
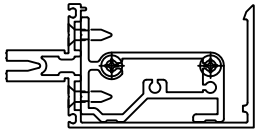
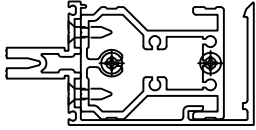
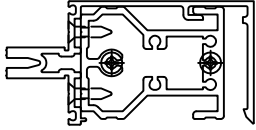
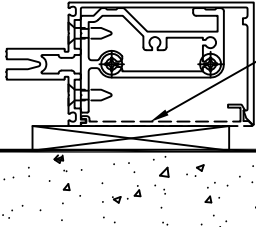
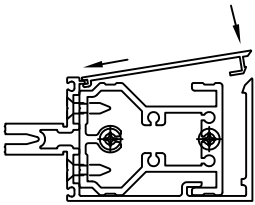



<div>GENERAL IMPACT INSTALLATION INSTRUCTIONS; FOR JOB SPECIFIC APPLICATION, PLEASE CONTACT FACTORY TO VERIFY THAT SYSTEM MEETS APPLICABLE CODES.</div>		162-950 (SHT 01 OF 08)	
<div>HANDLING, STORING, AND PROTECTION OF ALUMINUM</div> <div>The material must be protected against damage. The following precautions are recommended to assure early acceptance of your products and workmanship.</div> <div>A. HANDLE CAREFULLY - Don't drop from the truck. Stack with adequate separation so material will not rub together. Store off the ground. Protect against elements and other construction trades. Wear hand protection to prevent injury due to sharp edges of cut extrusions.</div> <div>B. KEEP MATERIAL AWAY FROM WATER, MUD AND SPRAY - Prevent cement, plaster, or other materials from damaging the finish.</div> <div>C. PROTECT THE MATERIALS AFTER ERECTION - Protect by wrapping with Kraft paper or by erecting Visqueen or canvas splatter screen. Cement, plaster, terrazzo, other alkaline solutions and acid based materials used to clean masonry are very harmful to the finish and should be removed with water and mild soap IMMEDIATELY.</div> <div>GENERAL INSTALLATION NOTES</div> <div>The following practices are recommended for all installations:</div> <div>A. CHECK SHOP DRAWINGS, INSTALLATION INSTRUCTIONS and GLAZING INSTRUCTIONS to become thoroughly familiar with the project. The SHOP DRAWINGS take precedence and include specific details for the project. The INSTALLATION INSTRUCTIONS are of a general nature and cover most common conditions.</div> <div>B. All materials are to be INSTALLED PLUMB, LEVEL, AND TRUE.</div> <div>C. All work should start from bench marks and/or column lines as established by the ARCHITECTURAL DRAWINGS and the GENERAL CONTRACTOR. Check mullion spacing from both ends of the masonry opening to prevent dimensional buildup of day light opening.</div> <div>D. Make certain that construction which will receive your materials is in accordance with the contract documents. If not, notify the GENERAL CONTRACTOR IN WRITING and resolve differences before proceeding with your work.</div> <div>E. Isolate all aluminum to be placed directly in contact with uncured masonry or incompatible materials with a heavy coat of zinc chromate or bituminous paint.</div> <div>F. Check all materials on arrival for quantity and be sure you have everything required to begin installation.</div> <div>G. Sealants must be compatible with all materials with which they have contact, including other sealant surfaces. Consult with sealant manufacturer for recommendations relative to joint size, shelf life, compatibility, priming, tooling, adhesion, etc.</div> <div>H. FASTENING - "Fastening" means any method of securing one part to another or to adjacent materials. These instructions specify only those fasteners used within the system. Due to varying perimeter conditions and job performance requirements, anchor fasteners are not specified in these instructions. For anchor fastening, refer to the Shop Drawings or consult the fastener supplier.</div>		<div>OPEN BACK HORIZONTAL NOTES</div> <div>THE OPEN BACK HORIZONTAL IS TO BE TYPICALLY USED FOR ALL HEAD/SILL AND LAST BAY INTERMEDIATE HORIZONTALS.</div> <div>THE OPEN BACK HORIZONTAL CAN BE USED AT OTHER CONDITIONS IF IT IS AN ADVANTAGE TO THE JOB DESIGN.</div> <div>THE SHEAR BLOCK AT ALL OPEN BACK INTERMEDIATE HORIZONTALS HAS THE OPTION TO BE PRE-INSTALLED INTO THE HORIZONTAL BEFORE HORIZONTALS ARE INSTALLED.</div> <div></div> <div><div>OPEN SIDE UP</div><div>HEAD CONDITION</div></div> <div><div>OPEN SIDE UP</div><div>CEILING INTERMEDIATE HORIZONTALS</div></div> <div><div>OPEN SIDE DOWN</div><div>STOOL INTERMEDIATE HORIZONTALS</div></div> <div><div>OPEN SIDE DOWN</div><div>SILL CONDITION SILL HORIZONTALS MUST BE SHIMMED</div></div> <div>WHEN THE OPEN SIDE OF THE OPEN BACK HORIZONTAL IS EXPOSED AND AT EYE LEVEL A SNAP-IN FILLER IS AVAILABLE.</div> <div></div> <div>WHEN THE SNAP-IN FILLER IS NOT USED AND DUE TO STANDARD COMMERCIAL EXTRUDING TOLERANCES, IT MAY BE REQUIRED TO USE A 4" PIECE OF THE FILLER AT EACH END OF A HORIZONTAL.</div> <div>USE PART 162-316 FOR THE 5 9/16" &amp; 6 5/16" DEEP SYSTEM USE PART 162-317 FOR THE 7 1/16" &amp; 7 13/16" DEEP SYSTEM</div>	
<div>CONFIDENTIAL AND PROPRIETARY INFORMATION KAWNEER COMPANY INC.</div> <div>THESE DRAWINGS ARE THE SOLE AND EXCLUSIVE PROPERTY OF KAWNEER AND CONTAIN SENSITIVE, PRIVILEGED OR CONFIDENTIAL INFORMATION WHICH MAY BE USED ONLY FOR ITS BENEFIT. THE DISCLOSURE OF THESE DRAWINGS TO UNAUTHORIZED PERSONS IS STRICTLY PROHIBITED. THIS DOCUMENT AND ALL COPIES MUST BE RETURNED UPON DEMAND. © COPYRIGHT KAWNEER COMPANY, INC., 2003</div>		<div>1600 SYSTEM<sup>1</sup> NOTES</div> <div>1600 System<sup>1</sup> is available with 1" framing members which accept 1 5/16" infill. Also, 1/4" framing members which accept 9/16" infill are available.</div> <div>THESE INSTRUCTIONS ARE BASED ON LARGE MISSLE IMPACT INSTALLATION. For small missle impact reference page 8.</div> <div>Glass bite is 3/4" at verticals and horizontals on large missle and 1/2" on small missle. Glass sizes must be calculated from approved shop drawings.</div> <div>Refer to corresponding test drawings for sealant and anchor information. Test may be job specific, so please contact a Kawneer representative for correct test reports and drawings.</div> <div>Unless otherwise specified, it is recommended that silicone sealant be used for all internal seals.</div> <div>Shim all sill horizontals at setting block locations.</div> <div>Sealant must be applied per the sealant manufacturer's recommendations and pass all adhesion and compatibility testing. At all joint seals, sealant must adhere to metal, gaskets, thermal separator and joint plug materials. Clean all surfaces prior to application of sealant and prime where necessary to achieve proper adhesion.</div> <div>Hurricane impact curtain walls require labels to be applied after assembly, glazing and installation. These labels identify that the curtain walls have been assembled and glazed as tested for hurricane impact. Every floor level of each elevation of a curtain wall requires a label. As viewed from the interior, labels shall be placed on the right side bay on the right side underside surface of a low lying horizontal, or in the right upper inside vertical surface close to the corner if there are no intermediate horizontal members. Labels are to be applied by the glazing contractor.</div>	
<div><div>KAWNEER AN ALCOA COMPANY</div></div>		<div>1600 SYS. 1 LARGE MISSLE IMPACT INSTALLATION INSTRUCTIONS</div>	
<div>Product Engineering &amp; Development</div>			
<div>95449-094 04/26/13</div>		<div>162-950 (SHT 01 OF 08)</div>	

GENERAL IMPACT INSTALLATION INSTRUCTIONS; FOR JOB SPECIFIC APPLICATION, PLEASE CONTACT FACTORY TO VERIFY THAT SYSTEM MEETS APPLICABLE CODES.

STEP - 1 CHECK OPENINGS

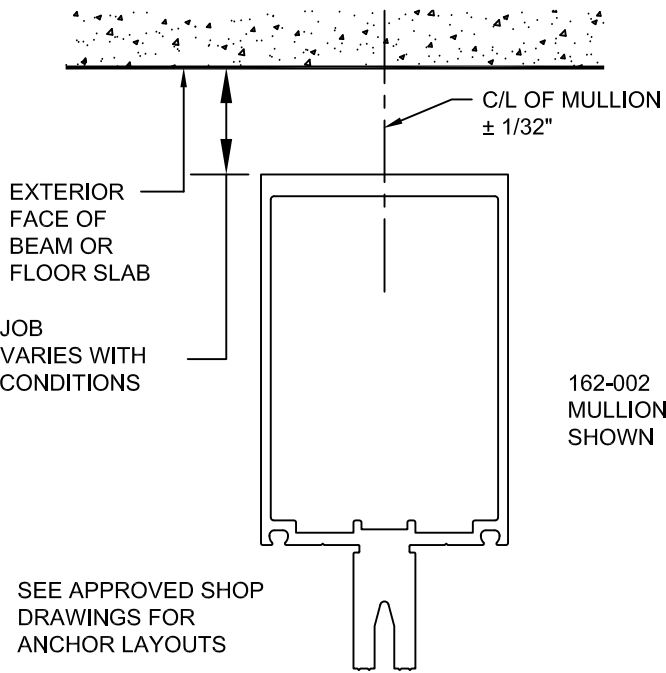
ELEVATIONS AND SLABS MUST BE WITHIN ADJUSTMENT OF ANCHORING SYSTEM. SEE APPROVED SHOP DRAWINGS FOR ALLOWABLE ADJUSTMENT.

ANCHORING SURFACES OF PERIMETER CONSTRUCTION MUST BE LEVEL AND PLUMB WITHIN THE ADJUSTMENT LIMITS OF THE HEAD, SILL AND JAMB. SEE APPROVED SHOP DRAWINGS FOR ALLOWABLE ADJUSTMENT.

STEP - 2 LAY OUT ANCHOR AND MULLION CENTERLINES

USE WALL LINES ESTABLISHED BY THE GENERAL CONTRACTOR. ON EACH FLOOR LAY OUT A REFERENCE LINE TO ESTABLISH IN AND OUT WALL LOCATIONS.

USE COLUMN CENTER LINES ESTABLISHED BY THE GENERAL CONTRACTOR. ON EACH FLOOR LAY OUT MULLION CENTER LINES AND ANCHOR CENTER LINES.



STEP - 3 INSTALL PRESET ANCHORS IF APPLICABLE

USING LOCATION LINES PREVIOUSLY ESTABLISHED, INSTALL PRESET ANCHORS IN PLACE PER APPROVED SHOP DRAWINGS.

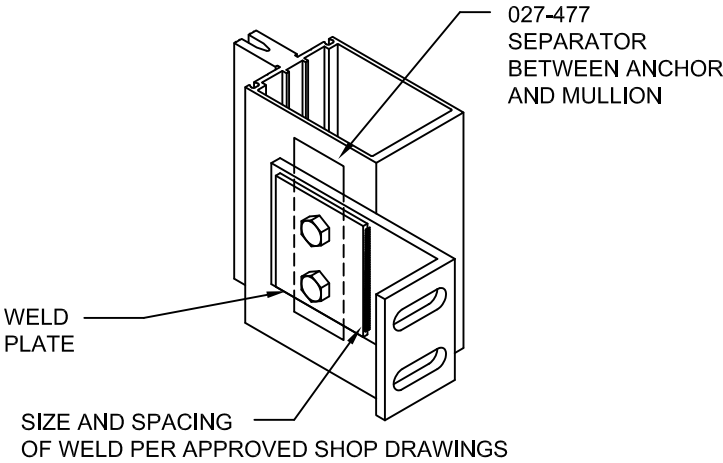
STEP - 4 FRAME ASSEMBLY

ATTACH ANCHORS TO MULLIONS WHERE APPLICABLE.

ANCHOR PREP MAY BE FABRICATED IN THE FIELD OR FACTORY. CONSULT APPROVED SHOP DRAWINGS FOR CORRECT METHOD.

STANDARD ANCHOR PREP IS THRU-BOLTED AT INTERMEDIATE VERTICALS AND TAPPING PLATES ARE USED AT JAMB VERTICALS. REFER TO APPROVED SHOP DRAWINGS FOR CORRECT METHOD.

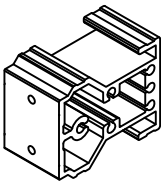
WHEN WELDING ANCHORS, PROTECT INSTALLED GLASS AND METAL FROM WELD SPLATTER.



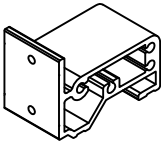
DO NOT OVER TIGHTEN ANCHOR CONNECTIONS. TIGHTEN TO A "SNUG TIGHT" POSITION WITH PARTS BROUGHT INTO GOOD CONTACT. BE SURE ANY SPRING TYPE LOCK WASHERS ARE COMPRESSED. THEN TIGHTEN APPROXIMATELY 1/2 MORE TURN.

