

GENERAL NOTES

THESE INSTALLATION INSTRUCTIONS ARE A SUPPLEMENT TO THE APPROVED SHOP DRAWINGS. USE IN CONJUNCTION WITH THOSE DRAWINGS.

1 - HANDLING, STORING AND PROTECTING ALUMINUM MATERIAL.

THE FOLLOWING PRECAUTIONS ARE RECOMMENDED TO ASSURE EARLY ACCEPTANCE OF YOUR PRODUCTS AND WORKMANSHIP.

A - HANDLE CAREFULLY - DO NOT 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.

B - KEEP MATERIAL AWAY FROM WATER, MUD AND SPRAY - PREVENT CEMENT, PLASTER AND OTHER MATERIALS FROM DAMAGING THE FINISH.

C - PROTECT THE MATERIALS AFTER ERECTION, BY WRAPPING WITH KRAFT PAPER - OR BY ERECTING VISQUEEN/CANVAS SPLATTER SCREENS. CEMENT, PLASTER, TERRAZZO AND OTHER ALKALINE MATERIALS ARE VERY HARMFUL TO THE FINISH AND SHOULD BE REMOVED WITH WATER AND MILD SOAP BEFORE SETTING OCCURS. UNDER NO CIRCUMSTANCES ALLOW THESE MATERIALS TO TO DRY OR PERMANENT STAINING WILL OCCUR.

2 - GENERAL RULES

THE FOLLOWING PRACTICES ARE RECOMMENDED FOR ALL WALL INSTALLATIONS.

A - READ COMPLETE INSTRUCTIONS BEFORE ORDERING GLASS OR FABRICATING MATERIAL.

B - CHECK SHOP DRAWINGS TO BECOME THOROUGHLY FAMILIAR WITH THE JOB.

C - ALL MATERIALS ARE TO BE INSTALLED PLUMB, LEVEL AND TRUE.

D - ALL WORK SHOULD START FROM ESTABLISHED BENCH MARKS AND COLUMN CENTER LINES ESTABLISHED BY THE ARCHITECTURAL DRAWINGS AND THE GENERAL CONTRACTOR.

E - THE SEQUENCE OF ERECTION SHOULD BE COORDINATED WITH THE JOB SUPERINTENDENT SO DELAYS ARE PREVENTED AND RISK OF MATERIAL DAMAGE IS MINIMIZED. IF PRESETTING OF ANCHORAGE IS REQUIRED, COORDINATE WITH GENERAL CONTRACTOR AND SUPERVISE LOCATION.

F - MAKE CERTAIN CONSTRUCTION WHICH WILL RECEIVE YOUR MATERIALS IS ACCORDING TO THE CONTRACT DOCUMENTS. IF NOT, NOTIFY THE GENERAL CONTRACTOR IN WRITING AND RESOLVE DIFFERENCES BEFORE PROCEEDING WITH YOUR WORK.

G - INSULATE ALL ALUMINUM TO BE PLACED DIRECTLY IN CONTACT WITH THE MASONRY OR INCOMPATIBLE MATERIALS WITH A HEAVY COAT OF ZINC CHROMATE OR BITUMINOUS PAINT.

H - FOLLOW KAWNEER INSTALLATION AND GLAZING INSTRUCTIONS.

J - CHECK ALL MATERIAL ON ARRIVAL FOR QUANTITY.

K - BE SURE TO HAVE ALL THE MATERIALS AND TOOLS NEEDED TO BEGIN THE INSTALLATION.

- 1 - APPROVED SHOP DRAWINGS
- 2 - LEVEL AND PLUMB (TRANSIT)
- 3 - FASTENERS AND REQUIRED DRIVERS.
- 4 - PERIMETERS AND ACCESSORIES SUCH AS ANCHORS, FASTENERS, SLEEVES AND/OR SPLICE CAPS.
- 5 - SEALING MATERIALS.
- 6 - GLAZING MATERIALS.

L - FOLLOW SEALANT MANUFACTURER'S RECOMMENDATIONS FOR PROPER SEALANT AND APPLICATION. ALL SEALANTS AND MASTICS MUST BE COMPATIBLE WITH ALL SURFACES INCLUDING OTHER SEALANT SURFACES. WHERE REQUIRED ALL SEALANTS MUST ADHERE TO ALL SURFACES INCLUDING OTHER SEALANT SURFACES.

1600 SYSTEM 5 NOTES

1600 SYSTEM 5 IS AVAILABLE WITH 1" FRAMING MEMBERS WHICH ACCEPT BOTH 1" AND 1/4" INFILLS.

1600 SYSTEM 5 IS DESIGNED AS AN INTERIOR GLAZED SYSTEM. EXTERIOR GLAZING IS A OPTION. SEE EXTERIOR GLAZING STEPS.

GLASS BITE IS 7/16" AT VERTICALS.

GLASS BITE IS 7/16" AT HORIZONTALS.

GLASS SIZES MUST BE CALCULATED FROM APPROVED SHOP DRAWINGS. GASKET ASSEMBLIES ARE PREFERRED REFERENCE SHEET #9.

UNLESS OTHERWISE SPECIFIED, IT IS RECOMMENDED THAT SILICONE SEALANT BE USED FOR ALL INTERNAL SEALS.

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.

CHECK OPENINGS

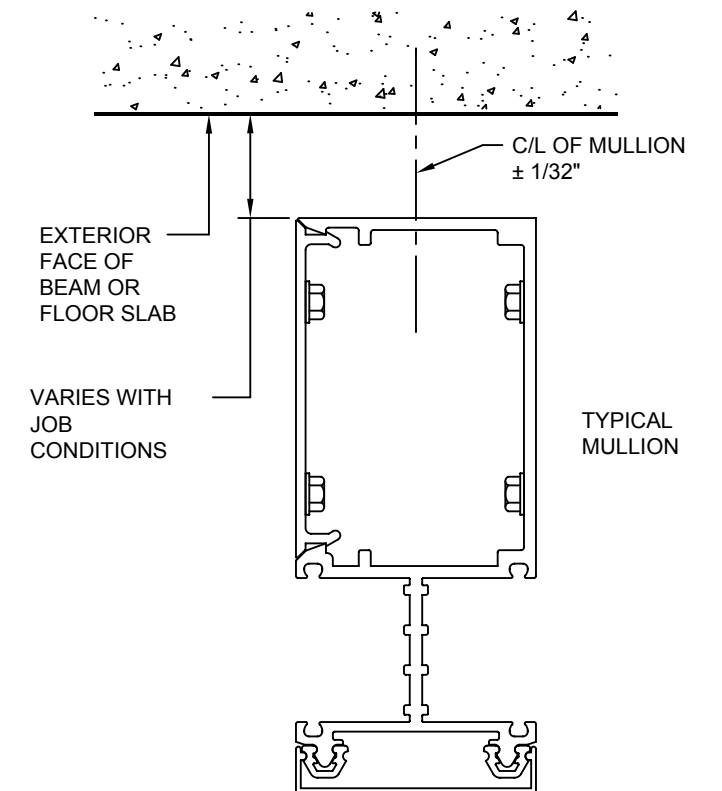
ELEVATIONS AND SLABS MUST BE WITHIN ADJUSTMENT OF ANCHORING SYSTEM. SEE APPROVED SHOP DRAWINGS FOR ALLOWABLE ADJUSTMENT.

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.

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.



SEE APPROVED SHOP DRAWINGS FOR ANCHOR LAYOUTS

THESE INSTRUCTIONS SHOW THE 6" SYSTEM. THE 7 1/2" SYSTEM IS SIMILAR



1600 SYSTEM 5 INSTALLATION
TYPE "A" UNITS - VERTICAL
RUNS THRU

PART NUMBER
166-971 1 OF 10

95488-31
07/25/07

DRAWING:

ORDER:

SHT:

