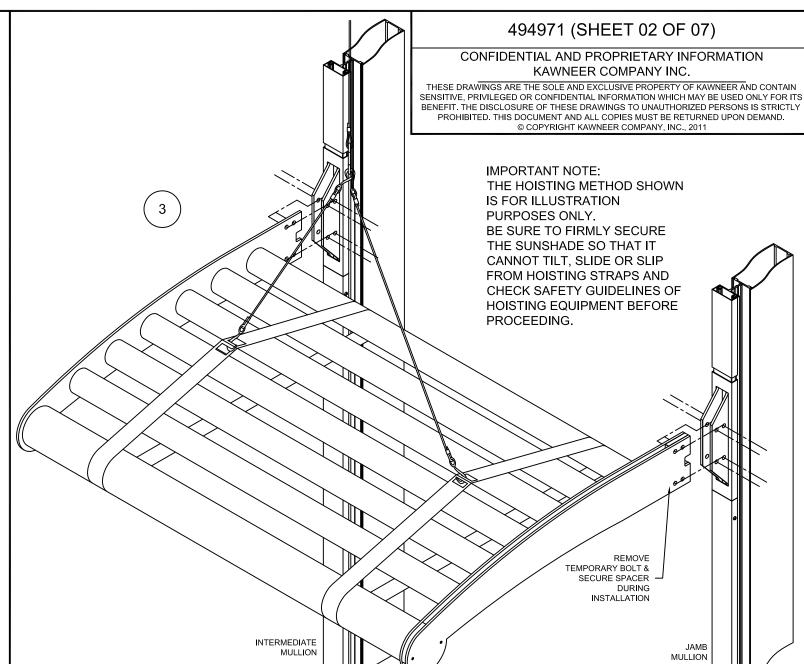
THE BRACKET CAP, OVER THE SLEEVE. REFERENCE STANDARD 1600 SYSTEM 5 **INSTALLATION** INSTRUCTIONS.

PIN VERTICAL COVER 2" BELOW BUTT JOINT WITH BRACKET CAP (494203). 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



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

**INSTALLING THE SUNSHADES** 

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 3 AND 4. 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.** 

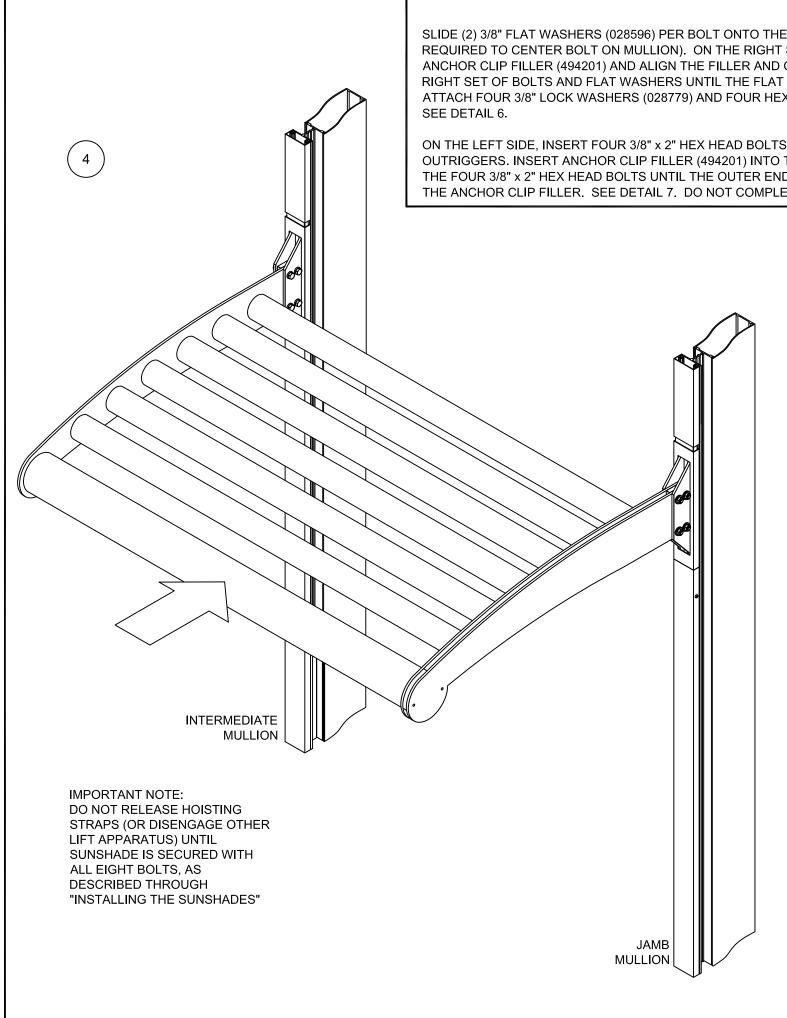
**VERSOLEIL OUTRIGGER SUNSHADE BAYS TO BE** INSTALLED BEFORE OPTIONAL 3 1/8" COVERS. SEE PAGE 04 FOR OPTIONAL 3 1/8" COVER INSTALLATION.