STEP - 4 FRAME ASSEMBLY

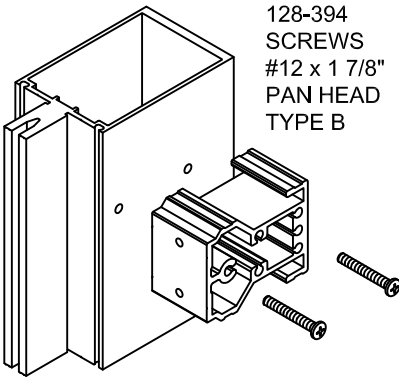
ATTACH SHEAR BLOCKS.



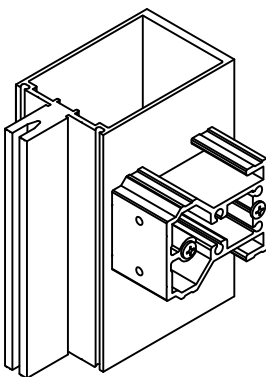
TYPICAL INTERMEDIATE SHEAR BLOCKS  
162-377 5 9/16" OR 6 5/16" SYSTEM  
162-378 7 1/16" OR 7 13/16" SYSTEM



HEAD AND SILL SHEAR BLOCKS  
162-331 5 9/16" OR 6 5/16" SYSTEM  
162-332 7 1/16" OR 7 13/16" SYSTEM



128-394 SCREWS  
#12 x 1 7/8" PAN HEAD TYPE B



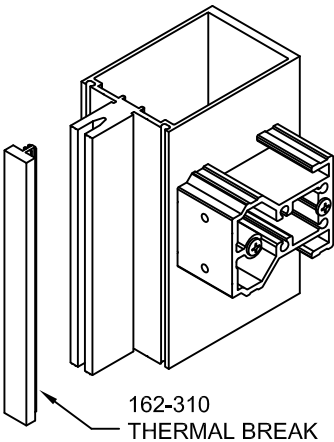
STEP - 5 INSTALL 162-310 THERMAL BREAK



162-310

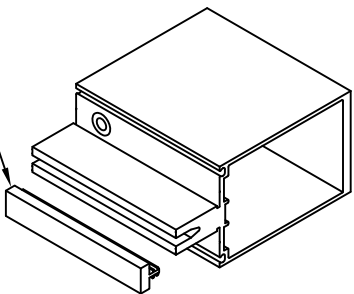
DO NOT STRETCH WHEN REMOVING FROM COIL AND CARTON

DO NOT STRETCH DURING INSTALLATION



162-310 THERMAL BREAK

162-310 THERMAL BREAK



162-950 (SHT 02 OF 08)

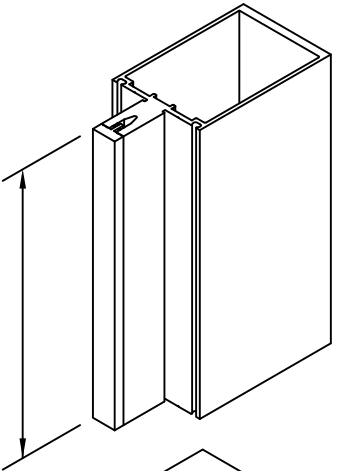
CONFIDENTIAL AND PROPRIETARY INFORMATION  
KAWNEER COMPANY INC.

THESE DRAWINGS ARE THE SOLE AND EXCLUSIVE PROPERTY OF KAWNEER AND CONTAIN SENSITIVE, PRIVILEGED OR CONFIDENTIAL INFORMATION WHICH MAY BE USED ONLY FOR ITS BENEFIT. THE DISCLOSURE OF THESE DRAWINGS TO UNAUTHORIZED PERSONS IS STRICTLY PROHIBITED. THIS DOCUMENT AND ALL COPIES MUST BE RETURNED UPON DEMAND.  
© COPYRIGHT KAWNEER COMPANY, INC., 2003

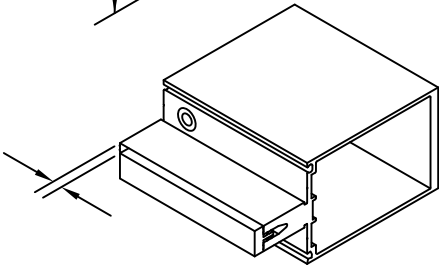
STEP - 5 INSTALL 162-310 THERMAL BREAK

OPTION TO INSTALL THERMAL BREAK AFTER VERTICALS AND HORIZONTALS ARE INSTALLED

THERMAL BREAK TO BE SAME LENGTH AS VERTICAL MULLIONS

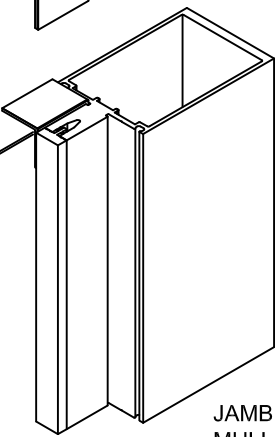
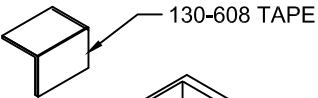


THERMAL BREAK TO BE 1/4" SHORT AT EACH END OF HORIZONTALS



INSTALL JAMB END CAPS AT JAMB SIDE ONLY WITH 130-608 DOUBLE SIDED TAPE AS SHOWN BELOW.

162-541 1 5/16" FRAMING  
162-542 9/16" FRAMING



JAMB END CAP TO BE A 1/16" ABOVE AND BELOW VERTICAL AT HEAD AND SILL

JAMB MULLION



Product Engineering & Development

95449-70  
07/11/08

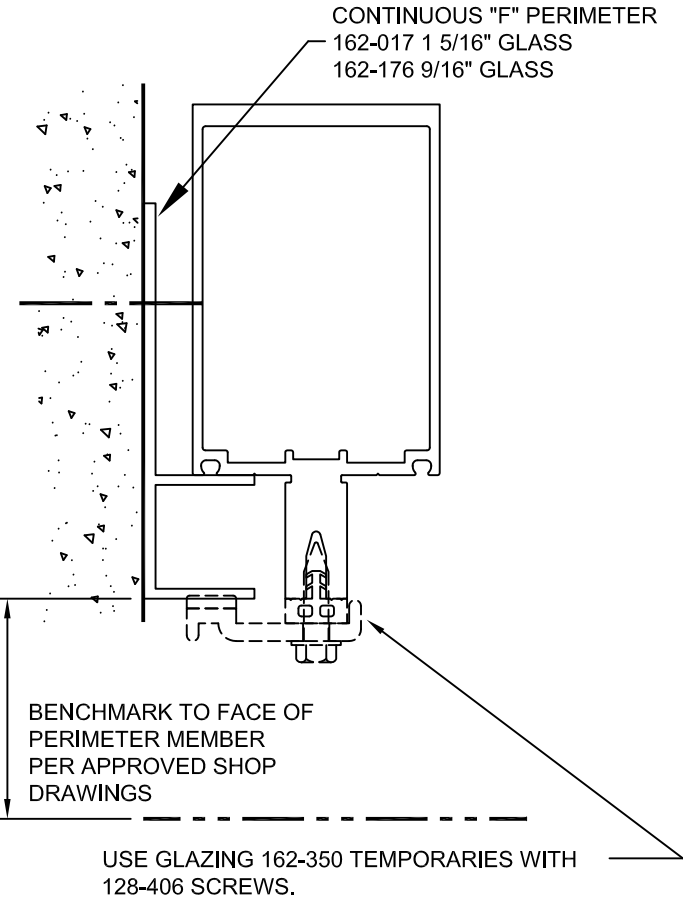
162-950 (SHT 02 OF 08)

1600 SYS. 1 LARGE MISSILE IMPACT INSTALLATION INSTRUCTIONS

GENERAL IMPACT INSTALLATION INSTRUCTIONS; FOR JOB SPECIFIC APPLICATION, PLEASE CONTACT FACTORY TO VERIFY THAT SYSTEM MEETS APPLICABLE CODES.

STEP - 6 PERIMETERS WHERE APPLICABLE

INSTALL PERIMETER MEMBERS PER APPROVED SHOP DRAWINGS. PERIMETER MEMBERS CAN OCCUR AT HEAD, SILL OR JAMB CONDITIONS.

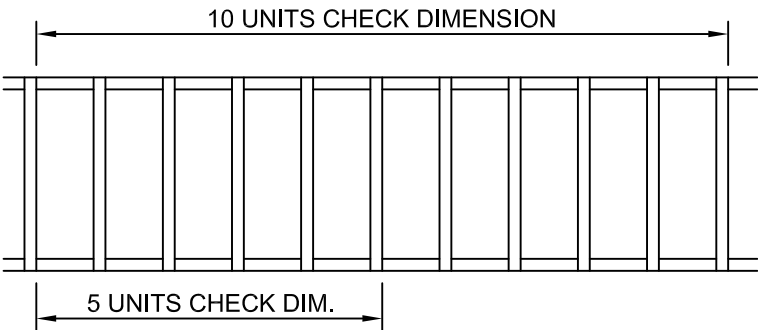


MAXIMUM TEMPORARY SPACING IS 30". IF MORE THAN A 50 MPH (80KPH) WIND IS EXPECTED, INSTALL PRESSURE PLATES.

STEP - 7 INSTALL VERTICAL MULLIONS

DIMENSION BUILD-UP CHECK

CHECK OVERALL FRAME DIMENSIONS ABOUT EVERY FIVE MULLIONS ON LONG RUNS. THIS IS TO AVOID DIMENSION BUILD-UP.



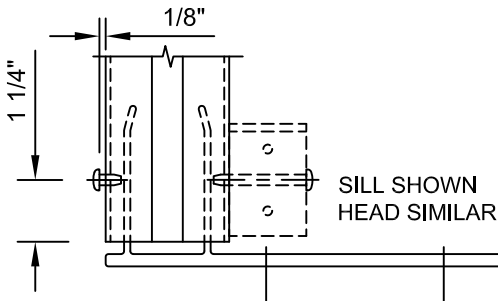
STEP - 7 INSTALL VERTICAL MULLIONS

AT HEAD AND SILL, APPLY "F" OR "T" ANCHORS WHERE APPLICABLE

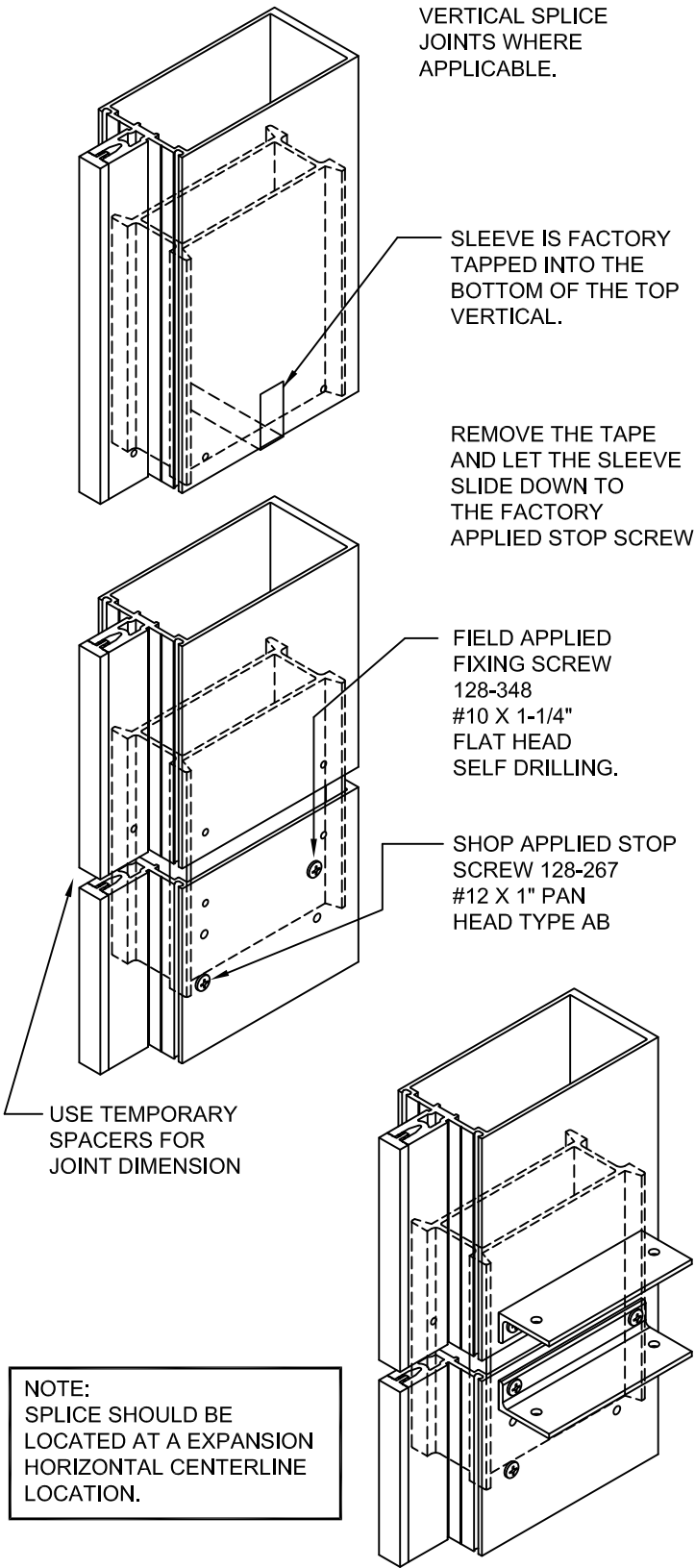
THESE SHEAR BLOCKS MAY NEED TO BE REMOVED TO INSTALL A ANCHOR FASTENER THAT MIGHT BE LOCATED CLOSE TO THE MULLION

"F" AND "T" ANCHOR FASTENER LOCATIONS PER APPROVED SHOP DRAWINGS

AT MULLION JAMB SIDE, APPLY (2) 128-396 SCREWS AS SHOWN TO CENTER F-CLIPS AS REQUIRED.



