

SERIES 9400 THERMALLY BROKEN SINGLE HUNG SMALL MISSILE IMPACT

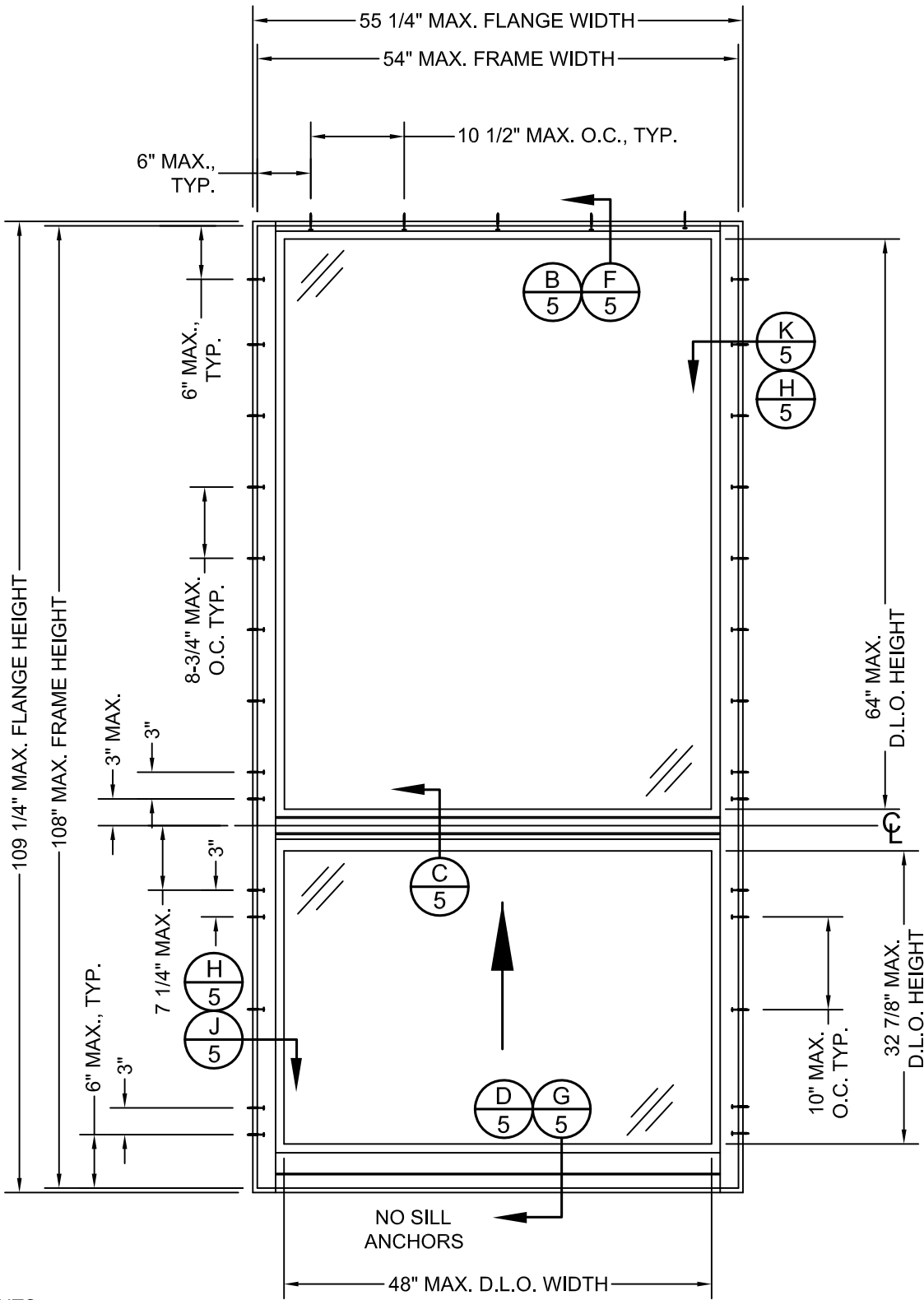
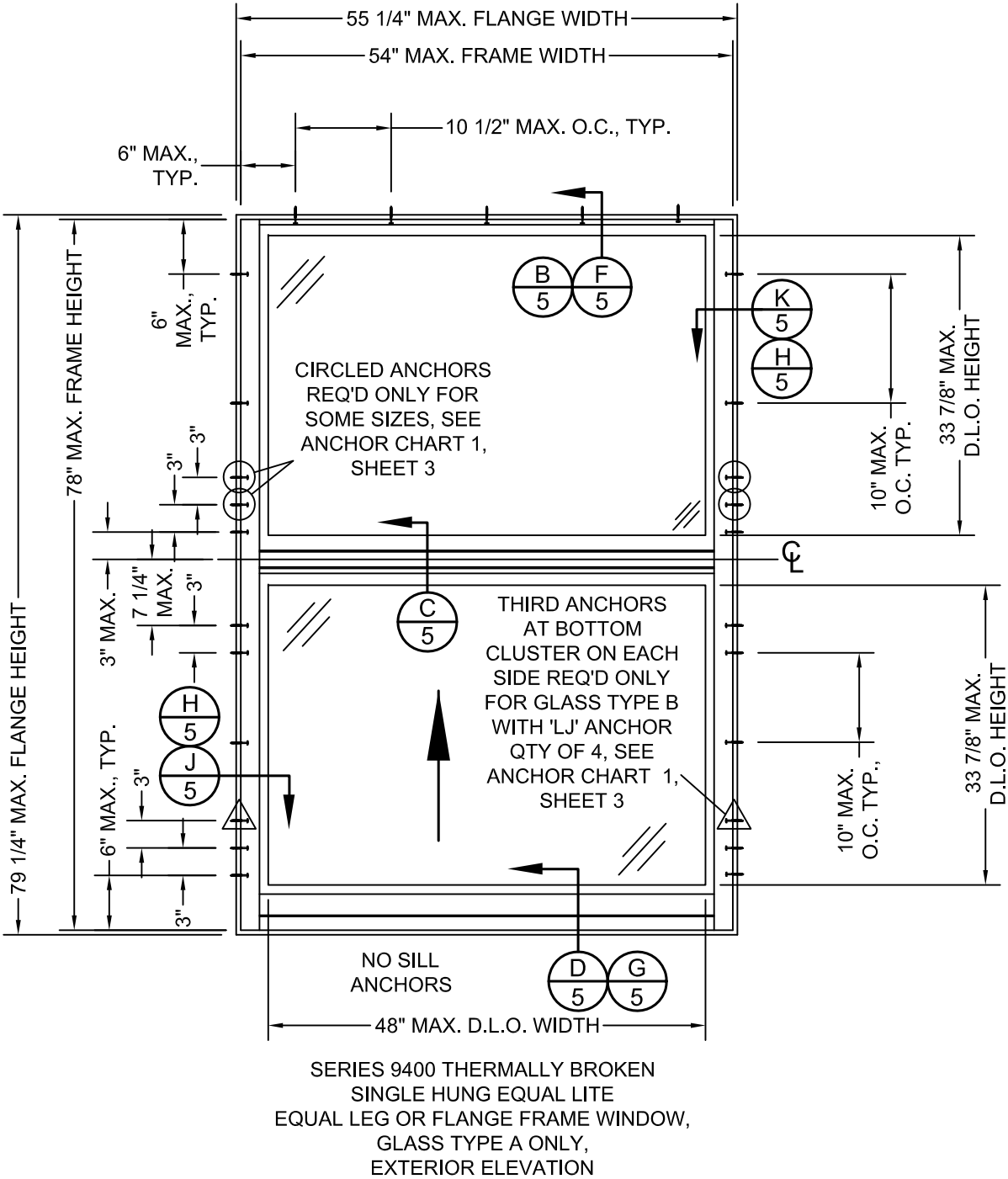


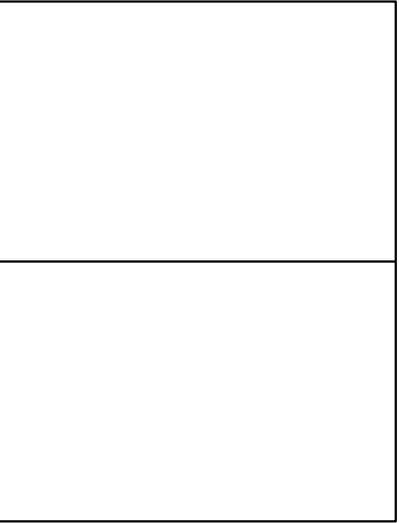
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SERIES 9400 THERMALLY BROKEN
SINGLE HUNG ORIEL
EQUAL LEG OR FLANGE FRAME WINDOW,
GLASS TYPE B ONLY,
EXTERIOR ELEVATION



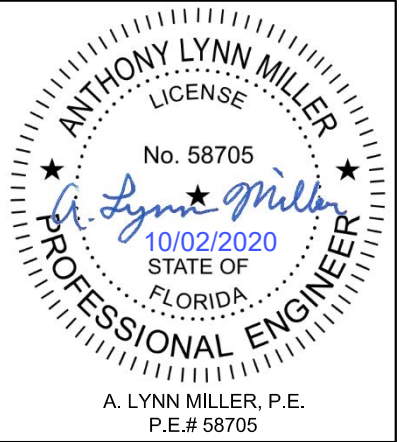
SERIES 9400 THERMALLY BROKEN
SINGLE HUNG EQUAL LITE
EQUAL LEG OR FLANGE FRAME WINDOW,
GLASS TYPE A ONLY,
EXTERIOR ELEVATION



Revision:

UPDATES FOR 2020 FBC. UPDATED
MANUFACTURING ADDRESS.

WINDOOR® INCORPORATED WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD. NORTH VENICE, FL 34275 (833) 554-5432	PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296		THERMALLY BROKEN ALUM. SINGLE HUNG (SM)		Date	09/30/20
	EQUAL LEG / FLANGE ELEVATIONS		ERIN KOSS		Drawn By	
	1 OF 10		9400 SMI HVHZ		No. DWG	
	SH9400T		A		Rev.	



