

THESE WINDOWS ARE RATED FOR LARGE & SMALL MISSILE IMPACT.
SHUTTERS ARE NOT REQUIRED.

SERIES MG-200
ALUMINUM SINGLE HUNG WINDOW

DESIGN LOAD RATINGS FOR THESE WINDOWS TO BE AS PER
CHARTS SHOWN ON SHEET 3.

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE
COMBINATIONS OF S.H./S.H. OR SINGLE HUNG WITH OTHER
WINDOW TYPES IN MODULES OF TWO OR MORE WINDOWS USING
F.B.C. APPROVED MULLIONS IN BETWEEN.
LOWER DESIGN PRESSURE FROM WINDOWS OR MULLION APPROVAL
WILL APPLY TO ENTIRE SYSTEM.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE
REQUIREMENTS OF THE 2020 (7TH EDITION)/2023 (8TH EDITION) FLORIDA
BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

1BY OR 2BY WOOD BUCKS & BUCK FASTENERS BY OTHERS, MUST BE
DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT
LOADS TO THE BUILDING STRUCTURE.

ANCHORS SHALL BE CORROSION RESISTANT, SPACED AS SHOWN ON DETAILS
AND INSTALLED PER MANUF'S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE
MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

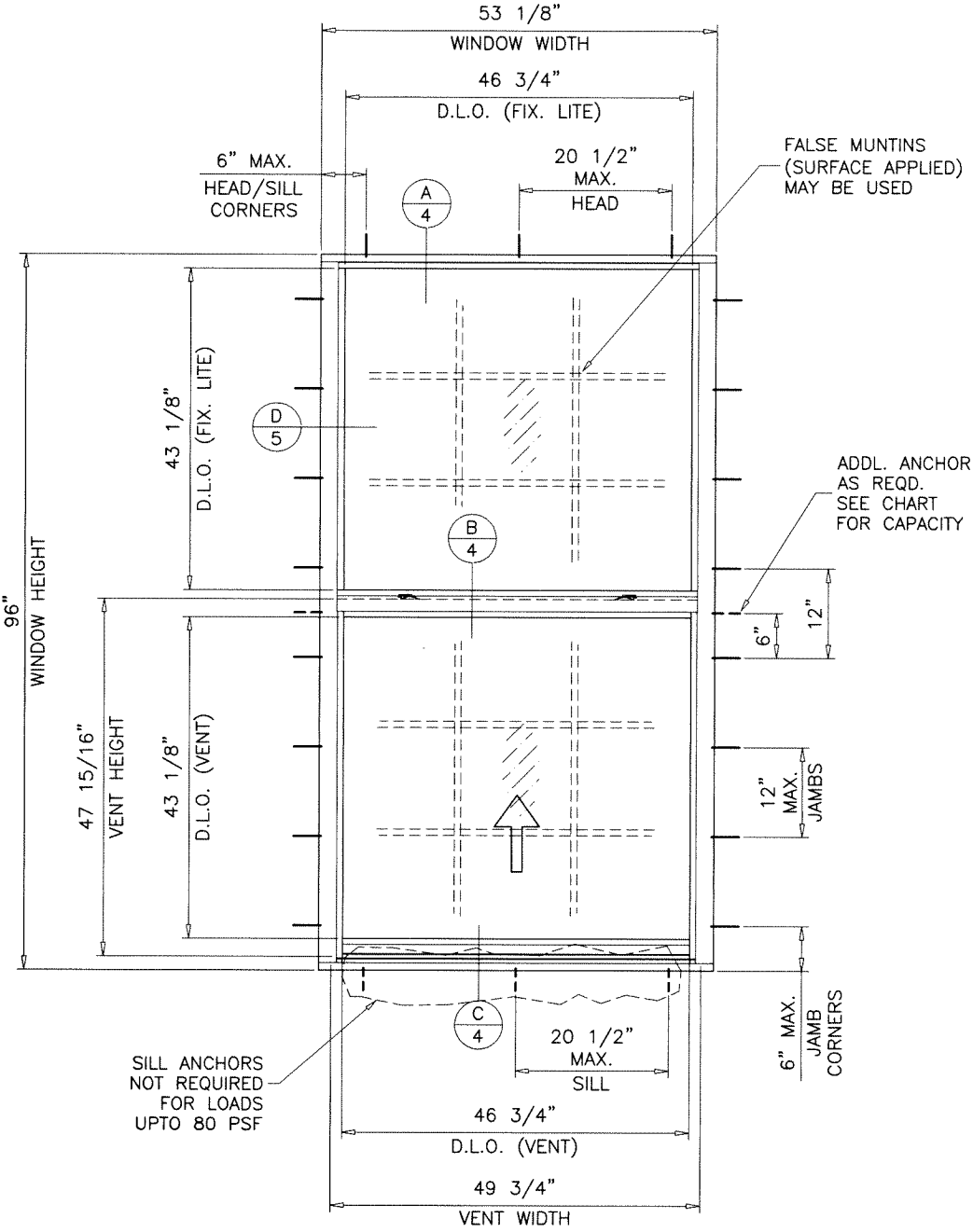
ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT
COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE
REQUIREMENTS OF THE 2020/2023 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION
FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY
OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR
WATER INFILTRATION RESISTANCE ETC.
CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY,
AND TO BE REVIEWED BY BUILDING OFFICIAL.

DESIGN LOADS SHOWN ARE BASED ON 'ALLOWABLE STRESS DESIGN (ASD)'.

MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION
IN ACCORDANCE WITH SECTION 1709.9.3 OF FLORIDA BUILDING CODE.
LABELING TO COMPLY WITH SECTION 1709.9.2.



TYPICAL ELEVATION
TESTED UNIT

A- CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND
INSTALLATION OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION
PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED
ON THIS DOCUMENT.

B- THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF
ALTERED BY ANY MEANS.

C- 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. ENGINEER OF RECORD, ACTING AS A DELEGATED
ENGINEER TO THE P.E.D. ENGINEER SHALL SUBMIT TO THIS LATTER THE SITE
SPECIFIC DRAWINGS FOR REVIEW.

D- THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF
THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.



Sealed: 7/24/2023

FL #20352.1

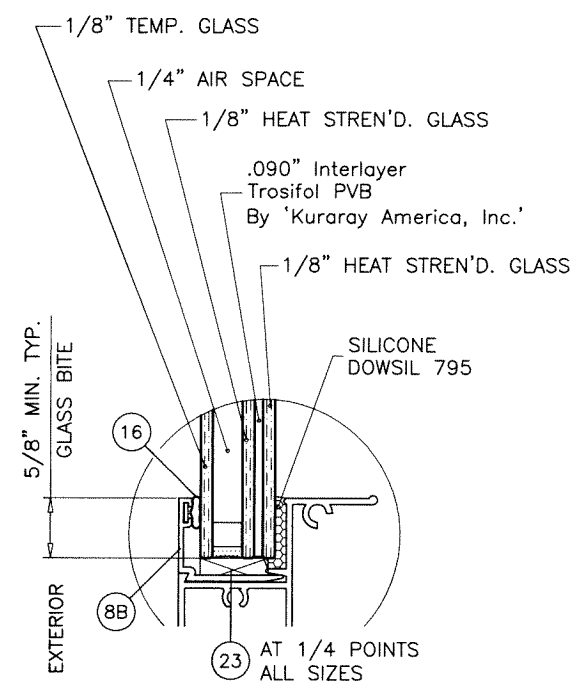
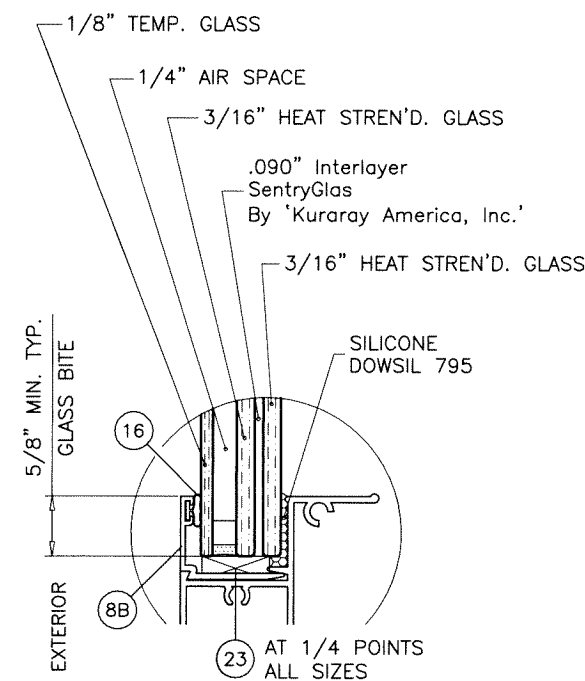
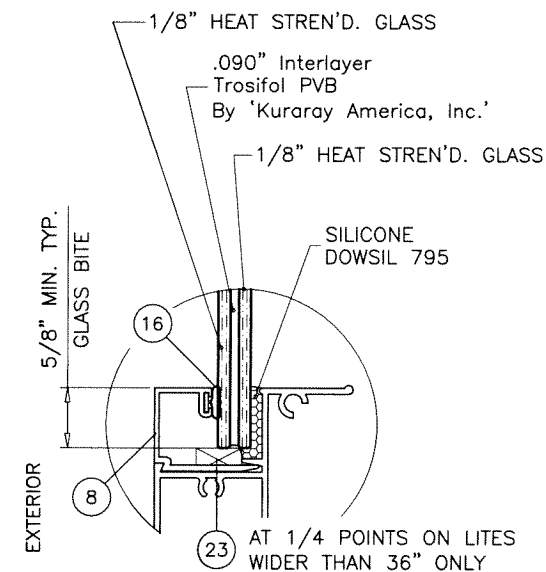
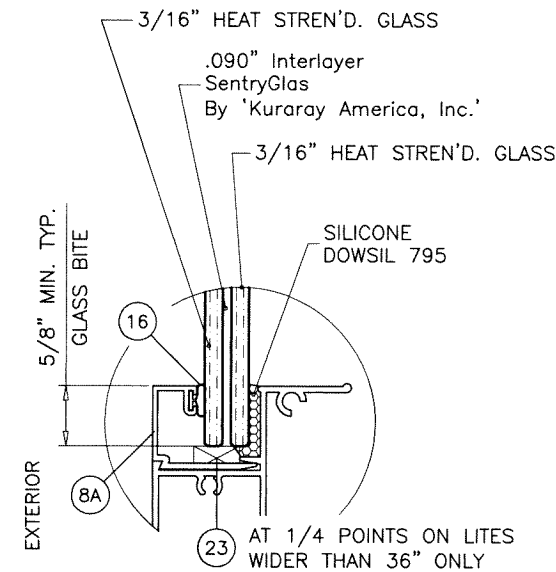
af c
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978
COMP-ANL W16-20MG

MG-200 ALUM SINGLE HUNG WINDOW (L.M.I.)
MR-GLASS DOORS & WINDOWS MANUFACTURING, LLC
8051 N.W. 79th Place
Medley, FL 33166
Tel. (305) 764-3963 Fax. (305) 470-8285

no	date	by	description
A	01.12.18		UPDATED TO 2017 FBC
B	07.24.20		UPDATED TO 2020 FBC
C	07.21.23		UPDATED TO 2023 FBC

