

GENERAL NOTES AND SPECIFICATIONS:

1. SERIES ZS-2750 PROJECT OUT ALUMINUM WINDOW SYSTEM, SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2018 EDITION OF THE INTERNATIONAL BUILDING CODE, (I.B.C) AND INTERNATIONAL RESIDENTIAL CODE, (I.R.C).

DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1609 OF THE INTERNATIONAL BUILDING CODE, FOR A BASIC WIND SPEED AS REQUIRED BY THE JURISDICTION WHERE THIS PRODUCT WILL BE INSTALLED, AND FOR A DIRECTIONALITY FACTOR $K_d=0.85$, IN ACCORDANCE WITH ASCE 7-16 STANDARD, AND SHALL NOT EXCEED THE DESIGN PRESSURE RATING INDICATED ON NOTE 2.

IN ORDER TO VERIFY THE ABOVE CONDITION, ULTIMATE DESIGN WIND LOADS DETERMINED PER ASCE 7-16 SHALL BE FIRST REDUCED TO A.S.D. DESIGN WIND LOADS BY MULTIPLYING THEM BY 0.6 IN ORDER TO COMPARE THESE W/ MAX. (A.S.D) DESIGN PRESSURE RATINGS INDICATED ON THIS SHEET.

IN ORDER TO VERIFY THAT ANCHORS ON THIS P.E.D., AS TESTED, WERE NOT OVERSTRESSED, A 33% INCREASE IN ALLOWABLE STRESS FOR WIND LOADS WAS NOT USED IN THEIR ANALYSIS. FASTENERS SPACING TO WOOD HAS BEEN DETERMINED IN ACCORDANCE WITH N.D.S. 2018.

THIS PRODUCT'S ADEQUACY FOR IMPACT AND WIND RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTIONS 1609.2 OF THE INTERNATIONAL BUILDING CODE, AS PER FLORIDA BUILDING CODE HIGH VELOCITY HURRICANE ZONE PROTOCOLS TAS-201, TAS-202, TAS-203, PER ARCHITECTURAL TESTING LAB REPORT #94443.02-801-18 AND AS PER SUBMITTED STRUCTURAL CALCULATIONS, PERFORMED AS PER SECTION 1604 OF THE ABOVE MENTIONED CODE. THIS PRODUCT IS ALSO APPROVED FOR WATER AND AIR INFILTRATION.

2. **MAXIMUM A.S.D. DESIGN PRESSURE RATING FOR THIS PRODUCT SHALL BE +60 psf, -60 psf.**

3. ALL ALUMINUM EXTRUSIONS SHALL BE ALUMINUM ASSOCIATION 6063-T6 ALLOY AND TEMPER (UNLESS OTHERWISE NOTED), PER ASTM B221, WITH $F_y = 25.0$ ksi MINIMUM. THE THICKNESS OF ALL EXTRUSIONS SHALL BE AS SHOWN ON THIS DRAWING.

4. ALL ALUMINUM IN CONTACT WITH DISSIMILAR MATERIALS SHALL COMPLY WITH SECTION III-6 OF THE 2015 ALUMINUM DESIGN MANUAL.

5. ALL SCREWS AND BOLTS INSTALLED TO BE STAINLESS STEEL 304 OR 316 AISI SERIES AND MEET ASTM A167, OR HOT DIPPED GALVANIZED (AFTER FABRICATION) CARBON STEEL AS PER ASTM A123 OR ASTM A153, OR HOT DIPPED GALVANIZED OR GALVANNEALED (PRIOR TO FABRICATION) AND MEET ASTM A653 WITH 50 ksi YIELD STRENGTH AND 90 ksi TENSILE STRENGTH.

6. ANCHORS NOTES, ANCHOR'S TYPE TO SUBSTRATE SHALL BE AS FOLLOWS:

(a) TO EXISTING 1/8" MIN. THICK METAL, ALUMINUM (6063-T6 ALLOY) OR STEEL ($F_y \geq 33$ KSI):

- #12-14x1" HWH DRIL-FLEX® STRUCTURAL SELF-DRILLING FASTENER AND #12x1" PHILLIPS FLAT HEAD HD A POINT FASTENER AT HINGE LOCATION W/ MIN. 1" EDGE DISTANCE, AS MANUFACTURED BY ELCO CONSTRUCTION PRODUCTS. MIN. EMBEDMENT SHALL BE 3 THREADS PASSED (BEYOND) THE EXISTING STRUCTURE THICKNESS.

7. ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE FASTENER MANUFACTURER.

