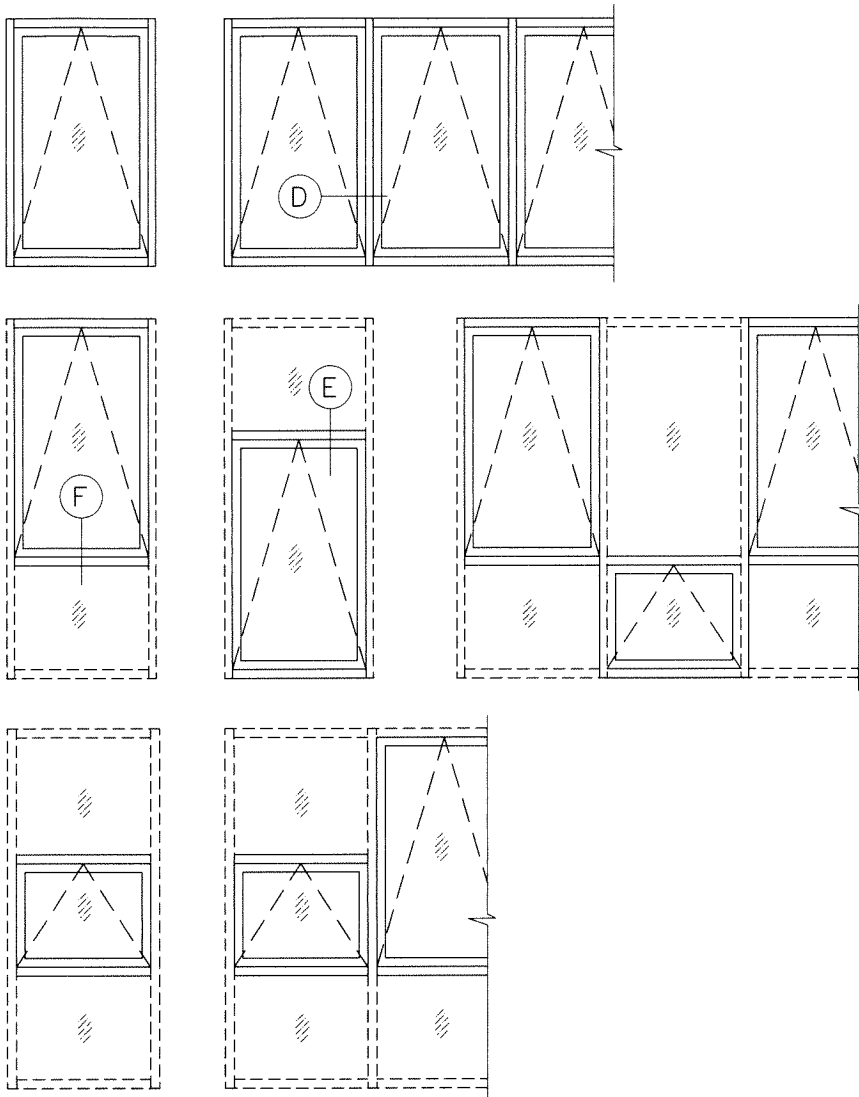




APPROVED CONFIGURATIONS

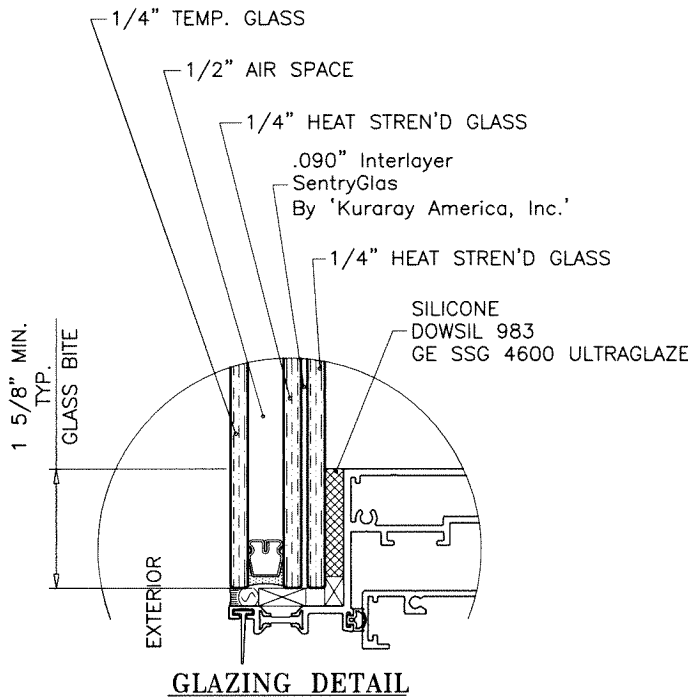
SEE SEPARATE APPROVAL FOR WW5250 WINDOW WALL AND CW7000 CURTAIN WALL DESIGN LOAD CAPACITIES AND ANCHORS. LOWER VALUES FROM PROJECTED WINDOW CAPACITY OR WINDOW WALL/CURTAIN WALL SYSTEM APPROVAL WILL APPLY TO ENTIRE SYSTEM.

