

**VERSOLEIL OUTRIGGER SUNSHADE  
INSTALLATION INSTRUCTIONS  
FOR 1600 SCREW SPLINE STRUCTURAL  
SILICONE GLAZED**

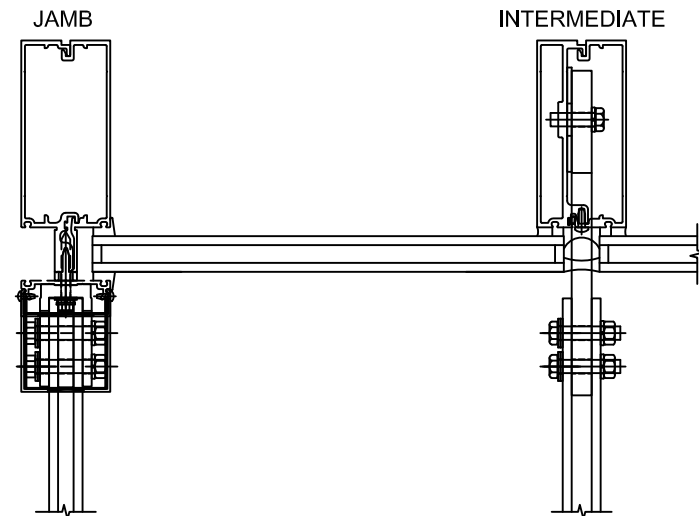
THE FOLLOWING INSTRUCTIONS ARE FOR THE INSTALLATION OF THE KAWNEER VERSOLEIL OUTRIGGER SUNSHADE. USE THESE INSTRUCTIONS IN CONJUNCTION WITH 1600 SCREW SPLINE STRUCTURAL SILICONE GLAZED CURTAIN WALL INSTALLATION INSTRUCTIONS (169971).

**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.

**JAMBS**

VERSOLEIL OUTRIGGER SUNSHADES USED IN CONJUNCTION WITH 1600 SS SSG FRAMING MEMBERS UTILIZE 1600 SCREW SPLINE CAPTURED FRAMING AND SUNSHADE ATTACHMENTS AT JAMB CONDITIONS. REFERENCE VERSOLEIL OUTRIGGER SUNSHADE 1600 SCREW SPLINE INSTALLATION INSTRUCTIONS (494972) AND APPROVED SHOP DETAILS FOR JAMB CONDITIONS.



NOTE: JAMB BRACKETS OR INTERMEDIATE STEM ANCHORS CANNOT SPAN A FRAMING SPLICE JOINT.

**EXTERIOR COVERS**

WHEN VERSOLEIL OUTRIGGERS ARE INSTALLED ON JAMBS 1" OR 3-1/8" COVERS MUST BE USED (REFERENCE VERSOLEIL OUTRIGGER SUNSHADE 1600 SCREW SPLINE INSTALLATION INSTRUCTIONS, 494972).

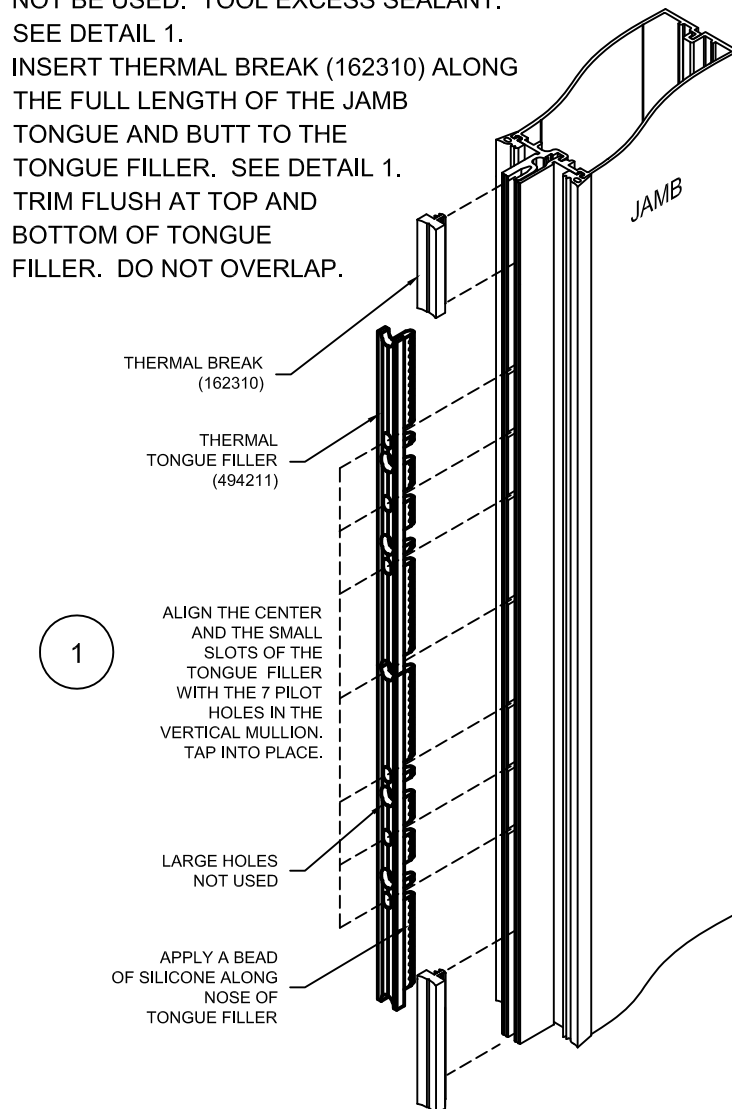
**SHOP UNIT ASSEMBLY**

**INSTALL 162310 THERMAL BREAK AT JAMB**

INSTALLATION OF THE THERMAL BREAK ON HORIZONTAL MEMBERS REMAINS UNCHANGED.

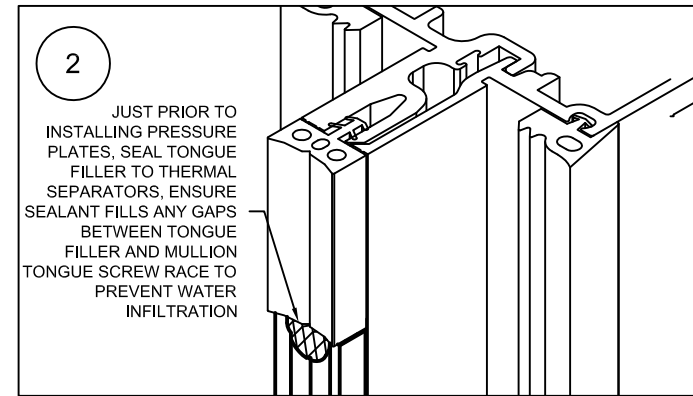
SUNSHADES LOCATED ON JAMBS REQUIRE THE USE OF TWO TONGUE FILLERS (494211) AT EVERY ANCHOR CLIP LOCATION. CHECK SHOP DRAWINGS FOR POSITION OF ANCHOR CLIPS. FOR EACH LOCATION OF AN ANCHOR CLIP, THE JAMB HAS BEEN PREPPED WITH SEVEN PILOT HOLES. RUN A BEAD OF SEALANT ALONG THE JAMB TONGUE FACE AND INTO THE SCREW BOSS AT EACH TONGUE FILLER LOCATION AND TAP TONGUE FILLER INTO PLACE. ALIGN THE CLEAR HOLES OF THE TONGUE FILLERS WITH THE SEVEN HOLES IN THE JAMB. 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 JAMB TONGUE AND BUTT TO THE TONGUE FILLER. SEE DETAIL 1. TRIM FLUSH AT TOP AND BOTTOM OF TONGUE FILLER. DO NOT OVERLAP.