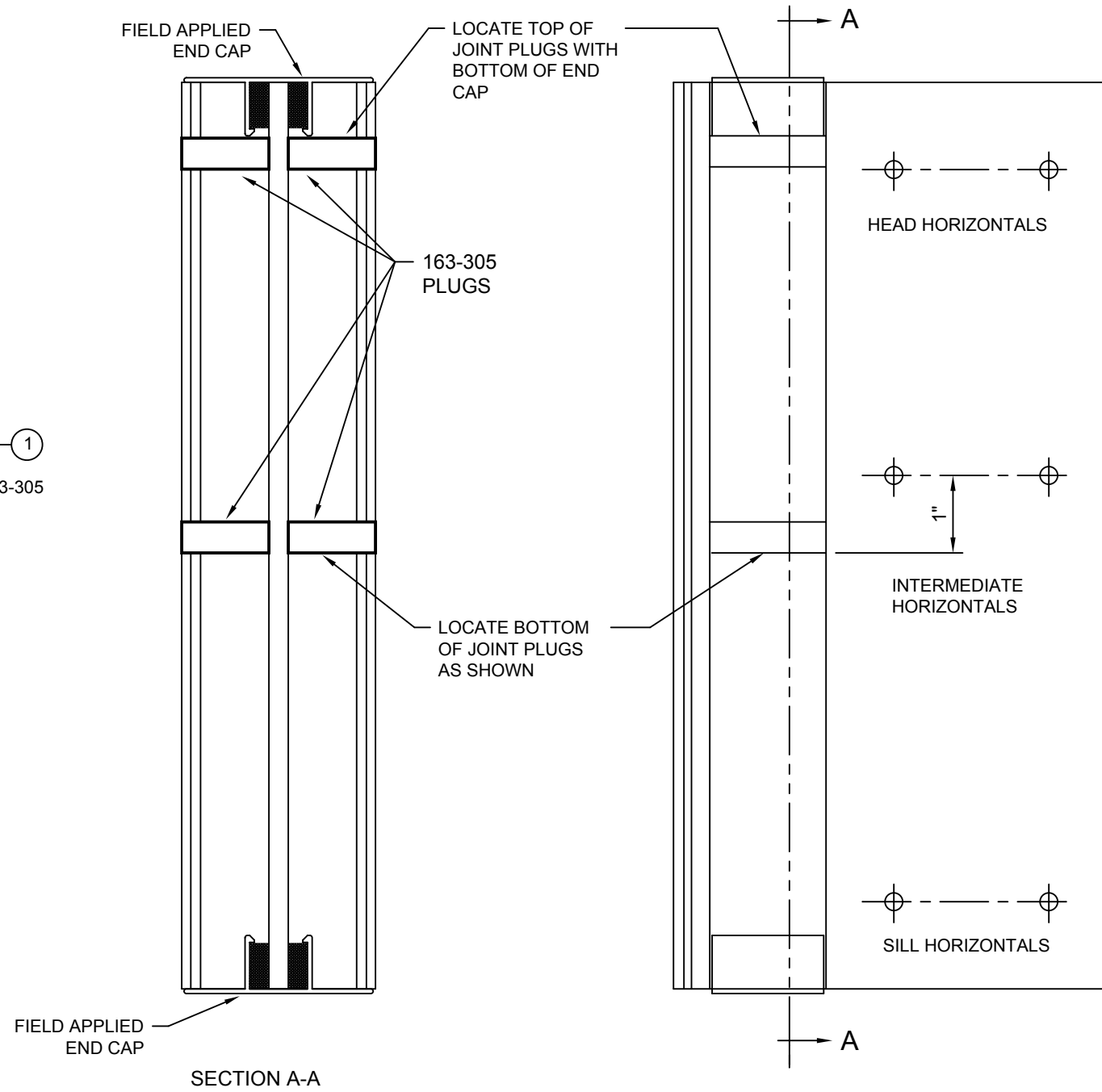
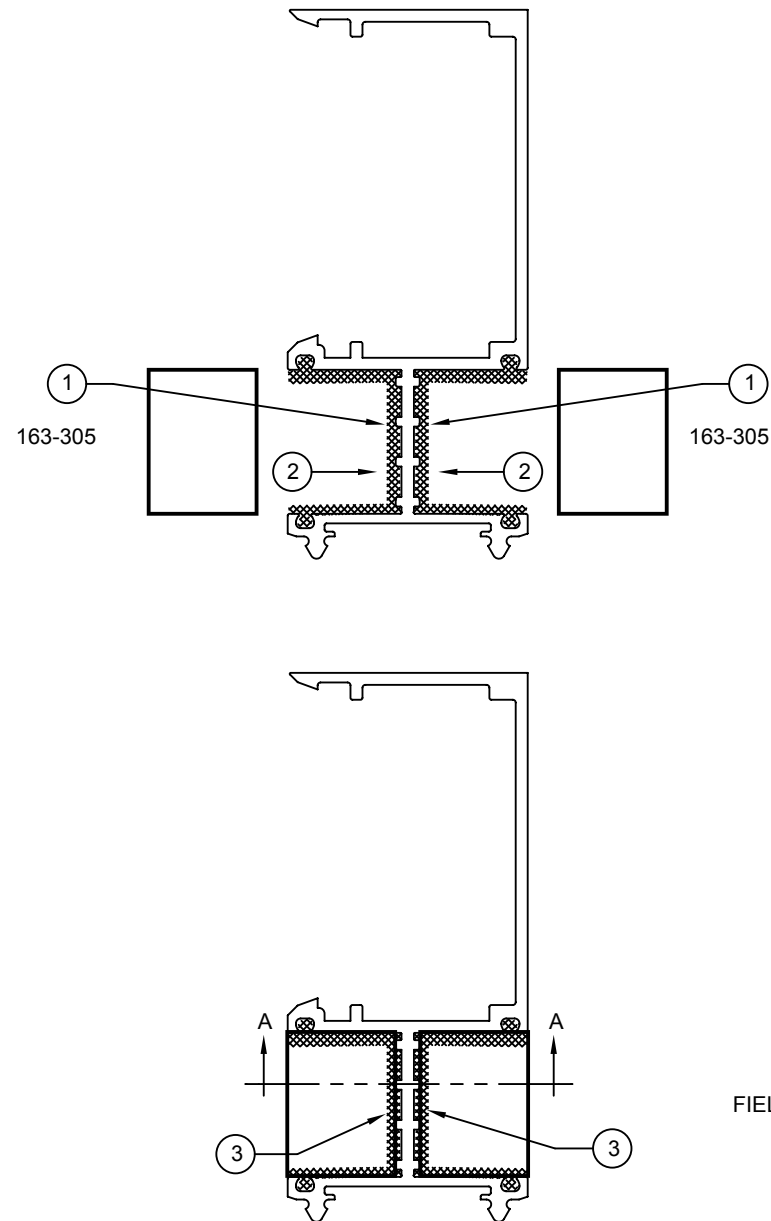
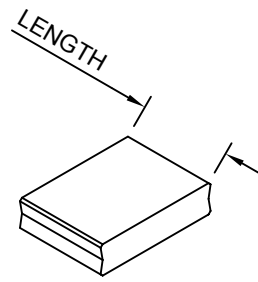
FRAME ASSEMBLY

INSTALL JOINT PLUGS.

NOTE JOINT PLUG LOCATIONS

- ① APPLY SEALANT AT JOINT PLUG LOCATIONS FILLING GASKET POCKETS AND GROOVES
- ② INSTALL JOINT PLUGS INTO SEALANT
- ③ TOOL SEALANT TO SEAL ALL VOIDS

JOINT PLUG 163-305
LENGTH 1-1/8"



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TYPE "A" UNITS - VERTICAL
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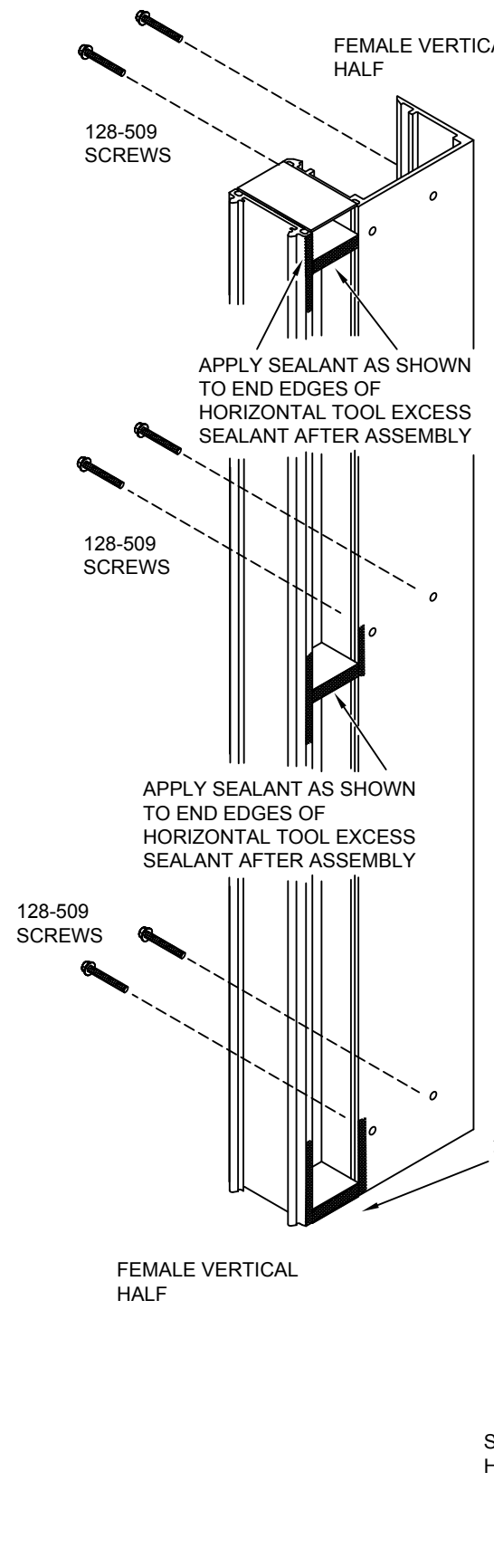
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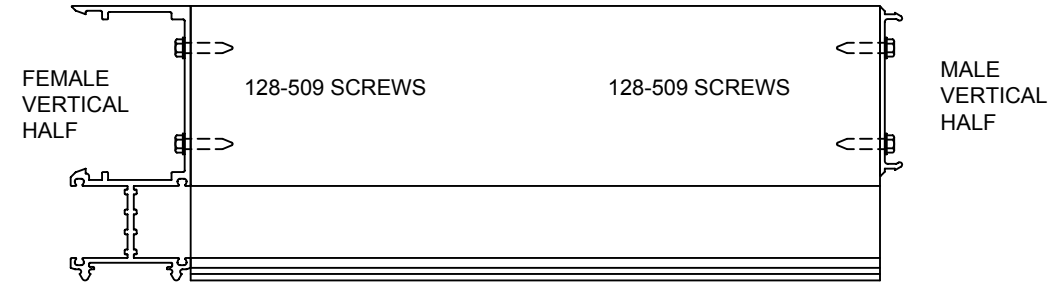
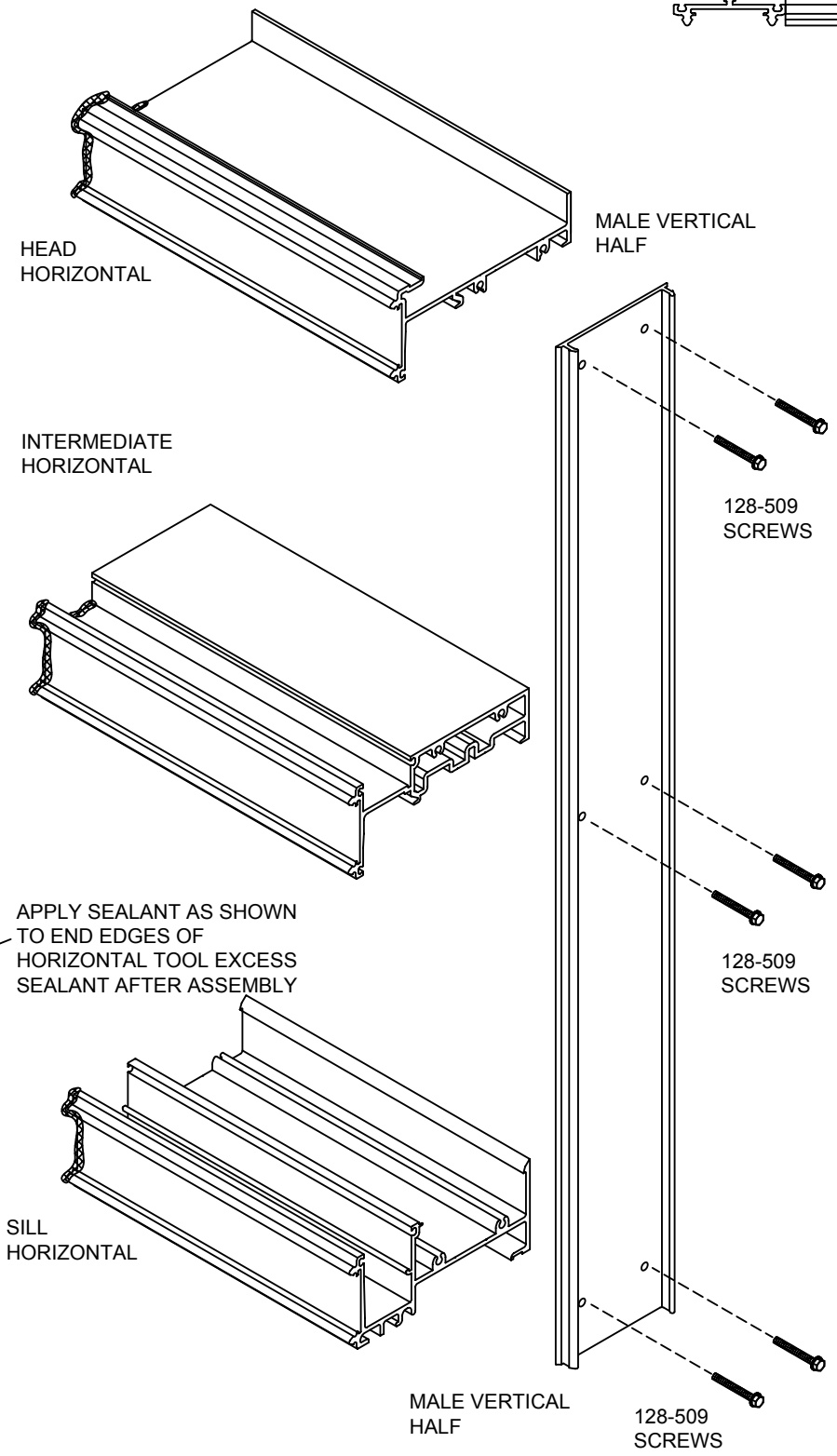
FRAME ASSEMBLY