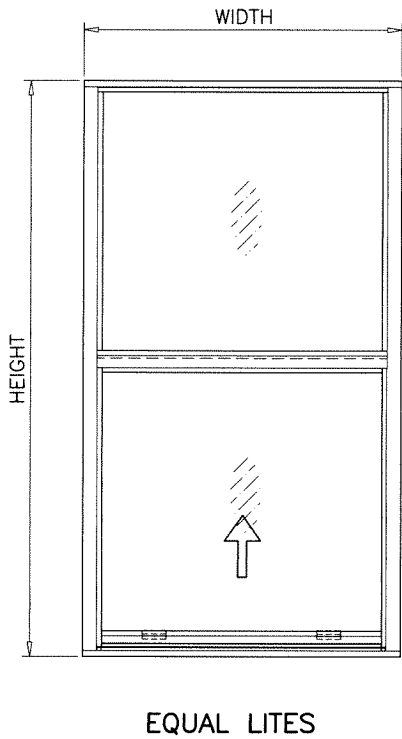
date: 04-15-16
scale: 1/2"=1'-0"
dr. by: TARIQ
chk. by:

drawing no.
W16-20
sheet 1 of 8



COMP-ANL\W16-20MG

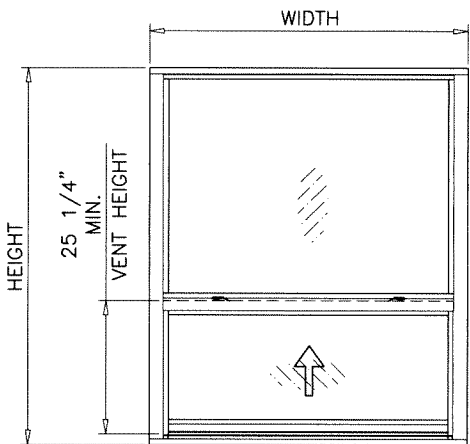
EQUAL LITES WINDOWS					
DESIGN LOAD CAPACITY - PSF					
FLANGE DIMS.		GLASS TYPES 'A' & 'A1'		GLASS TYPES 'B' & 'B1'	
WIDTH	HEIGHT	EXT.(+)	INT.(-)	EXT.(+)	INT.(-)
19-1/8"	38-3/8" (4)	80.0	140.0	80.0	80.0
26-1/2"		80.0	140.0	80.0	80.0
30"		80.0	140.0	80.0	80.0
37"		80.0	140.0	80.0	80.0
48"		80.0	140.0	80.0	80.0
53-1/8"		80.0	140.0	80.0	80.0
19-1/8"	50-5/8" (6)	80.0	140.0	80.0	80.0
26-1/2"		80.0	140.0	80.0	80.0
30"		80.0	140.0	80.0	80.0
37"		80.0	140.0	80.0	80.0
48"		80.0	140.0	80.0	80.0
53-1/8"		80.0	140.0	80.0	80.0
19-1/8"	63" (6)	80.0	140.0	80.0	80.0
26-1/2"		80.0	140.0	80.0	80.0
30"		80.0	140.0	80.0	80.0
37"		80.0	140.0	80.0	80.0
48"		80.0	140.0	80.0	80.0
53-1/8"		80.0	140.0	80.0	80.0
19-1/8"	74-1/4" (8)	80.0	140.0	80.0	80.0
26-1/2"		80.0	140.0	80.0	80.0
30"		80.0	140.0	80.0	80.0
37"		80.0	140.0	80.0	80.0
48"		80.0	140.0	80.0	80.0
53-1/8"		80.0	129.6	80.0	80.0
19-1/8"	76" (8)	80.0	140.0	80.0	80.0
26-1/2"		80.0	140.0	80.0	80.0
30"		80.0	140.0	80.0	80.0
37"		80.0	140.0	80.0	80.0
48"		80.0	140.0	80.0	80.0
53-1/8"		80.0	128.5	80.0	80.0
19-1/8"	84" (8)	80.0	140.0	-	-
26-1/2"		80.0	140.0	-	-
30"		80.0	140.0	-	-
37"		80.0	140.0	-	-
48"		80.0	140.0	-	-
53-1/8"		80.0	124.7	-	-
19-1/8"	90" (8)	80.0	140.0	-	-
26-1/2"		80.0	140.0	-	-
30"		80.0	140.0	-	-
37"		80.0	140.0	-	-
48"		80.0	140.0	-	-
53-1/8"		80.0	123.1	-	-
19-1/8"	96" (8)	80.0	140.0	-	-
26-1/2"		80.0	140.0	-	-
30"		80.0	140.0	-	-
37"		80.0	140.0	-	-
48"		80.0	140.0	-	-
53-1/8"		80.0	122.4	-	-
53-1/8"	74-1/4"	80.0	140.0	-	-
53-1/8"	76"	80.0	140.0	-	-
53-1/8"	84"	80.0	140.0	-	-
53-1/8"	90"	80.0	140.0	-	-
53-1/8"	96"	80.0	140.0	-	-
NO. IN PARENTHESIS INDICATE NO. OF ANCHORS PER JAMB.					
ADDL. ANCHOR AT MTG. RAIL					



EQUAL LITES

UNEQUAL LITES WINDOWS			
DESIGN LOAD CAPACITY - PSF			
FLANGE DIMS.		GLASS TYPES 'A' & 'A1'	
WIDTH	HEIGHT	EXT.(+)	INT.(-)
19-1/8"	63" (7)	80.0	140.0
26-1/2"		80.0	140.0
37"		80.0	140.0
40"		80.0	140.0
43"		80.0	140.0
48"		80.0	140.0
50"		80.0	140.0
52"		80.0	140.0
53-1/8"		80.0	140.0
19-1/8"	74-1/4" (8)	80.0	140.0
26-1/2"		80.0	140.0
37"		80.0	140.0
40"		80.0	140.0
43"		80.0	140.0
48"		80.0	140.0
50"		80.0	140.0
52"		80.0	140.0
53-1/8"		80.0	140.0
19-1/8"	76" (8)	80.0	140.0
26-1/2"		80.0	140.0
37"		80.0	140.0
40"		80.0	140.0
43"		80.0	140.0
48"		80.0	140.0
50"		80.0	140.0
52"		80.0	140.0
53-1/8"		80.0	140.0
19-1/8"	84" (8)	80.0	140.0
26-1/2"		80.0	140.0
37"		80.0	140.0
40"		80.0	140.0
43"		80.0	140.0
48"		80.0	140.0
50"		80.0	140.0
52"		80.0	140.0
53-1/8"		80.0	140.0
19-1/8"	90" (9)	80.0	140.0
26-1/2"		80.0	140.0
37"		80.0	140.0
40"		80.0	140.0
43"		80.0	140.0
48"		80.0	140.0
50"		80.0	140.0
52"		80.0	140.0
53-1/8"		80.0	140.0
19-1/8"	96" (9)	80.0	140.0
26-1/2"		80.0	140.0
37"		80.0	140.0
40"		80.0	140.0
43"		80.0	140.0
48"		80.0	140.0
50"		80.0	140.0
52"		80.0	140.0
53-1/8"		80.0	140.0