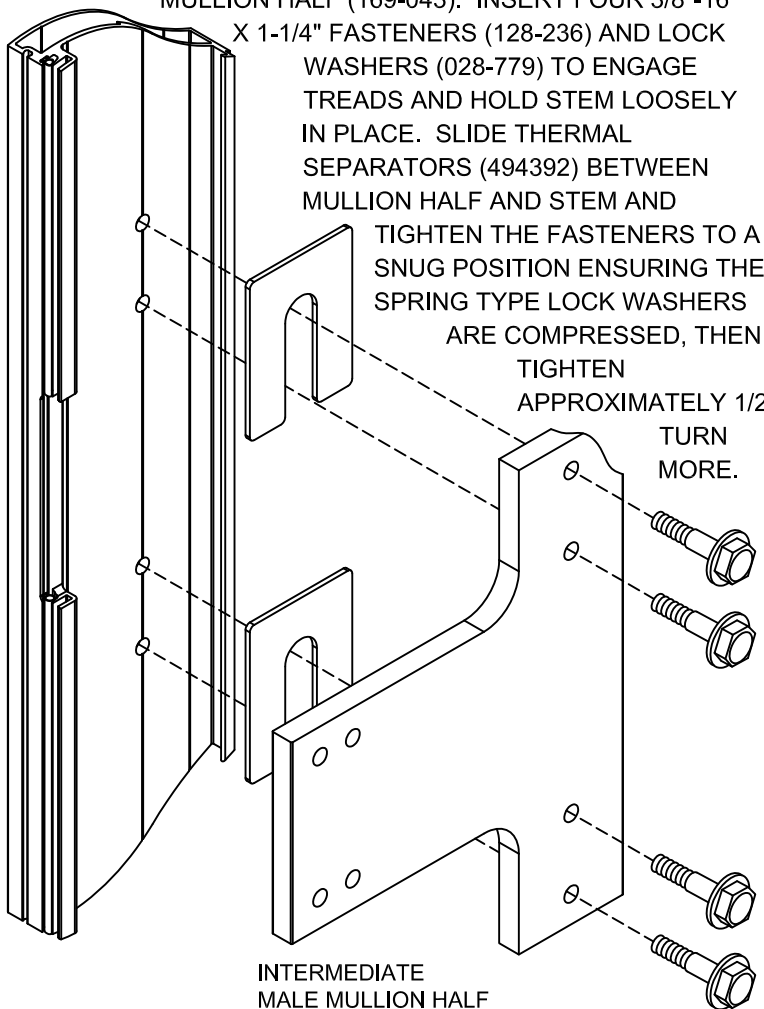
**INSTALL 162310 THERMAL BREAK**

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 TO JAMBS.



**SUNSHADE ATTACHMENT, TYPICAL INTERMEDIATE**

START AND STOP BULB GASKET (027-493) AT THE TOP AND BOTTOM OF THE NOTCH IN THE MALE MULLION HALF, 169043. ALIGN THE FOUR CLEAR HOLES IN THE SUNSHADE MOUNTING STEM (494391) WITH THE FOUR TAPPED HOLES IN THE MALE MULLION HALF (169-043). INSERT FOUR 3/8"-16 X 1-1/4" FASTENERS (128-236) AND LOCK WASHERS (028-779) TO ENGAGE TREADS AND HOLD STEM LOOSELY IN PLACE. SLIDE THERMAL SEPARATORS (494392) BETWEEN MULLION HALF AND STEM AND



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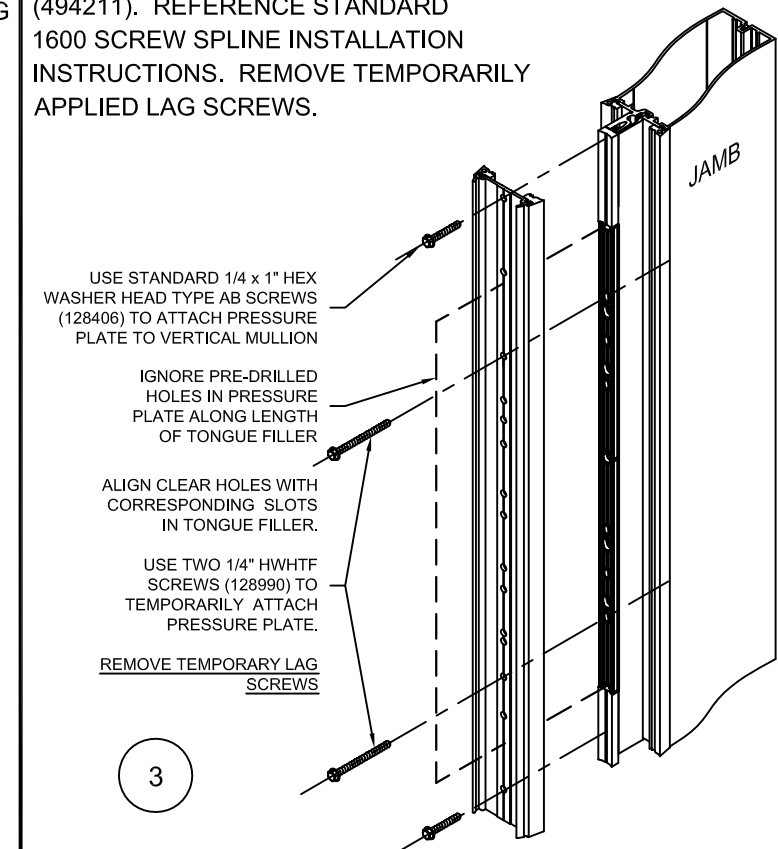
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**UNITS INSTALLED, REFERENCE STANDARD INSTALLATION INSTRUCTIONS (169971)**

**INSTALL JAMB EXTERIOR PRESSURE PLATES**

PRESSURE PLATES AT JAMBS WILL BE PREPPED FOR THE SUNSHADES PRIOR TO SHIPMENT TO THE JOB SITE. THE PREP WILL CONSIST OF SEVEN CLEAR HOLES PER SUNSHADE ATTACHMENT. CLEAR HOLES IN PRESSURE PLATE MUST BE ALIGNED WITH CORRESPONDING HOLES IN TONGUE FILLER AND JAMB. SEE DETAIL 3. TO ENSURE ALIGNMENT, INSERT TWO 1/4" HWHTF SCREWS (128990) THROUGH THE CENTER OF THE CLEAR HOLES IN BOTH THE TOP AND BOTTOM POSITION AS TEMPORARIES (FINGER TIGHTEN). INSTALL PRESSURE PLATES, FOLLOWING STANDARD 1600 SCREW SPLINE 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 SCREW SPLINE INSTALLATION INSTRUCTIONS. REMOVE TEMPORARILY APPLIED LAG SCREWS.