ASSEMBLED UNIT

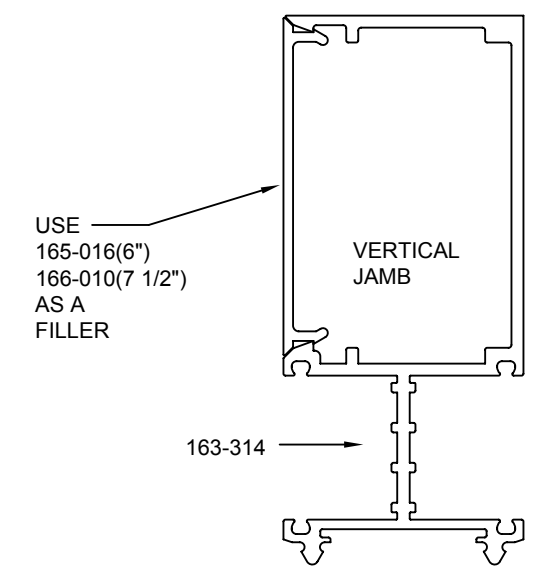


ASSEMBLE VERTICALS TO HORIZONTALS USING 128-509 SCREWS #12 x 1" HEX WASHER HEAD TYPE AB

FRAME IS SHOWN IN UPRIGHT POSITION BUT MAY BE ASSEMBLED IN ANY DESIRABLE POSITION.



INSTALL 163-314 COMPOSITE THERMAL PERIMETER FILLERS SAME LENGTH AS VERTICALS



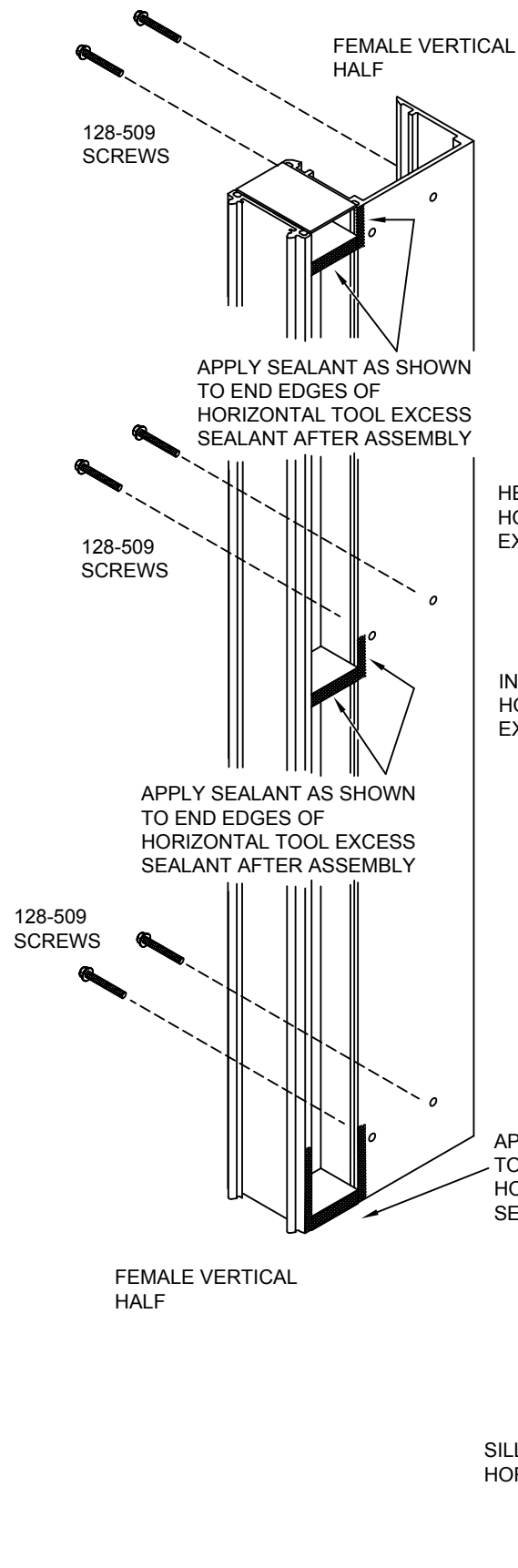
DURING UNIT INSTALLATION SHOWN ON SHEET #5 APPLY SEALANT TO HORIZONTAL EDGES AS SHOWN TOOL EXCESS SEALANT

<p>KAWNEER</p> <p>1600 SYSTEM 5 INSTALLATION TYPE "A" UNITS - VERTICAL RUNS THRU</p>	<p>PART NUMBER 166-971 3 OF 10</p>
	<p>95488-31 07/25/07</p>
	<p>DRAWING:</p>
	<p>ORDER:</p>
<p>SHT:</p>	<p>166-971 3 OF 10</p>

FRAME ASSEMBLY

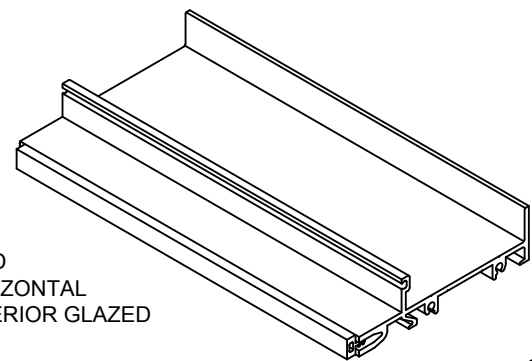
AT EXTERIOR GLAZING

ASSEMBLED UNIT

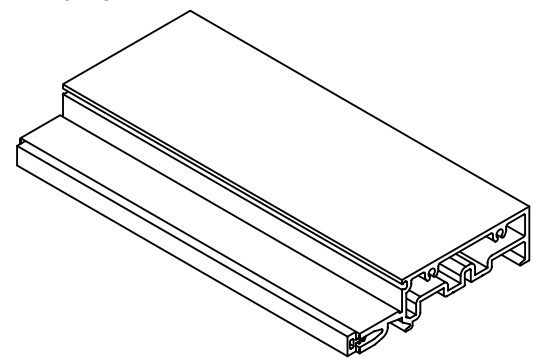


ASSEMBLE VERTICALS TO HORIZONTALS USING 128-509 SCREWS #12 x 1" HEX WASHER HEAD TYPE AB

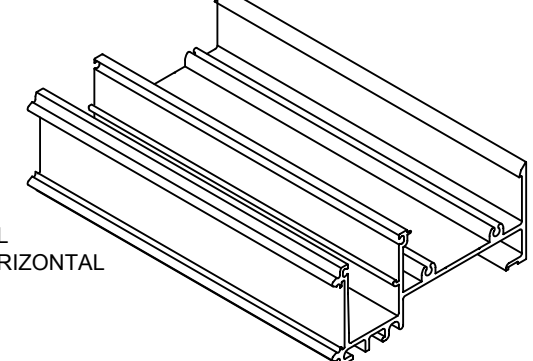
FRAME IS SHOWN IN UPRIGHT POSITION BUT MAY BE ASSEMBLED IN ANY DESIRABLE POSITION.



HEAD HORIZONTAL EXTERIOR GLAZED



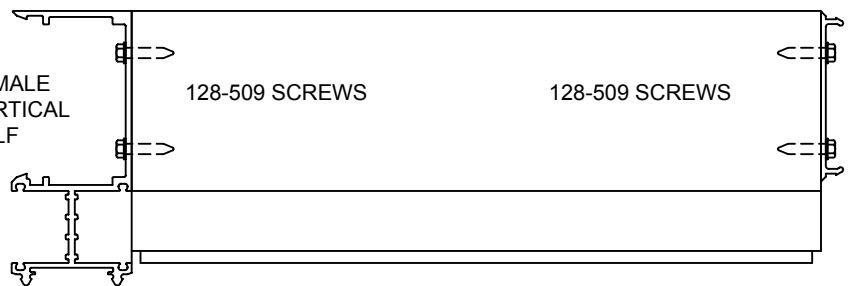
INTERMEDIATE HORIZONTAL EXTERIOR GLAZED



SILL HORIZONTAL

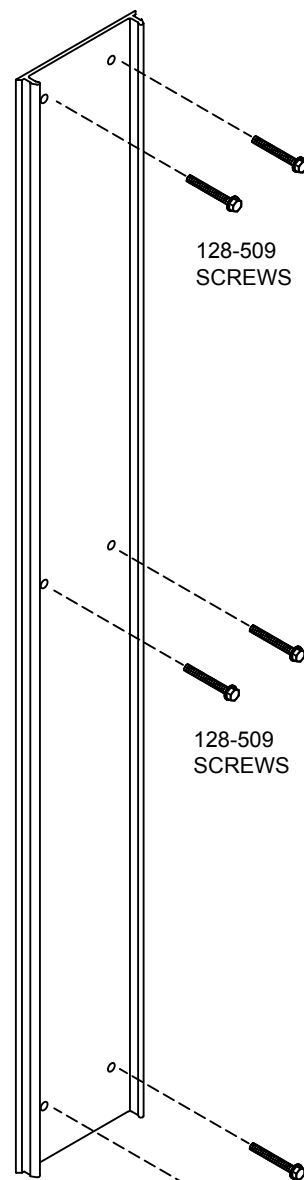
APPLY SEALANT AS SHOWN TO END EDGES OF HORIZONTAL TOOL EXCESS SEALANT AFTER ASSEMBLY