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

SERIES 2650
ALUMINUM PROJECT OUT WINDOW

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF PROJECTED WINDOWS IN MODULES OF TWO OR MORE WINDOWS FOR WINDOWS CAPACITY SEE ABOVE. ALSO PROJECTED WINDOWS WITHIN WW5250 WINDOW WALL AND CW7000 CURTAIN WALL SYSTEMS. SEE SEPARATE APPROVAL FOR WW5250 & CW7000 SYSTEMS MULLION, GLASS AND ANCHOR CAPACITIES. LOWER DESIGN PRESSURES FROM WINDOW CAPACITY OR WINDOW WALL/CURTAIN WALL APPROVAL WILL APPLY TO ENTIRE SYSTEM.

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



1/2" AIR SPACE CONSISTING OF:
SPACER:
'HELIMA' LOW PROFILE ALUMINUM SPACER
BY 'LINGERMANN GMBH'
AROUND THE PERIMETER OF THE GLASS.
PERIMETER SEALANT:
SILICONE
DOWSIL 791
GE 2000

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.

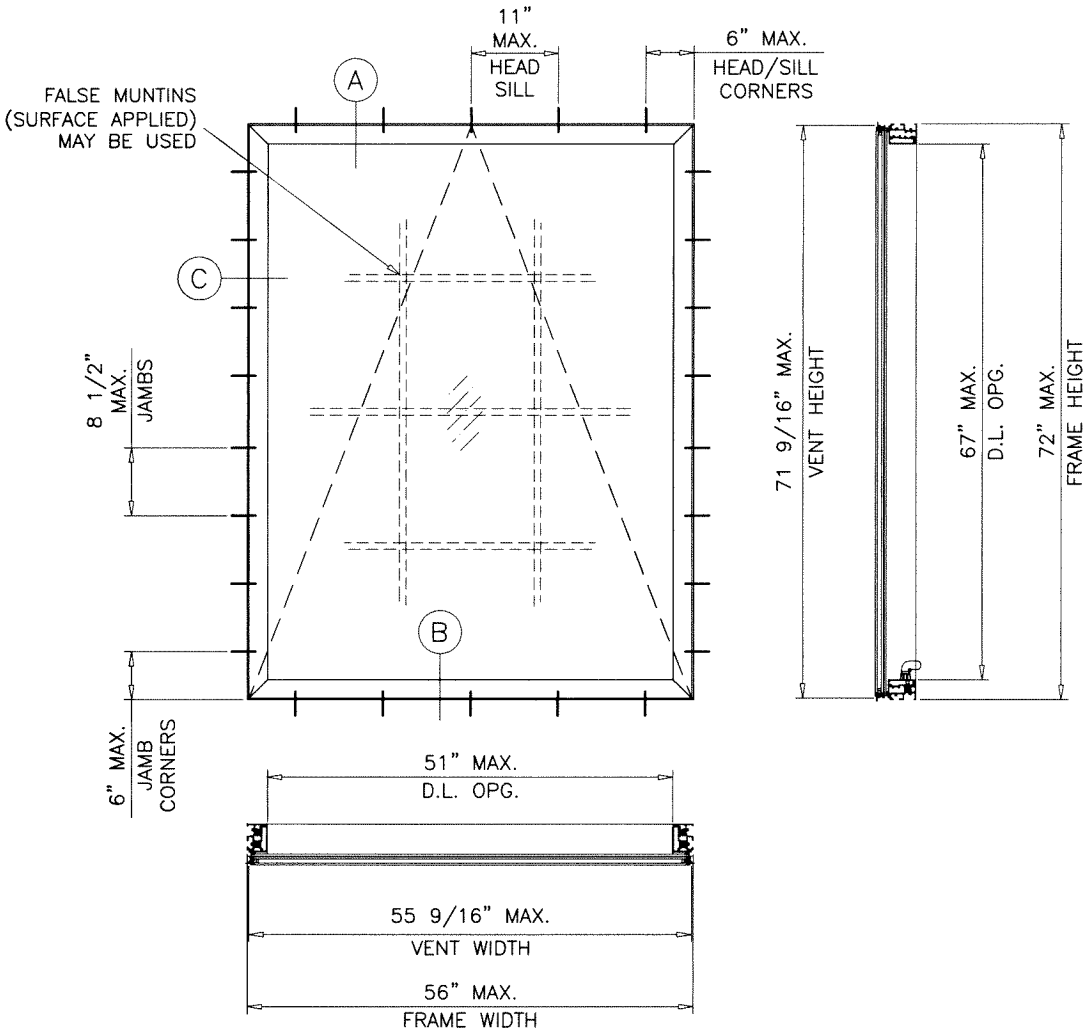
ALL SHIMS TO BE HIGH IMPACT, NON-METALLIC AND NON-COMPRESSIBLE.