VERSOLEIL OUTRIGGER  
SUNSHADE  
1600 SS SSG  
INSTALLATION INSTRUCTIONS

## SUNSHADE BRACKET ATTACHMENT, JAMBS

### ATTACH JAMB ANCHOR CLIPS

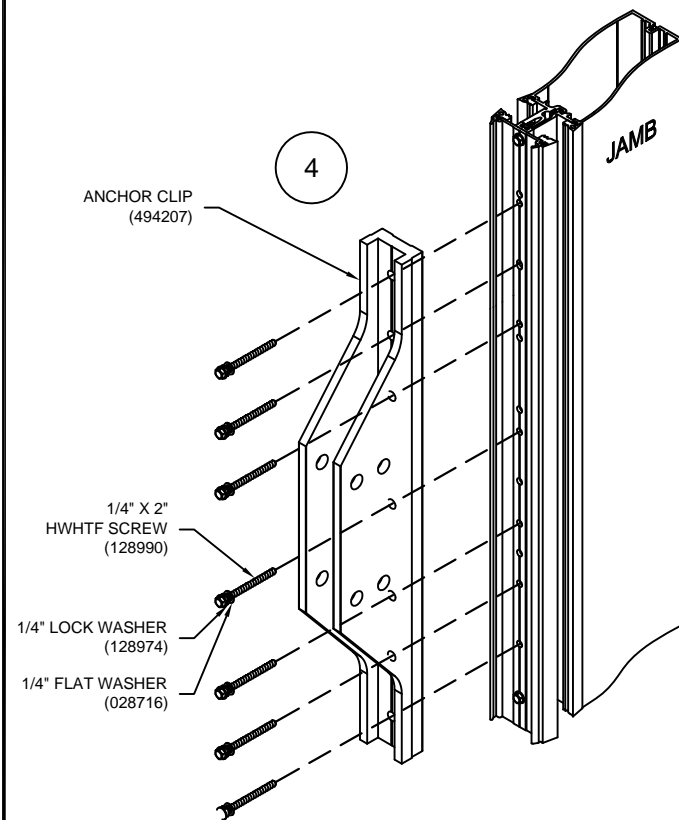
ALIGN THE SEVEN CLEAR HOLES IN THE ANCHOR CLIP (494207) WITH THE SEVEN CLEAR HOLES IN THE PRESSURE PLATE AND MULLION. ATTACH WITH SEVEN 1/4" x 2" HWHTF SCREWS (128990), SEVEN LOCK WASHERS (128974) AND SEVEN FLAT WASHERS (028716). SEE DETAIL 4.