FEMALE VERTICAL HALF



MALE VERTICAL HALF

MALE VERTICAL HALF



128-509 SCREWS

128-509 SCREWS

128-509 SCREWS

MALE VERTICAL HALF

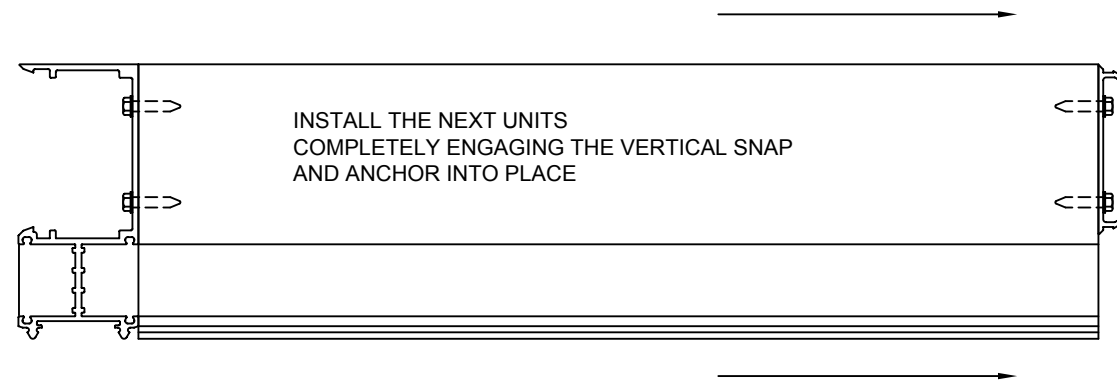
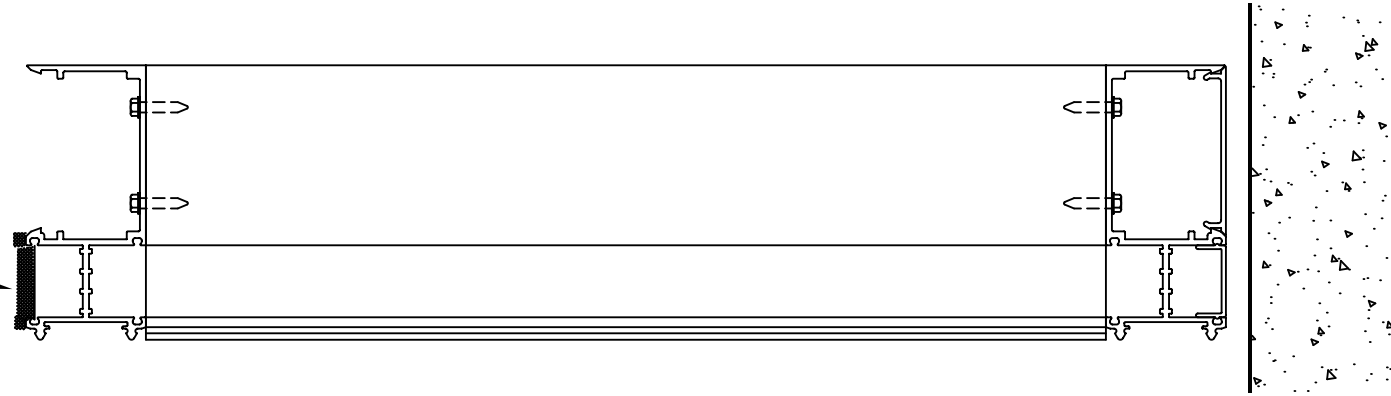
DURING UNIT INSTALLATION SHOWN ON SHEET #5 APPLY SEALANT TO HORIZONTAL EDGES AS SHOWN TOOL EXCESS SEALANT

<p>1600 SYSTEM 5 INSTALLATION TYPE "A" UNITS - VERTICAL RUNS THRU</p>	<p>PART NUMBER 166-971 4 OF 10</p>
	<p>95488-31 07/25/07</p>
	<p>DRAWING:</p>
	<p>ORDER:</p>
	<p>SHT:</p>

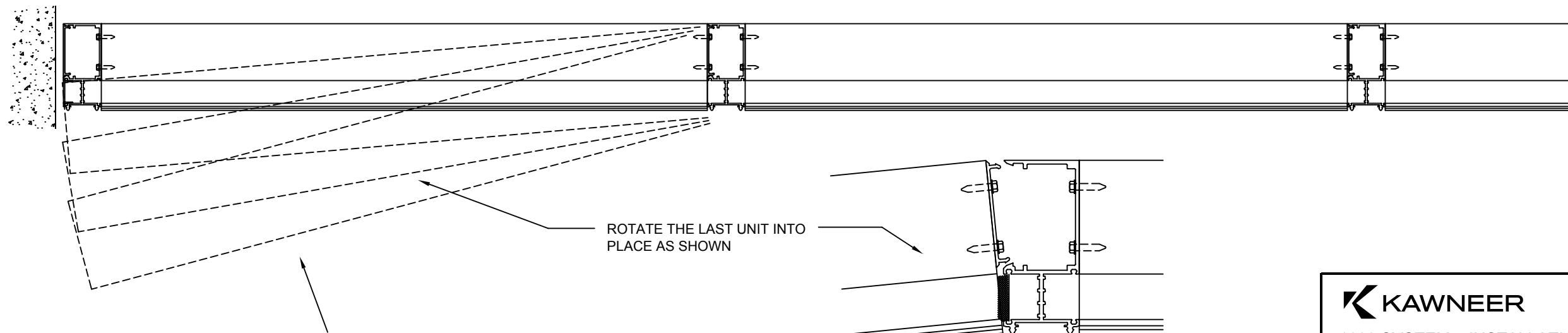
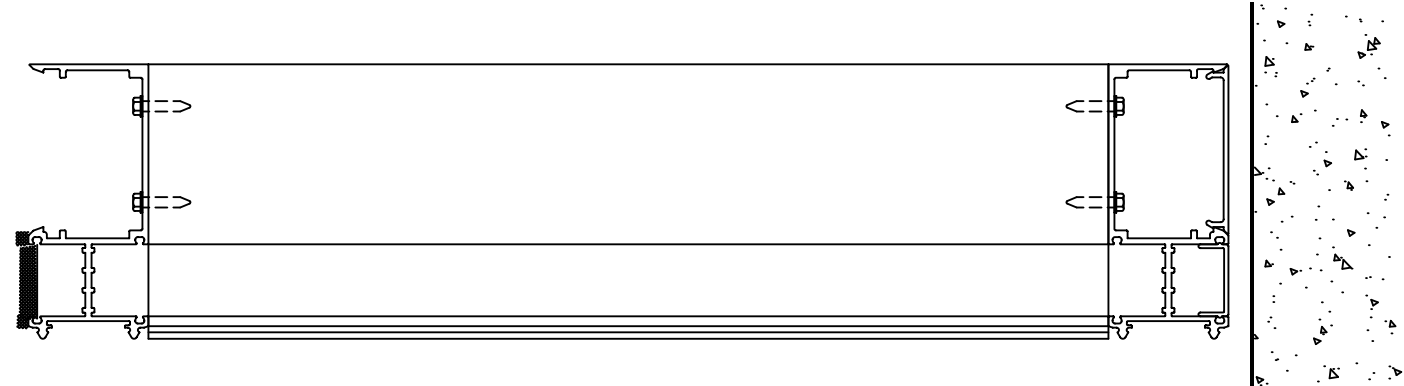
INSTALL UNITS HEAD AND SILL ANCHORING WILL VARY PER JOB - REFERENCE APPROVED SHOP DRAWINGS

POSITION FIRST UNIT INTO PLACE AND ANCHOR HEAD AND SILL WITH FASTENER SIZE AND QUANTITY REQUIRED FOR JOB CONDITIONS

APPLY SEALANT AS SHOWN ON SHEET #2 JUST PRIOR TO INSTALLING UNIT TOOL EXCESS AFTER ASSEMBLY



INSTALL THE NEXT UNITS COMPLETELY ENGAGING THE VERTICAL SNAP AND ANCHOR INTO PLACE



ROTATE THE LAST UNIT INTO PLACE AS SHOWN



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TYPE "A" UNITS - VERTICAL
RUNS THRU

PART NUMBER
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DRAWING:

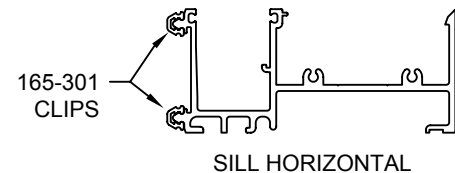
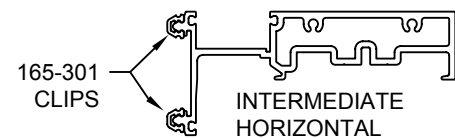
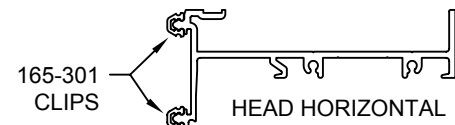
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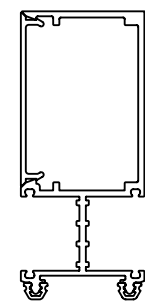
INSTALL EXTERIOR THERMAL CLIPS AND EXTERIOR COVERS

INSTALL COVERS THAT RUN THRU FIRST

INSTALL 165-301 THERMAL CLIPS AT DLO MINUS 2". CENTER PART ON DLO. RUN CONTINUOUS AROUND ELEVATION OUTSIDE PERIMETER WHERE POSSIBLE. BUTT SPliced PARTS ARE ACCEPTABLE.

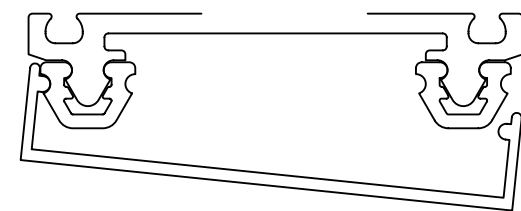
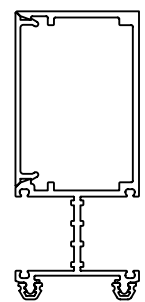