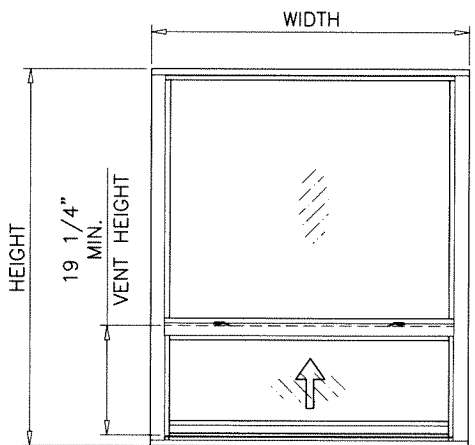
NO. IN PARENTHESIS INDICATE NO. OF ANCHORS PER JAMB.



UNEQUAL LITES (ORIEL TYPE)

UNEQUAL LITES WINDOWS			
DESIGN LOAD CAPACITY - PSF			
FLANGE DIMS.		GLASS TYPES 'B' & 'B1'	
WIDTH	HEIGHT	EXT.(+)	INT.(-)
19-1/8"	50-5/8" (6)	80.0	80.0
26-1/2"		80.0	80.0
30"		80.0	80.0
32"		80.0	80.0
36"		80.0	80.0
37"		80.0	80.0
46"		80.0	80.0
48"		80.0	80.0
53-1/8"		80.0	80.0
19-1/8"	63" (6)	80.0	80.0
26-1/2"		80.0	80.0
30"		80.0	80.0
32"		80.0	80.0
36"		80.0	80.0
37"		80.0	80.0
46"		80.0	80.0
48"		80.0	80.0
53-1/8"		80.0	80.0
19-1/8"	74-1/4" (8)	80.0	80.0
26-1/2"		80.0	80.0
30"		80.0	80.0
32"		80.0	80.0
36"		80.0	80.0
37"		80.0	80.0
46"		80.0	80.0
48"		80.0	80.0
53-1/8"		80.0	80.0
19-1/8"	76" (8)	80.0	80.0
26-1/2"		80.0	80.0
30"		80.0	80.0
32"		80.0	80.0
36"		80.0	80.0
37"		80.0	80.0
46"		80.0	80.0
48"		80.0	80.0
53-1/8"		80.0	80.0
19-1/8"	84" (8)	80.0	80.0
26-1/2"		80.0	80.0
30"		80.0	80.0
32"		80.0	80.0
36"		80.0	80.0
37"		80.0	80.0
46"		80.0	80.0
48"		80.0	80.0
53-1/8"		80.0	80.0
19-1/8"	90" (9)	80.0	80.0
26-1/2"		80.0	80.0
30"		80.0	80.0
32"		80.0	80.0
36"		80.0	80.0
37"		80.0	80.0
46"		80.0	80.0
48"		80.0	80.0
53-1/8"		80.0	80.0
19-1/8"	96" (9)	80.0	80.0
26-1/2"		80.0	80.0
30"		80.0	80.0
32"		80.0	80.0
36"		80.0	80.0
37"		80.0	80.0
46"		80.0	80.0
48"		80.0	80.0
53-1/8"		80.0	80.0

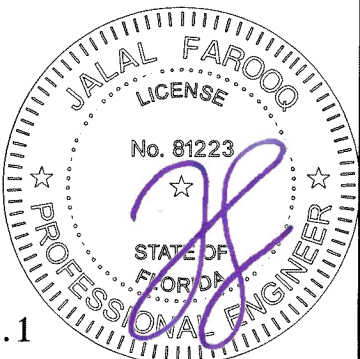
NO. IN PARENTHESIS INDICATE NO. OF ANCHORS PER JAMB.



UNEQUAL LITES (ORIEL TYPE)

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE
BASED ON ASTM E1300-09 (3 SEC. GUSTS)
AND FLORIDA BUILDING COMMISSION
DECLARATORY STATEMENT DCA05-DEC-219