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

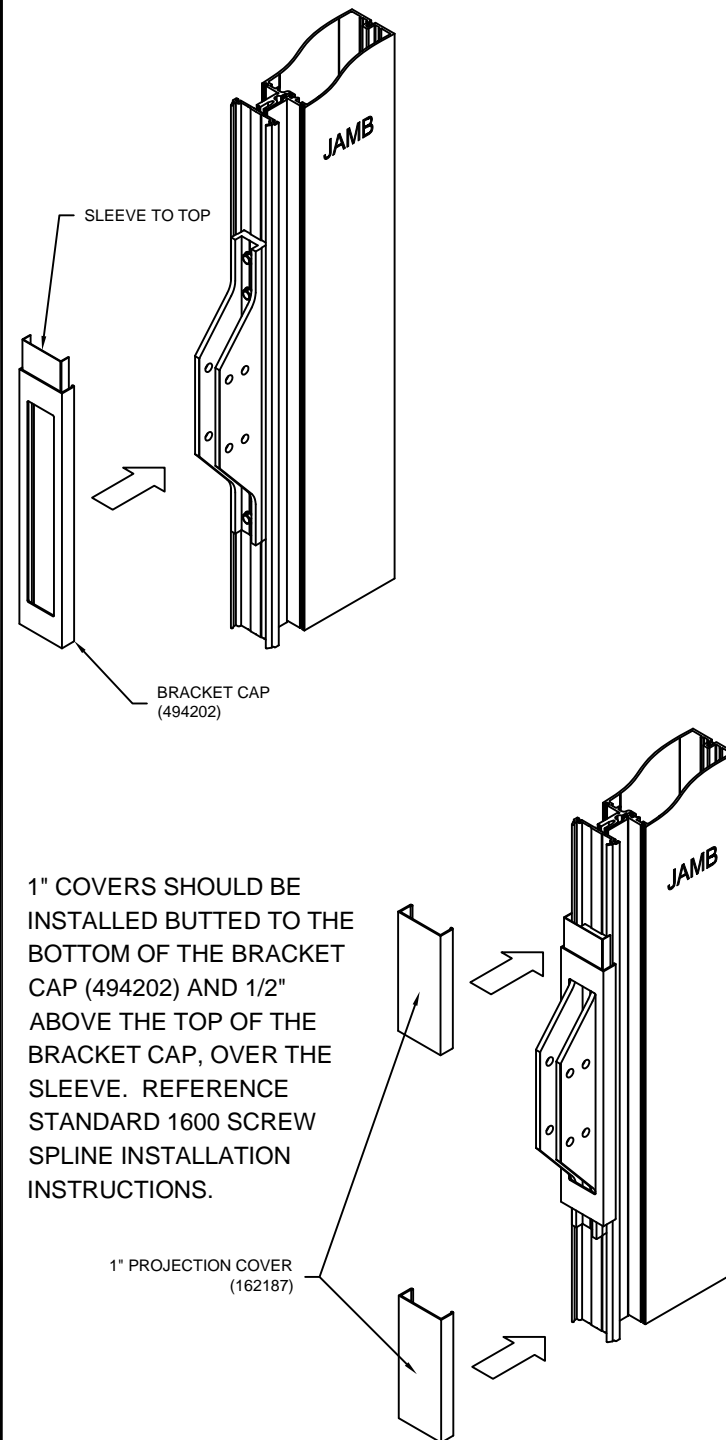
**NOTE: DO NOT INCREASE HOLE SIZE TO FACILITATE INSTALLATION.**

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

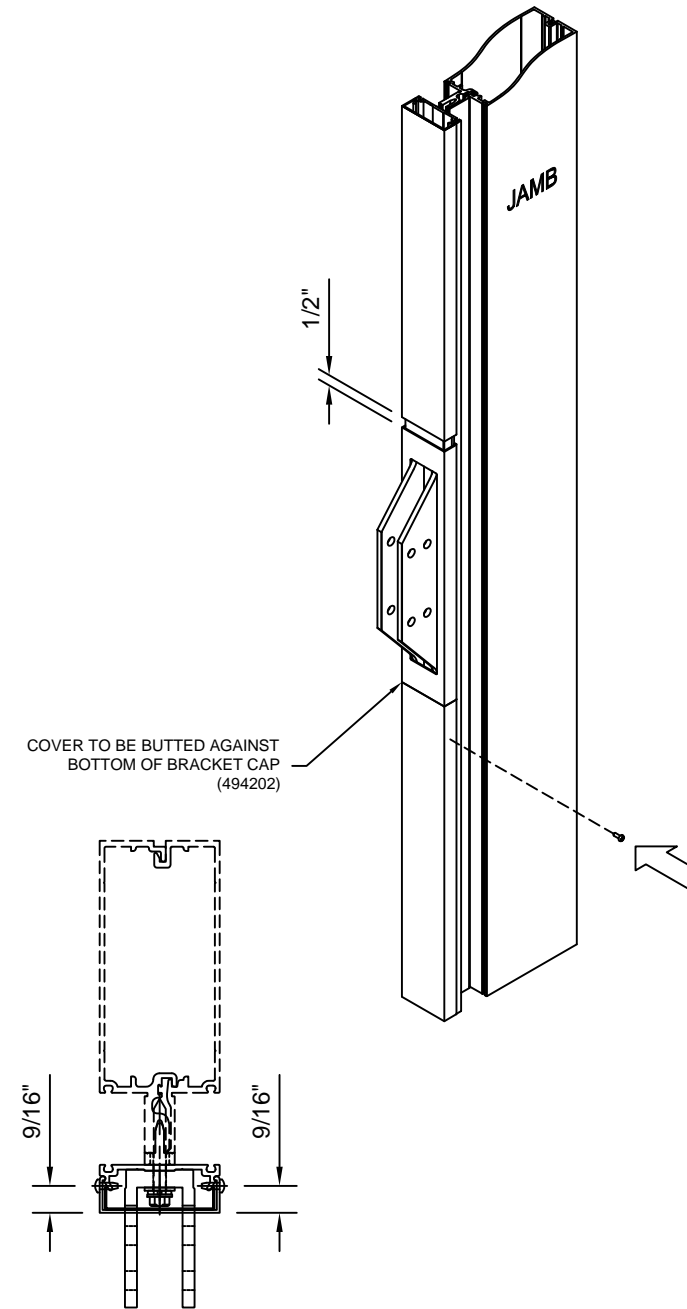
ATTACH ALL ANCHOR CLIPS BEFORE PROCEEDING TO NEXT STEP.



### INSTALL 1" COVERS AT JAMB LOCATIONS



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).



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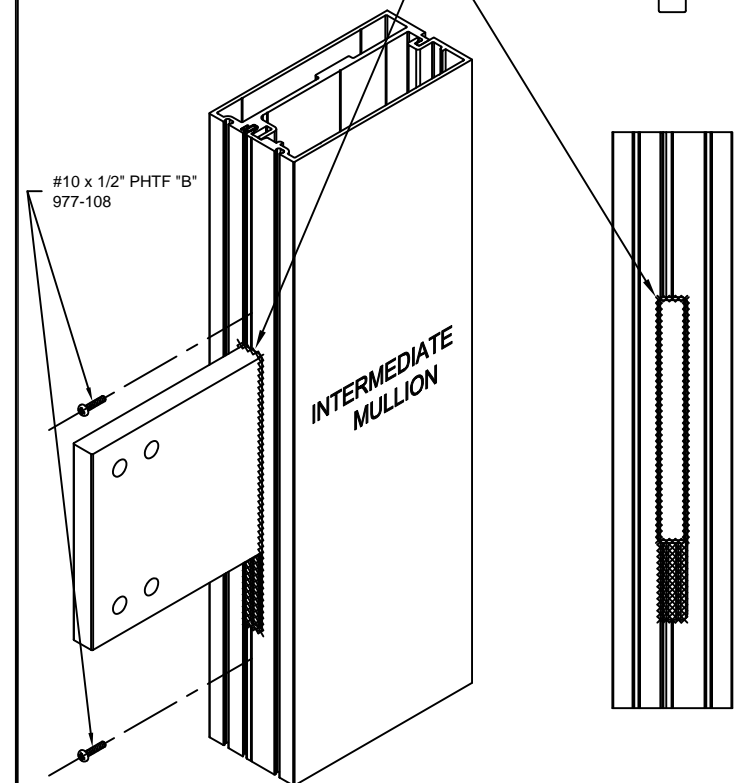
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### SEAL STEM BRACKETS AT INTERMEDIATE MULLIONS

APPLY A CONTINUOUS BEAD OF SEALANT AROUND THE STEM (494391) AND THE INTERMEDIATE MULLION ASSEMBLY. MARRY SEALANT TO VERTICAL BULB GASKET (027-493). TOOL SEALANT INTO MACHINED OPENING AND REMOVE ANY EXCESS SEALANT.

IN ADDITION TO STANDARD 24" O.C. LOCATIONS, INSTALL (1) #10 X 1/2" PHTF "B" (977-108) FASTENER, 1" ABOVE AND BELOW NOTCH IN FEMALE MULLION HALF (169008).

APPLY A CONTINUOUS BEAD OF SEALANT AROUND THE STEM ANCHOR TO THE MULLION ASSEMBLY MARRYING SEALANT TO THE VERTICAL BULB GASKET, 027493



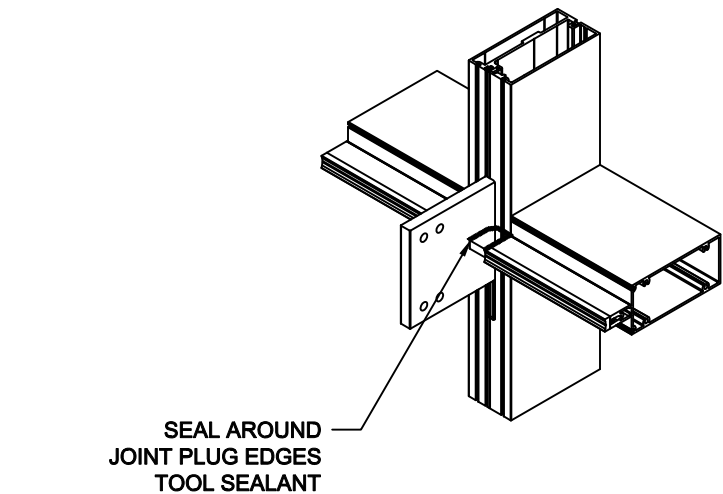
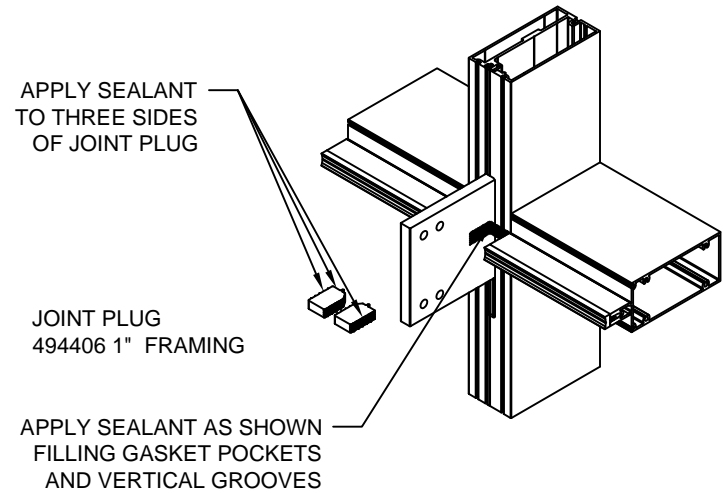
**KAWNEER** VERSOLEIL OUTRIGGER  
SUNSHADE  
1600 SS SSC  
INSTALLATION INSTRUCTIONS