8. PRODUCT INSTALLATION SHALL ONLY BE PERFORMED INTO EXISTING STRUCTURE CONSISTING OF 1/8" MIN. THICK ALUMINUM OR STEEL FRAME STRUCTURE AND SHALL COMPLY WITH SECTION 2406 OF THE INTERNATIONAL BUILDING CODE AND WITH SPECS INDICATED IN THIS DRAWING PLUS ANY BUILDING AND ZONING REGULATIONS PROVIDED BY THE JURISDICTION WHERE PERMIT IS APPLIED TO.

9. PROVIDE 1/8" MAX. BEARING SHIM SPACE (TYP.). WHEN ALLOW BY THIS DRAWING.

10. THIS PRODUCT SYSTEM WILL NOT REQUIRE A HURRICANE PROTECTION DEVICE.

11. PROVIDE DOW CORNING 795 & 995 SEALANT TYPICAL AT ALL FRAME AND GLASS JOINTS PER BILL OF MATERIALS, SHEET 3 OF 4.

12. REMAINING COMPONENTS FOR THIS PRODUCT SHALL BE AS INDICATED ON BILL OF MATERIALS, SHEET 3 OF THIS DRAWING.

13. PRODUCT MANUFACTURE'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION AT PRODUCT IN ACCORDANCE WITH TEXAS DEPARTMENT OF INSURANCE REQUIREMENTS. ONE LABEL SHALL BE PLACED FOR EVERY OPENING.

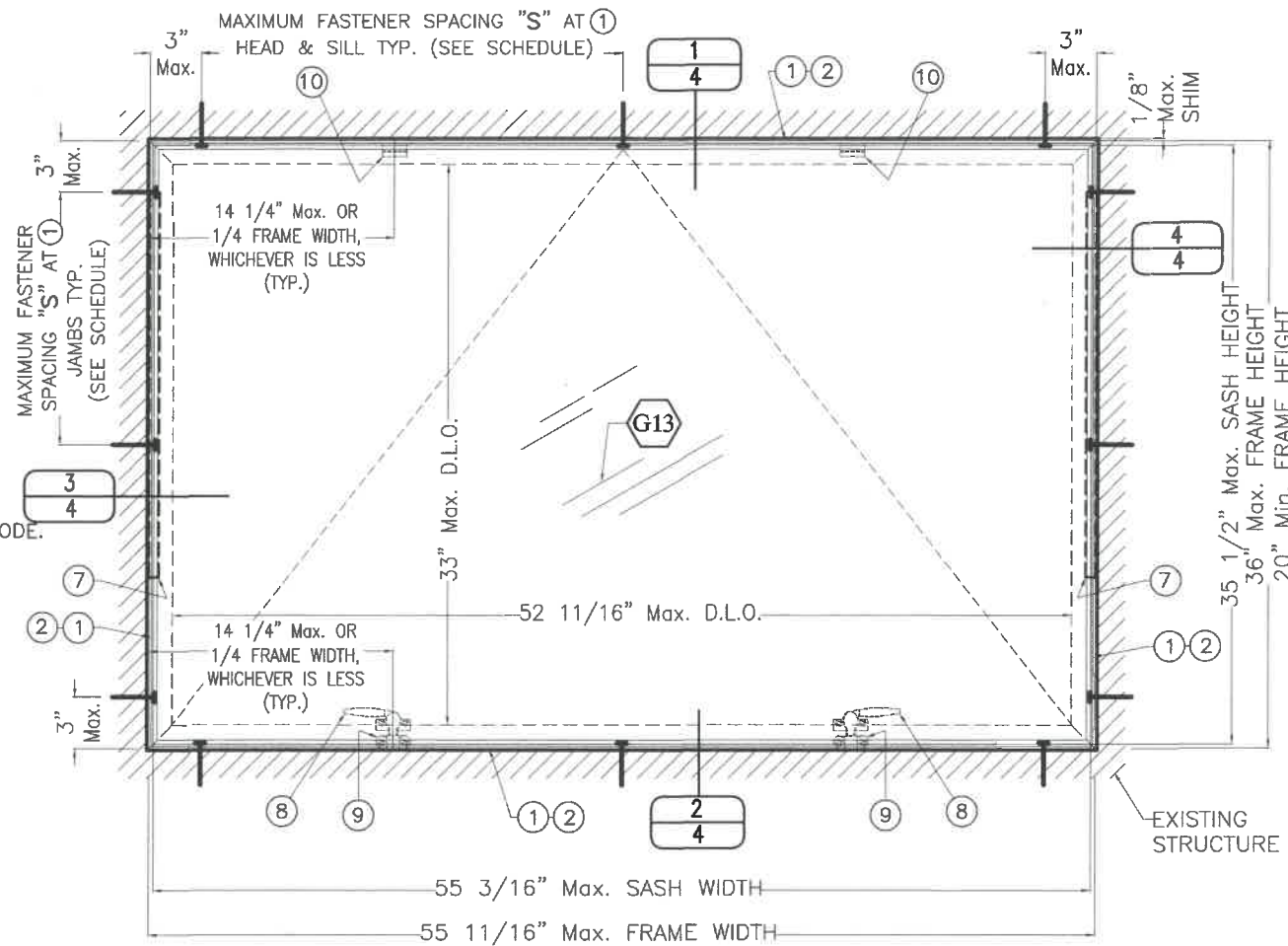
14. (a) THIS P.E.D. PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT; i.e. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.E.D.