JAMB VERTICAL

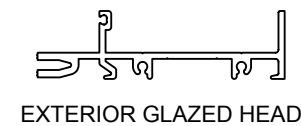


165-301 CLIPS

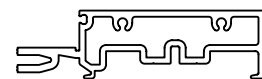
INTERMEDIATE VERTICAL



ENGAGE ONE SIDE OF COVER AND INSTALL USING WOOD BLOCKING AND MALLET

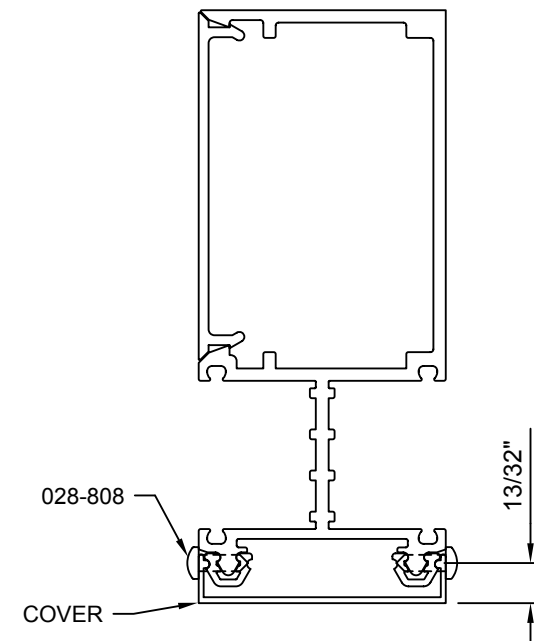


EXTERIOR GLAZED HEAD



EXTERIOR GLAZED HORIZONTAL

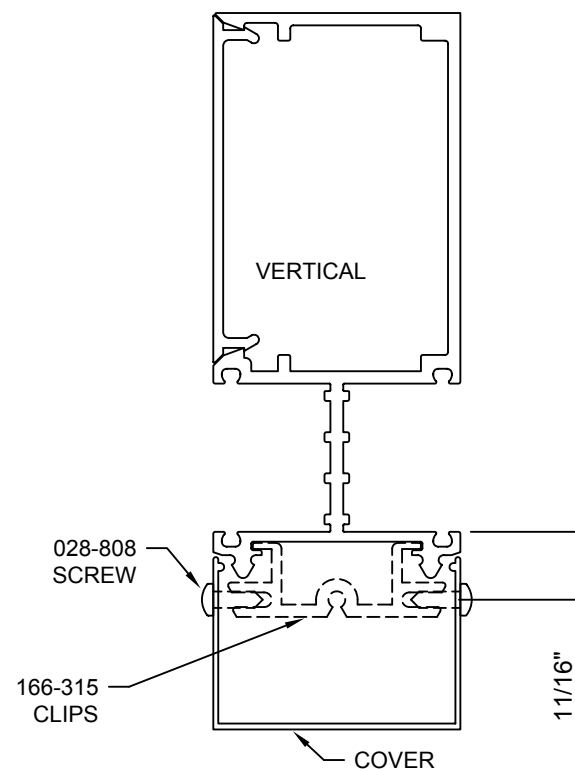
DEEP EXTERIOR COVER PINNING



TYPICAL VERTICAL COVER PINNING FOR COVERS UP TO APPROX 1 1/2" PROJECTION DRILL .152" DIA HOLE #24 DRILL AND APPLY 028-808 SCREWS #8 x 1/2" PAN HEAD TYPE A LOCATE SCREW AT A HORIZONTAL CLOSEST TO THE COVER HEIGHT CENTER

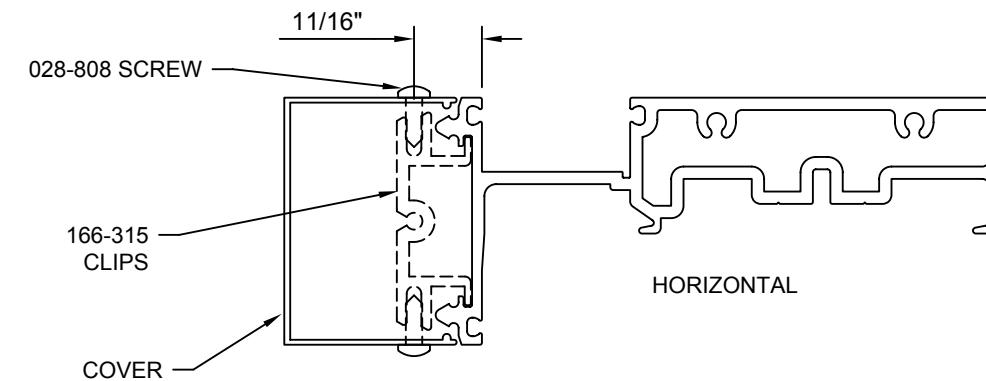
INSTALL HORIZONTAL COVERS WITH THE WEEP HOLES AT THE BOTTOM.

FOR COVERS DEEPER THAN A 1 1/2" PROJECTION UNLESS NOTED OTHERWISE



DEEP VERTICAL COVER PINNING LOCATE CLIPS AT HEAD AND SILL HORIZONTALS

CRIMP INTO PLACE AT CLIP BOTTOM DRILL .177" DIA HOLES #16 DRILL INTO COVER APPLY 028-808 SCREWS JUST SNUG SCREW INTO PLACE DO NOT OVER TIGHTEN



DEEP HORIZONTAL COVER PINNING LOCATE CLIPS AT EACH END OF HORIZONTAL CRIMP INTO PLACE LEAVING A SPACE FOR COVER EXPANSION DRILL .177" DIA HOLES #16 DRILL INTO COVER APPLY 028-808 SCREWS #8 x 1/2" PAN HEAD TYPE A JUST SNUG SCREW INTO PLACE DO NOT OVER TIGHTEN

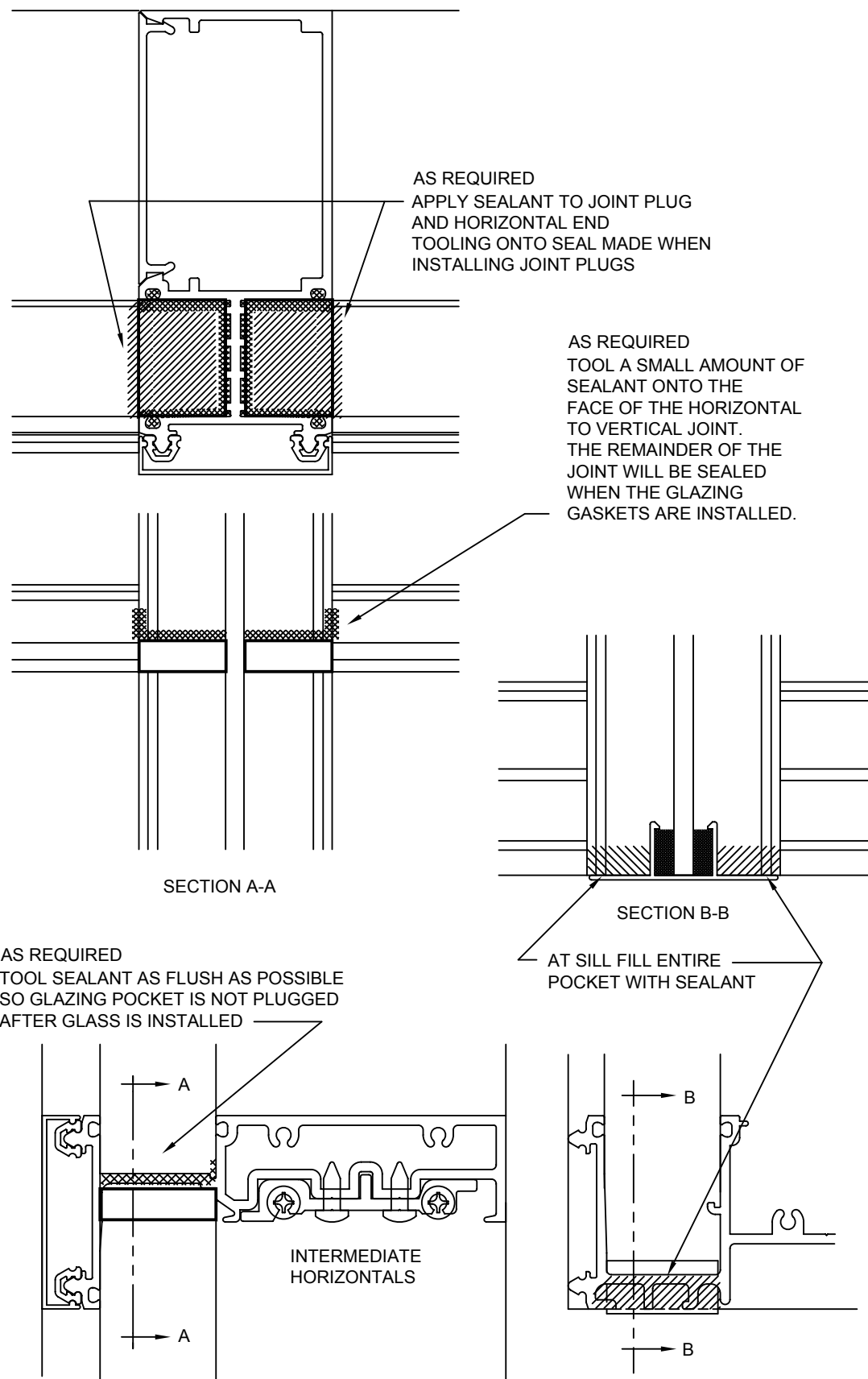


1600 SYSTEM 5 INSTALLATION
TYPE "A" UNITS - VERTICAL
RUNS THRU

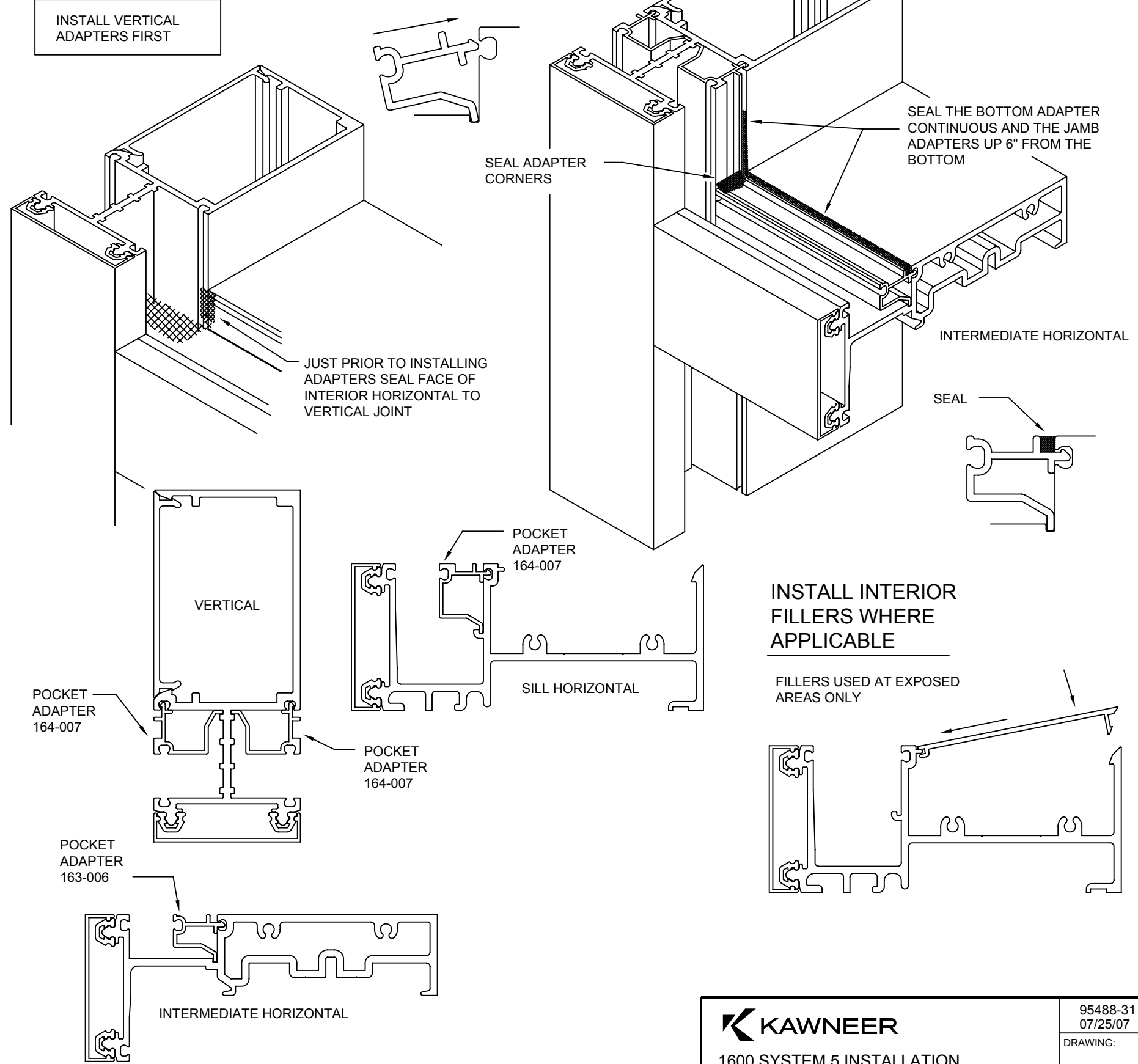
PART NUMBER
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SEAL JOINT PLUG TO HORIZONTAL