STEP - 7 INSTALL VERTICAL MULLIONS



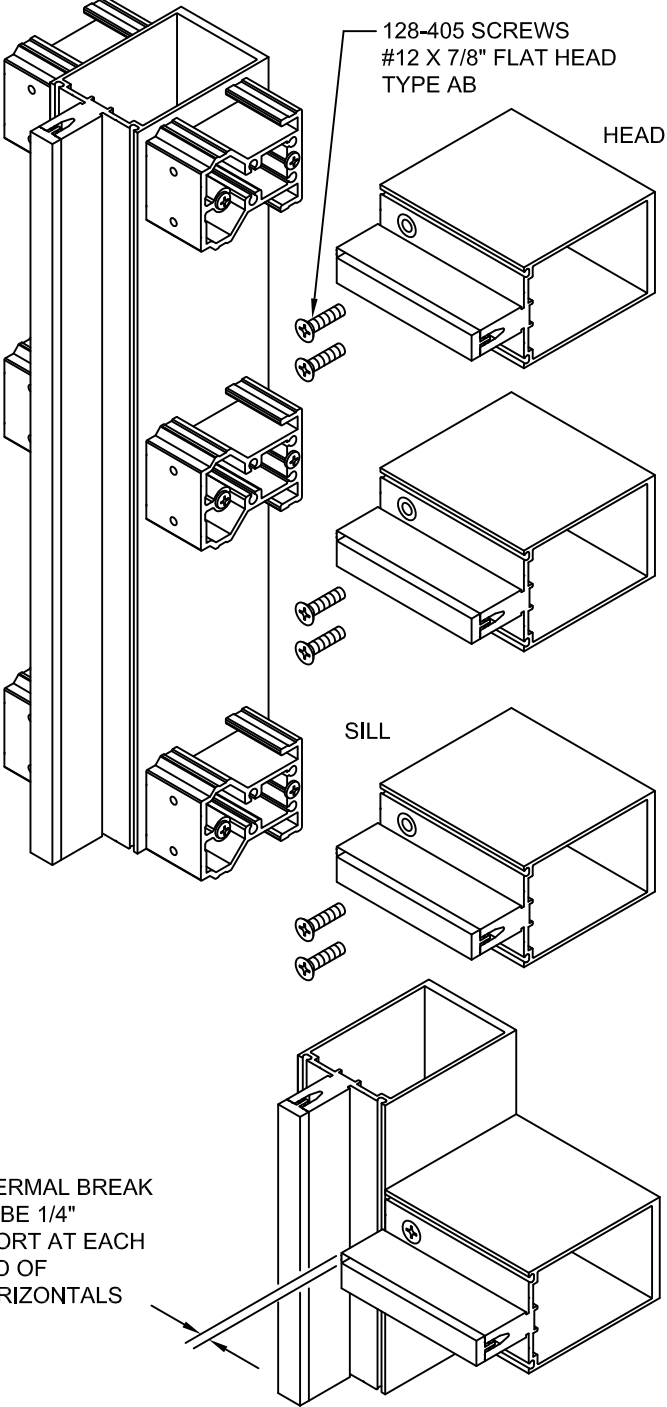
162-950 (SHT 03 OF 08)

CONFIDENTIAL AND PROPRIETARY INFORMATION  
KAWNEER COMPANY INC.

THESE DRAWINGS ARE THE SOLE AND EXCLUSIVE PROPERTY OF KAWNEER AND CONTAIN SENSITIVE, PRIVILEGED OR CONFIDENTIAL INFORMATION WHICH MAY BE USED ONLY FOR ITS BENEFIT. THE DISCLOSURE OF THESE DRAWINGS TO UNAUTHORIZED PERSONS IS STRICTLY PROHIBITED. THIS DOCUMENT AND ALL COPIES MUST BE RETURNED UPON DEMAND.  
© COPYRIGHT KAWNEER COMPANY, INC., 2003

STEP - 8 INSTALL HEAD/SILL AND INTERMEDIATE HORIZONTALS

TUBULAR HORIZONTALS



Product Engineering & Development

95449-69  
10/20/07

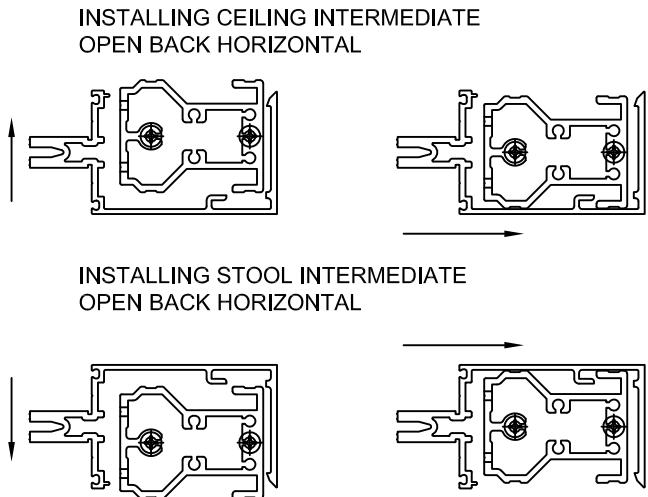
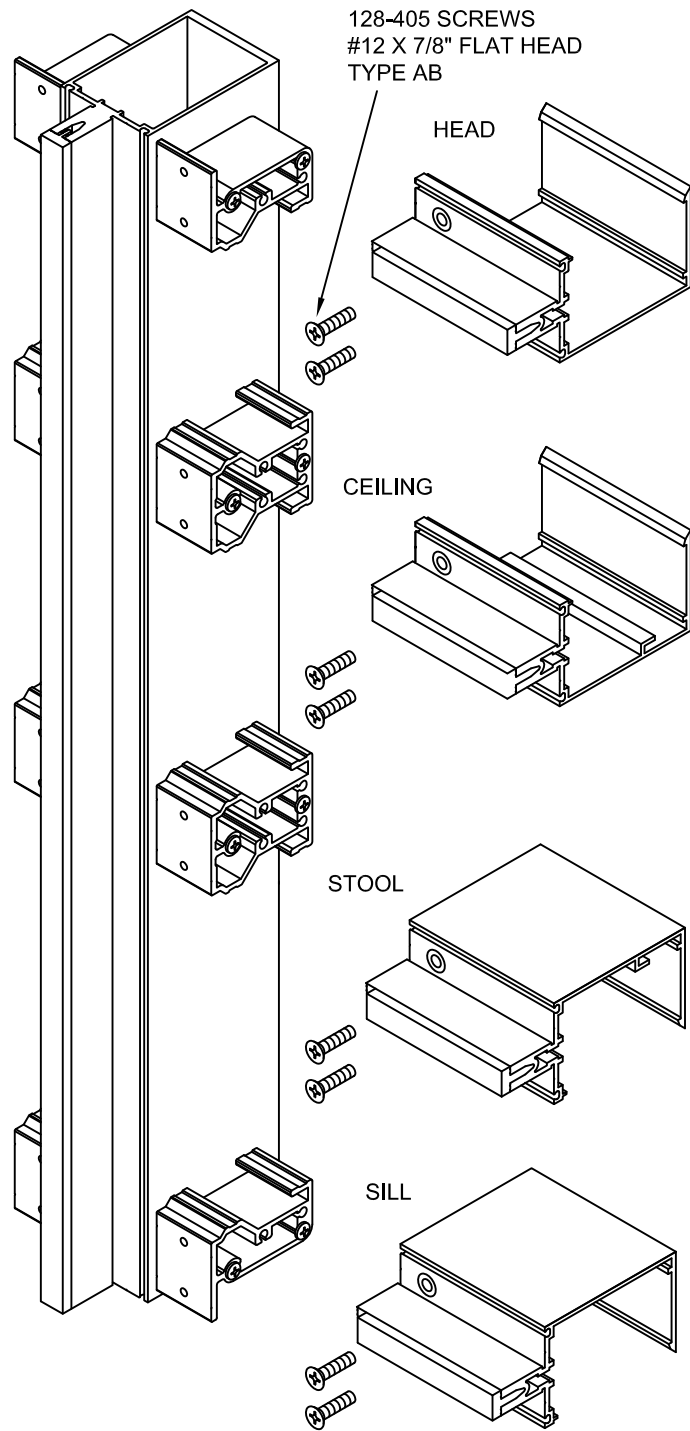
1600 SYS. 1 LARGE  
MISSILE IMPACT  
INSTALLATION  
INSTRUCTIONS

162-950 (SHT 03 OF 08)

GENERAL IMPACT INSTALLATION INSTRUCTIONS; FOR JOB SPECIFIC APPLICATION, PLEASE CONTACT FACTORY TO VERIFY THAT SYSTEM MEETS APPLICABLE CODES.

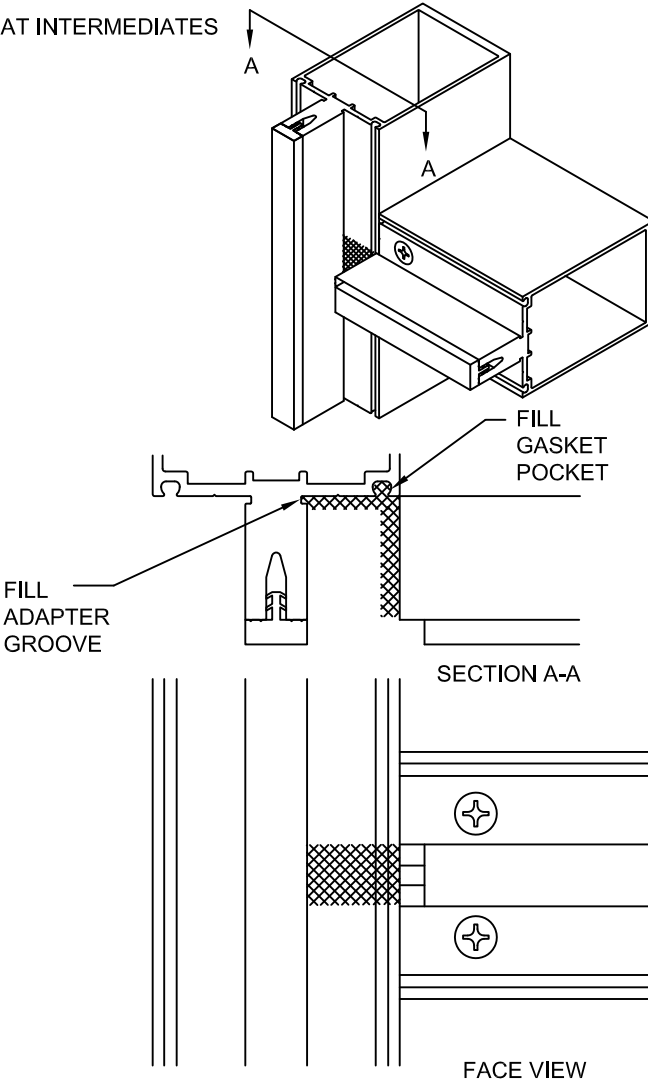
STEP - 8 INSTALL HEAD/SILL AND INTERMEDIATE HORIZONTALS

OPEN BACK HORIZONTALS AND LAST BAY HORIZONTALS.  
FILLER AVAILABLE WHEN OPEN BACK IS EXPOSED AND AT EYE LEVEL.