(b) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT, BASED ON THIS P.E.D., PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.

(c) THIS P.E.D. WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.

(d) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D.

(e) ORIGINAL P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.



**ZS-2750 PROJECT OUT ALUMINUM WINDOW SYSTEM
TYPICAL EXTERIOR ELEVATION**

SCALE : 3/32" = 1"

MAXIMUM FASTENERS SPACING "S" SCHEDULE		
LOCATION	MAX. A.S.D DESIGN PRESSURE RATING (psf)	1/8" MIN. THICK METAL, ALUMINUM (6063-T6 ALLOY) OR STEEL ($F_y \geq 33$ KSI)
		SELF DRILLING FASTENERS (SEE NOTE #6 (a))
JAMBS	$\leq \pm 48.0$	15" o.c.
	$\leq \pm 55.0$	15" o.c.
	$\leq \pm 60.0$	14" o.c.
HEAD & SILL	$\leq \pm 30.0$	24" o.c.
	$\leq \pm 35.0$	24" o.c.
	$\leq \pm 42.0$	20" o.c.
	$\leq \pm 60.0$	14" o.c.

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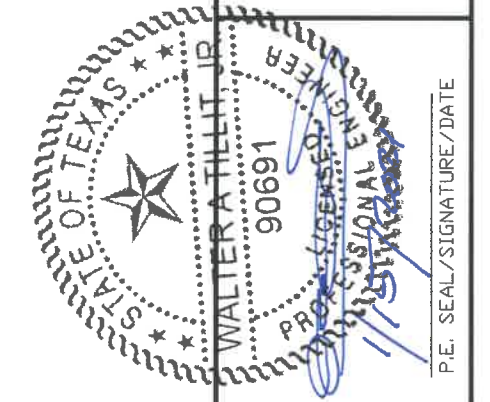
M.P. DRAWN BY: 8/4/2020 DATE: 20-236 DRAWING No. SHEET 1 OF 4

SERIES ZS-2750 PROJECT OUT ALUMINUM WINDOW SYSTEM LARGE MISSILE IMPACT RESISTANT

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1	NOTE 6 (a)/1	1/15/2021	3		
2			4		

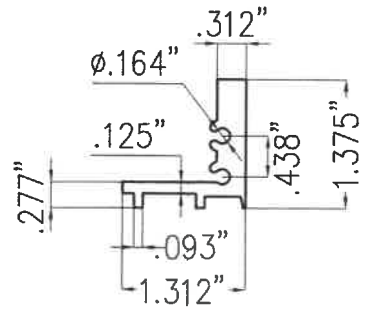
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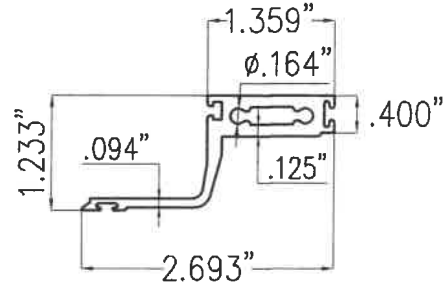
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ZS-2750 PROJECT OUT ALUMINUM WINDOW SYSTEM COMPONENTS

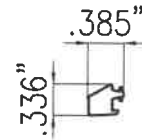
SCALE : 1/2" = 1"



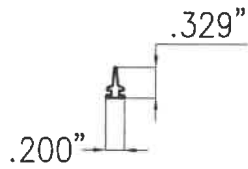
① **WINDOW FRAME**
ZS-8



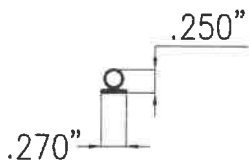
② **WINDOW SASH**
ZS-22



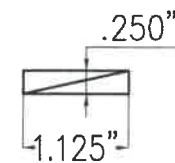
③ **INTERIOR GLAZING GASKET**
GP-132 - 861132