INSTALL 1/4" INFILL ADAPTERS



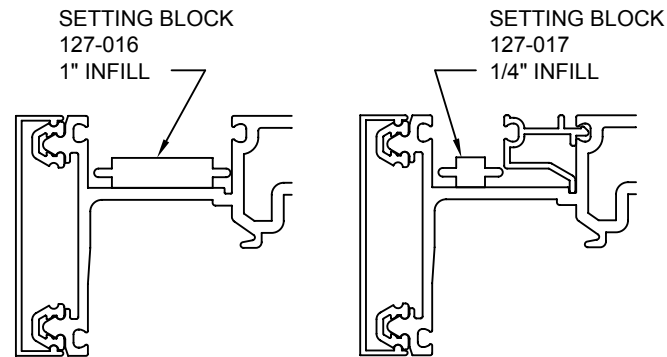
<p>KAWNEER</p> <p>1600 SYSTEM 5 INSTALLATION TYPE "A" UNITS - VERTICAL RUNS THRU</p>	<p>95488-31 07/25/07</p>
	<p>DRAWING:</p>
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	<p>SHT:</p>
<p>PART NUMBER 166-971 7 OF 10</p>	

INTERIOR GLAZING

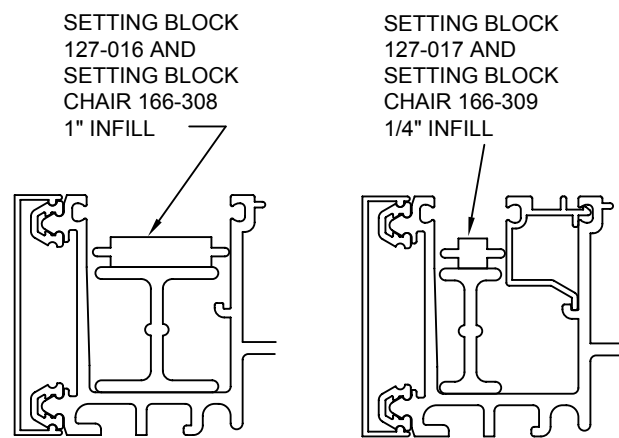
IT IS ESSENTIAL THAT ALL GUTTERS AT HORIZONTALS BE CLEANED PRIOR TO GLAZING.

THIS IS NECESSARY TO AVOID CLOGGING OF WEEP SYSTEMS AS WELL AS STAINING OF EXTERIOR METAL AND GLASS SURFACES.

INSTALL SETTING BLOCKS LOCATING PER APPROVED SHOP DRAWINGS.



INTERMEDIATE HORIZONTALS



SILL HORIZONTALS

NOTE - GASKET ASSEMBLIES ARE PREFERRED IN ORDER TO MAINTAIN THE GASKET CORNERS WHEN INSTALLING THE GLASS. IF ASSEMBLIES ARE NOT USED SEAL GASKET CORNERS AND ALLOW SEALANT TO SKIN OVER BEFORE INSTALLING THE GLASS.

INTERIOR GLAZING

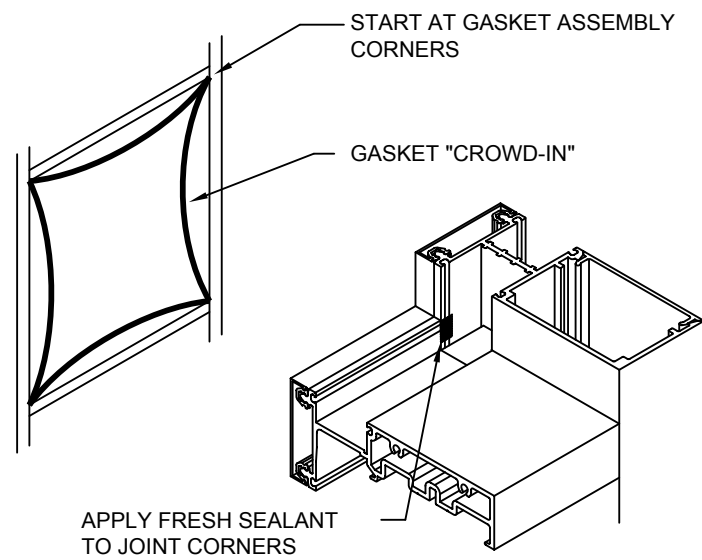
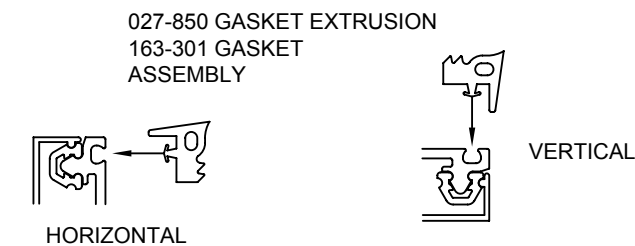
INSTALL EXTERIOR GASKET ASSEMBLIES.

GASKET ASSEMBLIES SHOULD BE INSTALLED JUST PRIOR TO GLASS TO AVOID GASKET CONTAMINATION BY JOB SITE DEBRIS.

IN TEMPERATURES COLDER THAN 50 DEGREES F, ARRANGEMENTS SHOULD BE MADE TO KEEP THE GASKETS WARM UNTIL INSTALLATION OF GASKETS AND GLASS. THIS WILL PREVENT EXCESSIVE GLAZING PRESSURE ON THE GLASS EDGE DUE TO COLD, STIFF GASKETS.

GASKETS CAN BECOME DEFORMED DURING STORAGE IN CARTONS. REMOVE GASKETS FROM CARTONS SEVERAL HOURS PRIOR TO USE AND ALLOW TO LAY FLAT OR HANG OVER RACK. TEMPERATURES SHOULD BE AT LEAST 50 DEGREES F.

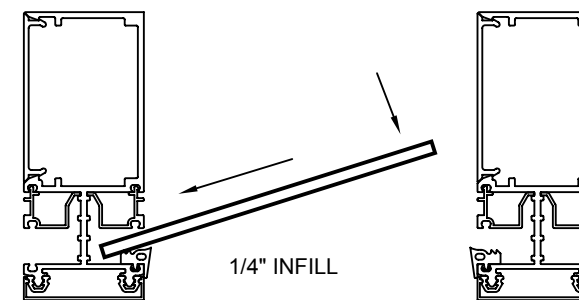
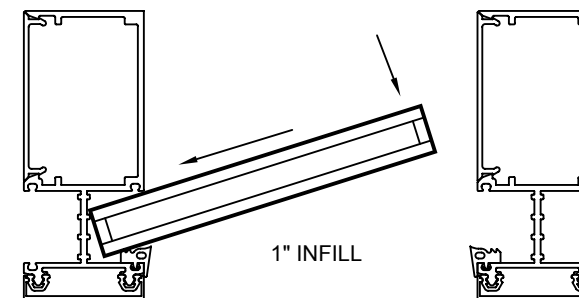
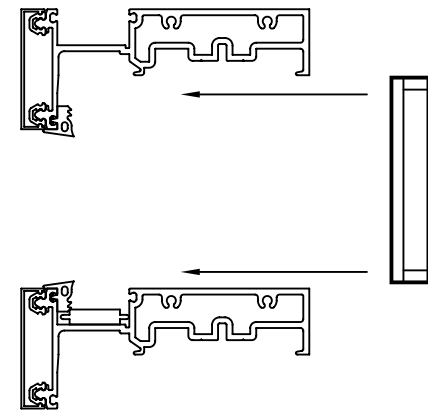
INSTALL GASKET ASSEMBLIES BY STARTING AT THE CORNERS AND WORKING TOWARDS THE CENTER, MAKING SURE THE CORNERS ARE SQUARE. GASKET ASSEMBLIES WILL BE SLIGHTLY LARGE TO ALLOW FOR SOME CROWD-IN. DO NOT STRETCH, CUT OR SPLICE GASKETS.



INSTALL COMPLETE GASKET ASSEMBLY THEN PULL BACK CORNERS AND APPLY SEALANT JUST PRIOR TO INSTALLING GLASS

INTERIOR GLAZING

INSTALL GLASS BY LIFTING ABOVE SILL AND INSERTING INTO VERTICAL POCKET AS SHOWN.



INTERIOR GLAZING

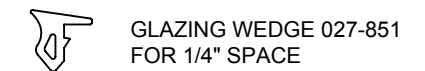
AFTER THE GLASS IS LOWERED ONTO THE SETTING BLOCKS AND CENTERED HORIZONTALLY, LIFT THE GLASS SLIGHTLY AND PUSH FORWARD INTO THE EXTERIOR GASKETS.

REFERENCE - FGMA GLAZING MANUAL IN THE "GLASS SETTING" SECTION.