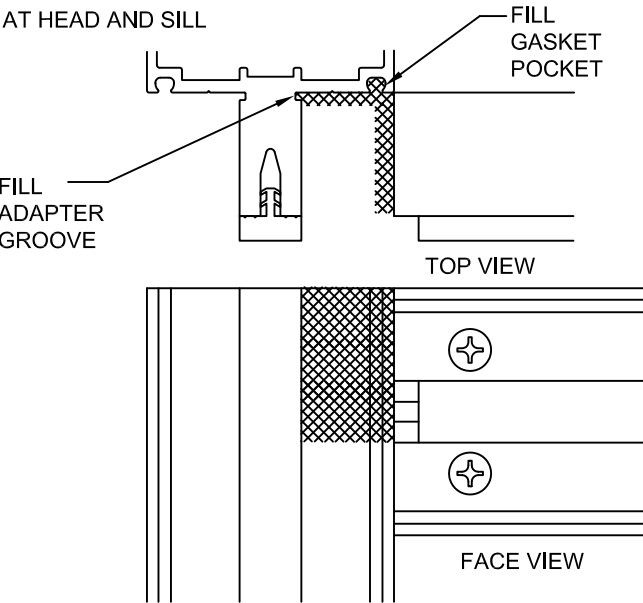
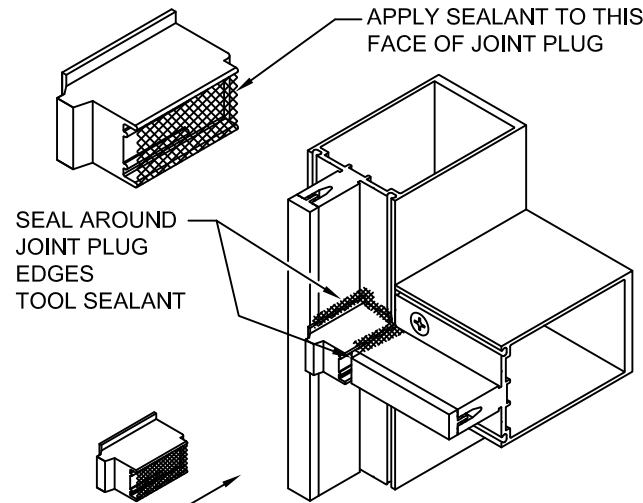
STEP - 9 INSTALL JOINT PLUGS

ALL SURFACES AND GROOVES MUST BE CLEANED PER THE SEALANT MANUFACTURER'S RECOMMENDATIONS.  
JUST BEFORE INSTALLING JOINT PLUGS, APPLY SEALANT AS SHOWN FILLING GASKET POCKET AND ADAPTER GROOVE.

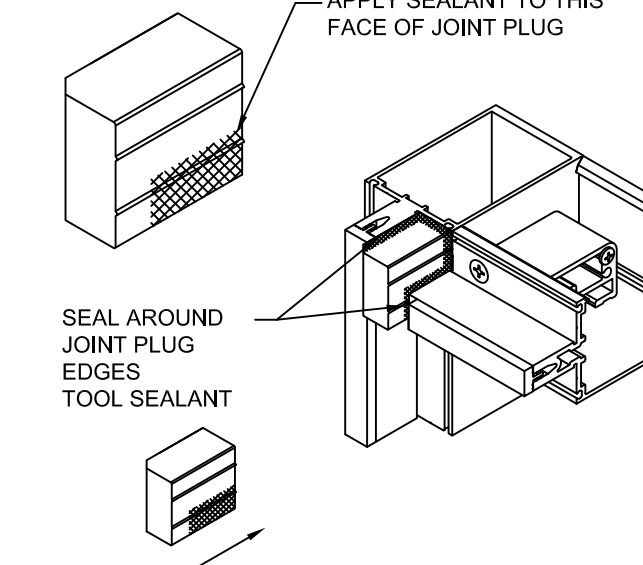


STEP - 9 INSTALL JOINT PLUGS

JOINT PLUG  
162-539 1 5/16" FRAMING (SHOWN)  
162-540 9/16" FRAME MEMBERS



HEAD AND SILL JOINT PLUG  
162-529 1 5/16" FRAMING (SHOWN)  
162-524 9/16" FRAMING



162-950 (SHT 04 OF 08)

CONFIDENTIAL AND PROPRIETARY INFORMATION  
KAWNEER COMPANY INC.

THESE DRAWINGS ARE THE SOLE AND EXCLUSIVE PROPERTY OF KAWNEER AND CONTAIN SENSITIVE, PRIVILEGED OR CONFIDENTIAL INFORMATION WHICH MAY BE USED ONLY FOR ITS BENEFIT. THE DISCLOSURE OF THESE DRAWINGS TO UNAUTHORIZED PERSONS IS STRICTLY PROHIBITED. THIS DOCUMENT AND ALL COPIES MUST BE RETURNED UPON DEMAND.  
© COPYRIGHT KAWNEER COMPANY, INC., 2003

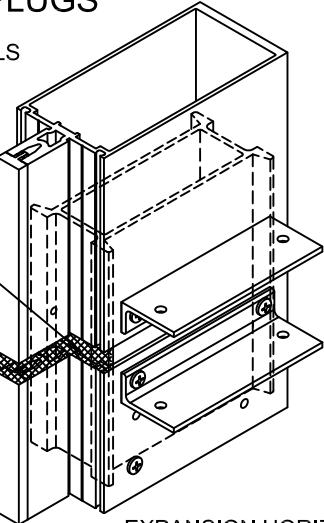
STEP - 10 SEAL INTERIOR OF VERTICAL SPLICE JOINTS AND INSTALL JOINT PLUGS

AT EXPANSION HORIZONTALS

EXPANSION HORIZONTAL  
NOT SHOWN FOR CLARITY

APPLY BOND  
BREAKER TAPE  
TO FACE OF SLEEVE

SEAL



EXPANSION HORIZONTAL  
SHEAR BLOCKS  
162-521 7 1/16" SYSTEM  
162-520 7 13/16" SYSTEM

028-536  
SCREWS #10  
X 3/8" FLAT  
HEAD  
TYPE B

162-536  
162-535  
1 5/16" JOINT PLUGS

SEAL AROUND  
JOINT PLUG  
EDGES AND SEAL  
OVER SCREW  
HEAD, TOOL  
SEALANT.

028-536  
SCREWS #10  
X 3/8" FLAT  
HEAD  
TYPE B

162-523  
162-522  
9/16" JOINT PLUGS

JOINT PLUG FOR  
EXPANSION HORIZONTAL  
MULLION. (1 5/16" SHOWN)

APPLY  
WITH  
028-536  
SCREWS

KAWNEER

Product Engineering & Development

95449-69  
10/20/07

1600 SYS. 1 LARGE  
MISSILE IMPACT  
INSTALLATION  
INSTRUCTIONS

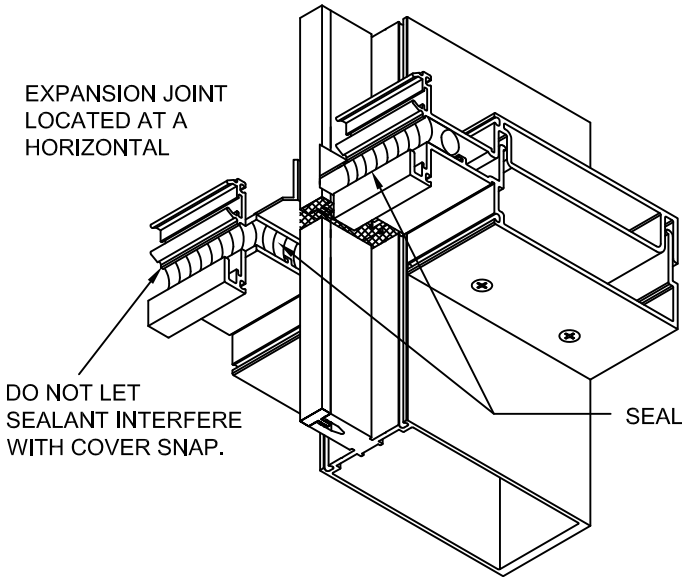
162-950 (SHT 04 OF 08)

GENERAL IMPACT INSTALLATION INSTRUCTIONS; FOR JOB SPECIFIC APPLICATION, PLEASE CONTACT FACTORY TO VERIFY THAT SYSTEM MEETS APPLICABLE CODES.

STEP - 10 SEAL INTERIOR OF VERTICAL SPLICE JOINTS AND INSTALL JOINT PLUGS

ALL SURFACES AND GROOVES MUST BE CLEANED PER THE SEALANT MANUFACTURER'S RECOMMENDATIONS.

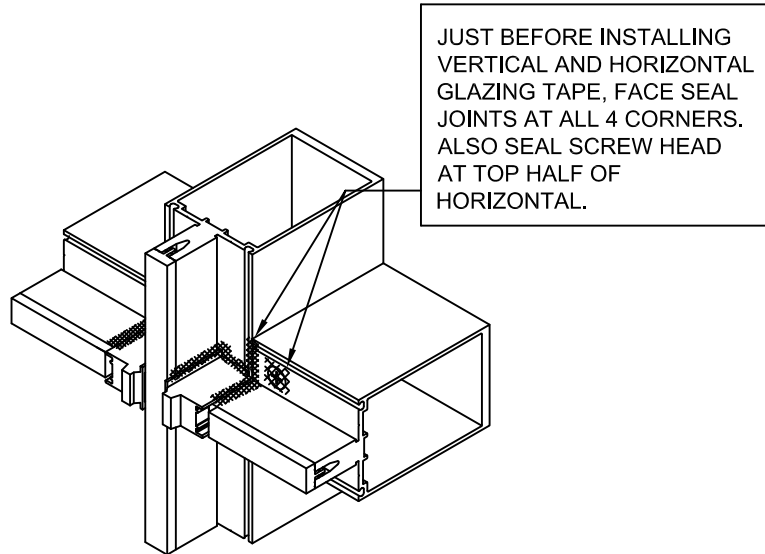
APPLY BACKER ROD AND SEALANT BETWEEN EXPANSION HORIZONTALS. RETURN SEAL AT ENDS AND MARRY TO SEAL BETWEEN HORIZONTALS AND MULLION SPLICE SEAL AT FACE OF MULLION TUBE.



STEP - 11 ADDITIONAL SEALS

ALL SURFACES AND GROOVES MUST BE CLEANED PER THE SEALANT MANUFACTURER'S RECOMMENDATIONS.

SEALS REQUIRED AT HEAD, SILL, INTERMEDIATE AND EXPANSION HORIZONTALS.



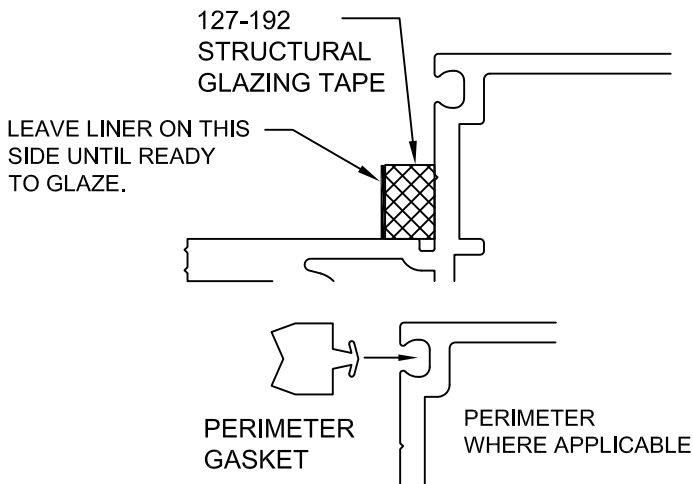
STEP - 12 INSTALL INTERIOR GLAZING TAPE

REFER TO TEST DRAWINGS AND REPORTS FOR APPROVED GLAZING TAPE AND REQUIRED SILICONE JOINT WIDTH. PLEASE CONTACT THE FACTORY FOR ASSISTANCE.

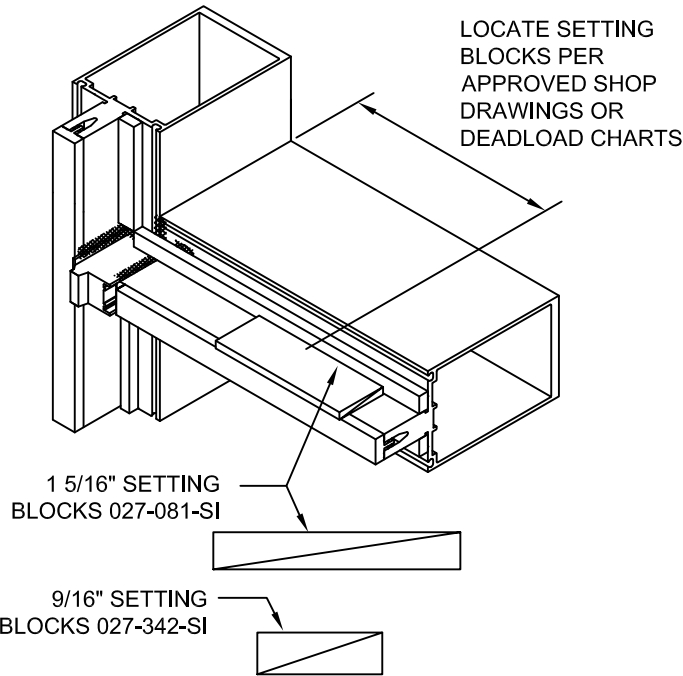
NOTE: DO NOT APPLY TAPE AT EXPANSION HORIZONTALS. REFERENCE STEP 15 ON SHEET 6 FOR GLAZING INFORMATION.

PREPARATION OF ALUMINUM SURFACES ARE TO BE EXACTLY AS OUTLINED BY THE SEALANT MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

NOTE: ACCESS IS REQUIRED FROM THE INTERIOR TO APPLY STRUCTURAL SILICONE AFTER GLASS INSTALLATION.



STEP - 13 INSTALL SETTING BLOCKS



STEP - 14 INSTALL EXTERIOR GASKETS INTO PRESSURE PLATES

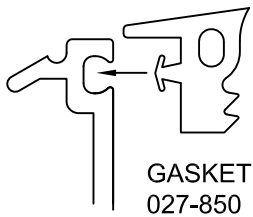
GASKETS SHOULD BE INSTALLED JUST PRIOR TO GLASS TO AVOID CONTAMINATION BY JOB SITE DEBRIS. GASKET GROOVES AND POCKETS SHOULD BE CLEAN.