GENERAL NOTES

1. THIS PRODUCT, FABRICATED AND ANCHORED AS DETAILED IN THIS DRAWING, IS SMALL MISSILE IMPACT RESISTANT AND DOES NOT REQUIRE THE USE OF IMPACT PROTECTIVE DEVICES (SHUTTERS) IN WINDBORNE DEBRIS REGIONS WHEN INSTALLED ABOVE 30' HEIGHT.
2. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE, INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ). SEE FL17820.
3. ALLOWABLE CONFIGURATIONS ARE AS INDICATED HEREIN.
4. THE DESIGN PRESSURE RATINGS (SEE SHEETS 3 AND 4) IN THIS DRAWING ARE AS LIMITED BY ASTM E-1300 04/09 GLASS TABLES, TESTED WATER, STRUCTURAL, AND CYCLIC PRESSURES, AND COMPARATIVE ANALYSIS (LIMITED BY CYCLIC AND WATER).
5. THE 4/3 ALLOWABLE STRESS INCREASE FACTOR (SHORT-TERM INCREASE FACTOR) HAS NOT BEEN USED IN THE ANCHOR ANALYSIS FOR THIS SYSTEM. THE 1.6 Cd FACTOR WAS USED IN THE ANALYSIS OF ANCHORAGE INTO WOOD SUBSTRATE.
6. INSTALLATION OF WOOD BUCKS TO THE SUBSTRATE TO BE ENGINEERED BY OTHERS OR AS APPROVED BY THE AUTHORITY HAVING JURISDICTION (A.H.J.). BUCKING, OPENINGS, & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED BY OTHERS IN ACCORDANCE WITH THE FBC TO TRANSFER SUPERIMPOSED LOADS TO THE STRUCTURE. ADEQUACY OF THE STRUCTURE TO RECEIVE THESE LOADS SHALL BE VERIFIED BY THE CONTRACTOR OR A.H.J. WHEN INSTALLING INTO CONCRETE (OR MASONRY AT JAMBS ONLY) WITH WOOD BUCKS LESS THAN 1-1/2" THICK, ANCHOR EMBEDMENT SHALL BE INTO CONCRETE (OR MASONRY AT JAMBS ONLY). WHEN INSTALLING INTO WOOD BUCKS 1-1/2" OR THICKER OVER CONCRETE (OR MASONRY AT JAMBS ONLY) , ANCHOR EMBEDMENT SHALL BE INTO THE WOOD.
7. DISSIMILAR MATERIALS THAT COME INTO CONTACT SHALL BE COATED OR OTHERWISE PROTECTED PER FBC CHAPTER 20 TO PREVENT GALVANIC REACTIONS. WOOD BUCKS, IF USED, SHALL BE PRESSURE TREATED, WITH EITHER A TREATMENT OR COATING COMPATIBLE WITH 6063-T6 ALUMINUM. ALL ANCHORS USED SHALL BE OF A MATERIAL OR HAVE A COATING COMPATIBLE WITH THE PRESSURE TREATED WOOD BUCKS AND ALL OTHER WINDOW MATERIALS.
8. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS, OR AS APPROVED, SIGNED, AND SEALED BY A FLORIDA-REGISTERED PROFESSIONAL ENGINEER ON A SITE-SPECIFIC BASIS.
9. SEALING AND FLASHING STRATEGIES FOR OVERALL WATER INFILTRATION RESISTANCE OF THE INSTALLED PRODUCT SHALL BE THE RESPONSIBILITY OF OTHERS USING ASTM E-2112 AND IS NOT ADDRESSED BY THIS DOCUMENT.
10. FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK, USE #12 GRADE 5 STEEL WOOD SCREWS WITH 1-3/8" MINIMUM EMBEDMENT INTO SUBSTRATE AND 1" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
11. FOR ANCHORING INTO CONCRETE, USE:

A. 1/4" ELCO ULTRACONS: 1-3/4" MIN. EMBEDMENT, 1" MIN. EDGE DISTANCE, 3" MIN. O.C.

B. 1/4" DEWALT ULTRAACON+: 1-3/4" MIN. EMBEDMENT, 1-3/16" MIN. EDGE DISTANCE, 3" MIN. O.C.

C. 1/4" ELCO CRETE-FLEX : 1-3/4" MIN. EMBEDMENT, 1" MIN. EDGE DISTANCE, 3" MIN. O.C.

D. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS. CONCRETE SHALL NOT BE CRACKED.
12. FOR ANCHORING INTO MASONRY (ONLY AT JAMBS), USE:

A. 1/4" ELCO ULTRAACON, DEWALT ULTRAACON+ OR ELCO CRETE-FLEX: 1-1/4" MIN. EMBEDMENT, 2-1/2" MIN. EDGE DISTANCE, 3" MIN. O.C.

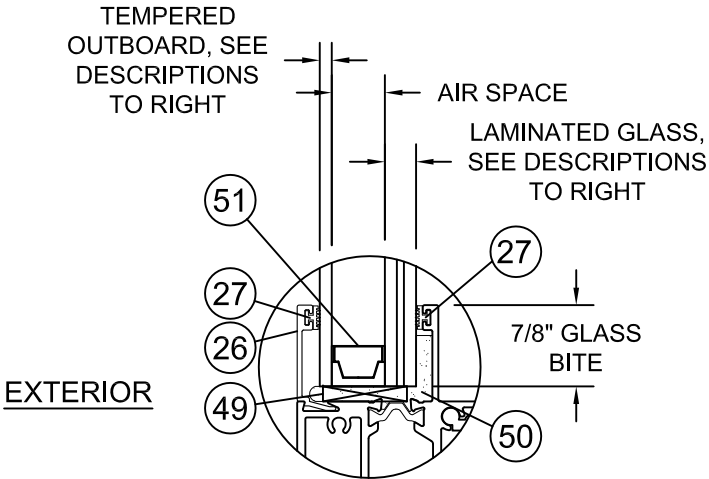
B. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS. MASONRY SHALL NOT BE CRACKED.
13. FOR ANCHORING INTO 0.060" MINIMUM 45KSI MIN. ULT. TENSILE STRENGTH STEEL, USE #12 ITW BUILDDEX TEKS SELECT SELF-DRILLING STRUCTURAL FASTENERS (GRADE 5) WITH FULL THREAD ENGAGEMENT THROUGH THE METAL WALL THICKNESS AND 1/2" MINIMUM EDGE DISTANCE. FOR ANCHORING INTO 1/8" MINIMUM THICKNESS 6063-T5 ALUMINUM OR 45KSI MIN. ULT. TENSILE STRENGTH STEEL, USE #12 GRADE 5 SELF-DRILLING FASTENER WITH FULL THREAD ENGAGEMENT THROUGH THE METAL WALL THICKNESS AND 1/2" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
14. INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTRUCTIONS AND MINIMUM SUBSTRATE STRENGTH SHALL BE AS FOLLOWS:

A. WOOD - MIN. SPECIFIC GRAVITY OF 0.42 (SPRUCE-PINE-FIR)

B. SOLID CONCRETE - 3350 PSI MIN. COMPRESSIVE STRENGTH MASONRY/CMU AT JAMBS ONLY - STRENGTH CONFORMANCE TO ASTM C-90 WITH NORMAL COMPRESSIVE STRENGTH OF 2 KSI MIN.

C. STEEL - 33 KSI MIN. YIELD STRENGTH, 45 KSI MIN. ULTIMATE TENSILE STRENGTH

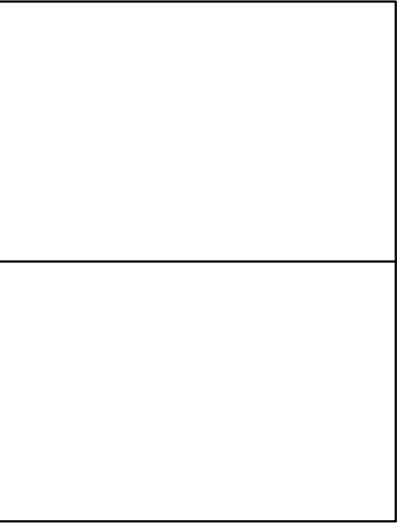
D. ALUMINUM - 6063-T5 MIN.



TYP. GLAZING DETAIL

TYPE A: 1" INSULATED LAMI GLASS:
3/16" TEMPERED OUTBOARD + 3/8" AIR SPACE
WITH HELIMA ALUMINUM SPACER +
7/16" LAMINATED CONSISTING OF:
3/16" ANNEALED +
0.035" SENTRYGLAS® (CLEAR AND WHITE)
GLASS INTERLAYERS BY KURARAY AMERICA, INC. +
3/16" ANNEALED

TYPE B: 1" INSULATED LAMI GLASS:
3/16" TEMPERED OUTBOARD + 1/2" AIR SPACE
WITH HELIMA ALUMINUM SPACER +
5/16" LAMINATED CONSISTING OF:
1/8" HEAT STRENGTH. +
0.035" SENTRYGLAS® (CLEAR AND WHITE)
GLASS INTERLAYERS BY KURARAY AMERICA, INC. +
1/8" HEAT STRENGTH.