95494-32  
07/09/12

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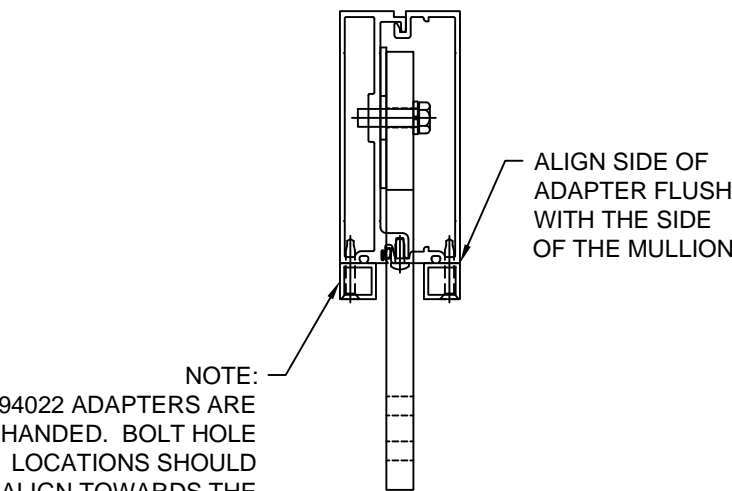
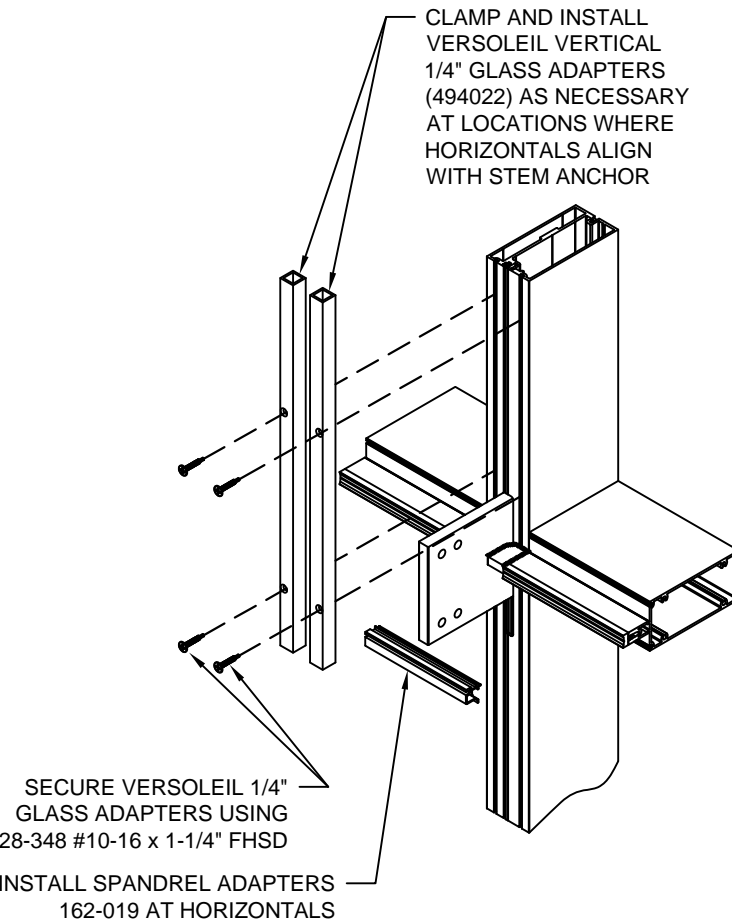
**INSTALL JOINT PLUGS**

INSTALL JOINT PLUGS AS SHOWN IN STANDARD 1600 SS SSG INSTALLATION INSTRUCTIONS (169971), EXCEPT WHERE HORIZONTALS ARE ALIGNED WITH VERSOLEIL STEM ANCHOR. WHEN HORIZONTAL IS ALIGNED WITH VERSOLEIL STEM ANCHOR USE JOINT PLUG (494406), AND INSTALL AS SHOWN BELOW.



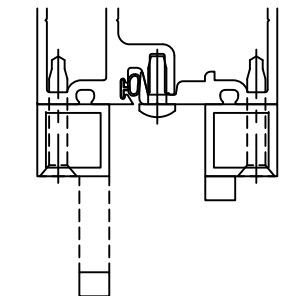
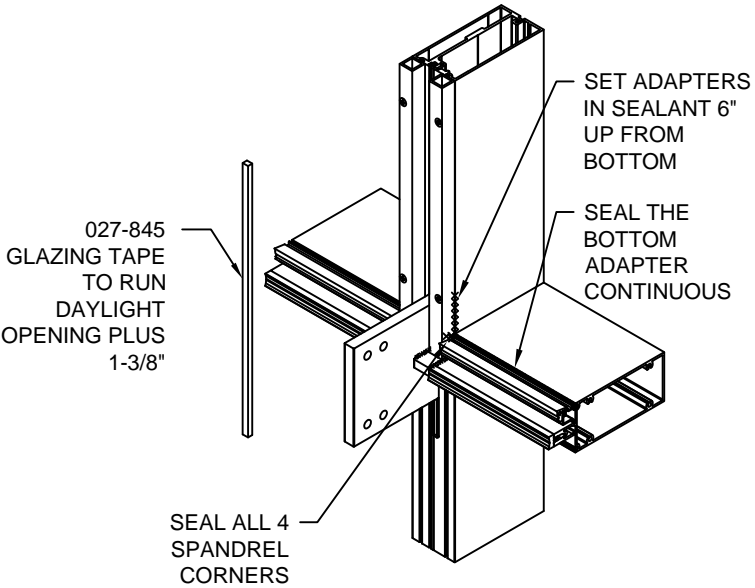
**INSTALL SPANDREL ADAPTERS AT INTERMEDIATE MULLIONS WITH STEM ANCHORS**

INSTALL SPANDREL ADAPTERS AS SHOWN IN STANDARD 1600 SS SSG INSTALLATION INSTRUCTIONS (169971), EXCEPT WHERE HORIZONTALS ARE ALIGNED WITH VERSOLEIL STEM ANCHOR. WHEN HORIZONTAL IS ALIGNED WITH VERSOLEIL STEM ANCHOR USE VERSOLEIL VERTICAL 1/4" GLASS ADAPTER (494022) AS SHOWN BELOW.