IN TEMPERATURES COLDER THAN 50° F, ARRANGEMENTS SHOULD BE MADE TO WARM GASKETS BEFORE INSTALLATION. THIS WILL PREVENT EXCESSIVE GLAZING PRESSURE ON THE GLASS DUE TO COLD, STIFF RUBBER GASKETS.

GASKETS CAN BECOME DEFORMED DURING STORAGE IN CARTONS. THEY SHOULD BE REMOVED FROM CARTONS SEVERAL HOURS PRIOR TO GLAZING AND LAID FLAT OR HUNG TO ALLOW RECOVERY OF CORRECT SHAPE. TEMPERATURES SHOULD BE AT LEAST 50° F TO ALLOW THIS.

GASKET INSTALLED LENGTH TO BE DAYLITE OPENING. GASKETS TO BE CUT LONG FOR SOME "CROWD-IN". GASKETS SHOULD NEVER BE "STRETCHED TO FIT".

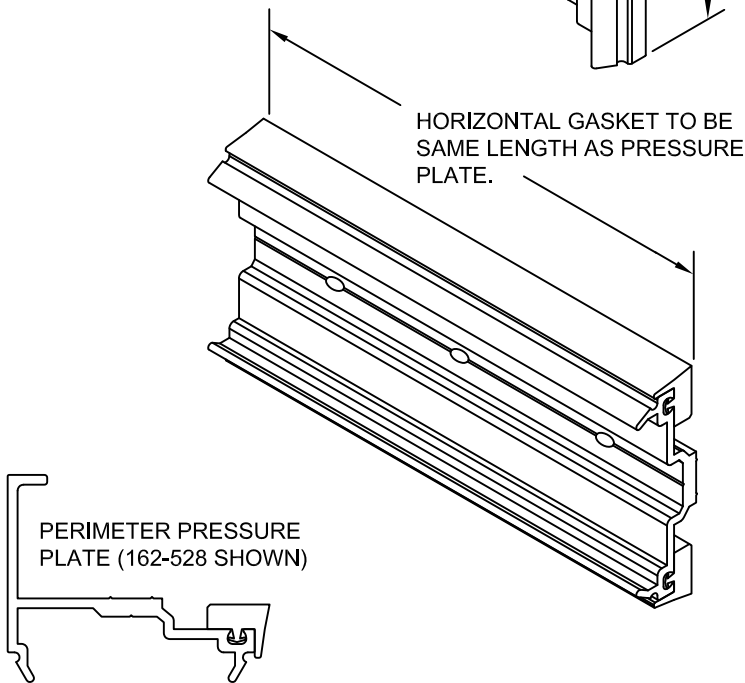
"CROWD-IN" TO BE 1/8" PER FOOT UP TO 5'-0", 3/16" PER FOOT UP TO 8'-0", 1/4" PER FOOT OVER 8'-0".



VERTICAL GASKETS ARE TO RUN CONTINUOUS EXCEPT AT THE HEAD/SILL CONDITIONS AND EXPANSION HORIZONTALS.

\* AT HEAD - STOP 1 9/16" SHORT UNDER SPLICE - FLUSH WITH TOP OF PRESSURE PLATE

\*\* AT SILL - STOP 1 9/16" SHORT AT SPLICE - STOP 2" SHORT



162-950 (SHT 05 OF 08)

CONFIDENTIAL AND PROPRIETARY INFORMATION  
KAWNEER COMPANY INC.

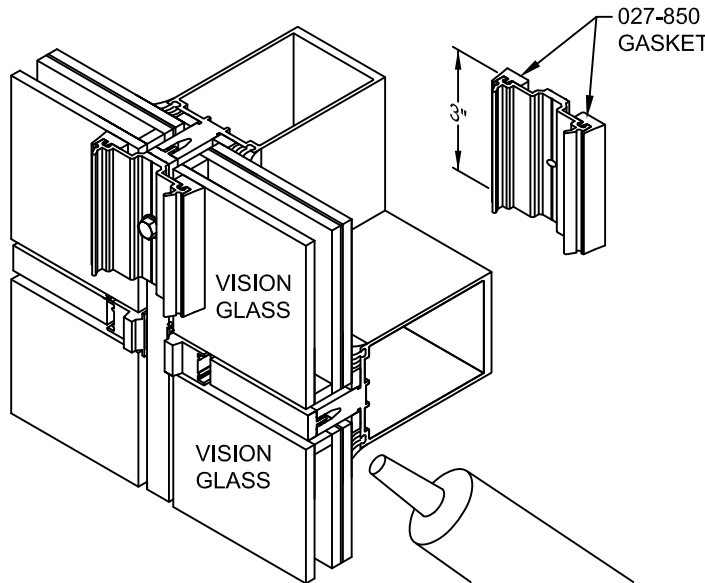
THESE DRAWINGS ARE THE SOLE AND EXCLUSIVE PROPERTY OF KAWNEER AND CONTAIN SENSITIVE, PRIVILEGED OR CONFIDENTIAL INFORMATION WHICH MAY BE USED ONLY FOR ITS BENEFIT. THE DISCLOSURE OF THESE DRAWINGS TO UNAUTHORIZED PERSONS IS STRICTLY PROHIBITED. THIS DOCUMENT AND ALL COPIES MUST BE RETURNED UPON DEMAND.  
© COPYRIGHT KAWNEER COMPANY, INC., 2003

STEP - 15 GLAZING GLASS

- CLEAN GLASS AND FRAMING AT STRUCTURAL SILICONE CONTACT SURFACES PER SEALANT MANUFACTURER'S RECOMMENDATIONS.
- PRIME FRAMING AS REQUIRED.
- REMOVE TAPE LINER.
- POSITION GLASS ON SETTING BLOCKS MAINTAINING PROPER GLASS BITE PER APPROVED SHOP DRAWINGS. PRESS GLASS INTO TAPE. INSURE A 1/4" SPACE BETWEEN THE GLASS AND FACE OF MULLION WHEN SETTING GLASS AND APPLYING TORQUE TO PRESSURE PLATE SCREWS.
- ATTACH 3" LONG TEMPORARY PRESSURE PLATES WITH 128-406 SCREWS. MAXIMUM TEMPORARY SPACING IS 30". IF WINDS GREATER THAN 50 MPH (80 KPH) ARE EXPECTED, ADDITIONAL TEMPORARIES MAY BE REQUIRED. CONSULT YOUR SEALANT AND/OR INFILL SUPPLIER FOR SPACING RECOMMENDATION.
- INSTALL PRESSURES PLATES WHERE POSSIBLE. IF NECESSARY, APPLY MASKING TAPE AT GLASS AND FRAMING TO AVOID ADDITIONAL CLEAN-UP AFTER APPLICATION OF STRUCTURAL SILICONE.

AT TYPICAL HORIZONTALS AND VERTICALS.

APPLY STRUCTURAL SILICONE SEALANT (DOW CORNING 995) COMPLETELY FILLING JOINTS. TOOL SEALANT.



KAWNEER

Product Engineering & Development

95449-89  
07/09/12

1600 SYS. 1 LARGE  
MISSILE IMPACT  
INSTALLATION  
INSTRUCTIONS

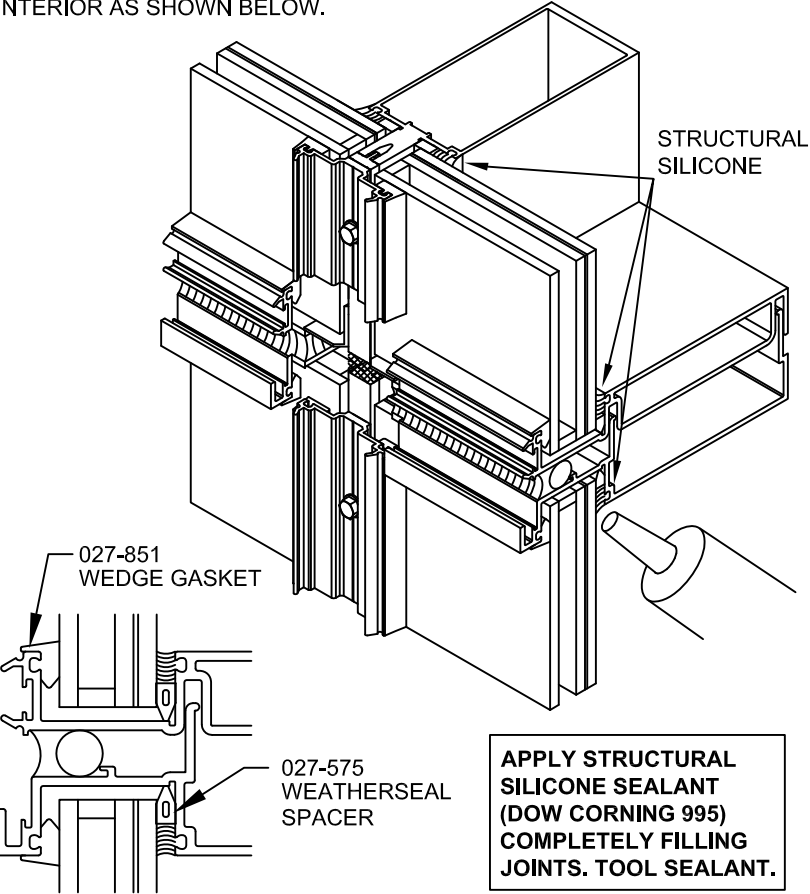
162-950 (SHT 05 OF 08)

GENERAL IMPACT INSTALLATION INSTRUCTIONS; FOR JOB SPECIFIC APPLICATION, PLEASE CONTACT FACTORY TO VERIFY THAT SYSTEM MEETS APPLICABLE CODES.

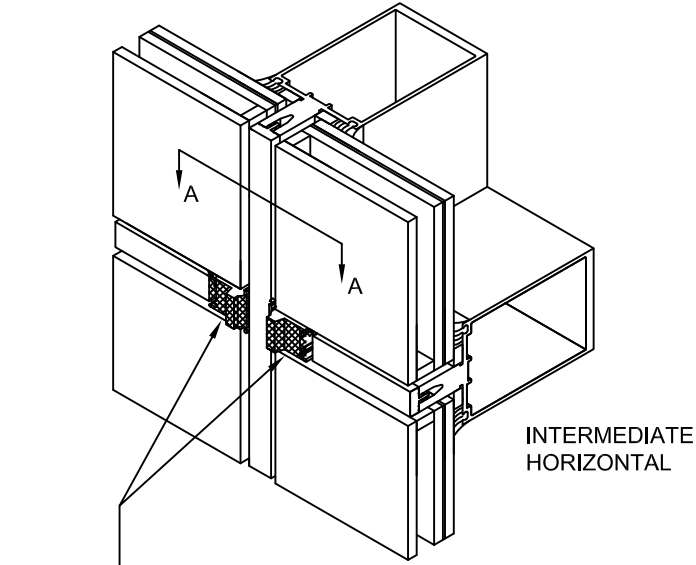
STEP - 15 GLAZING GLASS

AT EXPANSION HORIZONTALS

INSTALL 027-851 WEDGE GASKET AT THE EXTERIOR OF THE EXPANSION HORIZONTALS AND THE 027-575 SPACER AT THE INTERIOR AS SHOWN BELOW.

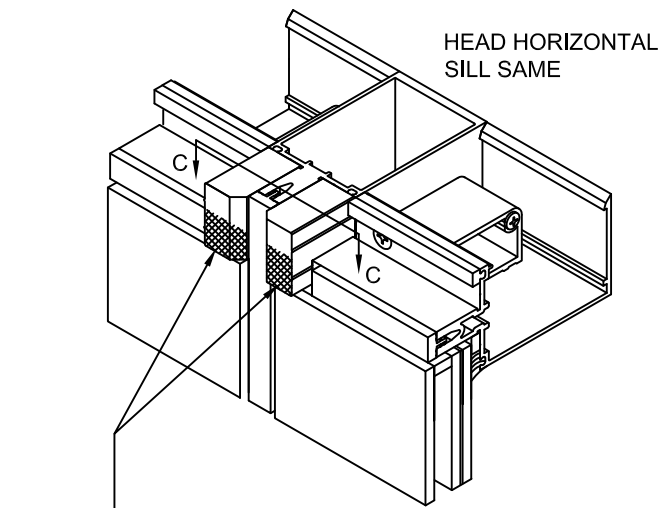
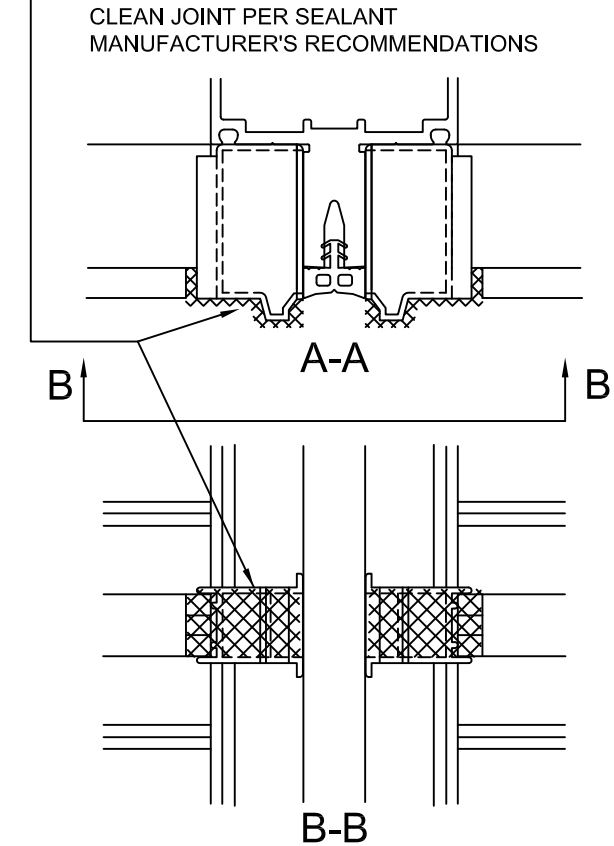