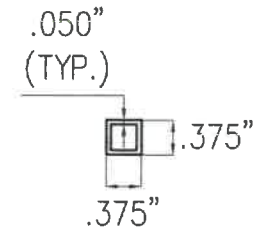
④ **GASKET**
ZS-9 - 4304



⑤ **BULB GASKET**
CW-998 - 861201



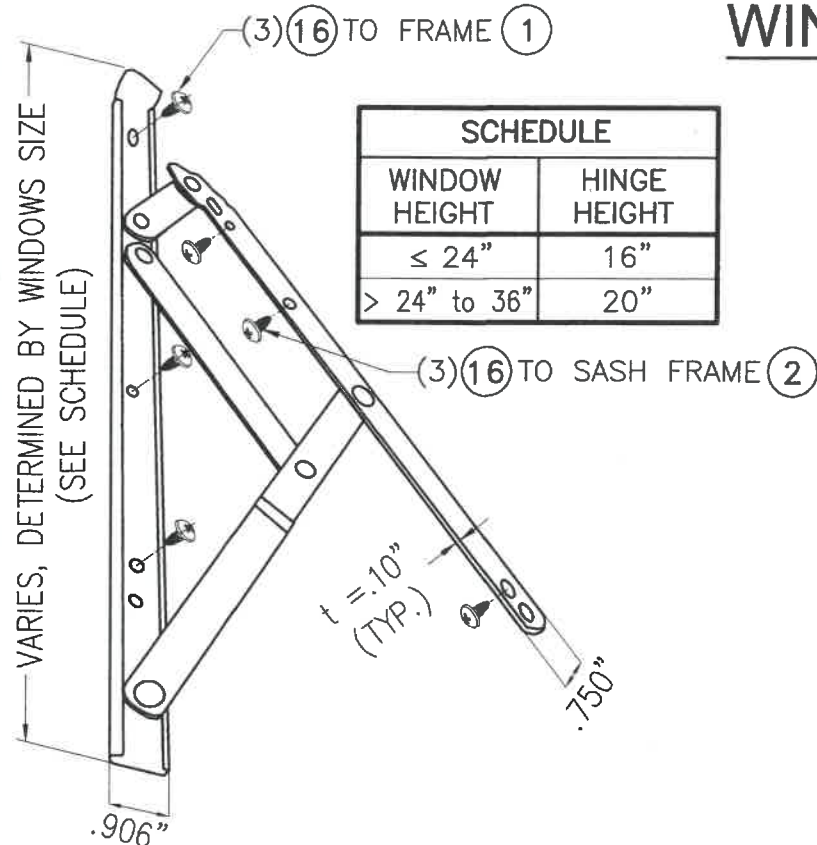
⑥ **SETTING BLOCK**
CW-1245
420-544



⑮ **BOX ALUMINUM SPACER**

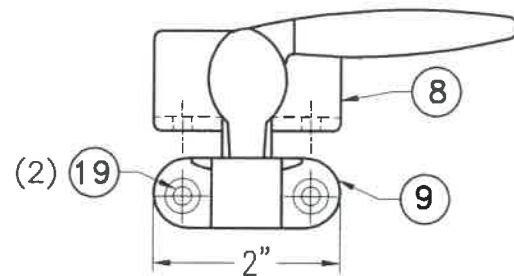
WINDOW HARDWARE COMPONENTS

NOT TO SCALE

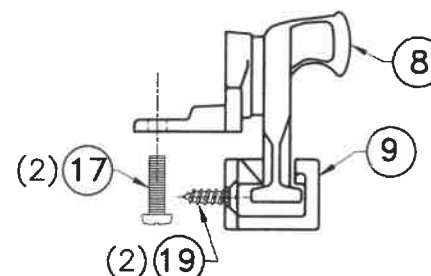


⑦ **4-BAR HINGE**
852-008 AMC 2000 Series

SCHEDULE	
WINDOW HEIGHT	HINGE HEIGHT
≤ 24"	16"
> 24" to 36"	20"