Sealed: 7/24/2023

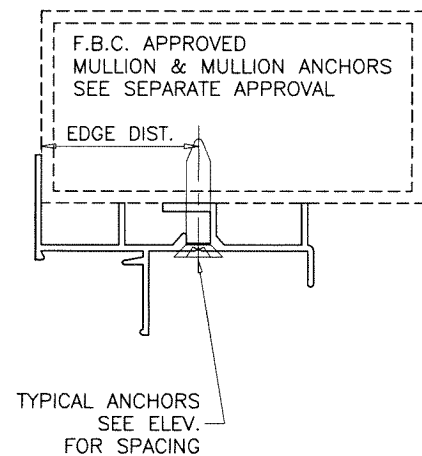
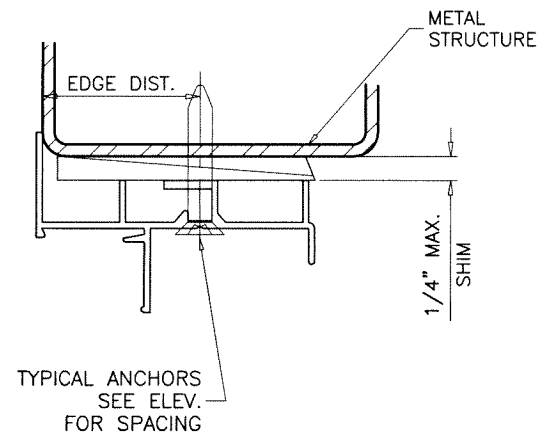
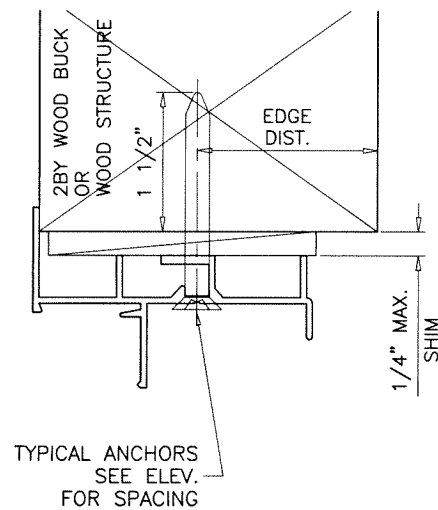
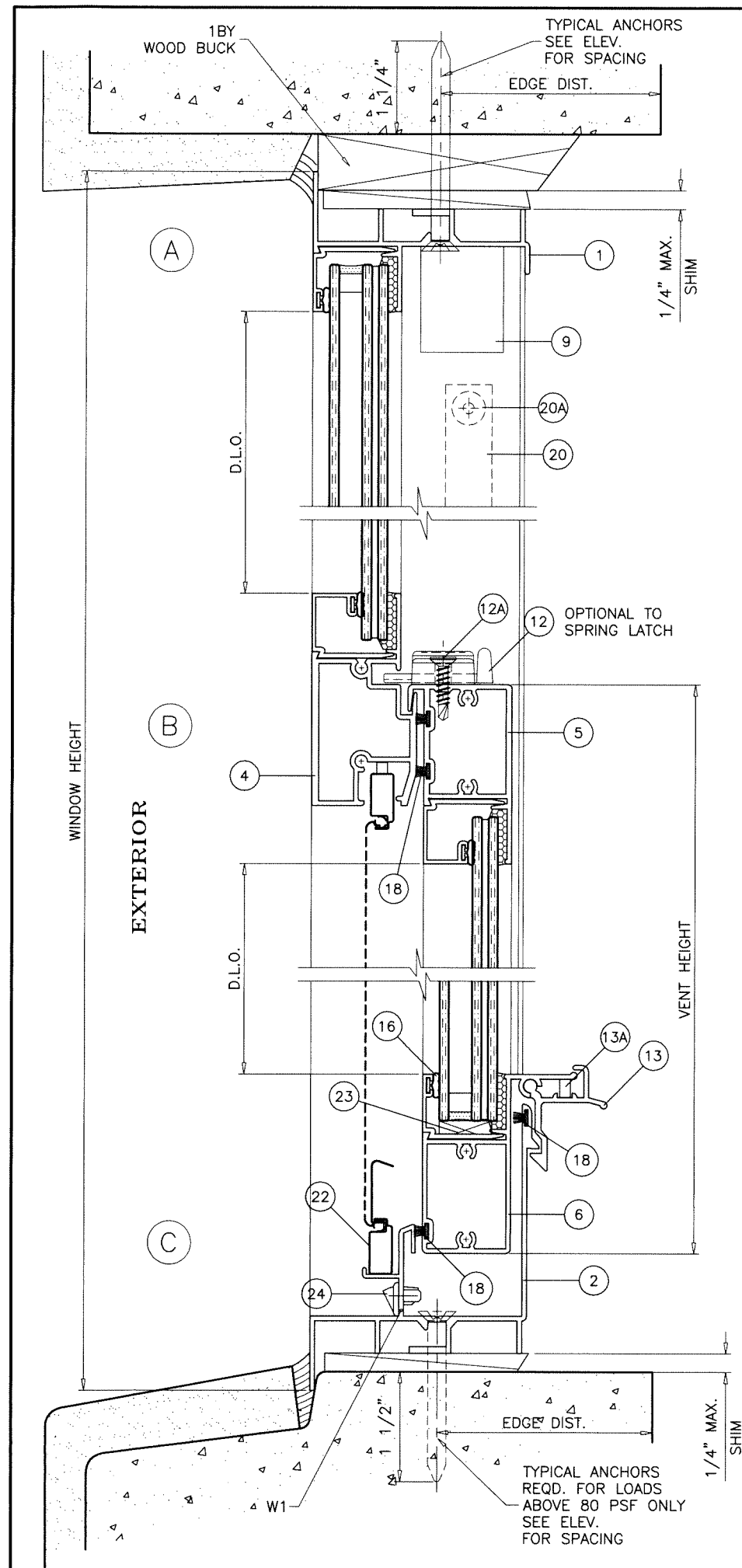


FL #20352.1

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978
(C.A.N. 3538)

MG-200 ALUM SINGLE HUNG WINDOW (L.M.I.)
MR-GLASS DOORS & WINDOWS MANUFACTURING, LLC
8051 N.W. 79th Place
Medley, FL. 33166
Tel. (305) 764-3963 Fax. (305) 470-8285

revisions:	no	date	by	description
date:	04-15-16			
scale:	-			
dr. by:	TARIQ			
chk. by:				
drawing no.	W16-20			
sheet	3 of 8			



WOOD BUCKS AND METAL STRUCTURE NOT BY 'MR-GLASS' MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

WEEPHOLES:

W1 = 1-1/2" X 5/16" WEEPHOLES AT 5-1/2" FROM EACH END

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)
 INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
 1-1/2" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)
 THRU 1BY BUCKS INTO CONC. OR BLOCKS
 1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
 1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)

DIRECTLY INTO CONCRETE OR BLOCKS
 1-1/2" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
 1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)

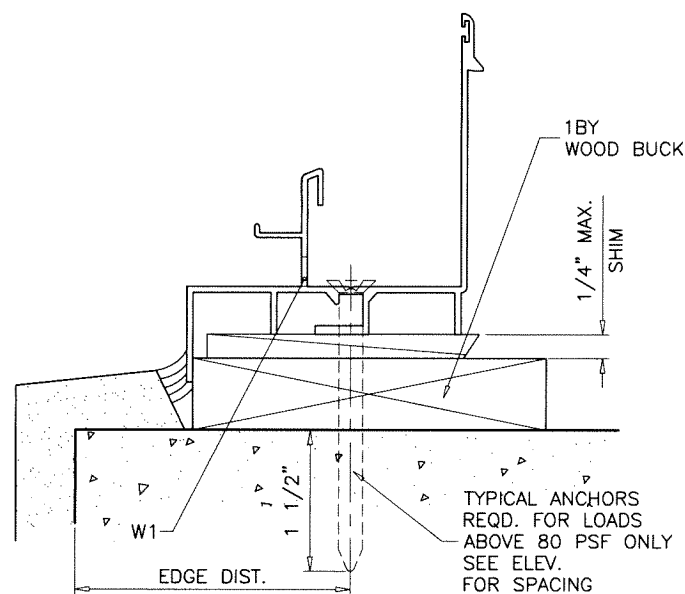
#14 SMS OR SELF-DRILLING SCREWS (GRADE 2 CRS)