STEP - 16 INSTALL EXTERIOR PRESSURE PLATES



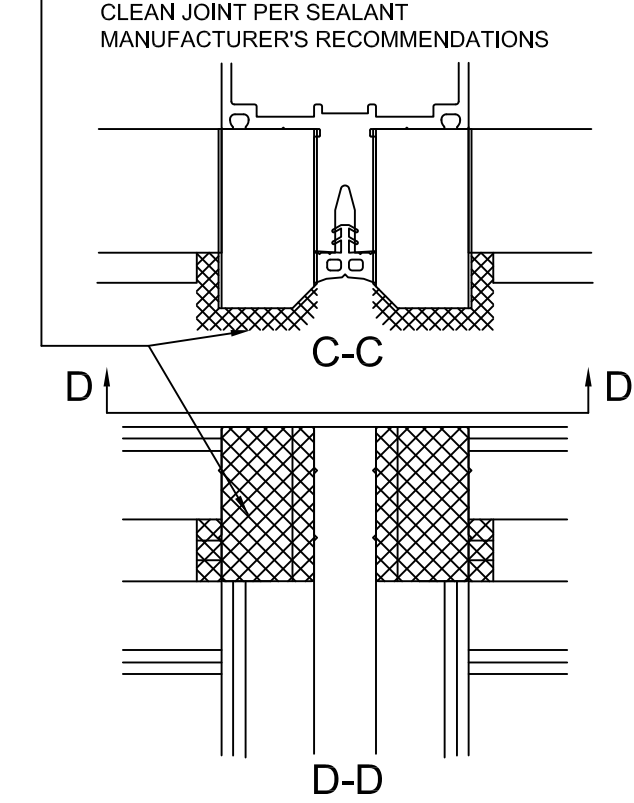
STEP - 16 INSTALL EXTERIOR PRESSURE PLATES

JUST BEFORE INSTALLING VERTICAL PRESSURE PLATES APPLY A GENEROUS AMOUNT OF SEALANT TO THE JOINT PLUG FACE FILLING JOINTS AS SHOWN.



STEP - 16 INSTALL EXTERIOR PRESSURE PLATES

JUST BEFORE INSTALLING VERTICAL PRESSURE PLATES APPLY A GENEROUS AMOUNT OF SEALANT TO THE JOINT PLUG FACE FILLING JOINTS AS SHOWN.

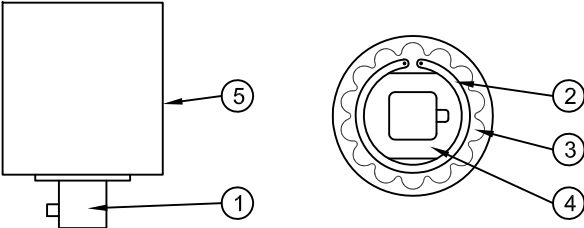


RECOMMEND USING TORQUE LIMIT TOOL 162-399 SEE NOTE.

NOTE - THE TORQUE LIMIT TOOL WAS DESIGNED TO BE USED WITH A HAND DRIVEN DEVICE.THE TOOL CAN BE ADAPTED TO A DRILL MOTOR IF USED AT A MAXIMUM SPEED OF APPROX. 300 RPM. HIGHER SPEEDS CAN CAUSE OVERHEATING AND AFFECT THE ACCURACY. AFTER APPROX. 1 HOUR OF TOOL USAGE CHECK TORQUE SETTINGS WITH A TORQUE WRENCH.

HOW TO SET TORQUE LIMIT

1. ATTACH ANY CALIBRATED TORQUE INDICATOR TO OUTPUT STUB (1) AND DETERMINE PRESENT TORQUE SETTING WHILE HOLDING THE BODY (5), OR VICE-VERSA.
2. REMOVE SNAP RING (2) AND LOCKING PLATE (3).
3. ADJUST NUT (4) WITH OPEN-END WRENCH : CLOCKWISE TO INCREASE TORQUE, COUNTER- CLOCKWISE TO DECREASE TORQUE.



162-950 (SHT 06 OF 08)

CONFIDENTIAL AND PROPRIETARY INFORMATION  
KAWNEER COMPANY INC.

THESE DRAWINGS ARE THE SOLE AND EXCLUSIVE PROPERTY OF KAWNEER AND CONTAIN SENSITIVE, PRIVILEGED OR CONFIDENTIAL INFORMATION WHICH MAY BE USED ONLY FOR ITS BENEFIT. THE DISCLOSURE OF THESE DRAWINGS TO UNAUTHORIZED PERSONS IS STRICTLY PROHIBITED. THIS DOCUMENT AND ALL COPIES MUST BE RETURNED UPON DEMAND.  
© COPYRIGHT KAWNEER COMPANY, INC., 2003

STEP - 16 INSTALL EXTERIOR PRESSURE PLATES

4. OBTAIN NEW TORQUE READING WITH THE CALIBRATED TORQUE INDICATOR. REPEAT PRECEDING STEP IF MORE ADJUSTMENT IS NECESSARY TO REACH DESIRED LIMIT.

5. REPLACE LOCKING PLATE INTO NOTCHES AND INSTALL SNAP RING. IF LOCKING PLATE DOES NOT "SEAT", MOVE THE ADJUSTING NUT SLIGHTLY UNTIL IT DROPS IN PLACE. THE DIRECTION IS BEST DETERMINED BY WHETHER A MINIMUM TORQUE APPLICATION OR A MAXIMUM ONE IS DESIRED.

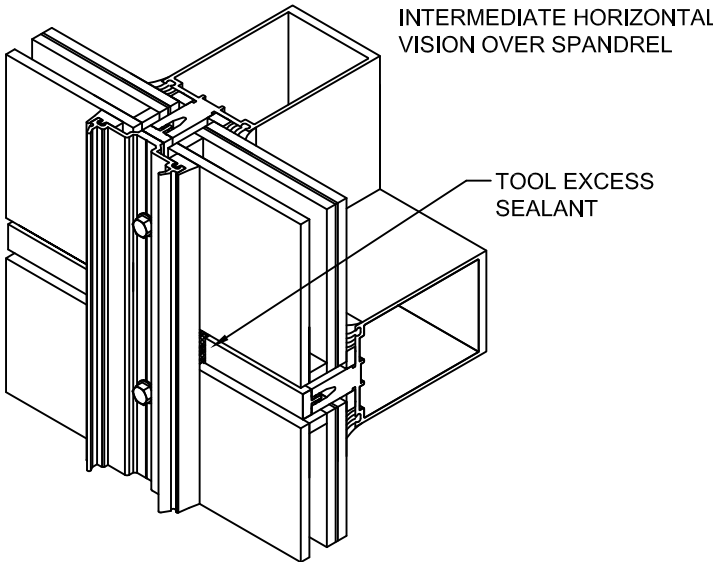
INSTALL PRESSURE PLATES USING SCREWS 128-406 1/4-14 X 1" HEX WASHER HEAD TYPE AB

SCREWS ARE TO BE LOCATED 9" ON CENTER FOR DESIGN LOADS UP TO 65 PSF. FOR DESIGN LOADS 66 PSF AND HIGHER, SCREWS ARE TO BE LOCATED 3" ON CENTER.

ALWAYS LOCATE A SCREW AS CLOSE AS POSSIBLE TO A HORIZONTAL JOINT. THIS WILL PROVIDE MAXIMUM PRESSURE FOR THE CRITICAL JOINT SEALS.

AT EACH HORIZONTAL AND VERTICAL PRESSURE PLATE INSTALL TWO SCREWS PART WAY, THEN INSTALL THE THIRD SCREW ALL THE WAY, AND THEN TIGHTEN THE FIRST TWO SCREWS. THIS ELIMINATES LATERAL WALKING OF THE PRESSURE PLATE POSITION.

TORQUE ALL SCREWS TO 95 TO 100 INCH POUNDS. DURING COLD WEATHER TORQUE SCREWS TO 50 INCH POUNDS UNTIL ALL 4 SIDES HAVE BEEN CLAMPED. THEN TORQUE SCREWS TO 95 TO 100 INCH POUNDS.



Product Engineering & Development

95449-84  
09/30/11

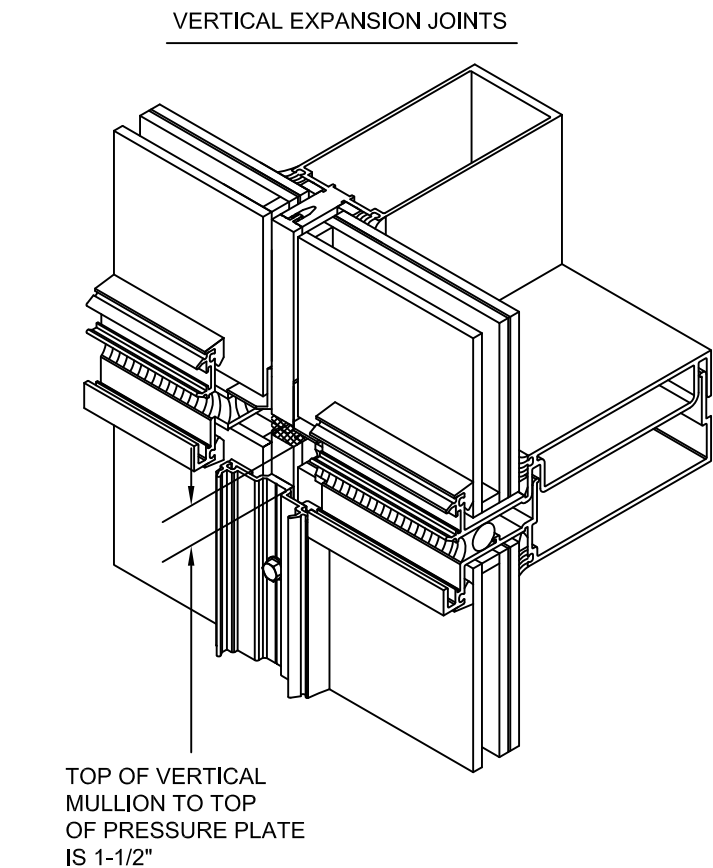
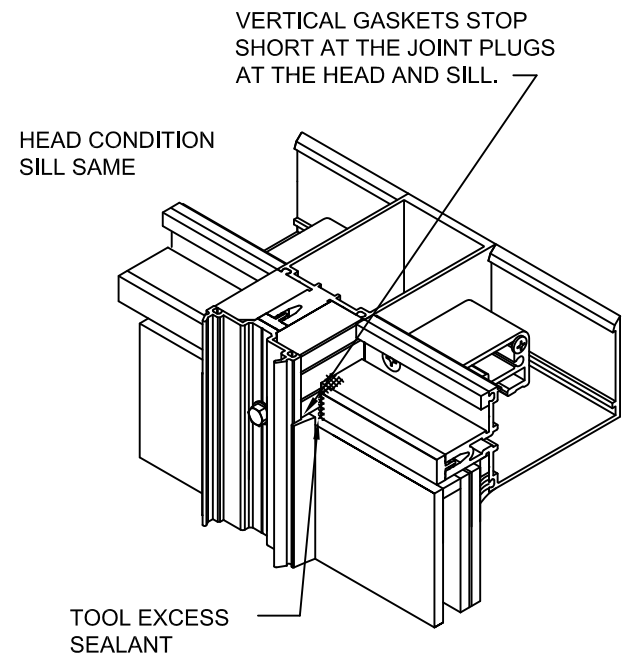
1600 SYS. 1 LARGE  
MISSILE IMPACT  
INSTALLATION  
INSTRUCTIONS

162-950 (SHT 06 OF 08)