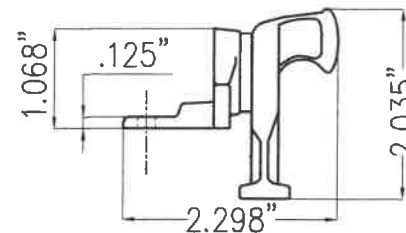


FRONT VIEW

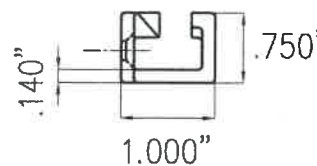


LEFT SIDE VIEW

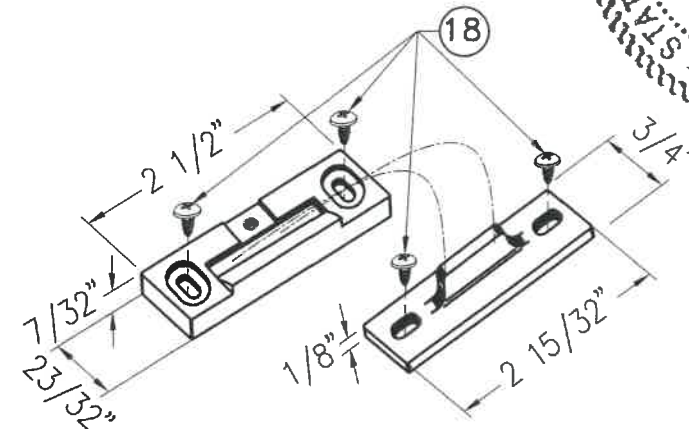
LOCKING CAM HANDLE & KEEPER ASSEMBLY



⑧ **LOCKING CAM HANDLE**
166-102
034130 LEFT HANDED CAM HANDLE
019047 RIGHT HANDED CAM HANDLE



⑨ **KEEPER**
208-043
019048



⑩ **SASH SNUBBERS**
AMC616 & AMC617-127
608321

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1	NOTE 6 (G)/1	1/19/2021	3		
2			4		



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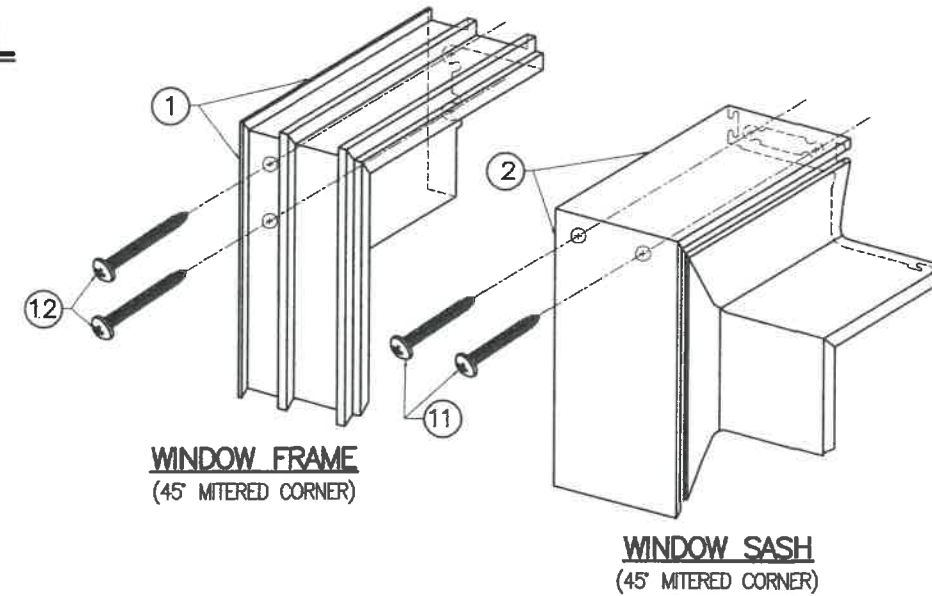
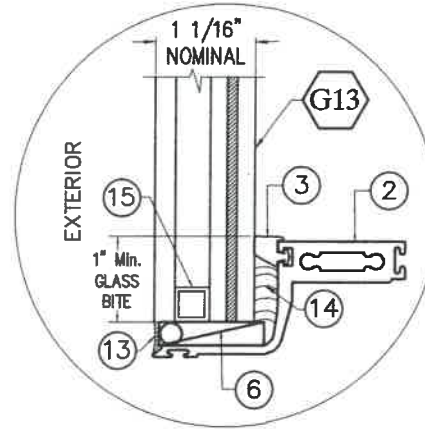
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TYPICAL GLAZING DETAIL

GLASS SCHEDULE			
GLASS LABEL	GLASS COMPOSITION	MANUFACTURER NAME	MAXIMUM D.L.O.
G13	1 1/16" NOMINAL INSULATED GLASS CONSISTING OF 1/4" TEMPER GLASS AT EXTERIOR - 3/8" AIR SPACE - (2) 3/16" H.S GLASS W/ 0.075" THICK VANCEVA™/STORMGLASS™ COMPOSITE INTERLAYER	EASTMAN CHEMICAL COMPANY (MA)/ OLDCASTLE BE, INC.	52 11/16" WIDE x 33" HIGH