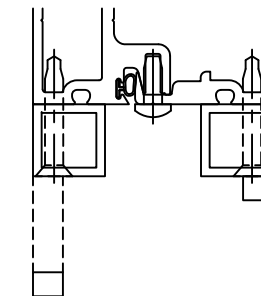


NOTE: 494022 ADAPTERS ARE HANDED. BOLT HOLE LOCATIONS SHOULD ALIGN TOWARDS THE OUTER FACE OF THE ADAPTER TO CREATE ENOUGH CLEARANCE FOR THE STEM ANCHOR

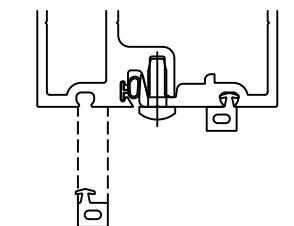
**INSTALL INTERIOR GLAZING GASKETS / TAPE AT STEM ANCHORS**



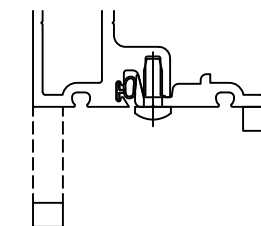
INTERIOR SEALANT APPLICATION WITH 027-845 GLAZING TAPE



PRE-GLAZED INTERIOR SEALANT APPLICATION WITH 027-845 GLAZING TAPE



INTERIOR SEALANT APPLICATION WITH 027-475 GLAZING GASKET



PRE-GLAZED INTERIOR SEALANT APPLICATION WITH 027-845 GLAZING TAPE

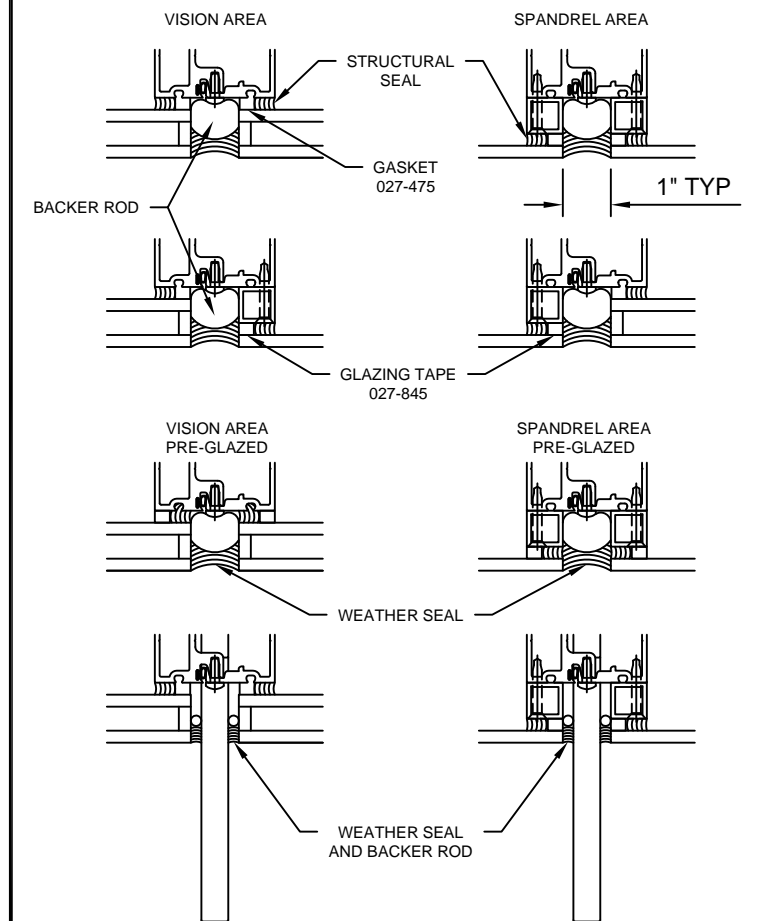
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**INSTALL STRUCTURAL AND WEATHER SEALS**

KAWNEER DOES NOT SUPPLY SEALANT. SEALANT TO BE SILICONE AS RECOMMENDED BY THE SEALANT MANUFACTURER. INFILL AND METAL TO BE CLEANED PER THE SEALANT MANUFACTURER'S RECOMMENDATIONS. SEALANT BACKER ROD TO BE PER THE SEALANT MANUFACTURER'S RECOMMENDATIONS.

FILL SPACE BETWEEN INSULATED UNITS AND BEHIND SINGLE GLAZED UNITS WITH RECOMMENDED BACKER ROD. APPLY STRUCTURAL SEAL AND WEATHER SEAL AS SHOWN. ALLOW STRUCTURAL SEAL TO CURE PER SEALANT MANUFACTURER'S RECOMMENDATIONS. THEN REMOVE TEMPORARY RETAINERS, SEAL FASTENER HOLES AND FILL WEATHER SEAL HOLES.



EXTERIOR STRUCTURAL SEAL MUST BE APPLIED IN THREE STEPS. EACH SIDE SEPARATELY THEN THE WEATHER SEAL

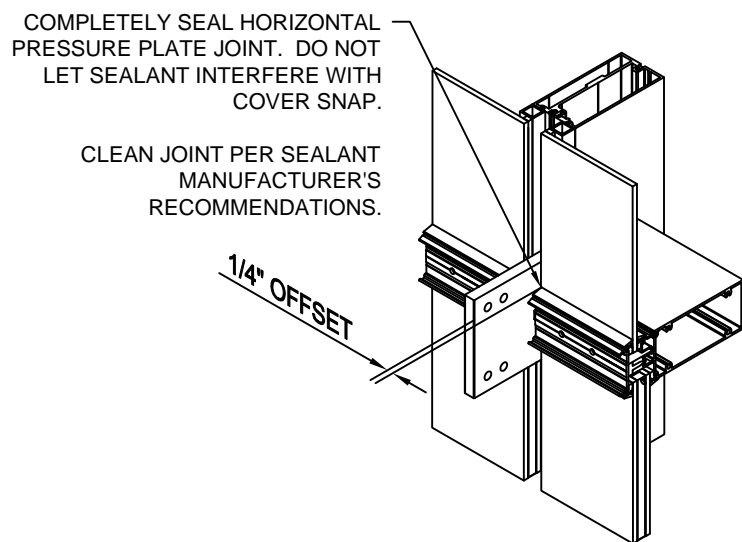
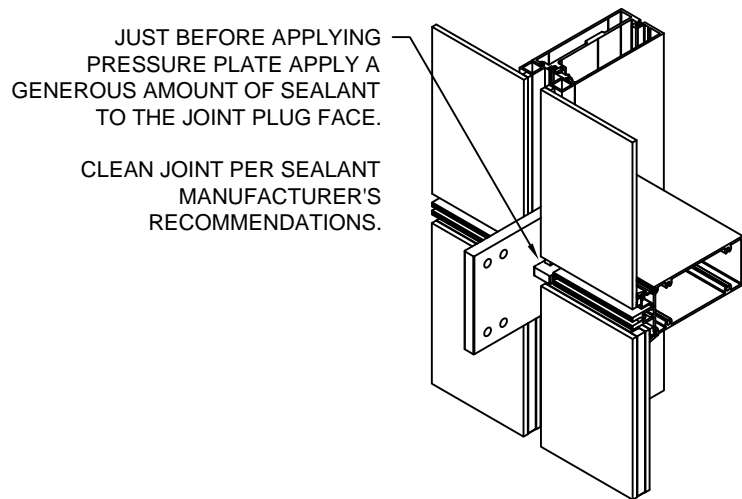
**KAWNEER** VERSOLEIL OUTRIGGER  
SUNSHADE  
1600 SS SSG  
INSTALLATION INSTRUCTIONS

**INSTALL EXTERIOR PRESSURE PLATES**

JAMB PRESSURE PLATES TO BE INSTALLED PER PREVIOUS STEPS.