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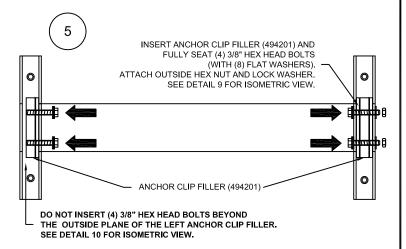
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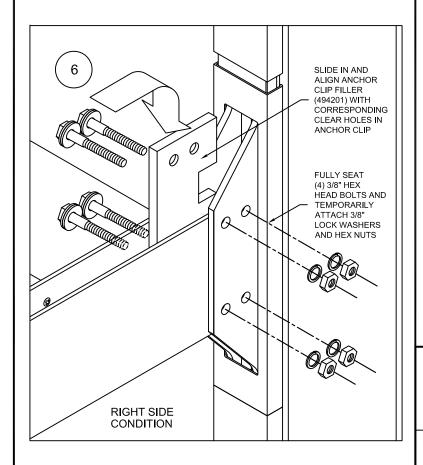


SLIDE (2) 3/8" FLAT WASHERS (028596) PER BOLT ONTO THE 3/8" x 2" HEX HEAD BOLTS (128539) (NOTE: (2) WASHERS ARE REQUIRED TO CENTER BOLT ON MULLION). ON THE RIGHT SIDE (END ASSEMBLY), REMOVE THE TEMPORARY FASTENER AT ANCHOR CLIP FILLER (494201) AND ALIGN THE FILLER AND OUTRIGGER WITH THE ANCHOR CLIP.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

ON THE LEFT SIDE, INSERT FOUR 3/8" x 2" HEX HEAD BOLTS WITH 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 7. 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).

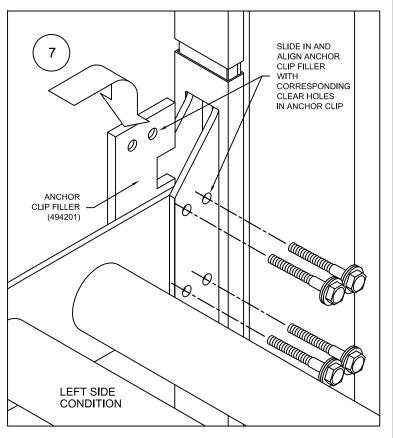




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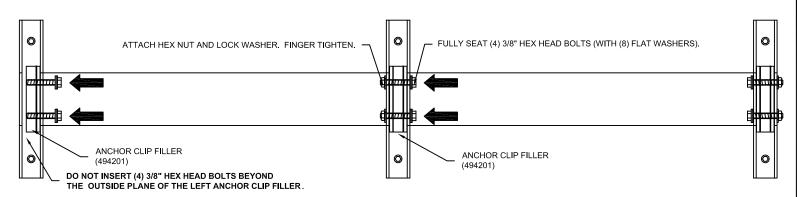
### **B. INSTALL SECOND BAY ASSEMBLY**

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.

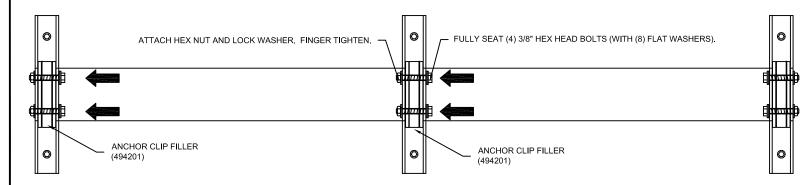
ON THE LEFT SIDE, ALIGN AND INSERT AN ANCHOR CLIP FILLER (494201) INTO THE CENTER OF THE ANCHOR CLIP AND PARTIALLY SEAT ANOTHER SET OF (4) 3/8" x 2" HEX HEAD BOLTS AND (8) FLAT WASHERS. RUN BOLTS THROUGH ASSEMBLY UNTIL THE OUTER ENDS OF THE BOLTS ARE FLUSH WITH THE OUTSIDE SURFACE OF THE ANCHOR CLIP 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 BOLTS AND 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.

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.