TYPICAL WINDOW GLASS SIZE = D.L.O. + 1"



CORNER ASSEMBLY DETAILS
(SEE NOTE 5, SHEET 1)

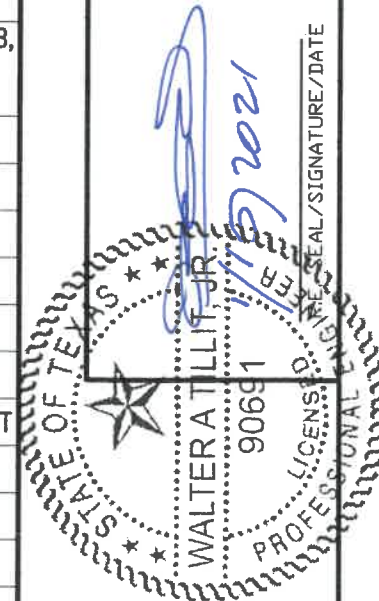
BILL OF MATERIALS

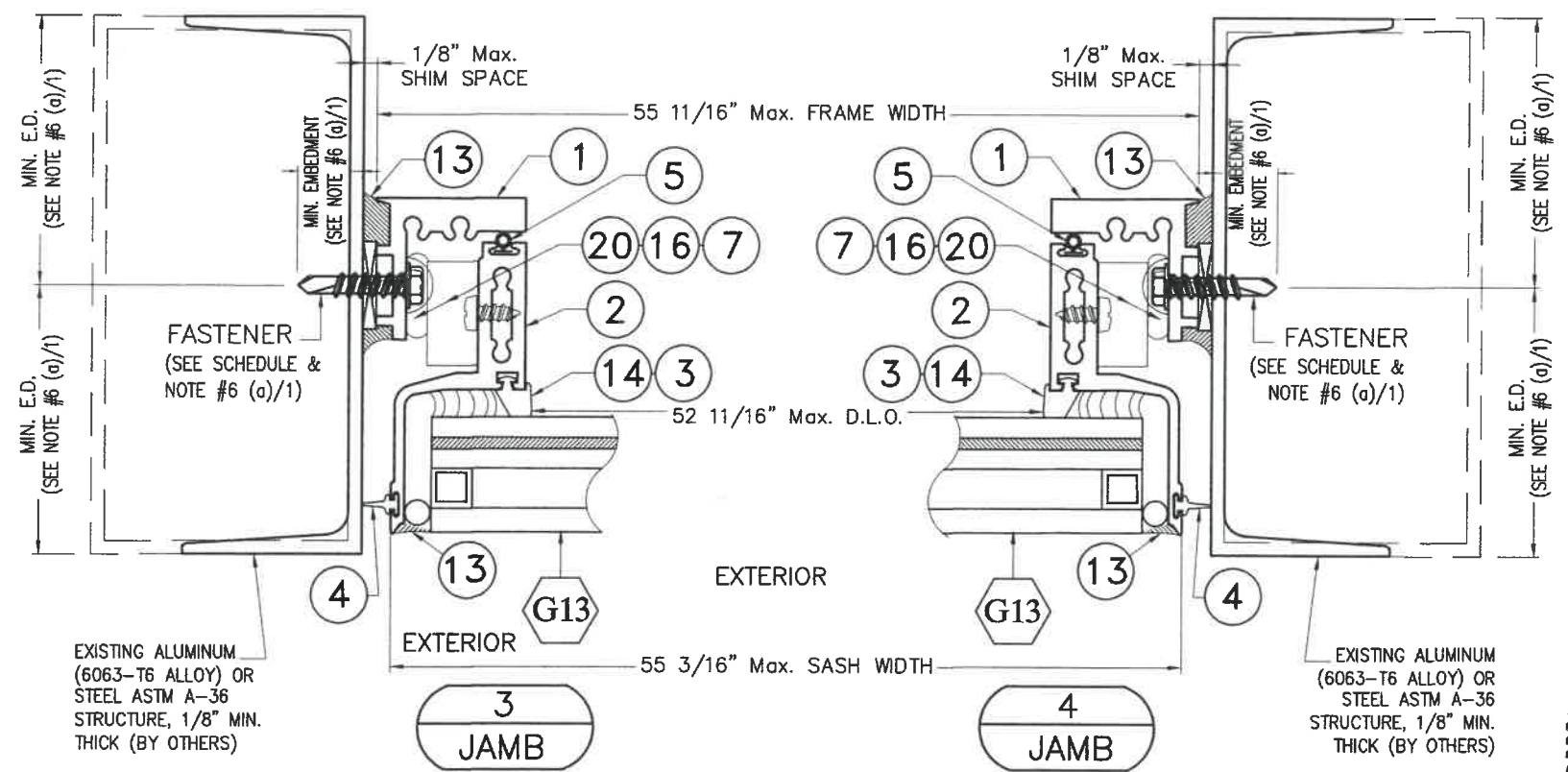
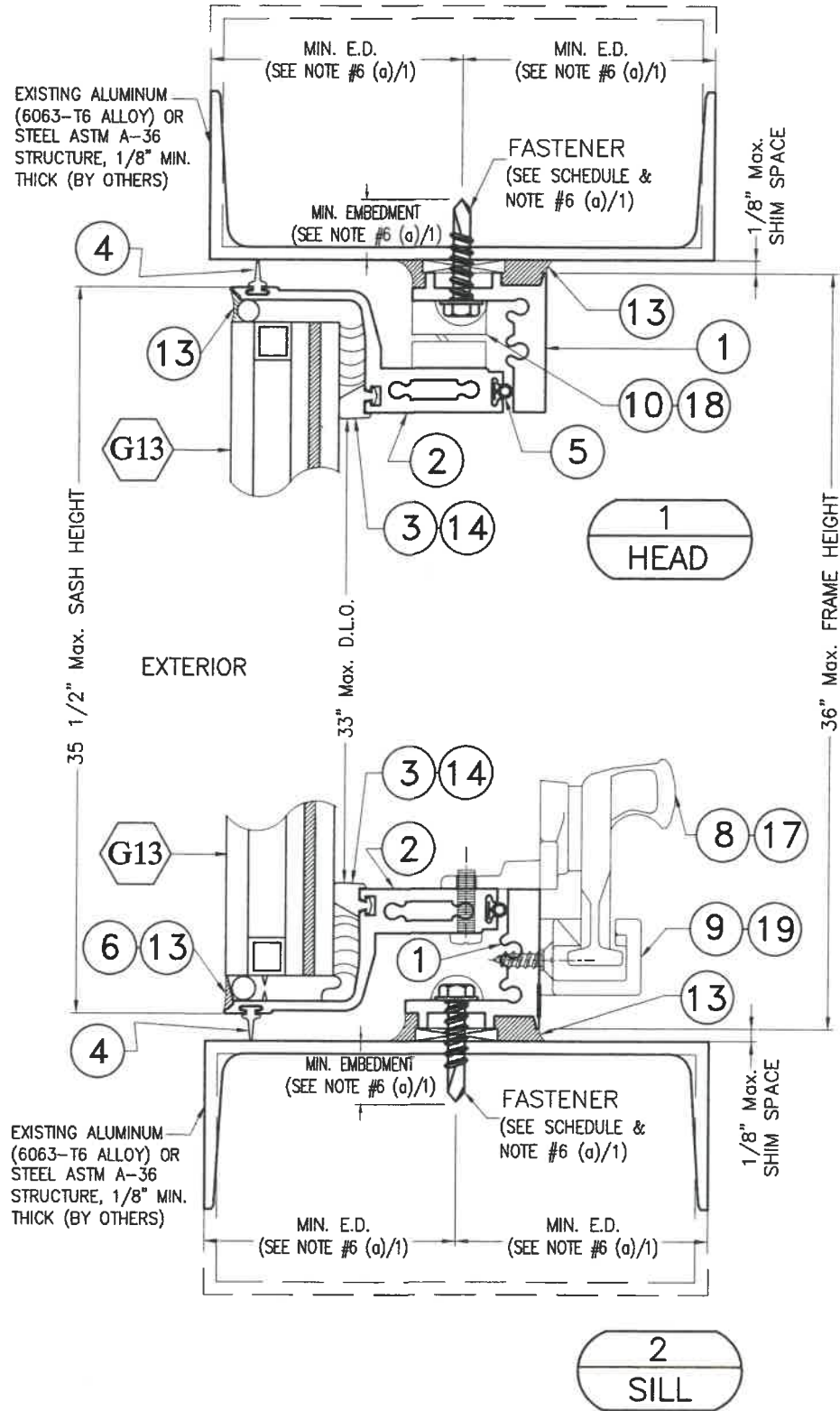
ITEM No.	PART NUMBER	DESCRIPTION	DIMENSIONS	MATERIAL	MANUFACTURER	NOTES
1.	ZS-8	WINDOW FRAME	1.312" x 1.375"	6063 - T6 ALUMINUM	OBE	
2.	ZS-22	WINDOW SASH	2.693" x 1.233"	6063 - T6 ALUMINUM	OBE	
3.	GP-132 - 861132	INTERIOR GLAZING GASKET	.385" x .336"	EPDM	TREMCO	LOCATED AT WINDOW SASH
4.	ZS-9 - 861201	GASKET	.200" x .329"	SANTOPRENE	EPG/TRELLBORG	LOCATED AT WINDOW SASH
5.	CW-998 - 861201	BULB GASKET	.270" x .250"	FOAM FILLED-TITE BULB	AMESBURY	LOCATED AT WINDOW SASH
6.	CW-1245 - 420-544	SETTING BLOCK	1.125" x .250" x 4"	SILICONE	EPG/TRELLBORG	LOCATED AT WINDOW SASH
7.	852-008 -AMC 2000	4-BAR HINGE	.10" THK. TYPICAL & HEIGHT DETERMINED BY WINDOW'S SIZE (SEE SHEET 2 OF 4)	304 STAINLESS STEEL	CALDWELL	ONE HINGE (FITS .625"Min.-.708"Max. WINDOW CAVITY) LOCATED AT EACH JAMB, CHANNEL FASTENED TO WINDOW'S FRAME & BAR FASTENED TO WINDOW'S SASH AS INDICATED ON SHEET 2 OF 4.