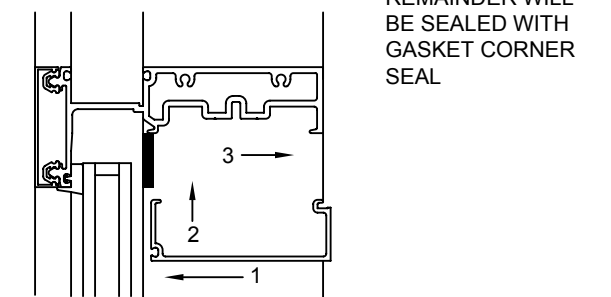
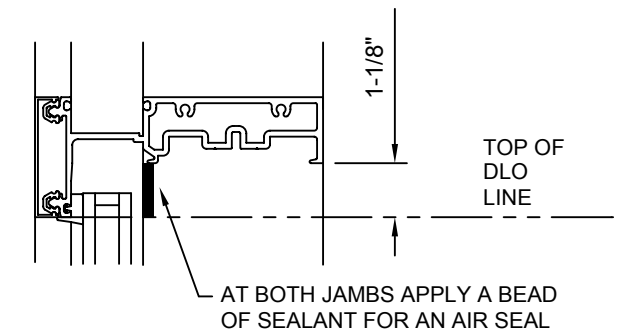
THE ABOVE WILL KEEP THE GLASS EDGE FROM DIGGING AND DEFORMING THE SETTING BLOCK. INSTALL A SHORT PIECE OF GLAZING WEDGE AT THE SETTING BLOCKS AS A TEMPORARY.

INSTALL A SHORT PIECE OF GLAZING WEDGE AT THE TWO VERTICALS AS A TEMPORARY. LOCATE TOWARDS THE TOP OF THE LITE.

LUBRICATE WITH WATER AS REQUIRED



INSTALL TOP INTERIOR HORIZONTAL STOPS



AFTER THE STOP IS INSTALLED USE GLAZING WEDGE TEMPORARIES.



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TYPE "A" UNITS - VERTICAL
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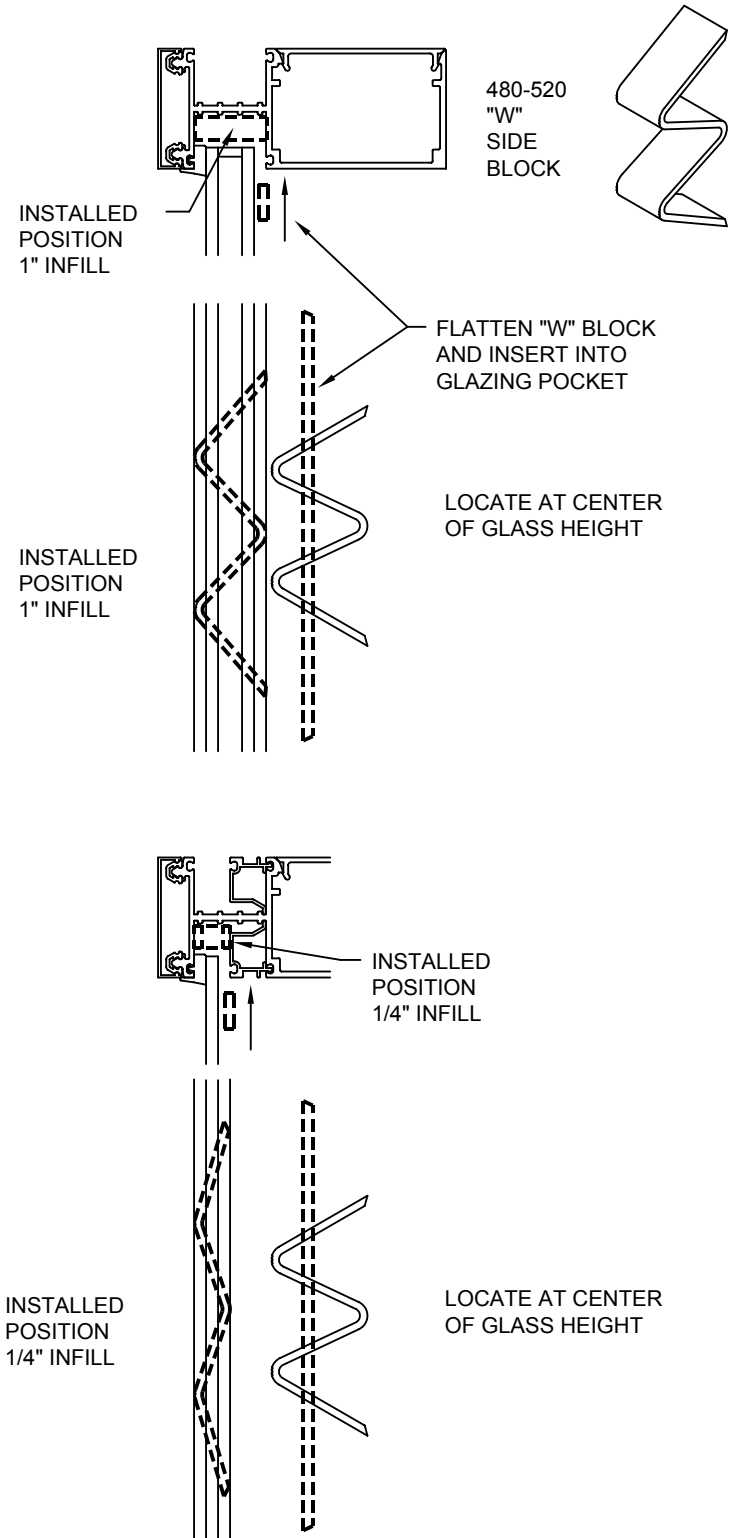
DRAWING:

ORDER:

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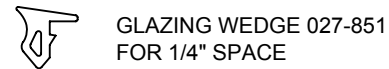
INTERIOR GLAZING

INSTALL "W" SIDE BLOCKS INTO BOTH VERTICAL POCKETS.



INTERIOR GLAZING

INSTALL GLAZING WEDGE GASKET

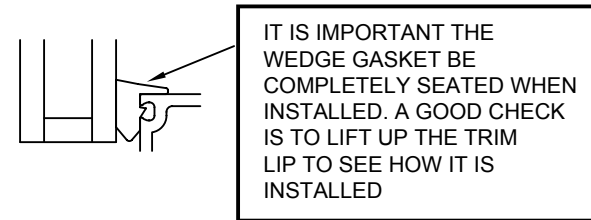


IN TEMPERATURES COLDER THAN 50 DEGREES F. ARRANGEMENTS SHOULD BE MADE TO KEEP THE GASKETS WARM UNTIL INSTALLATION OF GASKETS AND GLASS. THIS WILL PREVENT EXCESSIVE GLAZING PRESSURE ON THE GLASS EDGE DUE TO COLD, STIFF GASKETS.

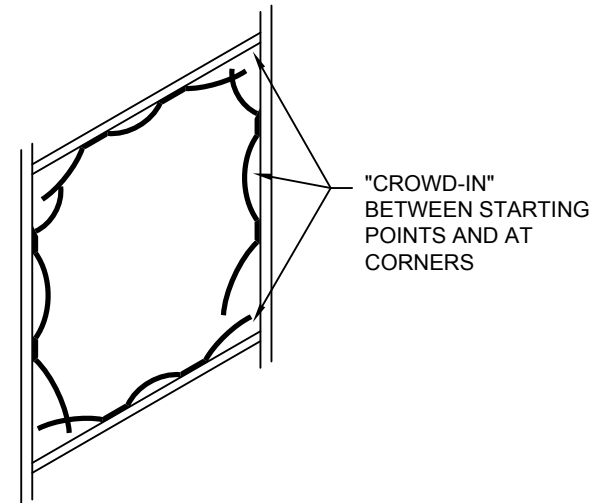
GASKETS CAN BECOME DEFORMED DURING STORAGE IN CARTONS. REMOVE GASKETS FROM CARTONS SEVERAL HOURS PRIOR TO USE AND ALLOW TO LAY FLAT OR HANG OVER RACK. TEMPERATURES SHOULD BE AT LEAST 50 DEGREES F.

APPLY WEDGE GASKETS IN THE SHALLOW POCKET SIDES FIRST TO REDUCE ANY POSSIBLE ROTATION OF THE APPLIED PRESSURE PLATE.

WHEN STARTING THE WEDGE GASKET THE BEST PLACE TO START IS NEAR A TEMPORARY. CUT THE WEDGE 1/8" TO 1/4" PER FOOT LONG FOR GASKET "CROWD-IN". THE "CROWD-IN" TO BE BETWEEN STARTING POINTS AND AT CORNERS. DO NOT STRETCH TO FIT. CORNERS GET SEALED SEE DETAIL BELOW.

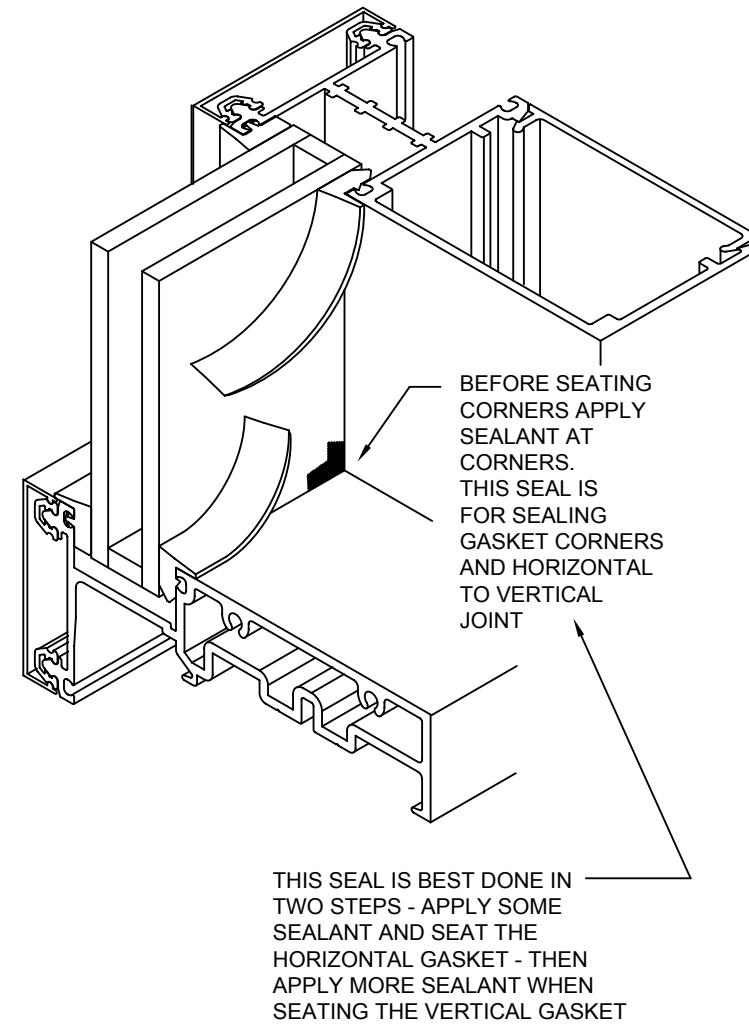


WATER MAY BE USED TO LUBRICATE WEDGE GASKET. BEFORE SEALING CORNERS WIPE GASKET AND CORNER WITH A CLEAN RAG. BEST METHOD IS TO LEAVE CORNERS OUT FOR SOME TIME TO LET WATER EVAPORATE AND WIPE CLEAN.