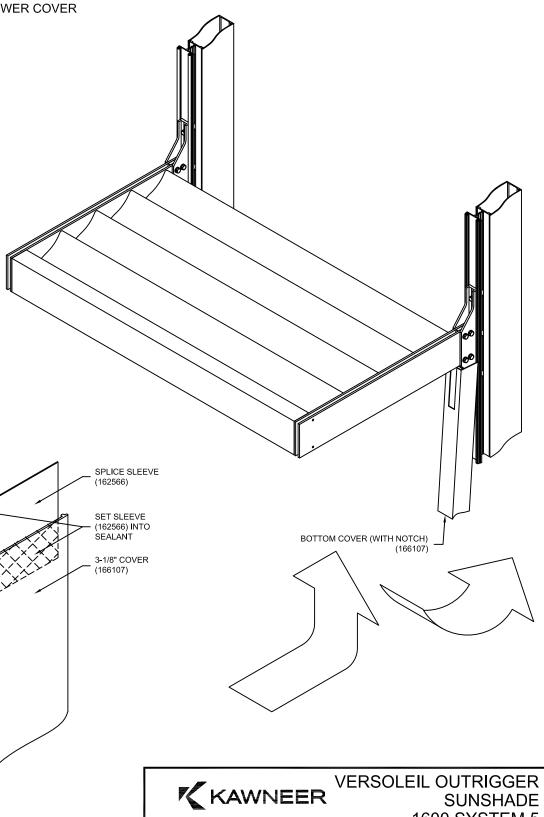
APPLY HORIZONTAL COVERS PER STANDARD INSTALLATION INSTRUCTIONS.

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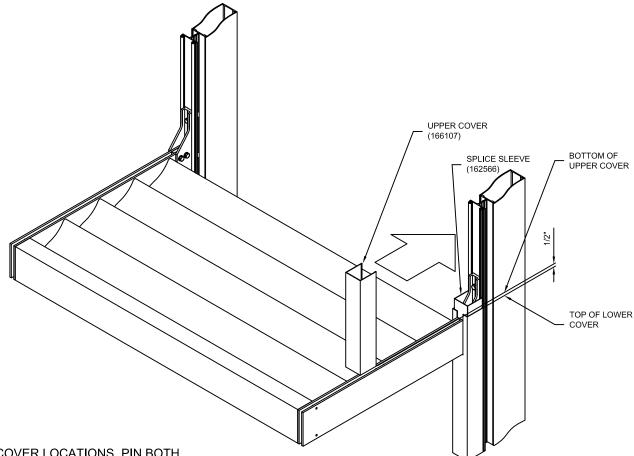
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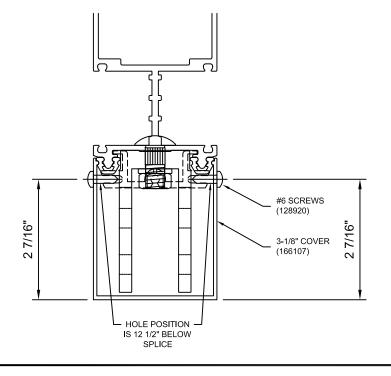
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ALIGN THE UPPER COVER WITH THE MULLION, ABOVE THE OUTRIGGERS, AND SPLICE SLEEVE ON THE LOWER COVER, LEAVING A 1/2" EXPANSION SPLICE BETWEEN THE UPPER AND LOWER COVERS. ENGAGE AS PER STANDARD 1600 SYSTEM 5 INSTALLATION INSTRUCTIONS.



AT ALL VERTICAL COVER LOCATIONS, PIN BOTH HALVES OF THE VERTICAL COVERS. DRILL A Ø0.106" HOLE (#36 DRILL) 12 1/2" 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

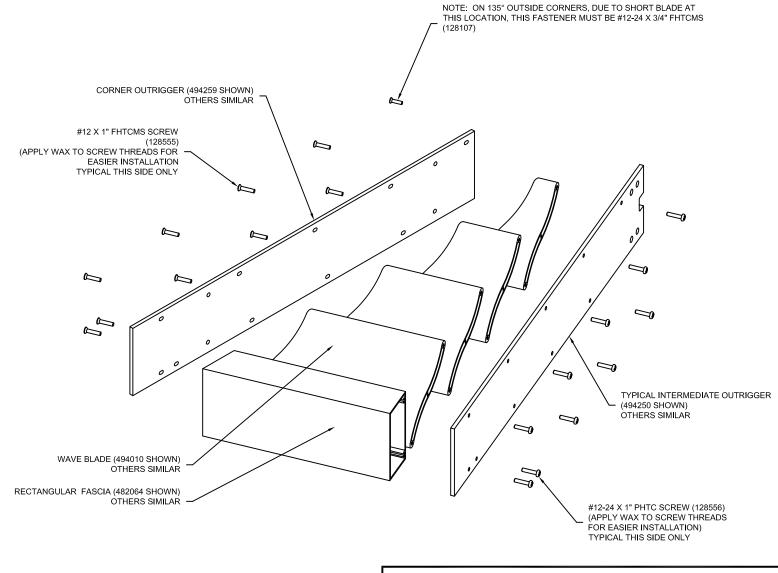
USE SCREW SPLINE JOINERY. LAYOUT LEFT AND RIGHT OUTRIGGERS (AT INSIDE CORNERS, AND SINGLE MULLION 90°