8.	166-102 ^{019047 RIGHT HAND} _{034130 LEFT HAND}	LOCKING CAM HANDLE	2.00" x 2.035" x 2.298" DEPTH	420 MANGANESE BRONZE	BRONZE CRAFT	AT SASH, LOCATED @ 14 1/4" o.c. Max. OR 1/4 FRAME WIDTH, WHICHEVER IS LESS
9.	208-043 -019048	KEEPER	2.00" x .750" x 1.00" DEPTH	415 ALUMINUM BRONZE	BRONZE CRAFT	AT FRAME, LOCATED @ 14 1/4" o.c. Max. OR 1/4 FRAME WIDTH, WHICHEVER IS LESS
10.	AMC616 & AMC617-127 ⁶⁰⁸³²¹	SASH SNUBBERS	2.50" x .750" x .125" THK.	300 SERIES STAINLESS STEEL	ADVANTAGE	AT SASH & FRAME, LOCATED @ 14 1/4" o.c. Max. OR 1/4 FRAME WIDTH, WHICHEVER IS LESS
11.	FS-115 - 650070	PHILLIPS PAN HEAD A POINT FASTENER	#10 x 1"	300 SERIES STAINLESS STEEL	VARIES	SASH ASSEMBLY SCREW
12.	FS-328 - 650080	PHILLIPS PAN HEAD B POINT FASTENER	#10 x 1 1/2"	STEEL	VARIES	FRAME ASSEMBLY SCREW
13.	795	STRUCTURAL SILICONE	CONT. ALL AROUND	SILICONE	DOW CORNING	PERIMETER SEALANT AT FRAME & AT SASH