Revision:	ADDED 1/4" ELCO ULTRAACON+

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296	WINDOOR® INCORPORATED WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD. NORTH VENICE, FL 34275 (833) 554-5432	THERMALLY BROKEN ALUM. SINGLE HUNG (SM)		Date	09/30/20
		GENERAL NOTES & GLAZING DETAILS		By	ERIN KOSS
		2 OF 10		DWG No.	9400 SMI HVHZ
		SH9400T		Sheet	A

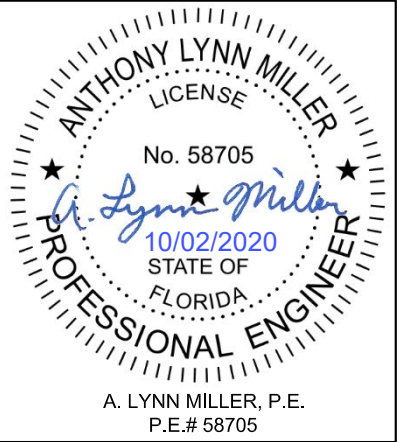


CHART 1. EQUAL LITE (FLANGE OR EQ. LEG) WITH GLASS TYPE A DESIGN PRESSURES (PSF)

FRAME HEIGHT (in.)		FRAME WIDTH (in.)					
		24	30	36	42	48	54
36	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0
	W	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-143.0	+100.0/-145.0	+100.0/-125.0
42	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0
	W	+100.0/-154.0	+100.0/-154.0	+100.0/-153.0	+100.0/-143.0	+100.0/-129.0	+100.0/-125.0
48	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0
	W	+100.0/-154.0	+100.0/-154.0	+100.0/-146.0	+100.0/-141.0	+100.0/-129.0	+100.0/-125.0
54	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0
	W	+100.0/-154.0	+100.0/-154.0	+100.0/-141.0	+100.0/-132.0	+100.0/-129.0	+100.0/-125.0
60	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-149.5
	W	+100.0/-154.0	+100.0/-151.0	+100.0/-137.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0
66	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-141.3
	W	+100.0/-134.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-124.0
72	C/M	+100.0/-160.0	+100.0/-156.9	+100.0/-152.6	+100.0/-152.6	+100.0/-152.6	+100.0/-135.0
	W	+100.0/-134.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-125.0	+100.0/-118.0
78	C/M	+100.0/-152.6	+100.0/-137.3	+100.0/-130.8	+100.0/-130.0	+100.0/-130.0	+100.0/-130.0
	W	+100.0/-134.0	+100.0/-125.0	+100.0/-125.0	+100.0/-116.0	+100.0/-116.0	+100.0/-106.0

C/M = CONCRETE-MASONRY OR METAL SUBSTRATE

W = WOOD SUBSTRATE

ANCHOR QUANTITIES FOR CHART 1, SEE EQUAL LITE ELEVATION FOR LOCATIONS

FRAME HEIGHT (in.)	FRAME WIDTH (in.)																							
	24				30				36				42				48				54			
	H	UJ	MR	LJ	H	UJ	MR	LJ	H	UJ	MR	LJ	H	UJ	MR	LJ	H	UJ	MR	LJ	H	UJ	MR	LJ
36	3	1	3	2	3	1	3	2	4	1	3	2	4	1	3	2	5	1	4	2	5	1	4	2
42	3	2	3	2	3	2	3	2	4	2	3	2	4	2	4	2	5	2	4	2	5	2	5	3
48	3	2	3	3	3	2	3	3	4	2	3	3	4	2	4	3	5	2	4	3	5	2	5	3
54	3	2	3	3	3	2	3	3	4	2	3	3	4	2	4	3	5	2	5	3	5	2	5	3
60	3	3	3	3	3	3	3	3	4	3	3	3	4	3	4	3	5	3	5	3	5	3	5	4
66	3	3	3	4	3	3	3	4	4	3	4	4	4	3	4	4	5	3	5	4	5	3	5	4
72	3	3	3	4	3	3	3	4	4	3	4	4	4	3	4	4	5	3	5	4	5	3	5	4
78	3	3	3	4	3	3	3	4	4	3	4	4	4	3	4	4	5	3	5	4	5	3	5	4

H = HEAD

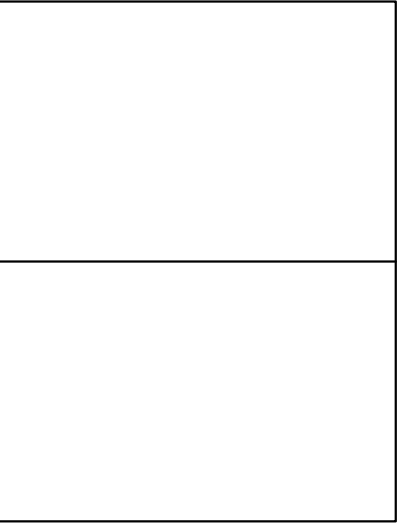
MR = TOTAL QTY IN CLUSTER AT EACH END OF MEETING RAIL (INCLUDING ANCHORS ABOVE AND BELOW MTG RAIL)

UJ = UPPER JAMB NOT INCLUDING MEETING RAIL QTY

LJ = LOWER JAMB NOT INCLUDING MEETING RAIL QTY

CHART 1 ANCHORAGE QUANTITY NOTES:

1. MAX. ANCHOR SPACING SHOWN IN THE ELEVATIONS ON SHEET 1 SHALL NOT BE EXCEEDED.
2. ANCHOR QUANTITIES IN UJ AND LJ LOCATIONS INCLUDE CORNER ANCHORS; EVENLY SPACE ANY ADDITIONAL ANCHORS REQUIRED BEYOND CORNER ANCHOR(S) BETWEEN CORNER AND MEETING RAIL ANCHORS.
3. REDUCE CORNER OR ON-CENTER SPACING AS REQUIRED TO ENSURE 3" MIN. SPACING IS MAINTAINED BETWEEN ANY TWO FASTENERS



Revision:	NO CHANGES THIS SHEET.	

WINDOOR® INCORPORATED		PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296			
WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD. NORTH VENICE, FL 34275 (833) 554-5432		THERMALLY BROKEN ALUM. SINGLE HUNG (SM)		09/30/20	
Title		Date		By	
Desc.		ERIN KOSS		Drawn	
DP & ANCHORAGE CHARTS - EQUAL LITE		9400 SMI HVHZ		Rev.	
SH9400T		3 OF 10		A	
Sheet		DWG No.			

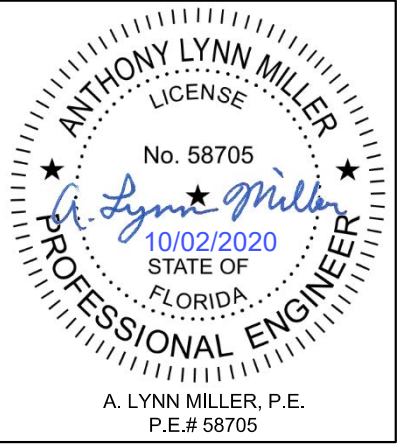


CHART 2. ORIEL (FLANGE OR EQ. LEG) WITH GLASS TYPE B, DESIGN PRESSURES (PSF)

FRAME HEIGHT (in.)	SASH HEIGHT (in.)	SASH D.L.O. (in.)	FIXED D.L.O. (in.)	SUB- STRATE	FRAME WIDTH (in.)					
					24	30	36	42	48	54
66	24 1/4	18	36 7/8	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-152.1
				W	+100.0/-160.0	+100.0/-160.0	+100.0/-140.0	+100.0/-129.0	+100.0/-129.0	+100.0/-122.0
72	26 3/8	20 1/8	40 3/4	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-145.9
				W	+100.0/-154.0	+100.0/-149.0	+100.0/-130.0	+100.0/-129.0	+100.0/-129.0	+100.0/-119.0
78	28 1/2	22 1/4	44 5/8	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-157.4	+97.8/-139.5
				W	+100.0/-154.0	+100.0/-134.0	+100.0/-130.0	+100.0/-129.0	+100.0/-129.0	+97.8/-117.0
84	30 5/8	24 3/8	48 1/2	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-156.5	+100.0/-142.3	+95.5/-132.3
				W	+100.0/-143.0	+100.0/-134.0	+100.0/-130.0	+100.0/-124.0	+100.0/-120.0	+95.5/-112.0
90	32 3/4	26 1/2	52 3/8	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-160.0	+100.0/-143.3	+100.0/-131.1	+93.9/-122.1
				W	+100.0/-143.0	+100.0/-134.0	+100.0/-130.0	+100.0/-124.0	+100.0/-112.0	+93.9/-103.0
96	34 7/8	28 5/8	56 1/4	C/M	+100.0/-160.0	+100.0/-160.0	+100.0/-149.8	+100.0/-133.3	+100.0/-123.3	+92.4/-113.5
				W	+100.0/-143.0	+100.0/-134.0	+100.0/-127.0	+100.0/-114.0	+100.0/-104.0	+92.4/-95.0
102	37	30 3/4	60 1/8	C/M	+100.0/-160.0	+100.0/-150.8	+100.0/-137.3	+100.0/-125.7	+100.0/-116.4	+91.1/-107.4
				W	+100.0/-143.0	+100.0/-134.0	+100.0/-118.0	+100.0/-106.0	+100.0/-96.0	+88.0/-88.0
108	39 1/8	32 7/8	64	C/M	+100.0/-152.8	+95.2/-137.5	+90.6/-129.0	+90.0/-118.0	+90.0/-109.8	+90.0/-101.0
				W	+100.0/-143.0	+95.2/-125.0	+90.6/-109.0	+90.0/-98.0	+89.0/-89.0	+82.0/-82.0

C/M = CONCRETE-MASONRY OR METAL SUBSTRATE

W = WOOD SUBSTRATE

ANCHOR QUANTITIES FOR CHART 2, SEE ORIEL ELEVATION FOR LOCATIONS

FRAME HEIGHT (in.)	FRAME WIDTH (in.)																			
	24				30				36				42				48			
	H	UJ	MR	LJ	H	UJ	MR	LJ	H	UJ	MR	LJ	H	UJ	MR	LJ	H	UJ	MR	LJ
66	3	4	3	2	3	4	3	2	4	4	3	2	4	4	4	2	5	4	5	3
72	3	5	3	2	3	5	3	2	4	5	3	2	4	5	4	3	5	5	5	3
78	3	5	3	2	3	5	3	2	4	5	3	3	4	5	4	3	5	5	5	3
84	3	5	3	2	3	5	3	3	4	5	4	3	4	5	4	3	5	5	5	3
90	3	6	3	3	3	6	3	3	4	6	4	3	4	6	4	3	5	6	5	3
96	3	6	3	3	3	6	3	3	4	6	4	3	4	6	4	3	5	6	5	3
102	3	7	3	3	3	7	3	3	4	7	4	3	4	7	4	3	5	7	5	3
108	3	7	3	3	3	7	3	3	4	7	4	3	4	7	4	3	5	7	5	3

H = HEAD
MR = TOTAL QTY IN CLUSTER AT EACH END OF MEETING RAIL (INCLUDING ANCHORS ABOVE AND BELOW MTG RAIL)