OR
 INTO F.B.C. APPROVED MULLIONS
 INTO METAL STRUCTURES (HEAD/SILL/JAMBS)
 (3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS
 ALUMINUM: 1/8" THK. MIN. (6063-T5 MIN.)
 STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)
 (STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

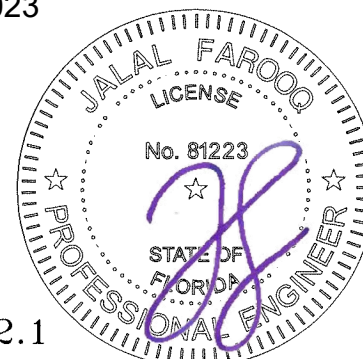
CRITICAL EDGE DISTANCE

INTO CONCRETE AND BLOCKS = 2-1/2" MIN.
 INTO WOOD STRUCTURE = 1" MIN.
 INTO METAL STRUCTURE = 3/4" MIN.

WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN.
 CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.
 C-90 HOLLOW/FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.



Sealed: 7/24/2023



FL #20352.1

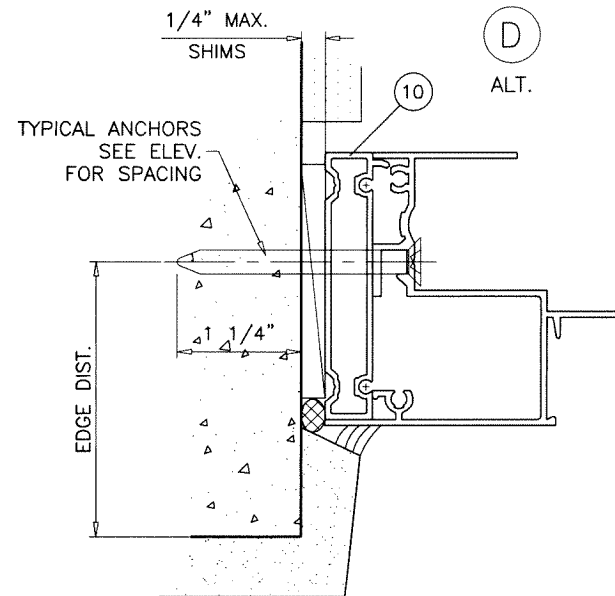
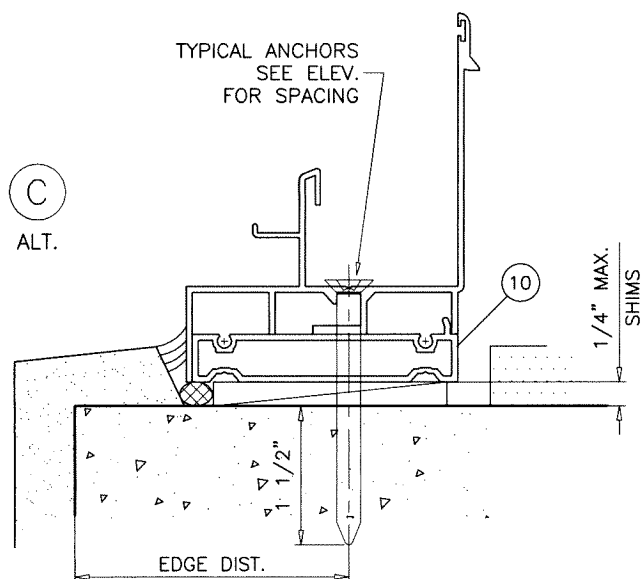
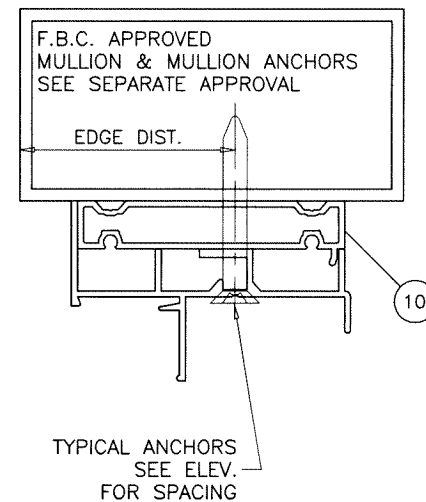
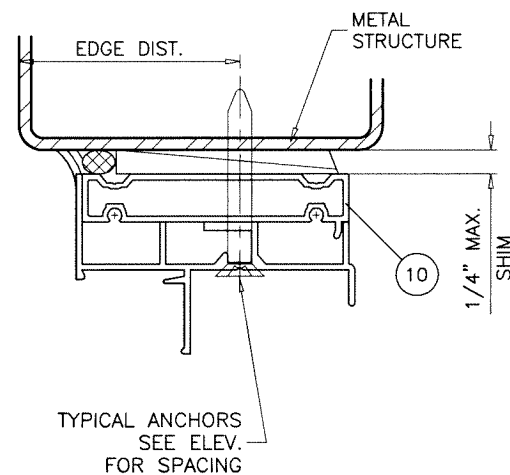
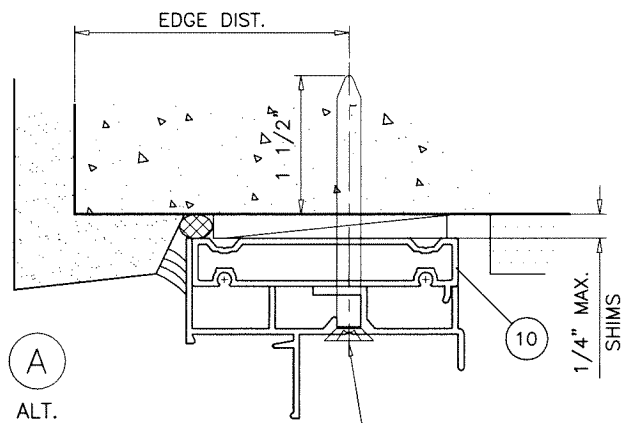
AL-FAROOQ CORPORATION
 ENGINEERS & PRODUCT DEVELOPMENT
 9360 SUNSET DRIVE, SUITE 220
 MIAMI, FLORIDA 33173
 TEL. (305) 264-8100 FAX. (305) 262-6978
 (C.A.N. 3538)
 COMP-ANL W16-20MG