IF THE INSTALLATION OF THE WEDGE REQUIRES EXCESSIVE FORCE OR THE WEDGE DOES NOT PROVIDE ENOUGH COMPRESSION ON THE EXTERIOR FIXED GASKET, CONTACT YOUR KAWNEER PROJECT MANAGER IMMEDIATELY.

INTERIOR GLAZING

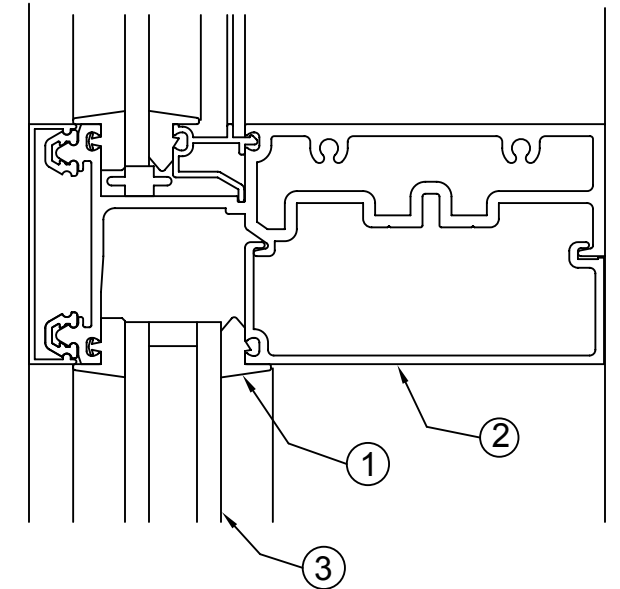


RE-GLAZING

INTERIOR GLAZED LITE

ORDER NEW

- 1 - FIXED GASKET ASSEMBLY
- 2 - WEDGE GASKET MATERIAL



REMOVE

- 1 - EXISTING WEDGE GASKET
- 2 - TOP INTERIOR STOP
- 3 - GLASS TO BE REPLACED

CLEAN METAL AND RE-GLAZE PER GLAZING INSTRUCTIONS



1600 SYSTEM 5 INSTALLATION
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RUNS THRU

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166-971 9 OF 10

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DRAWING:

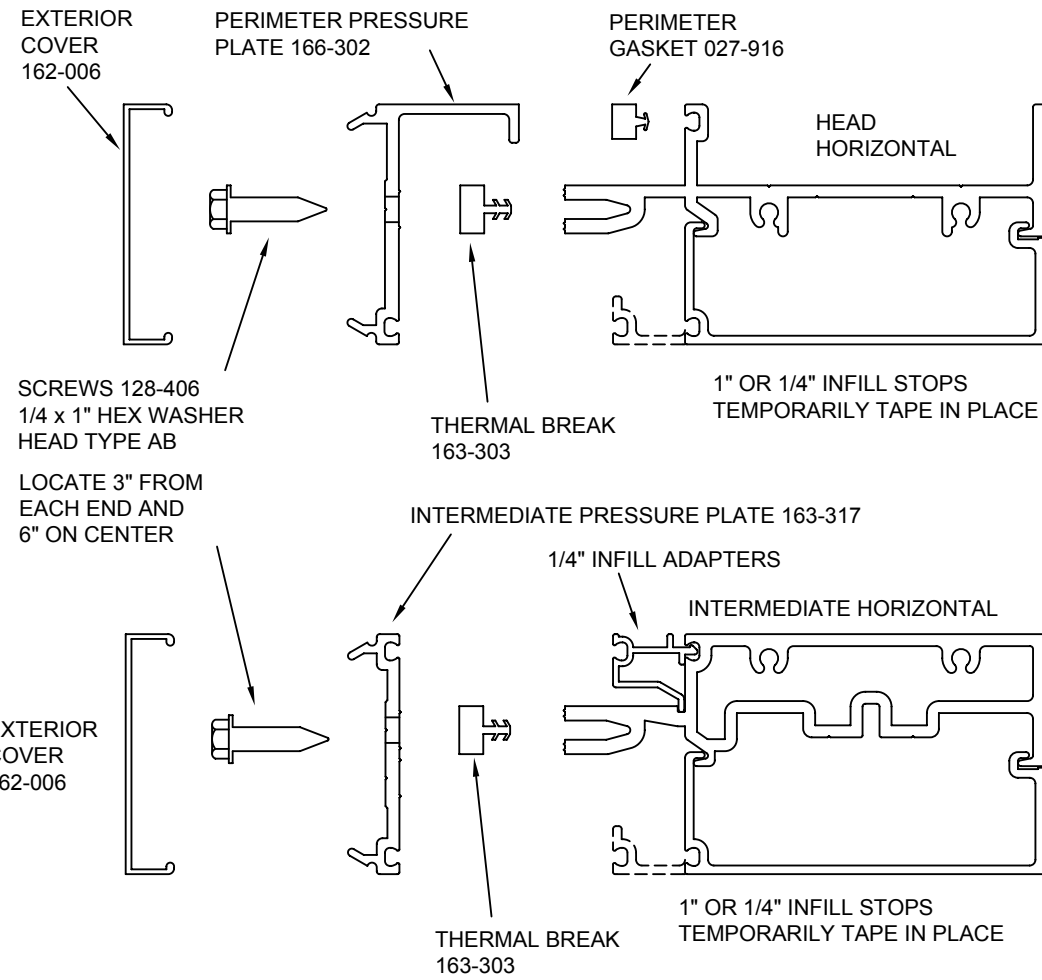
ORDER:

SHT:

EXTERIOR GLAZING

EXTERIOR GLAZED HEAD AND INTERMEDIATE HORIZONTAL DETAILS

SILL DETAILS THE SAME AS INTERIOR GLAZING



INSTALL SETTING BLOCKS SAME AS SHOWN AT INTERIOR GLAZING

INSTALL INTERIOR FIXED GASKETS SAME AS EXTERIOR GASKETS SHOWN AT INTERIOR GLAZING

INSTALL GLASS AS SHOWN ON THIS SHEET

INSTALL SIDE BLOCKS FROM THE EXTERIOR SAME AS AT INTERIOR GLAZING

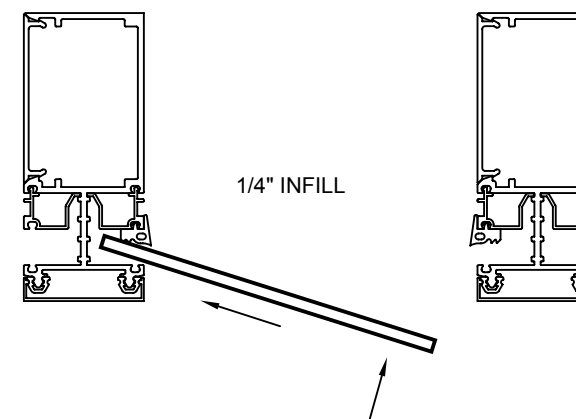
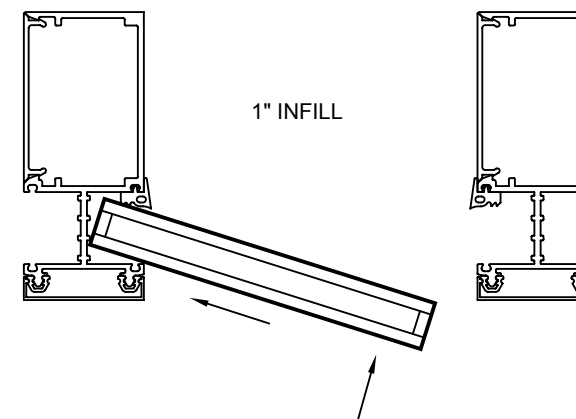
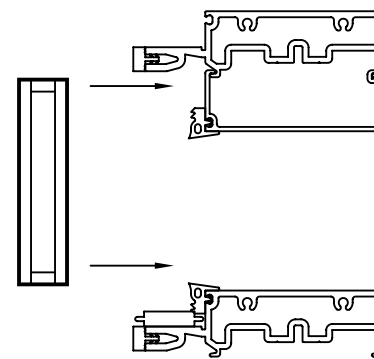
INSTALL HORIZONTAL PRESSURE PLATES - TORQUE SCREWS TO 50 INCH POUNDS
- WITH WEEPS TOWARDS TOP OF HORIZONTAL

SEAL ALL EXTERIOR PRESSURE PLATE JOINTS

INSTALL EXTERIOR COVERS - INSTALL HORIZONTAL COVERS WITH THE WEEP HOLES DOWN

INSTALL EXTERIOR WEDGE GASKET SAME AS AT INTERIOR GLAZING

INSTALL GLASS BY LIFTING ABOVE SILL AND INSERTING INTO VERTICAL POCKET AS SHOWN.



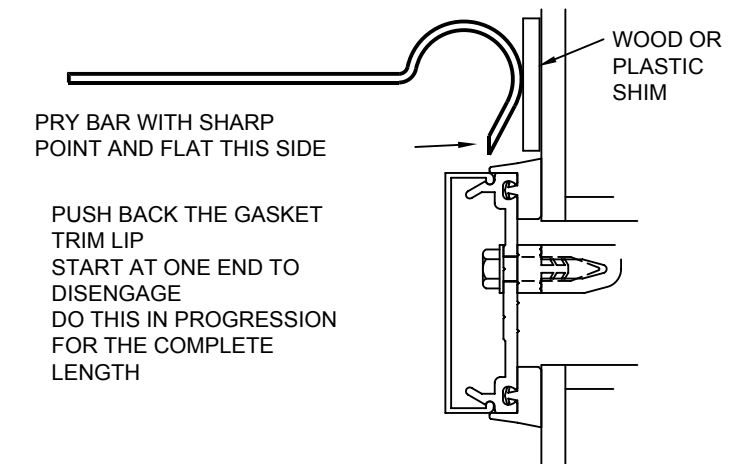
RE-GLAZING

EXTERIOR GLAZED LITES

ORDER NEW

- 1 - FIXED GASKET ASSEMBLY OR MATERIAL
- 2 - WEDGE GASKET MATERIAL AND SILL
- 4 - NEW EXTERIOR COVER IF EXISTING COVER CAN NOT BE SAVED

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



PUSH BACK THE GASKET TRIM LIP START AT ONE END TO DISENGAGE DO THIS IN PROGRESSION FOR THE COMPLETE LENGTH

NEXT REMOVE PRESSURE PLATE, GASKETS AND GLASS.

CLEAN METAL AND RE-GLAZE PER EXTERIOR GLAZING INSTRUCTIONS



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DRAWING:

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