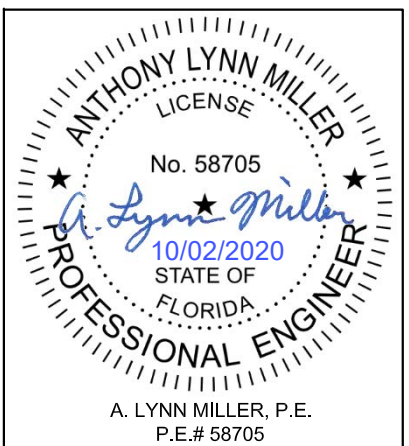
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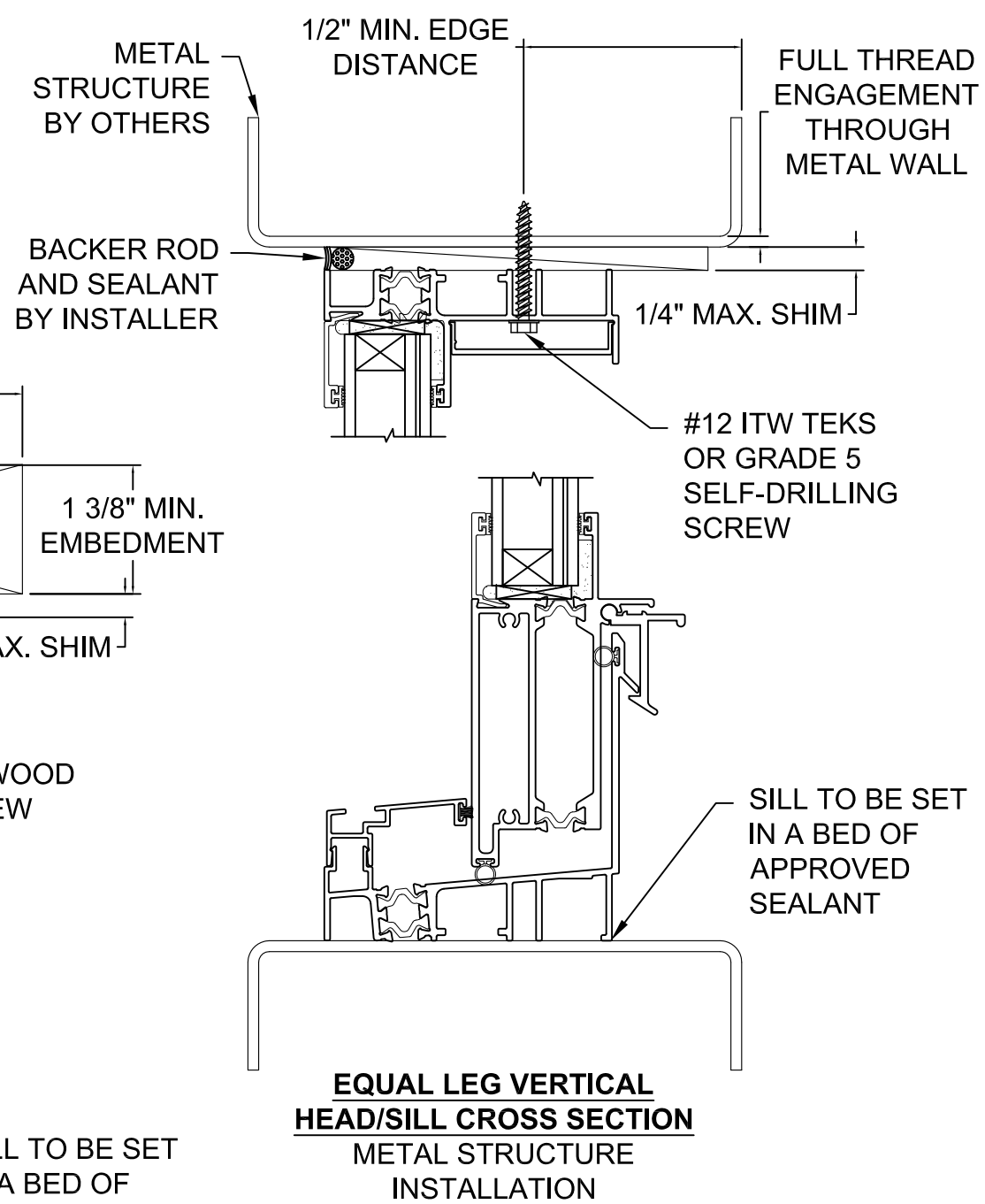
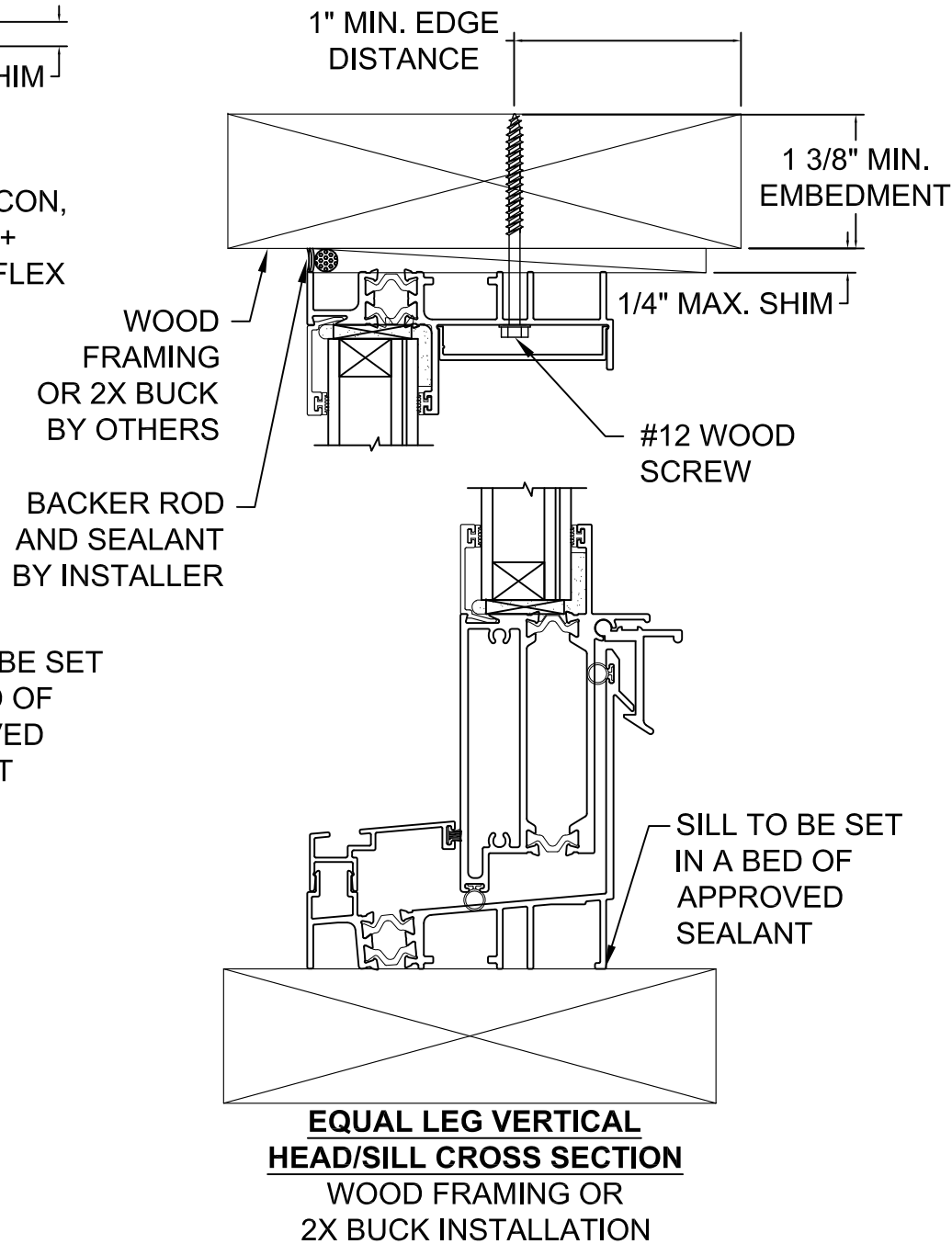
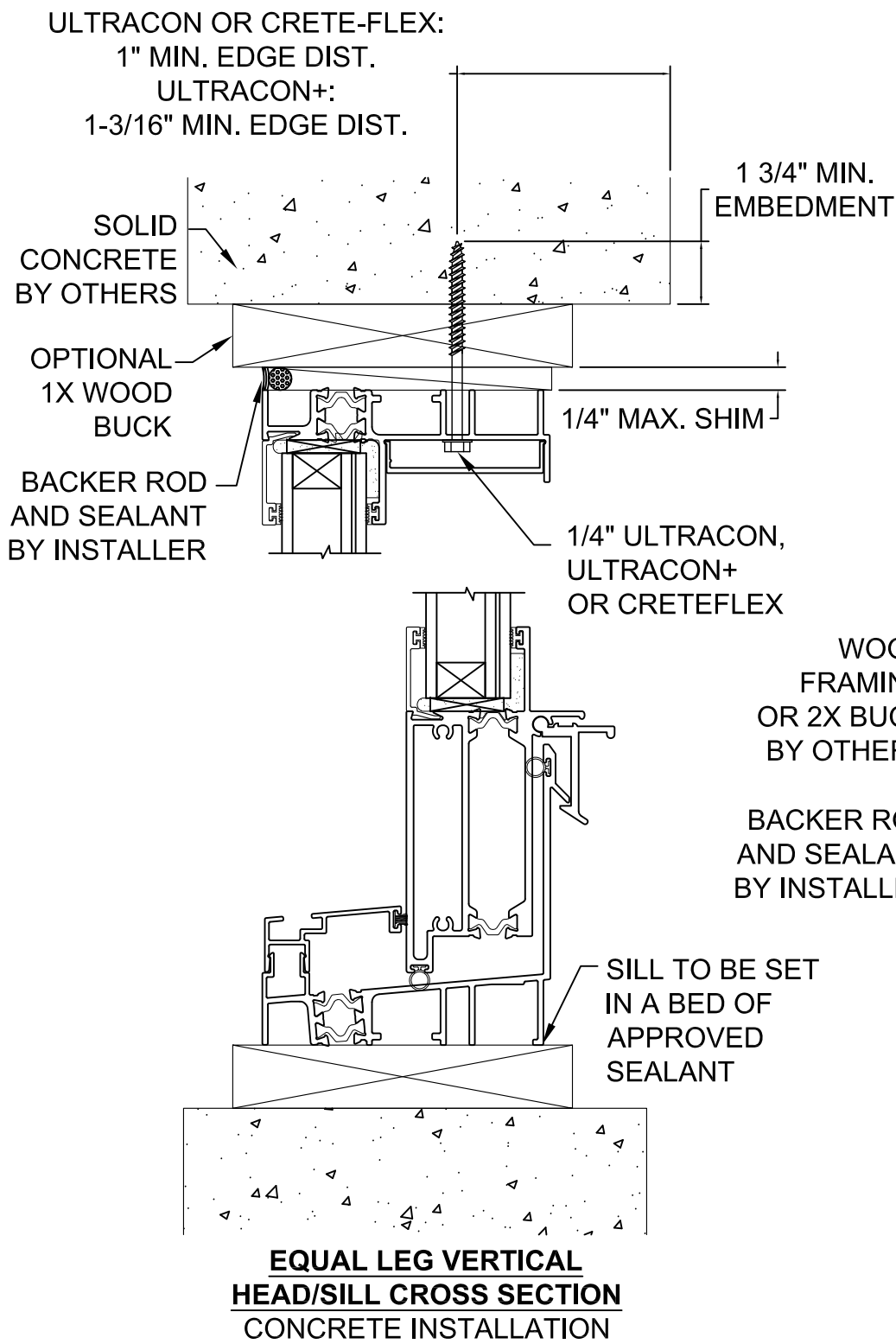
CHART 2 ANCHORAGE QUANTITY NOTES:

1. THE MAXIMUM ANCHOR SPACING SHOWN IN THE ORIEL ELEVATION ON SHEET 1 SHALL NOT BE EXCEEDED.
2. ANCHOR QUANTITIES IN UJ AND LJ LOCATIONS INCLUDE CORNER ANCHORS; EVENLY SPACE ANY ADDITIONAL ANCHORS REQUIRED BEYOND CORNER ANCHOR(S) BETWEEN CORNER AND MEETING RAIL ANCHORS.
3. REDUCE CORNER OR ON-CENTER SPACING AS REQUIRED TO ENSURE 3" MIN. SPACING IS MAINTAINED BETWEEN ANY TWO FASTENERS

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296	09/30/20	ERIN KOSS	9400 SMI HVHZ	A
WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD. NORTH VENICE, FL 34275 (833) 554-5432	THERMALLY BROKEN ALUM. SINGLE HUNG (SM)	DP & ANCHORAGE CHARTS - ORIEL	4 OF 10	SH9400T







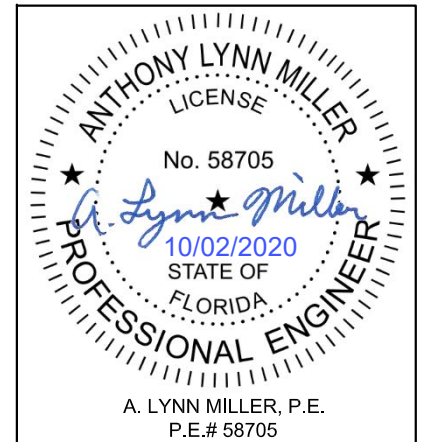
GENERAL ANCHOR NOTES:

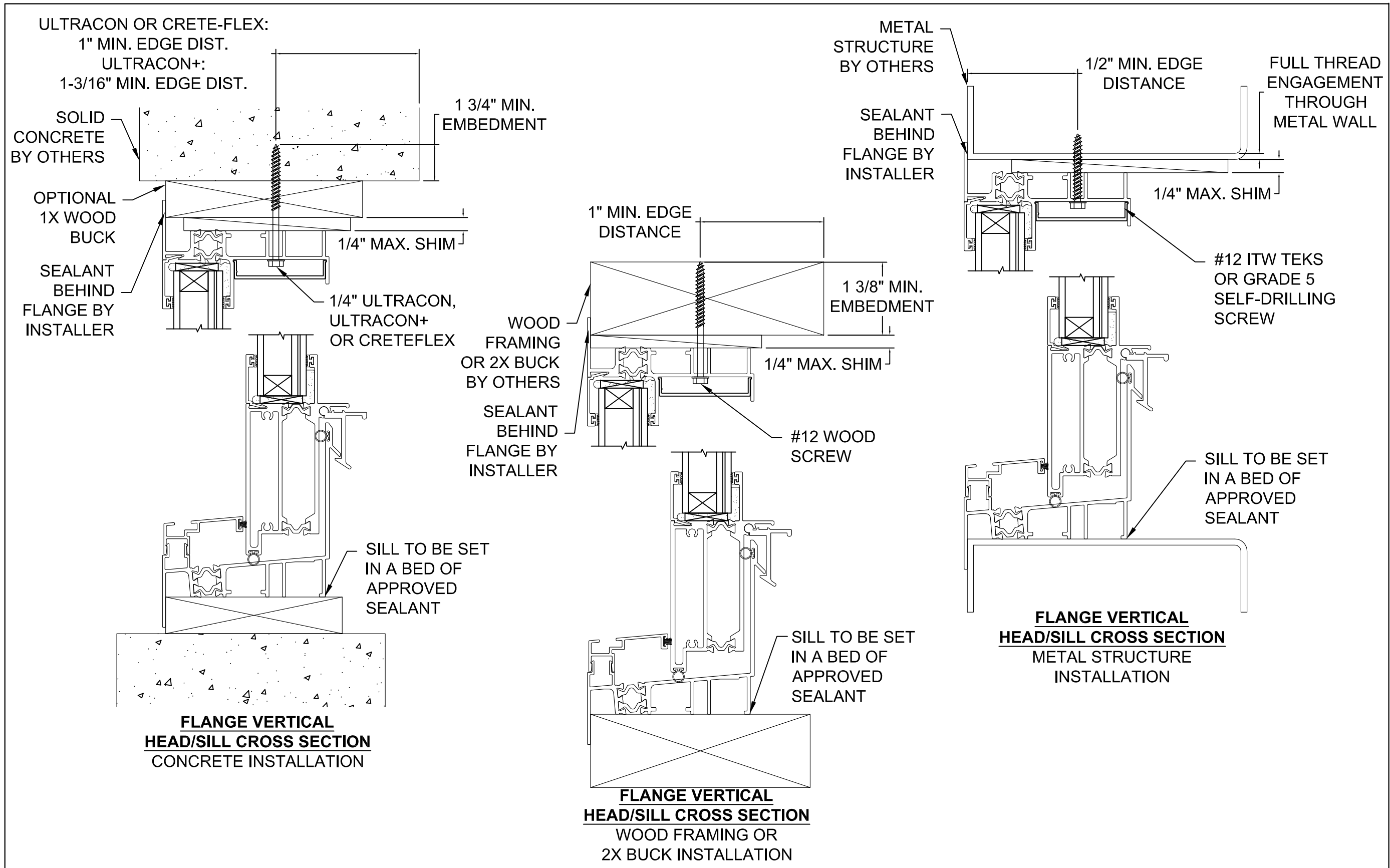
1. INSTALL ONE ANCHOR AS INDICATED IN DETAILS ON THIS SHEET AT EACH LOCATION SHOWN IN THE ELEVATIONS ON SHEET 1.
2. INSTALL SHIMS AT EACH ANCHOR LOCATION WHERE A GAP OF 1/16" OR GREATER EXISTS BETWEEN PRODUCT FRAME AND SUBSTRATE.
3. SHIMS SHALL BE LOAD-BEARING (PLASTIC OR METALLIC) AND CAPABLE OF TRANSFERRING LOADS TO SUBSTRATE.
4. SPECIFIED ANCHOR EMBEDMENT TO SUBSTRATE SHALL BE BEYOND WALL FINISH OR STUCCO, BY OTHERS.

EXTERIOR
←

Revision:
ADDED 1/4" ELCO ULTRACON+

PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296	Date	09/30/20	Rev.	A
WINDOOR [®] INCORPORATED WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD. NORTH VENICE, FL 34275 (833) 554-5432	By	ERIN KOSS	Dwg. No.	9400 SMI HVHZ
THERMALLY BROKEN ALUM. SINGLE HUNG (SM)	Title	INSTALLATION DETAILS - EQUAL LEG	Sheet	6 OF 10
SH9400T	Series	DESC.	SH9400T	A





- GENERAL ANCHOR NOTES:**
1. INSTALL ONE ANCHOR AS INDICATED IN DETAILS ON THIS SHEET AT EACH LOCATION SHOWN IN THE ELEVATIONS ON SHEET 1.
 2. INSTALL SHIMS AT EACH ANCHOR LOCATION WHERE A GAP OF 1/16" OR GREATER EXISTS BETWEEN PRODUCT FRAME AND SUBSTRATE.
 3. SHIMS SHALL BE LOAD-BEARING (PLASTIC OR METALLIC) AND CAPABLE OF TRANSFERRING LOADS TO SUBSTRATE.
 4. SPECIFIED ANCHOR EMBEDMENT TO SUBSTRATE SHALL BE BEYOND WALL FINISH OR STUCCO, BY OTHERS.
- EXTERIOR** ←

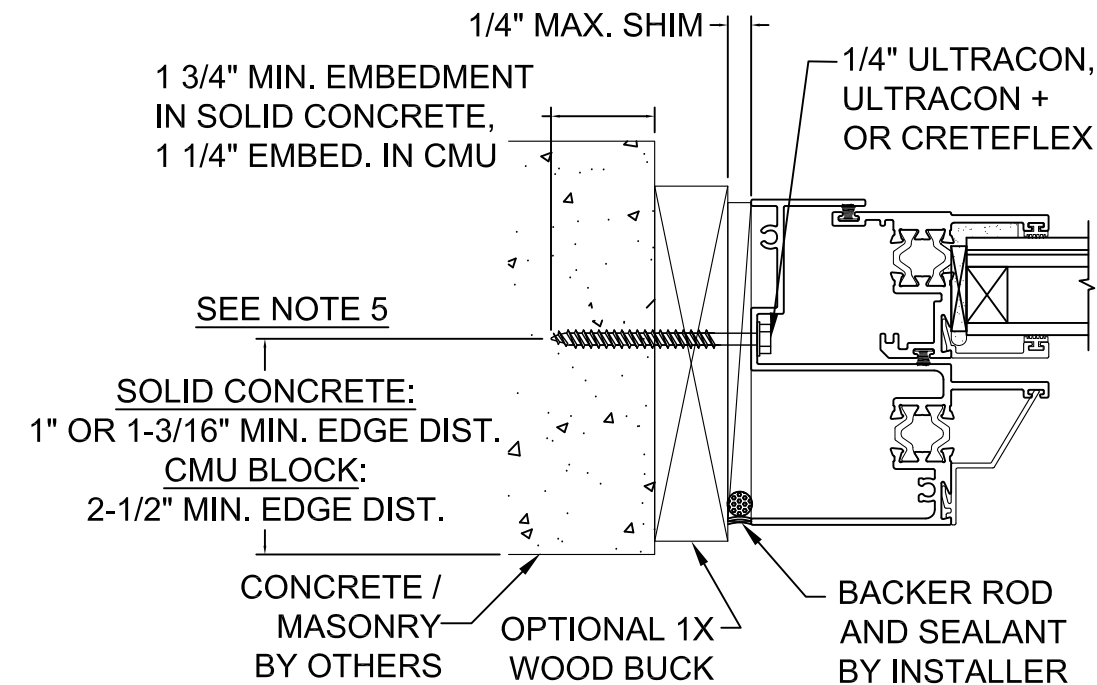
Revision:

ADDED 1/4" ELCO ULTRACON+

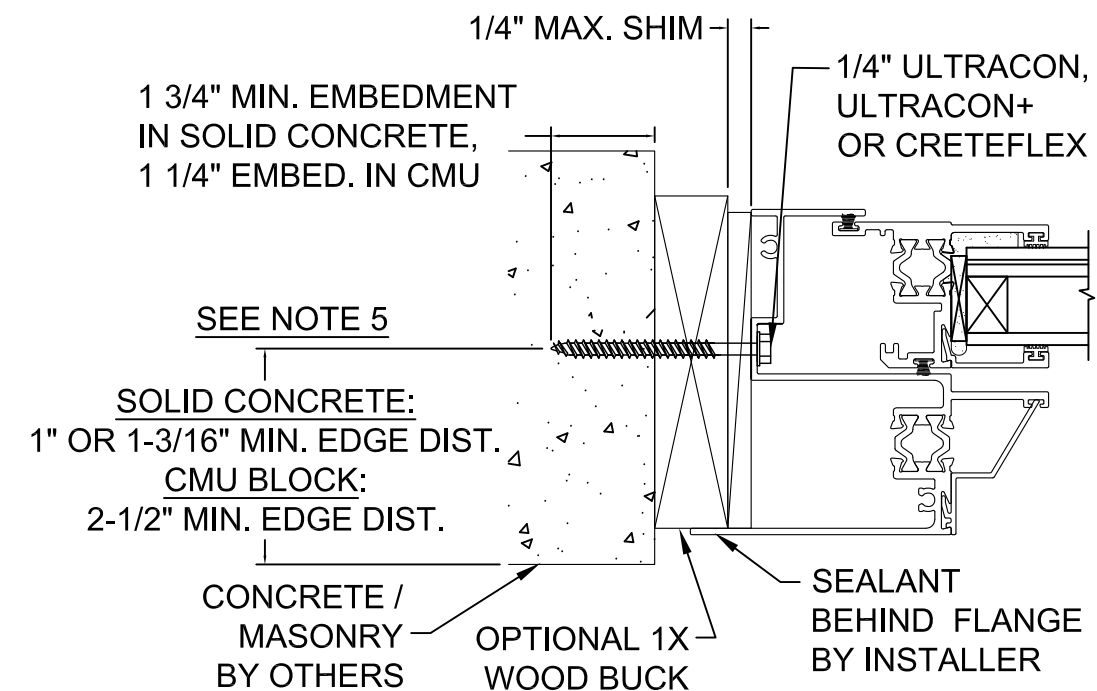
PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296	Windo [®] OR INCORPORATED WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD. NORTH VENICE, FL 34275 (833) 554-5432	Date	09/30/20	Rev.	A
		By	ERIN KOSS	DWG No.	9400 SMI HVHZ
		INSTALLATION DETAILS - FLANGE		Sheet	7 OF 10
THERMALLY BROKEN ALUM. SINGLE HUNG (SM)		Series	SH9400T		

ANTHONY LYNN MILLER
LICENSE
No. 58705
10/02/2020
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

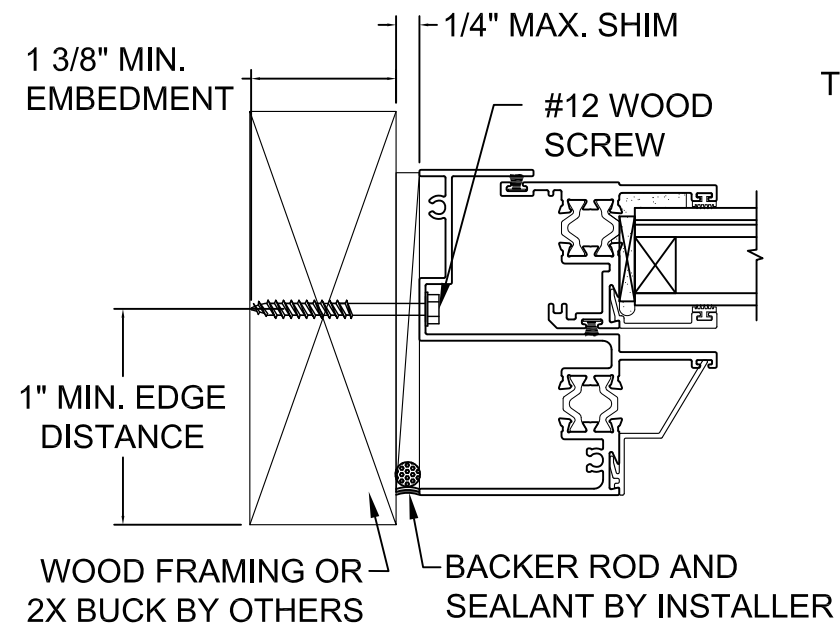
A. LYNN MILLER, P.E.
P.E.# 58705



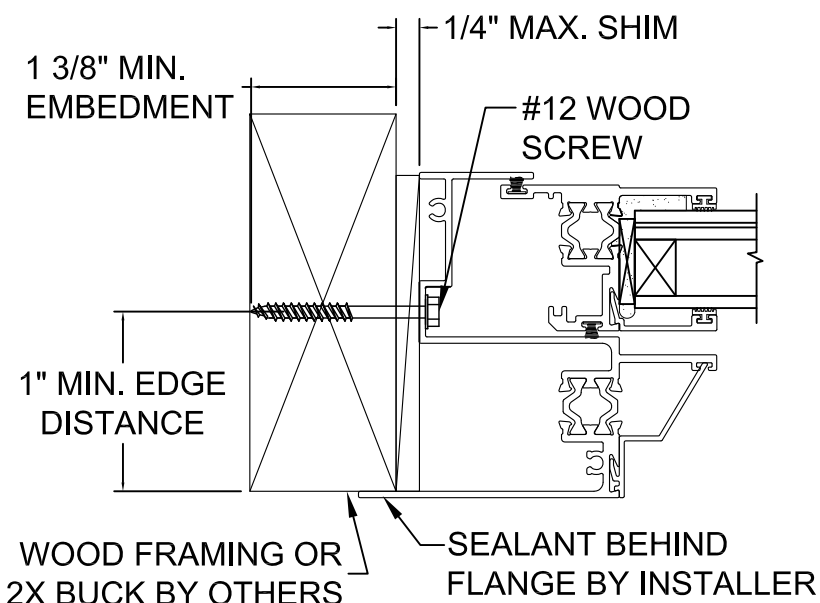
EQUAL LEG HORIZONTAL JAMB
CROSS SECTION
CONCRETE/MASONRY INSTALLATION



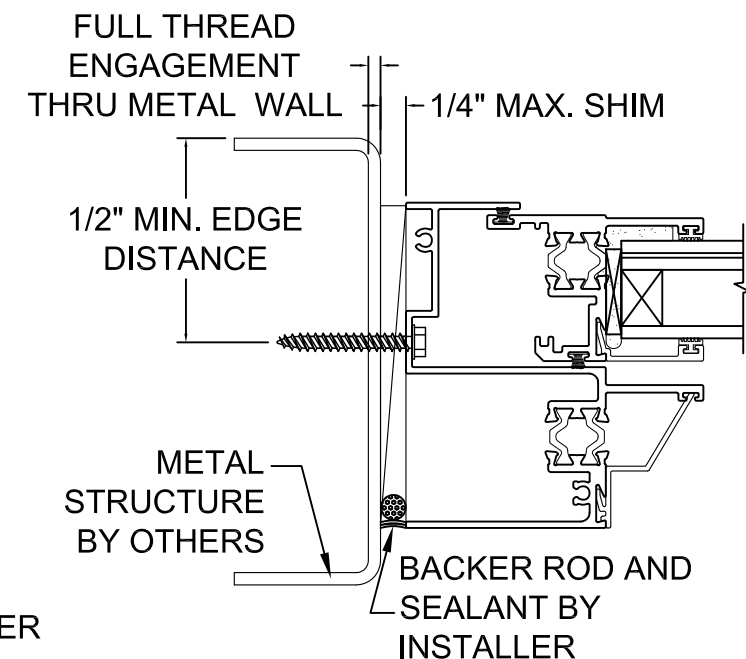
FLANGE HORIZONTAL JAMB
CROSS SECTION
CONCRETE/MASONRY INSTALLATION



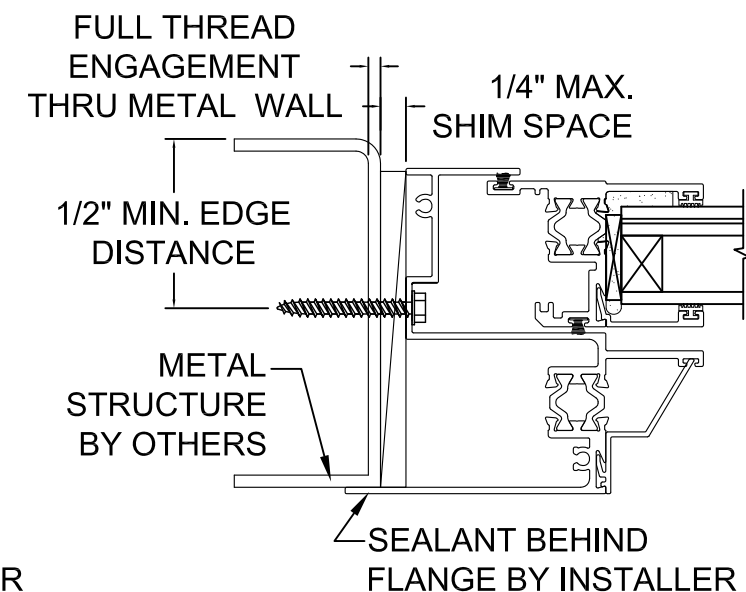
EQUAL LEG HORIZONTAL JAMB
CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION



FLANGE HORIZONTAL JAMB
CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION



EQUAL LEG HORIZONTAL JAMB
CROSS SECTION
METAL STRUCTURE INSTALLATION



FLANGE HORIZONTAL JAMB
CROSS SECTION
METAL STRUCTURE INSTALLATION

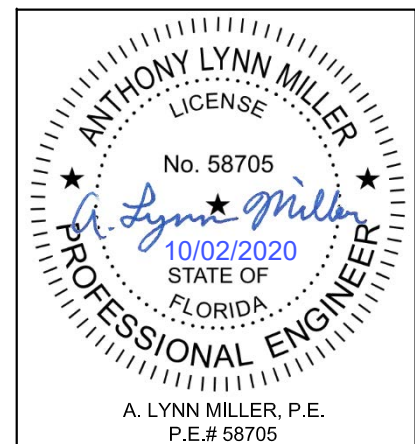
GENERAL ANCHOR NOTES:

1. INSTALL ONE ANCHOR AS INDICATED IN DETAILS ON THIS SHEET AT EACH LOCATION SHOWN IN THE ELEVATIONS ON SHEET 1.
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3. SHIMS SHALL BE LOAD-BEARING (PLASTIC OR METALLIC) AND CAPABLE OF TRANSFERRING LOADS TO SUBSTRATE.
4. SPECIFIED ANCHOR EMBEDMENT TO SUBSTRATE SHALL BE BEYOND WALL FINISH OR STUCCO, BY OTHERS.
5. 1" MIN. EDGE DIST. FOR ULTRACON OR CRETE-FLEX INTO CONCRETE, 1-3/16" MIN. EDGE DIST. FOR ULTRACON+ INTO CONCRETE.

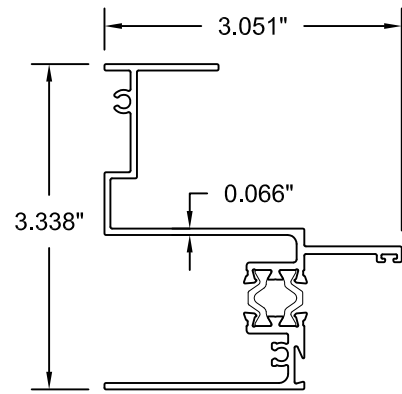
EXTERIOR
↓

Revision:	ADDED 1/4" ELCO ULTRACON+

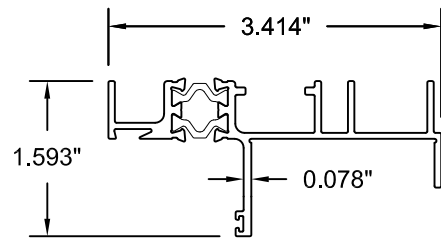
WINDOOR® INCORPORATED WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD. NORTH VENICE, FL 34275 (833) 554-5432		PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296			
		THERMALLY BROKEN ALUM. SINGLE HUNG (SM)		Date	09/30/20
		INSTALLATION DETAILS - JAMBS		By	ERIN KOSS
		Sheet	8 OF 10	DWG No.	9400 SMI HVHZ
		Series	SH9400T	Rev.	A



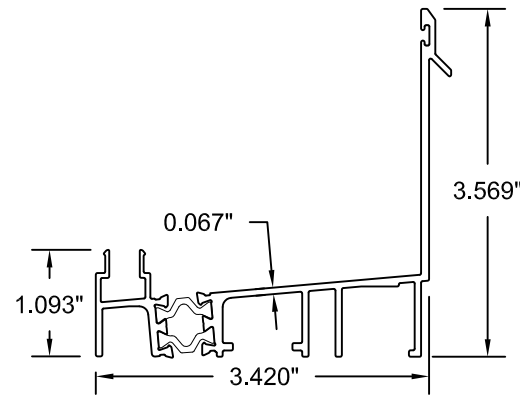
A. LYNN MILLER, P.E.
P.E.# 58705



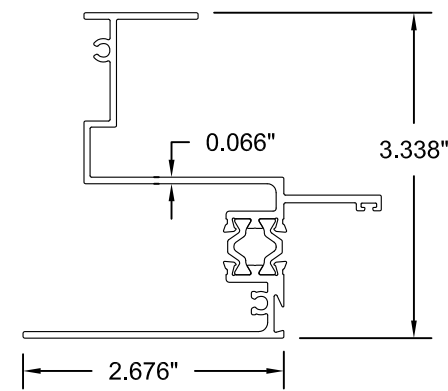
① FRAME JAMB EQUAL LEG
1349X004



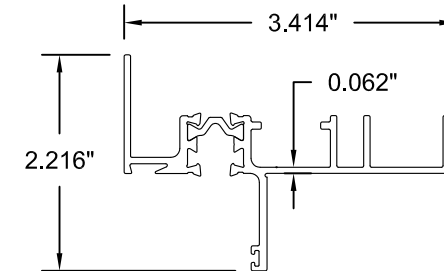
② FRAME HEAD EQUAL LEG
1394X001



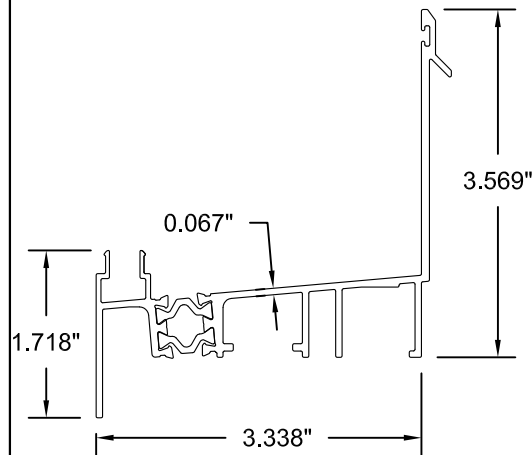
③ FRAME SILL EQUAL LEG
13940001



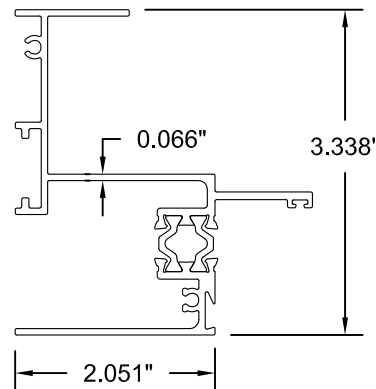
④ FRAME JAMB FLANGE
1394X005



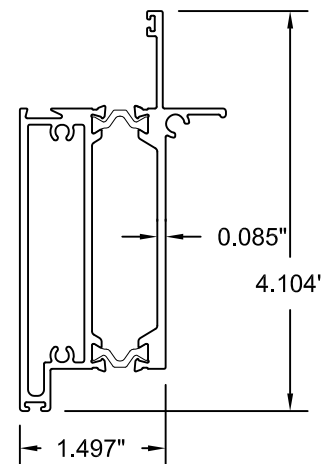
⑤ FRAME HEAD FLANGE
1394X002



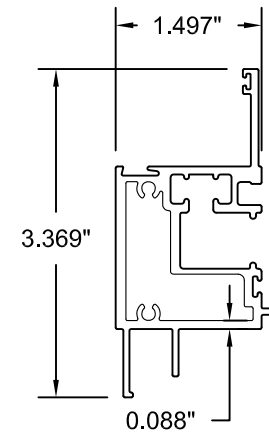
⑥ FRAME SILL FLANGE
13940002



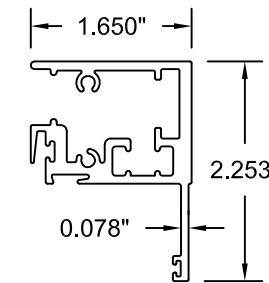
⑦ FRAME JAMB FIN
1349X006



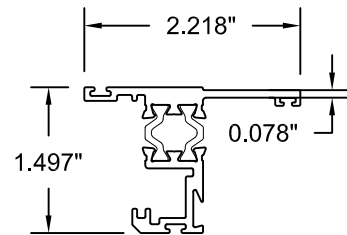
⑧ SASH BOTTOM RAIL
13940004



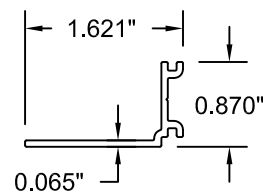
⑨ FIXED MEETING RAIL
1394X007



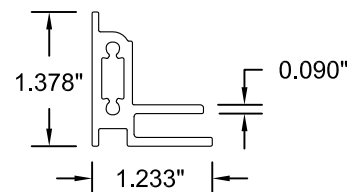
⑩ SASH MEETING RAIL
1394X010



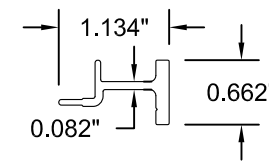
⑪ SASH STILE ASSEMBLY
13940005



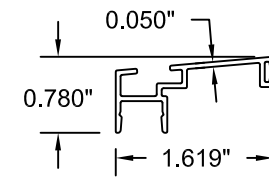
⑫ FIN ADAPTER
S-49332



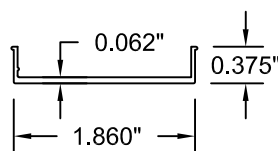
⑬ FIXED MTG. RAIL
REINFORCEMENT
1294X029