MG-200 ALUM SINGLE HUNG WINDOW (L.M.I.)
MR-GLASS DOORS & WINDOWS MANUFACTURING, LLC
 8051 N.W. 79th Place
 Medley, FL 33166
 Tel. (305) 764-3963 Fax. (305) 470-8285

revisions:	no	date	by	description

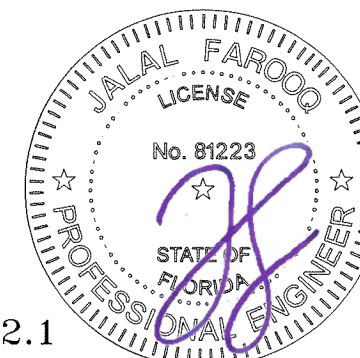
date: 04-15-16
 scale: 1/2" = 1"
 dr. by: TARIQ
 chk. by:

drawing no.
W16-20
 sheet 4 of 8



INSTALLATION DETAILS WITH FLUSH FRAME ADAPTER

FL #20352.1



Sealed: 7/24/2023

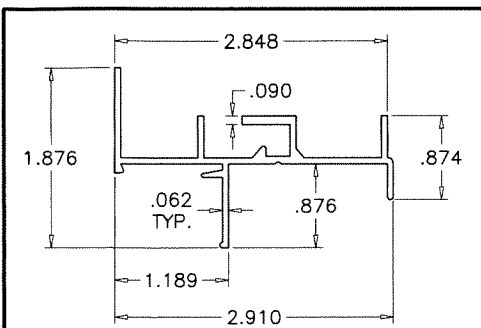
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173 (C.A.N. 3538)
TEL. (305) 264-8100 FAX. (305) 262-6978

MG-200 ALUM SINGLE HUNG WINDOW (L.M.I.)
MR-GLASS DOORS & WINDOWS MANUFACTURING, LLC
8051 N.W. 79th Place
Medley, FL 33166
Tel. (305) 764-3963 Fax. (305) 470-8285

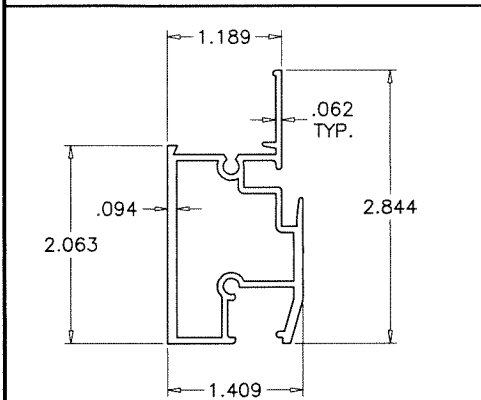
revisions:	
no	date by description

date: 04-15-16	scale: 1/2" = 1"	dr. by: TARIQ	chk. by:
----------------	------------------	---------------	----------