HORIZONTAL PRESSURE PLATES WHEN NOT ALIGNED WITH STEM ANCHORS ARE TO BE INSTALL PER STANDARD 1600 SS SSG INSTALLATION INSTRUCTIONS (169971).

HORIZONTALS THAT ARE ALIGNED WITH STEM ANCHORS WILL HAVE PRESSURE PLATES INSTALLED AS STANDARD EXCEPT, LENGTH OF PRESSURE PLATES WILL BE DIFFERENT, THERE WILL BE A 1/4" SPACE BETWEEN STEM ANCHOR AND END OF PRESSURE PLATE. SEE BELOW.



**INSTALL EXTERIOR COVERS**

HORIZONTAL COVERS ARE TO BE INSTALL PER STANDARD 1600 SS SSG INSTALLATION INSTRUCTIONS (169971) WITH EQUAL SPACING ON BOTH ENDS OF THE COVER (BETWEEN OUTRIGGERS / JAMBS).

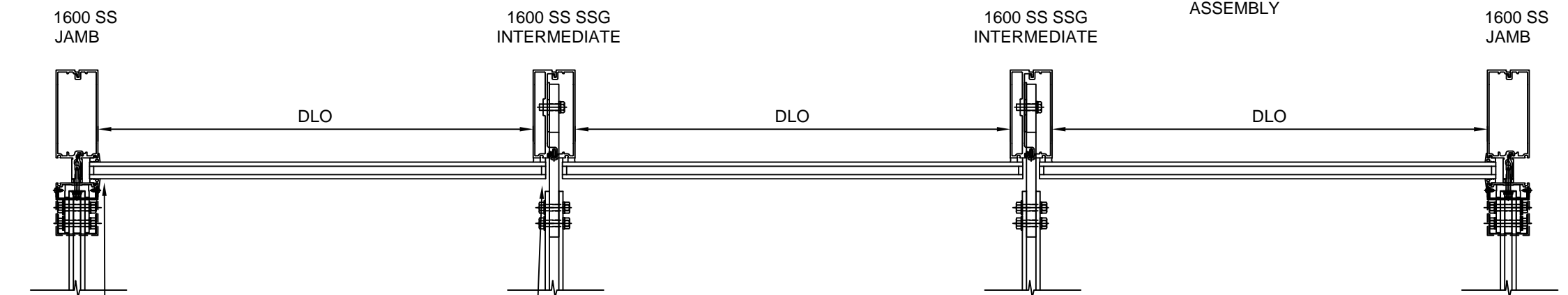
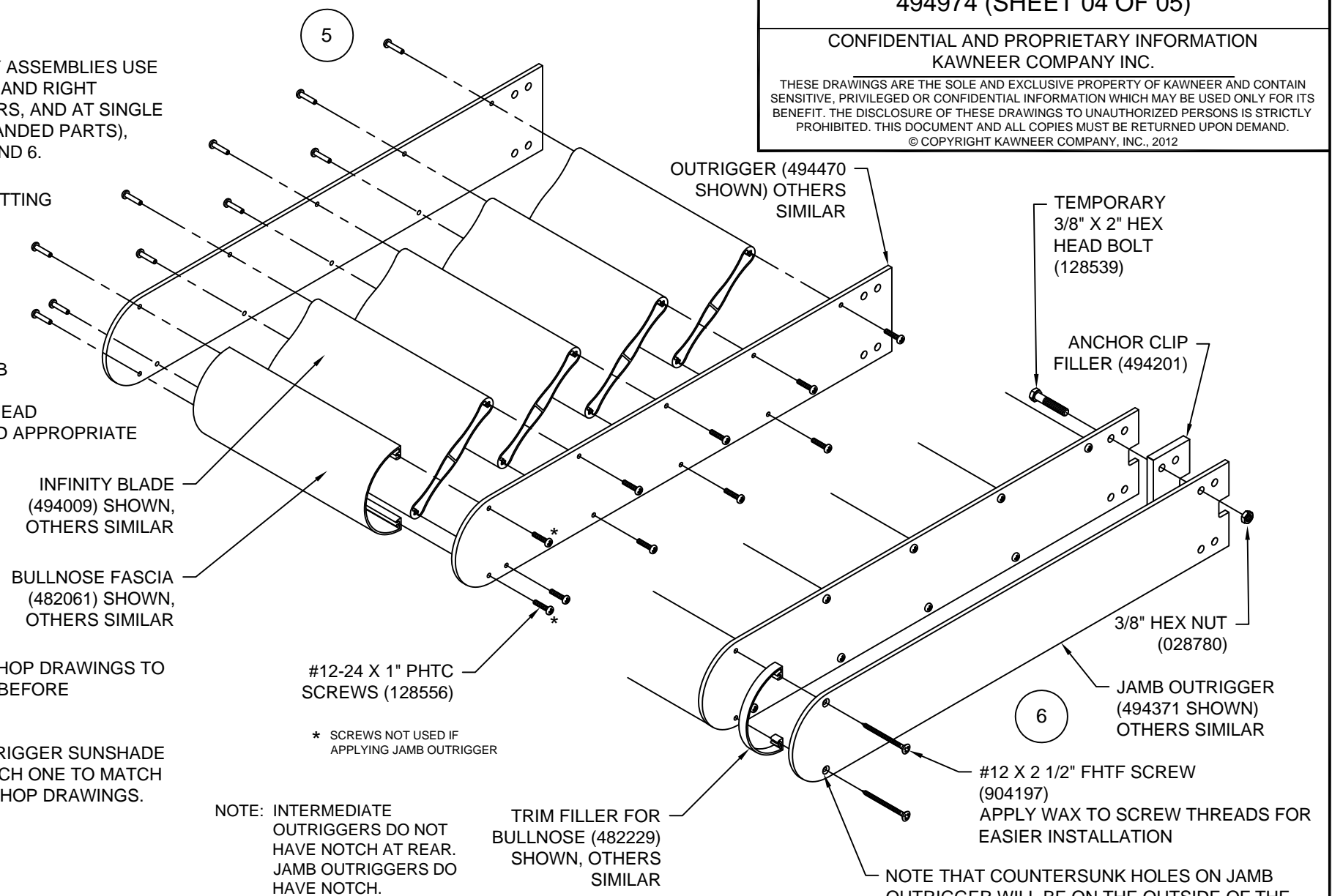
**ASSEMBLING THE SUNSHADES**