14.	995	STRUCTURAL SILICONE	CONT. ALL AROUND	SILICONE	DOW CORNING	SASH (.25" SPACE TO GLASS) FILL SEALANT & SASH PERIMETER SEALANT
15.	-	BOX ALUMINUM GLASS SPACER	.375" x .375" x .05"	ALUMINUM		LOCATED AT GLASS EDGES
16.	FS-53 - 650030	PHILLIPS ROUND HEAD A POINT FASTENER	#10 x 3/8"	300 SERIES STAINLESS STEEL	VARIES	ATTACH HINGE LEG (BAR) TO SASH & TO FRAME
17.	476	PHILLIPS PAN HEAD MACHINE SCREW	#10-24 x 5/8"	300 SERIES STAINLESS STEEL	VARIES	ATTACH LOCKING CAM HANDLES
18.	FS-109 - 650040	PHILLIPS PAN HEAD A POINT FASTENER	#10 x 1/2"	300 SERIES STAINLESS STEEL	VARIES	ATTACH FRAME SNUBBER
19.	FS-56 - 650041	PHILLIPS PAN HEAD B POINT CAD FASTENER	#10 x 1/2"	300 SERIES STAINLESS STEEL	VARIES	ATTACH KEEPER

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SERIES ZS-2750 PROJECT OIT ALUMINUM WINDOW SYSTEM		DRAWING No.	
LARGE MISSILE IMPACT RESISTANT		SHEET 3 OF 4	
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SERIES ZS-2750 PROJECT OUT ALUMINUM WINDOW SYSTEM LARGE MISSILE IMPACT RESISTANT

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