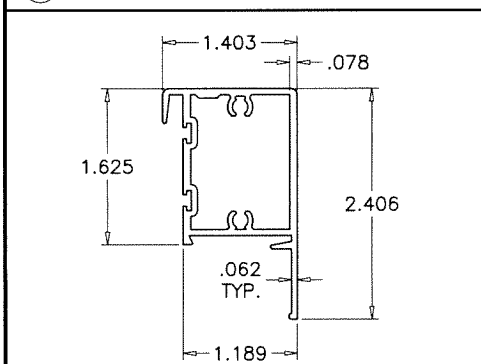
drawing no.
W16-20
sheet 6 of 8



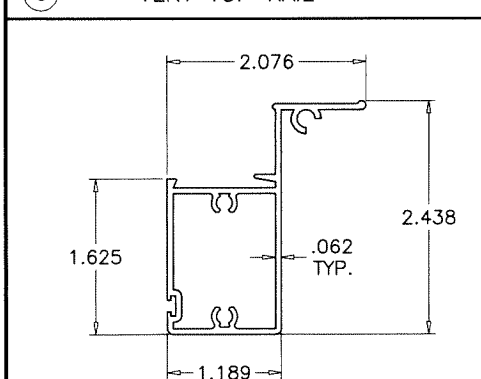
① FRAME HEAD



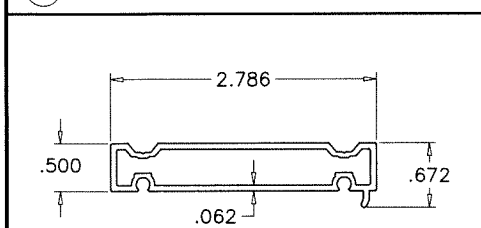
④ FIX. MEETING RAIL



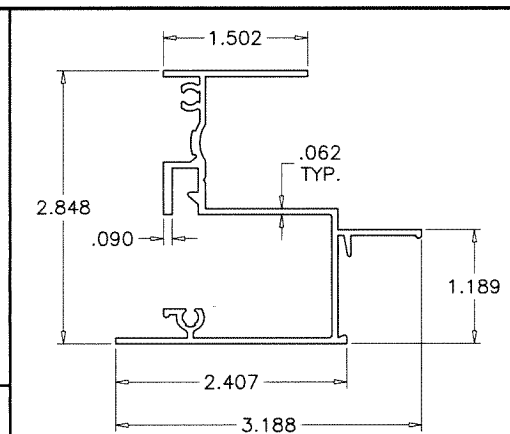
⑤ VENT TOP RAIL



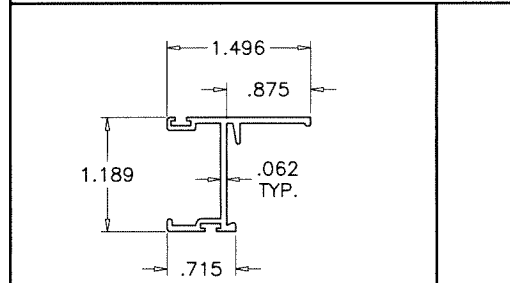
⑥ VENT BOTTOM RAIL



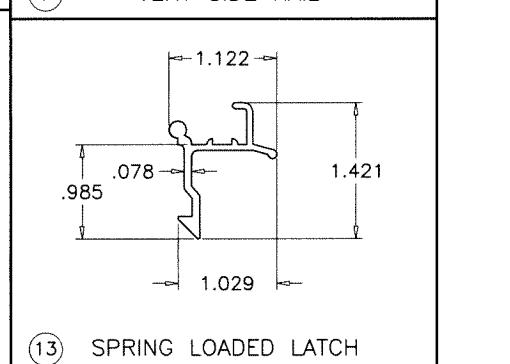
⑩ FLUSH FRAME ADAPTER



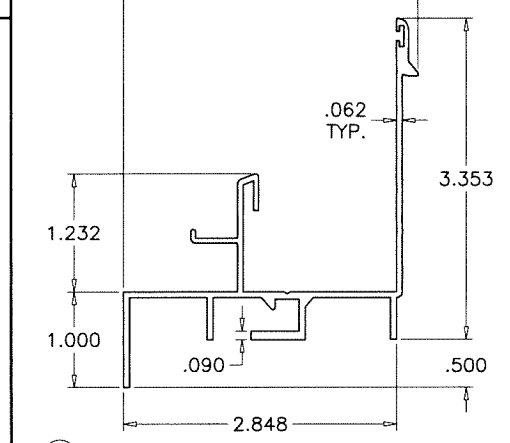
③ FRAME JAMB



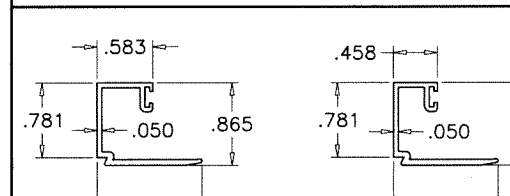
⑦ VENT SIDE RAIL



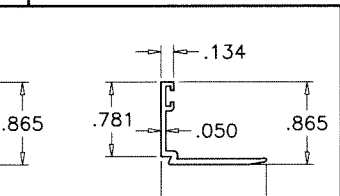
⑬ SPRING LOADED LATCH



② FRAME SILL



⑧ GLAZING BEADS



⑧A GLAZING BEADS

ITEM #	PART #	REQD.	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	MG201	1	FRAME HEAD	6063-T6	-
2	MG202	1	FRAME SILL	6063-T6	-
3	MG203	2	FRAME JAMB	6063-T6	-
4	MG204	1	FIXED MTG. RAIL	6063-T6	-
5	MG205	1	VENT TOP RAIL	6063-T6	-
6	MG206	1	VENT BOTTOM RAIL	6063-T6	-
7	MG207	2	VENT SIDE RAIL	6063-T6	-
8	MG208	AS RQD.	GLAZING BEAD (5/16" GLASS)	6063-T6	-
8A	MG209	AS RQD.	GLAZING BEAD (7/16" GLASS)	6063-T6	-
8B	MG210	AS RQD.	GLAZING BEAD (INSUL. LAM. GLASS)	6063-T6	-
9	-	2/VENT	SASH STOP	6063-T6	-
10	MG212	AS REQD.	FLUSH FRAME ADAPTER	6063-T6	-
11	-	-	-	-	-
12	SL203P	2/ VENT	SWEEP LATCH	ZAMAK	SULLIVAN & ASSOC.
12A	#8 X 5/8"	2/ LATCH	LATCH INST. SCREWS	ST. STEEL	OH SMS
13	MG211	2/ VENT	SPRING LOADED LATCH	6063-T6	ALTERNATE TO SWEEP LATCH
13A	-	2/ LATCH	LATCH SPRING	ST. STEEL	-
14	#10 X 1"	AS REQD.	FRAME & VENT ASSEMBLY SCREWS	CRS	PH SMS
16	E202	AS REQD.	GLAZING BEAD BULB	NEOPRENE	ULTRAFAB
18	W73231NK000B	AS REQD.	SIDE RAIL FIN SEAL W'STRIPPING	-	ULTRAFAB
19A	MG221	2/ VENT	VENT BOTTOM GUIDE	CELCON	M&M PLASTICS
19B	MG222	2/ VENT	VENT TOP GUIDE	CELCON	M&M PLASTICS
19.1	#6 X 5/8"	1/ GUIDE	SASH GUIDE INST. SCREW	CRS	FH SMS TYPE B
20	SL-14A-044	2/VENT	ULTRALIFT SPIRAL BALANCE	-	CALDWELL
20A	#10 X 1-1/4"	1/ BALANCE	BALANCE INST. SCREW	-	OH SMS TYPE B
22	-	1	5/16" BOX SCREEN	-	OPTIONAL
23	-	2/ LITE	SETTING BLOCK AT 1/4 POINTS	EPDM	DUROMETER 80±5 SHORE A
24	-	2	HI-FLOW WEEPER	-	PREFERRED ENGINEERING PRODUCTS

Sealed: 7/24/2023



FL #20352.1

AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978
(C.A.N. 3538)

MG-200 ALUM SINGLE HUNG WINDOW (L.M.I.)
MR-GLASS DOORS & WINDOWS MANUFACTURING, LLC
8051 N.W. 79th Place
Medley, FL. 33166
Tel. (305) 764-3963 Fax. (305) 470-8285

revisions:	no	date	by	description

date: 04-15-16	scale: 1/2" = 1"	dr. by: TARIQ	chk. by:
drawing no. W16-20			
sheet 7 of 8			