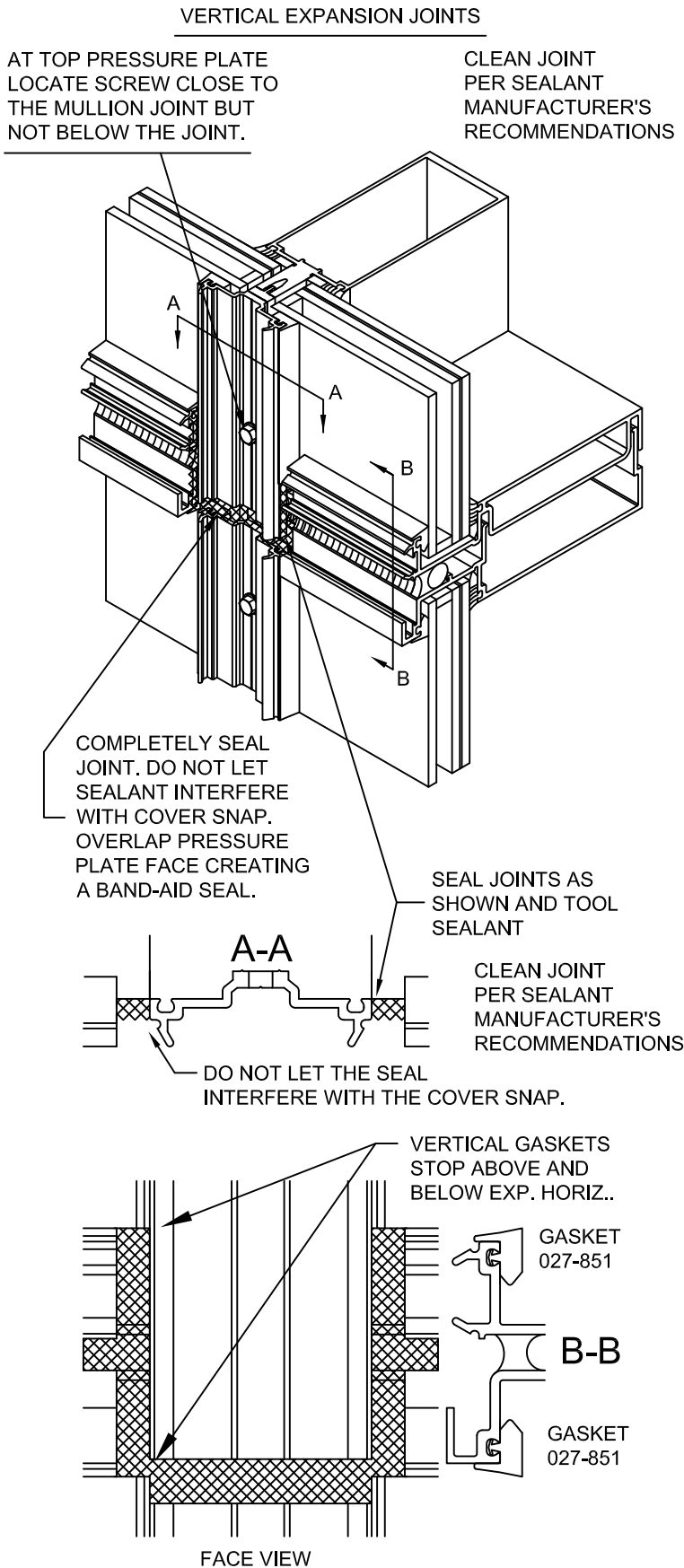


GENERAL IMPACT INSTALLATION INSTRUCTIONS; FOR JOB SPECIFIC APPLICATION, PLEASE CONTACT FACTORY TO VERIFY THAT SYSTEM MEETS APPLICABLE CODES.

STEP - 16 INSTALL EXTERIOR PRESSURE PLATES

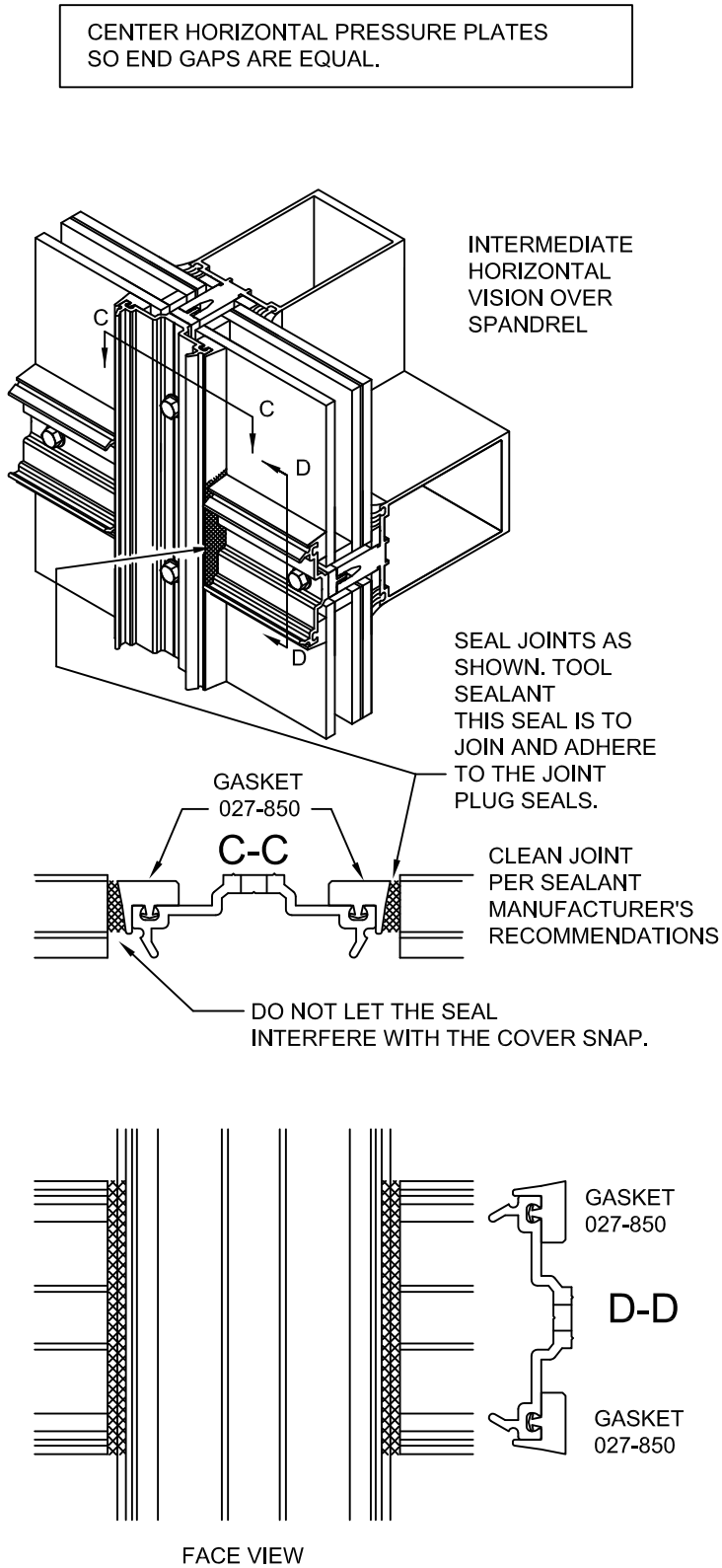


STEP - 16 INSTALL EXTERIOR PRESSURE PLATES



STEP - 16 INSTALL EXTERIOR PRESSURE PLATES

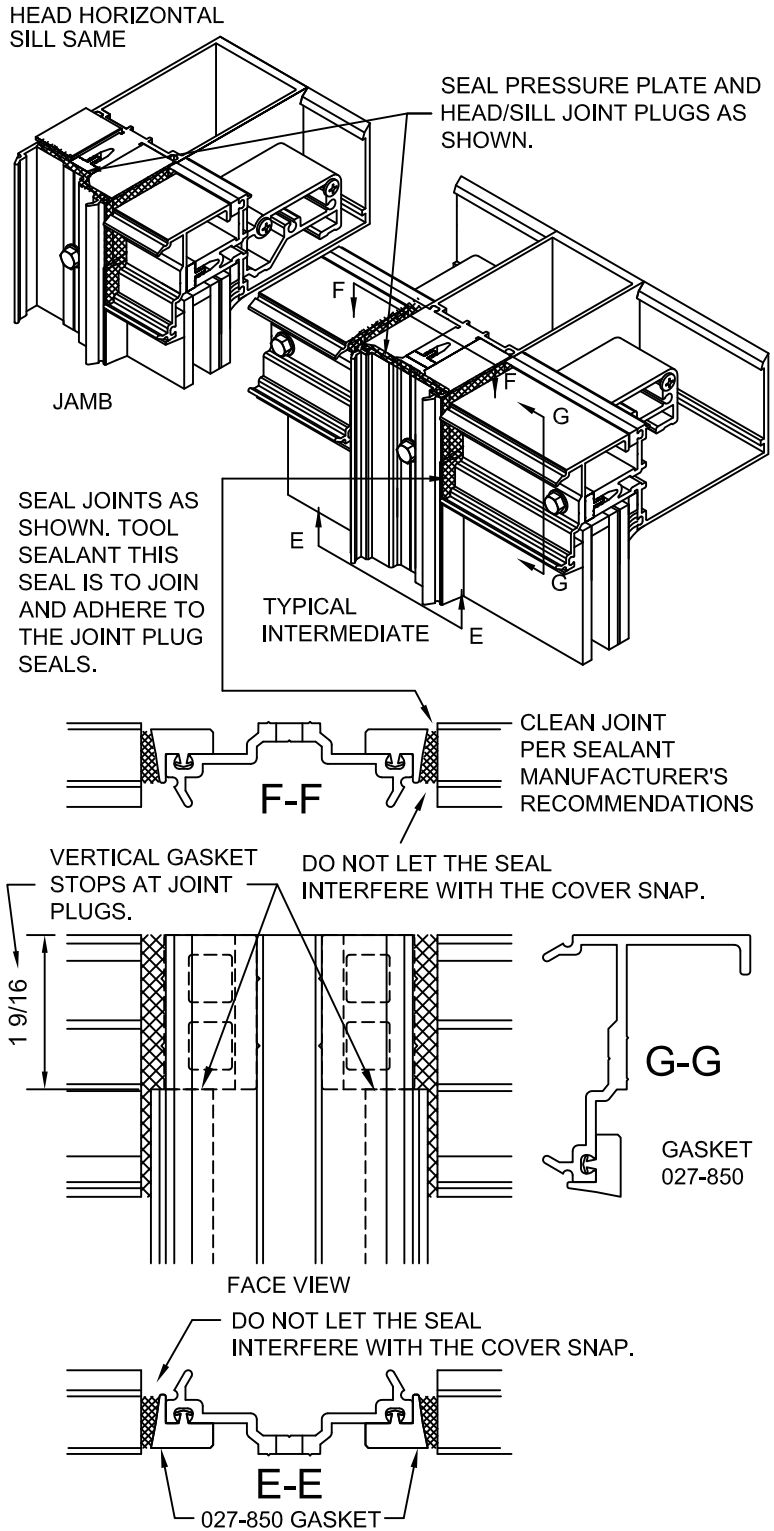
INSTALL HORIZONTAL PRESSURE PLATES



162-950 (SHT 07 OF 08)

CONFIDENTIAL AND PROPRIETARY INFORMATION  
KAWNEER COMPANY INC.

THESE DRAWINGS ARE THE SOLE AND EXCLUSIVE PROPERTY OF KAWNEER AND CONTAIN SENSITIVE, PRIVILEGED OR CONFIDENTIAL INFORMATION WHICH MAY BE USED ONLY FOR ITS BENEFIT. THE DISCLOSURE OF THESE DRAWINGS TO UNAUTHORIZED PERSONS IS STRICTLY PROHIBITED. THIS DOCUMENT AND ALL COPIES MUST BE RETURNED UPON DEMAND.  
© COPYRIGHT KAWNEER COMPANY, INC., 2003



KAWNEER

Product Engineering & Development

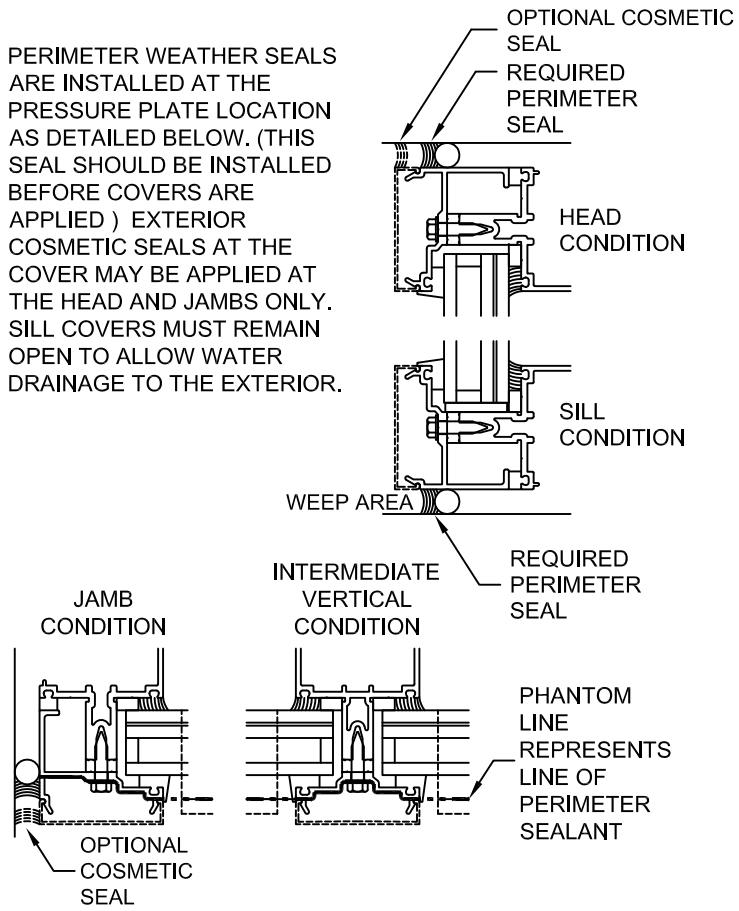
95449-84  
09/30/11

1600 SYS. 1 LARGE  
MISSILE IMPACT  
INSTALLATION  
INSTRUCTIONS

162-950 (SHT 07 OF 08)

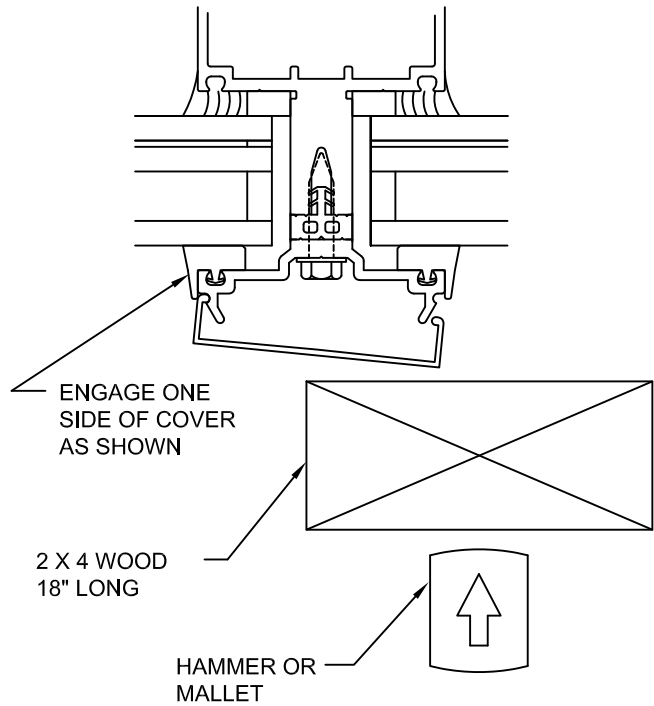
GENERAL IMPACT INSTALLATION INSTRUCTIONS; FOR JOB SPECIFIC APPLICATION, PLEASE CONTACT FACTORY TO VERIFY THAT SYSTEM MEETS APPLICABLE CODES.