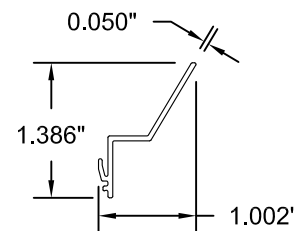
⑭ SASH TOP RAIL
REINFORCEMENT
1194X011



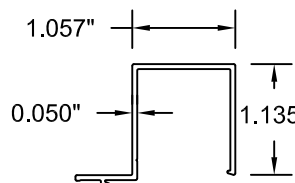
⑮ SILL SCREEN RETAINER
1194X009



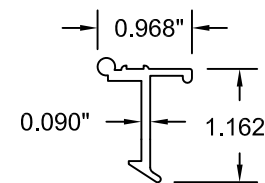
⑯ FRAME HEAD
SCREW COVER
1194X013



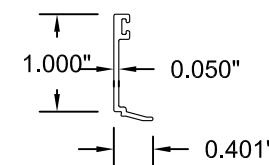
⑰A SCREEN ADAPTOR
17010415



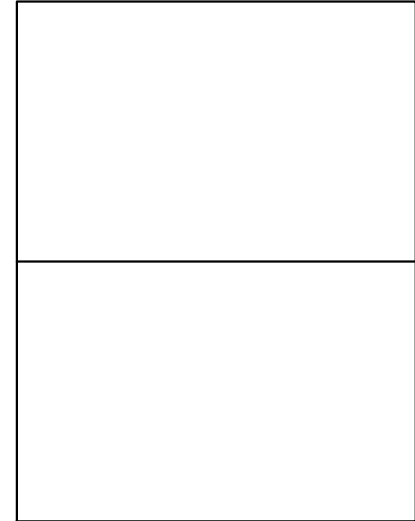
⑰B SCREEN ADAPTOR
1194X014



⑱ SILL SNAP LOCK
11007327

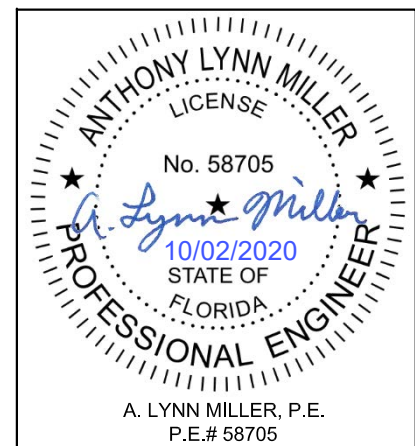


⑳ GLASS STOP
1194X012



Revision: NO CHANGES THIS SHEET.

WINDOOR® INCORPORATED WINDOOR INCORPORATED 104 TRIPLE DIAMOND BLVD. NORTH VENICE, FL 34275 (833) 554-5432		PREPARED BY A. LYNN MILLER 1070 TECHNOLOGY DRIVE N. VENICE, FL 34275 (941) 480-1600 REGISTRATION #29296						
		Title		Date				
		THERMALLY BROKEN ALUM. SINGLE HUNG (SM)		09/30/20				
		Desc.		ERIN KOSS				
SH9400T	Series	Extrusions		By Drawn	9400 SMI HVHZ	No. DWG	Rev.	A
		9 OF 10						
		Sheet						

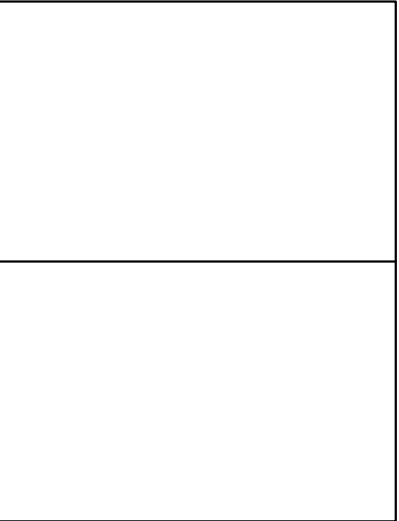
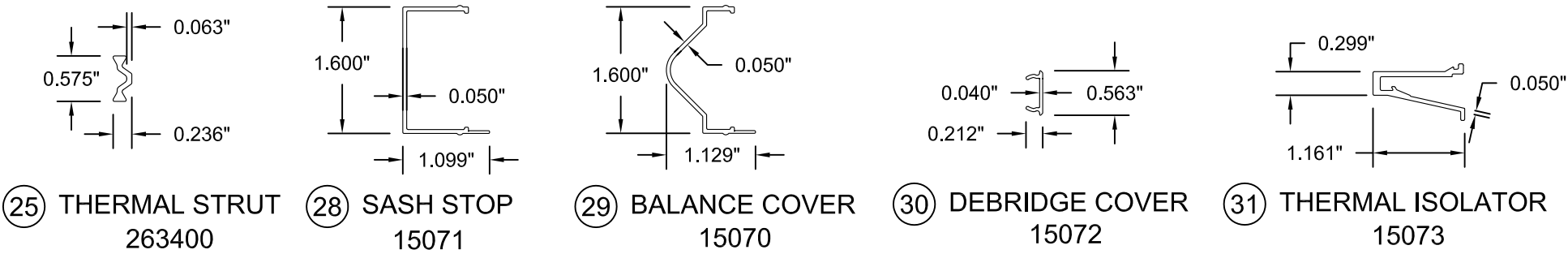


BILL OF MATERIALS			
NO.	PART NUMBER	DESCRIPTION	MANUFACTURER (MAT.)
1	1349X004	FRAME JAMB EQUAL LEG	KEYMARK (ALUM. 6063-T6)
2	1394X001	FRAME HEAD EQUAL LEG	KEYMARK (ALUM. 6063-T6)
3	13940001	FRAME SILL EQUAL LEG	KEYMARK (ALUM. 6063-T6)
4	1394X005	FRAME JAMB FLANGE	KEYMARK (ALUM. 6063-T6)
5	1394X002	FRAME HEAD FLANGE	KEYMARK (ALUM. 6063-T6)
6	13940002	FRAME SILL FLANGE	KEYMARK (ALUM. 6063-T6)
7	1349X006	FRAME JAMB FIN	KEYMARK (ALUM. 6063-T6)
8	13940004	SASH BOTTOM RAIL	KEYMARK (ALUM. 6063-T6)
9	1394X007	FIXED MEETING RAIL	KEYMARK (ALUM. 6063-T6)
10	1394X010	SASH MEETING RAIL	KEYMARK (ALUM. 6063-T6)
11	13940005	SASH STILE ASSEMBLY	KEYMARK (ALUM. 6063-T6)
12	S-49332	FIN ADAPTER	KEYMARK (ALUM. 6063-T6)
13	1294X029	FIXED MTG. RAIL REINFORCEMENT	KEYMARK (ALUM. 6063-T6)
14	1194X011	SASH TOP RAIL REINFORCEMENT	KEYMARK (ALUM. 6063-T6)
15	1194X009	SILL SCREEN RETAINER	KEYMARK (ALUM. 6063-T6)
16	1194X013	FRAME HEAD SCREW COVER	KEYMARK (ALUM. 6063-T6)
17A	17010415	VERTICAL SCREEN ADAPTER	Team Plastics (VINYL)
17B	1194X014	SCREEN ADAPTER	KEYMARK (ALUM. 6063-T6)
18	11007327	SILL SNAP LOCK (OPTIONAL)	KEYMARK (ALUM. 6063-T6)
19	H4000-XX-SL202	SASH LOCK	
20		1" INSULATED GLASS - SEE SHEET 2	
21	15075	SASH GUIDE LEFT	
22	15074	SASH GUIDE RIGHT	
23	WA2L	WEEP GATE	PREFERRED ENGINEERING
24	15176	FOAM PAD - SILL AT JAMBS	
25	263400	9/16" THERMAL STRUT INSULBAR	ENSINGER (TECATHERM 66 GF)
26	1194X012	GLASS STOP	KEYMARK (ALUM. 6063-T6)
27	121005	GLAZING VINYL #5	TEAM PLASTICS (VINYL)
28	15071	SASH STOP	TEAM PLASTICS (VINYL)
29	15070	BALANCE COVER	TEAM PLASTICS (VINYL)
30	15072	DEBRIDGE COVER	TEAM PLASTICS (VINYL)

BILL OF MATERIALS			
NO.	PART NUMBER	DESCRIPTION	MANUFACTURER (MAT.)
31	15073	THERMAL ISOLATOR	TEAM PLASTICS (VINYL)
32		ULTRA LIFT SPIRAL BALANCE	CALDWELL
33	218237	BALANCE CARRIER	CALDWELL
34	11940006	ECO BALANCE SASH BRACKET	SELJAN
35	S4000-XX-150	SCREEN FRAME	KEYMARK (ALUM. 6063-T6)
36	S4000-BL-SC	SCREEN CORNERS	
37	S4000-SS-027	SCREEN WIRE LIFT	
38	900187	SCREEN TENSION SPRING	
39	SBVXX-BL-0600Z	SCREEN MESH	
40	S0010-BL-2200R	SCREEN SPLINE	
41	121998	0.187" W X 0.200" H FIN WEATHERSTRIP	ULTRAFAB
42	W4000-BL-20218	0.187" W X 0.300" H PROLON WEATHERSTRIP	ULTRAFAB
43	W4070-BL-W2	CLOSED CELL FOAM PAD	FRANK LOWE
44	122023	0.810" W X 0.700" L X 0.240" H WOOLPILE PAD	ULTRAFAB
45	131096	#6 X 3/4" FLAT HEAD TYPE A PAINTED SASH LOCK SCREWS	
46	131014	#8 X 1" PAN HEAD SQUARE DRIVE LEAD POINT CORNER ASSEMBLY SCREWS	
47	131085	#8 X 1" FLAT HEAD BALANCE SCREWS TYPE A	
48		#12 PAN HEAD INSTALLATION SCREWS	
49	121104	GLASS SHIM DUROMETER 85	FRANK LOWE (2RB-89-0250-024-032)
50		SIKA 552, DCW 791, DOW 983	SIKA / DOW (POLYURETHANE/SILICONE)
51	TP990	SPACER SYSTEM (SEE NOTE BELOW)	HELIMA (ALUMINUM AW-3000)

NOTE: SPACER MATERIAL

TENSILE ULTIMATE STRENGTH FTU= 17KSI
TENSILE YIELD STRENGTH FTY= 12KSI



Revision:

ADDED DOW 791 & DOW 983 TO BOM.

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600
REGISTRATION #29296

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INCORPORATED
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104 TRIPLE DIAMOND BLVD.
NORTH VENICE, FL 34275
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THERMALLY BROKEN ALUM. SINGLE HUNG (SM)

09/30/20

Date

By

ERIN KOSS

Rev.

A

9400 SMI HVHZ

No.

DWG

10 OF 10

Sheet

SH9400T

Series

Desc.

BOM & EXTRUSIONS