VERSOLEIL OUTRIGGER SUNSHADE BAY ASSEMBLIES USE SCREW SPLINE JOINERY. LAYOUT LEFT AND RIGHT OUTRIGGERS (JAMBS AT INSIDE CORNERS, AND AT SINGLE MULLION 90° OUTSIDE CORNERS ARE HANDED PARTS), BLADES, AND FASCIA. 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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|                         | 95494-32<br>07/09/12  |
| 494974 (SHEET 04 OF 05) |   |

**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 CLIP (IF JAMB PRESENT) AND ANCHOR STEM (INTERMEDIATES). THE OUTRIGGERS SHOULD BE POSITIONED ON THE INSIDE OF THE ANCHOR CLIP AND THE OUTSIDE OF THE ANCHOR STEM. JAMB 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. SEE INSTALLATION INSTRUCTIONS 494972.

ON THE STEM ANCHOR SIDE OF THE FIRST BAY ASSEMBLY INSERT (4) 3/8-16 x 1-3/4" HEX HEAD MACHINE SCREWS (128-178) THROUGH (8) 3/8" WASHERS (028596) INTO THE STEM ANCHOR. DO NOT INSERT THE HEX HEAD BOLTS BEYOND THE PLANE OF THE ANCHOR STEM RECEIVING THE SECOND BAY. DO NOT INSTALL CORRESPONDING LOCK WASHER AND NUT UNTIL THE SECOND BAY IS HOISTED INTO POSITION.

**JAMB NOTE:**

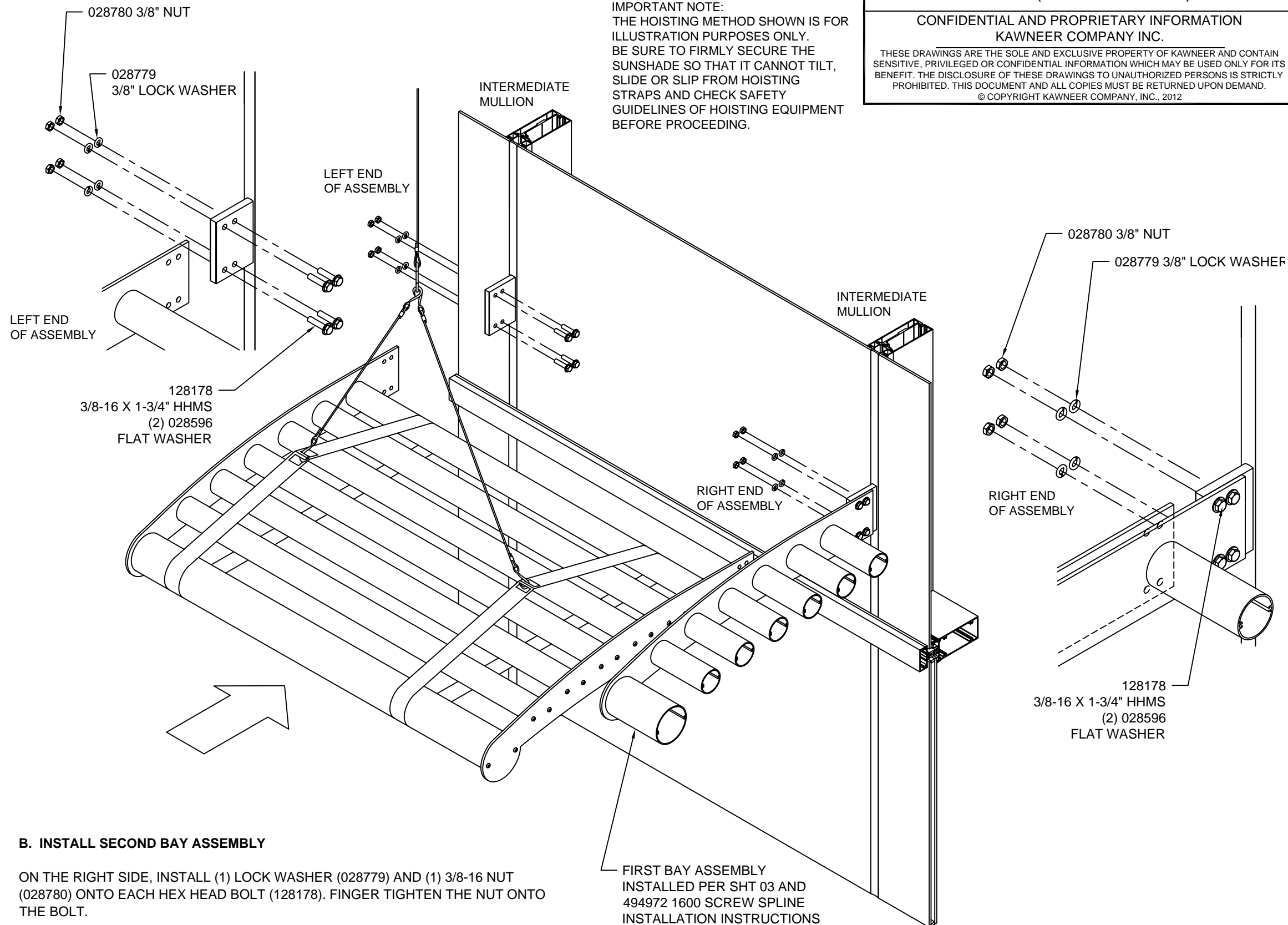
REFERENCE 494972 1600 SCREW SPLINE SUNSHADE INSTALLATION INSTRUCTIONS

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

VERSOLEIL OUTRIGGER SUNSHADE BAYS TO BE INSTALLED BEFORE OPTIONAL 3 1/8" COVERS.

**CORNERS**

WHEN VERSOLEIL OUTRIGGER CORNERS ARE REQUIRED REFERENCE VERSOLEIL OUTRIGGER SUNSHADE 1600 SYSTEM 2 INSTALLATION INSTRUCTIONS, 494975.



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

ON THE RIGHT SIDE, INSTALL (1) LOCK WASHER (028779) AND (1) 3/8-16 NUT (028780) ONTO EACH HEX HEAD BOLT (128178). FINGER TIGHTEN THE NUT ONTO THE BOLT.

ON THE LEFT SIDE, SLIDE (2) 3/8" FLAT WASHER (028596) PER BOLT ONTO THE 3/8" x 1-3/4" HEX HEAD BOLTS (128178). INSERT ALL FOUR HEX HEAD BOLTS WITH FLAT WASHERS INTO THROUGH THE OUTRIGGER AND INTO THE ANCHOR STEM.

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).

FIRST BAY ASSEMBLY INSTALLED PER SHT 03 AND 494972 1600 SCREW SPLINE INSTALLATION INSTRUCTIONS



VERSOLEIL OUTRIGGER  
SUNSHADE  
1600 SS SSC  
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