STEP - 17 INSTALL PERIMETER SEALS

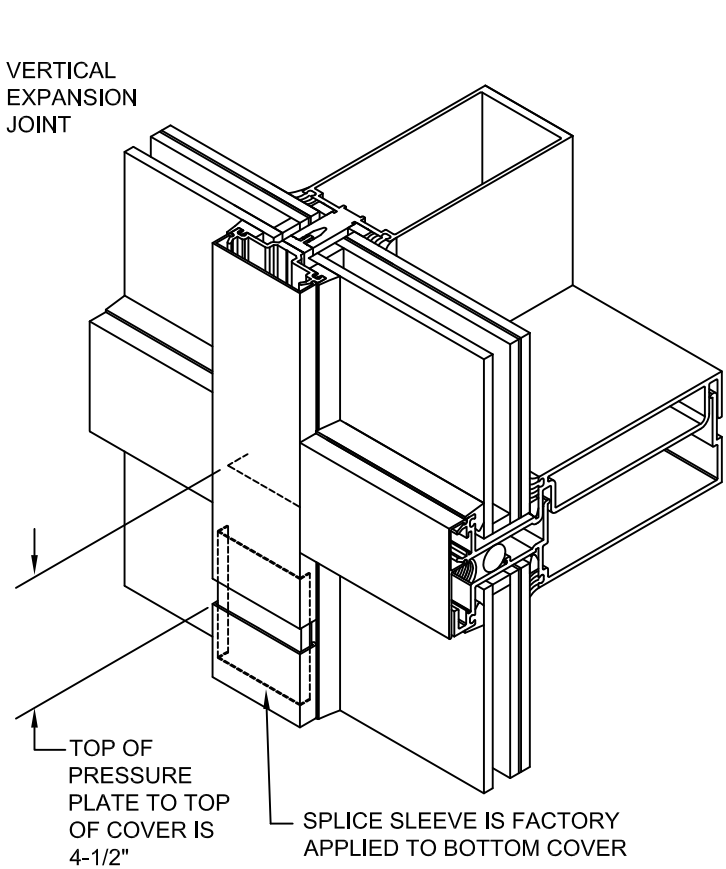


STEP - 18 INSTALL EXTERIOR COVERS

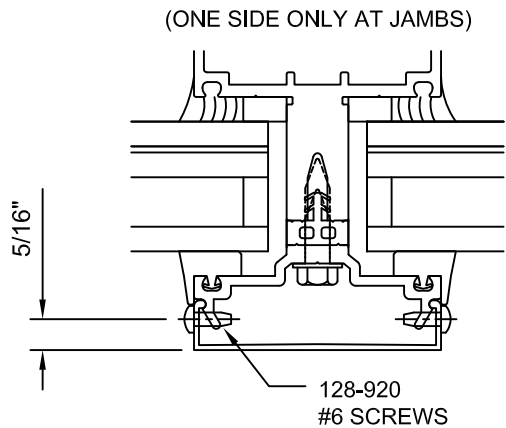
CARE MUST BE TAKEN TO AVOID DAMAGE TO COVERS DURING INSTALLATION. USE A 18" LONG PIECE OF 2 X 4 WOOD ALONG WITH A HAMMER OR MALLET TO SEAT THE COVER.



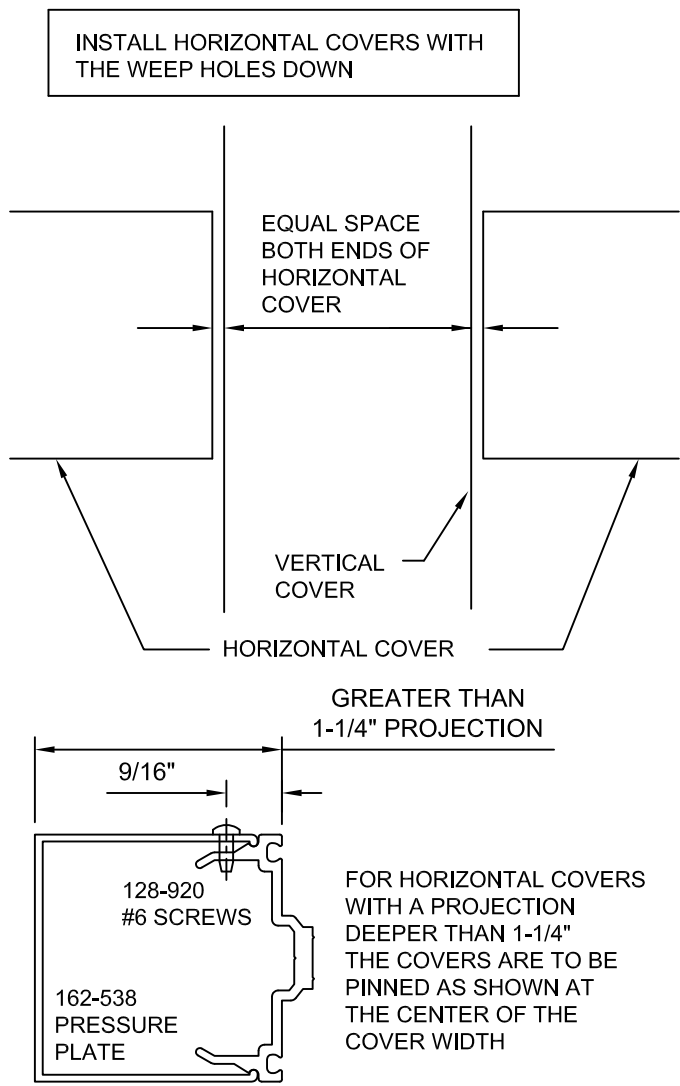
STEP - 18 INSTALL EXTERIOR COVERS



PINNING OF ALL VERTICAL COVERS IS REQUIRED FOR BOTH SIDES. DRILL A .106 DIA. HOLE (#36 DRILL) AND INSTALL 128-920 SCREWS #6 X 3/8" PAN HEAD TYPE B LOCATE PINNING AT A HORIZONTAL CLOSEST TO THE COVER HEIGHT CENTER.



STEP - 18 INSTALL EXTERIOR COVERS

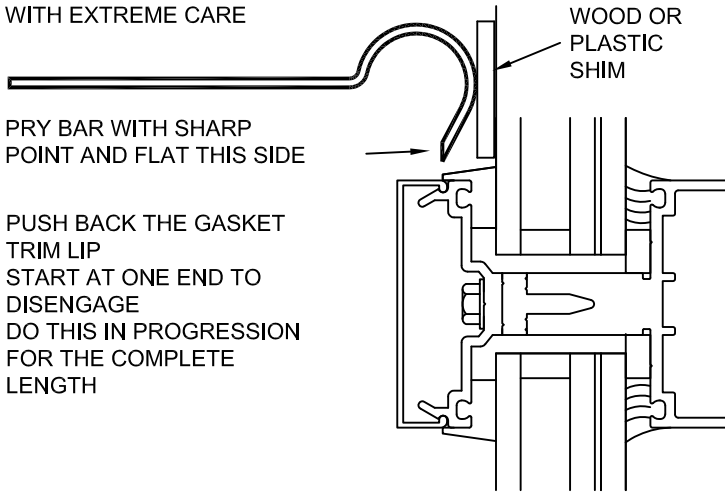


STEP - 19 INSTALL MIAMI DADE LABELS

REFERENCE SHEET 1 FOR ADDITIONAL INFORMATION

REMOVING COVERS

COVERS CAN BE SAVED IF TOLERANCES ARE NOT TOO TIGHT AND THE COVER IS REMOVED WITH EXTREME CARE

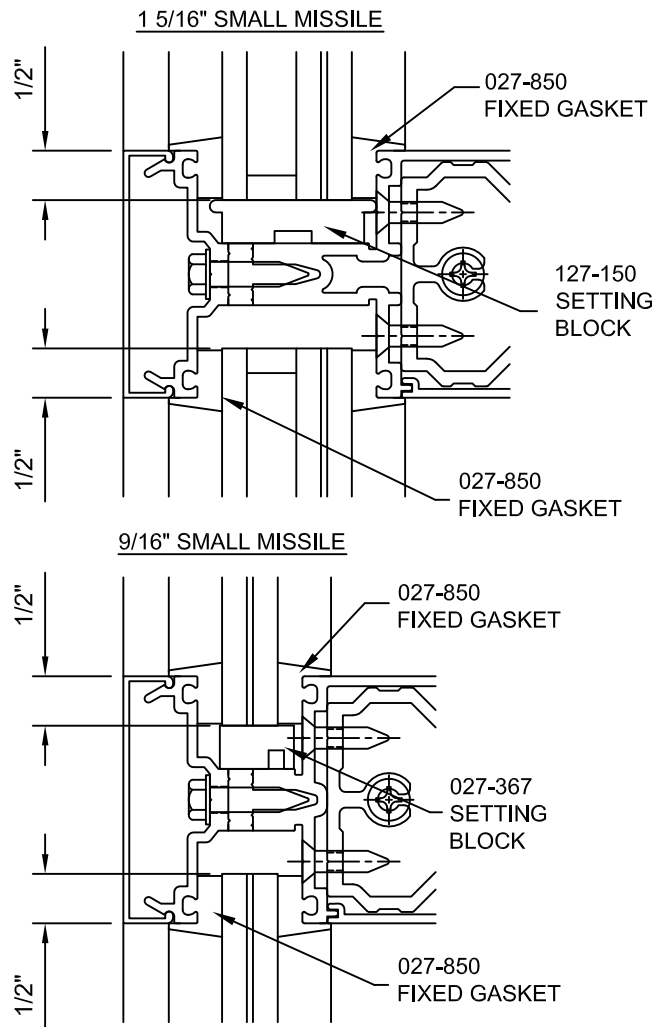


162-950 (SHT 08 OF 08)

CONFIDENTIAL AND PROPRIETARY INFORMATION  
KAWNEER COMPANY INC.

THESE DRAWINGS ARE THE SOLE AND EXCLUSIVE PROPERTY OF KAWNEER AND CONTAIN SENSITIVE, PRIVILEGED OR CONFIDENTIAL INFORMATION WHICH MAY BE USED ONLY FOR ITS BENEFIT. THE DISCLOSURE OF THESE DRAWINGS TO UNAUTHORIZED PERSONS IS STRICTLY PROHIBITED. THIS DOCUMENT AND ALL COPIES MUST BE RETURNED UPON DEMAND.  
© COPYRIGHT KAWNEER COMPANY, INC., 2003

SMALL MISSILE IMPACT



INFILL SIZE FORMULA FOR SMALL MISSILE IS DLO + 1"

FOR INSTALLATION OF SMALL MISSILE IMPACT SYSTEM, USE IMPACT STOCK LENGTH INSTRUCTIONS IN CONJUNCTION WITH INSTALLATION INSTRUCTIONS 162-960 & 162-970. PRESSURE PLATE FASTENERS ARE LOCATED 3" ON CENTER - REFER TO STEP 17 OF THESE INSTRUCTIONS FOR PRESSURE PLATE INSTALLATION.

AS WITH LARGE MISSILE IMPACT, REFER TO TEST DRAWINGS AND REPORTS FOR APPROVED SEALANT AND ANCHORING. THIS MAY VARY PER TEST. PLEASE CONTACT THE FACTORY FOR ASSISTANCE.

KAWNEER

Product Engineering & Development

95449-89  
07/09/12

1600 SYS. 1 LARGE  
MISSILE IMPACT  
INSTALLATION  
INSTRUCTIONS

162-950 (SHT 08 OF 08)