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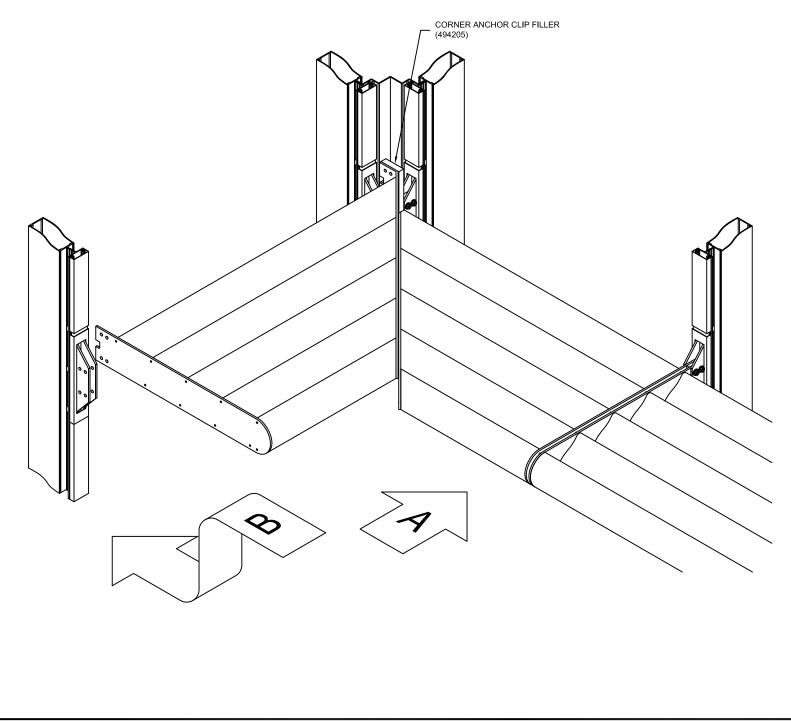
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# INSTALLING THE SUNSHADE AT 90° & 135 ° DOUBLE MULLION INSIDE CORNERS

INSTALL ANCHOR BRACKETS AND 1" COVERS SIMILAR TO TYPICAL INTERMEDIATE MULLION APPLICATION.

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

- 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.



# 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

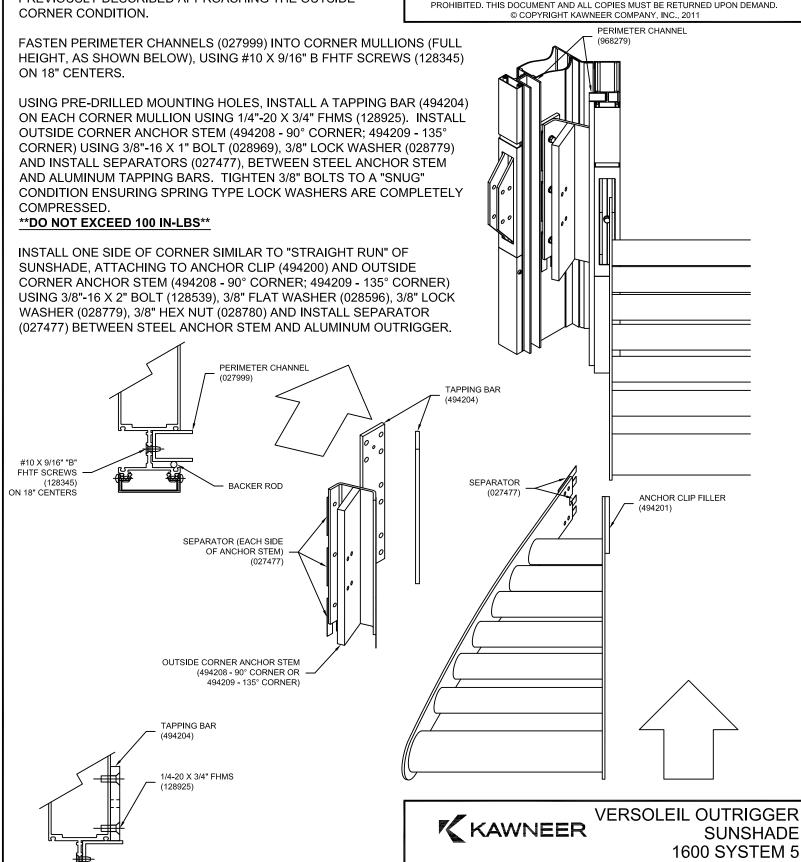
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