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

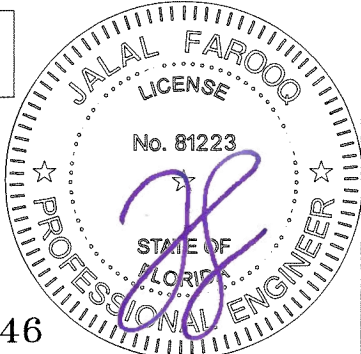
MAXIMUM DESIGN LOAD RATING = + 100.0 PSF
(FOR SIZE SHOWN OR SMALLER) - 132.0 PSF

PRODUCT COMPLIES WITH REQUIREMENTS OF ANSI Z97.1.
SAFEGUARD REQUIREMENTS TO BE VERIFIED.

- 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.

INSUL. LAM. GLASS
LARGE MISSILE IMPACT

Sealed: 10/18/2023



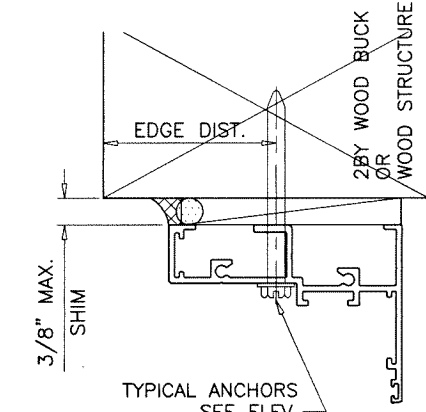
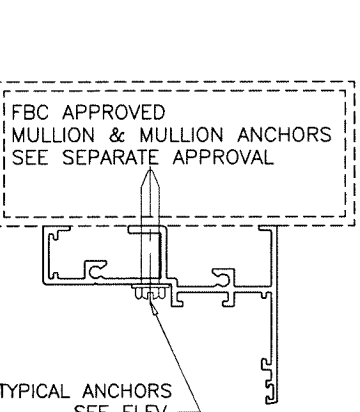
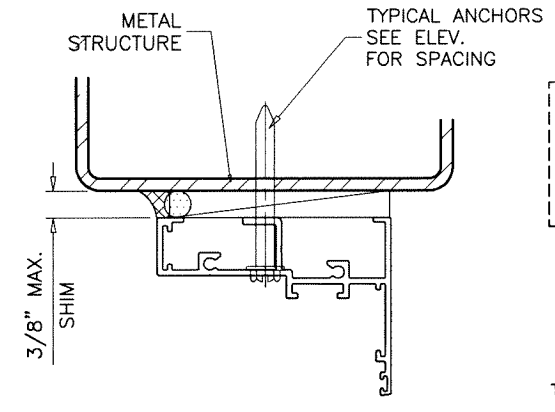
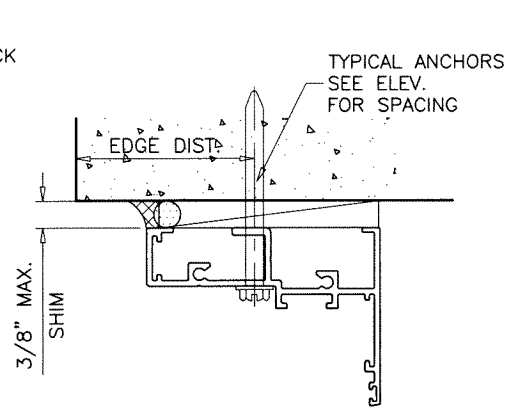
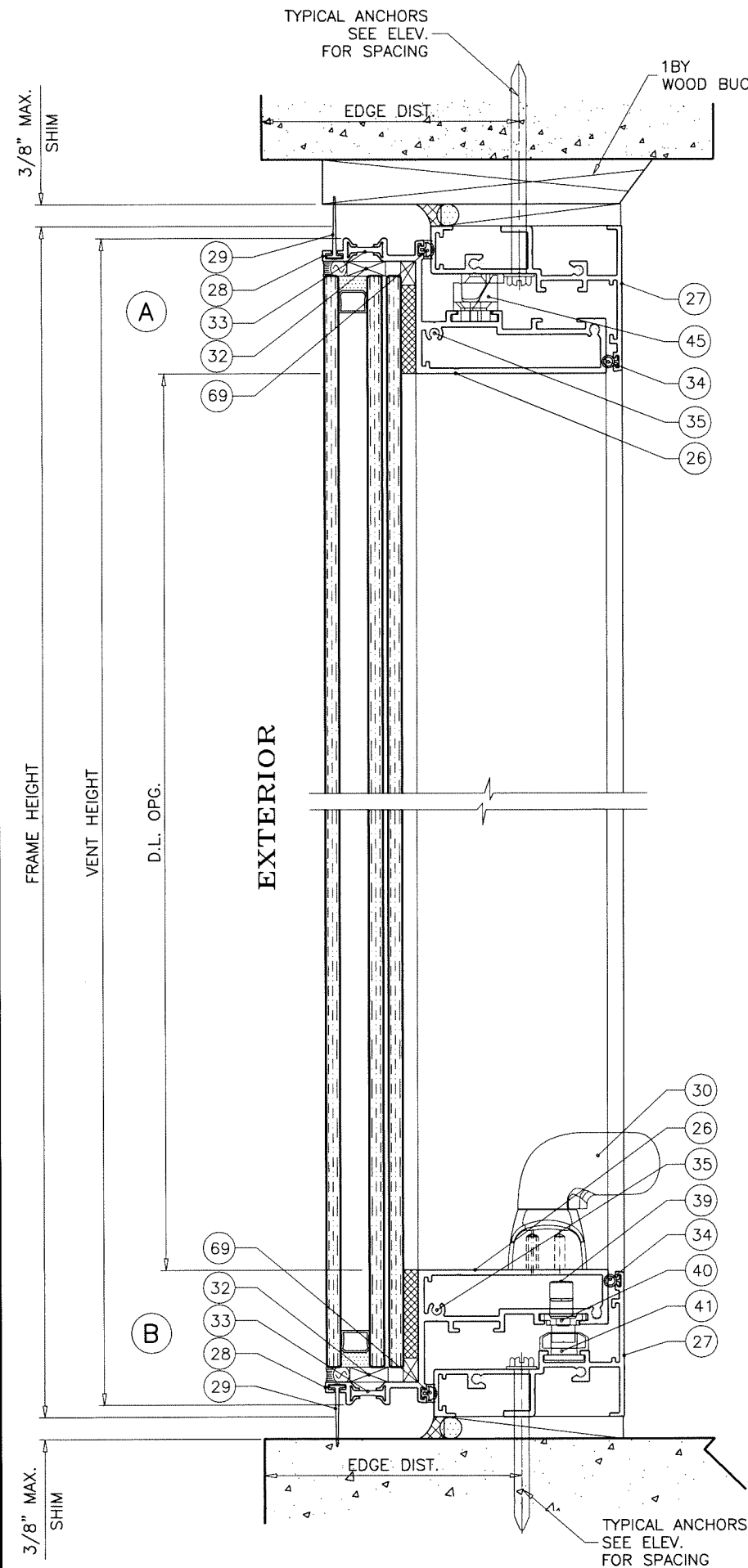
FL #22046

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AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978
COMP-ANL W14-04GWL

SERIES 2650 ALUMINUM PROJECT OUT WDW. (L.M.I.)
TECNOGLASS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

date: 02-14-14		revisions:			
		no	date	by	description
scale: 1/2"=1'-0"		A	03.13.17		GENERAL REVISION
		B	10.23.17		UPDATED TO 2017 FBC
		C	12.07.20		UPDATED TO 2020 FBC
		D	10.02.23		UPDATED TO 2023 FBC
drawing no.					
W14-04					
sheet 1 of 6					

INSTALLATION DETAILS INTO CONCRETE, WOOD AND METAL



WOOD BUCKS AND METAL STRUCTURES NOT BY 'TECNOGLASS' MUST SUPPORT LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING
1/4" DIA. KWIK-CON II+ BY 'HILTI' (Fu=138 KSI, Fy=137 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
1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
1-1/4" MIN. EMBED INTO BLOCKS (JAMBS)
1/4" DIA. TEKS OR SELF DRILLING SCREWS (GRADE 5 CRS)
INTO F.B.C. APPROVED MULLIONS
OR
INTO METAL STRUCTURES (HEAD/SILL/JAMBS)
(3) THREADS MIN. PENETRATION BEYOND SUBSTRATE
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)
TYPICAL EDGE DISTANCE
INTO CONCRETE AND MASONRY = 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: 10/18/2023

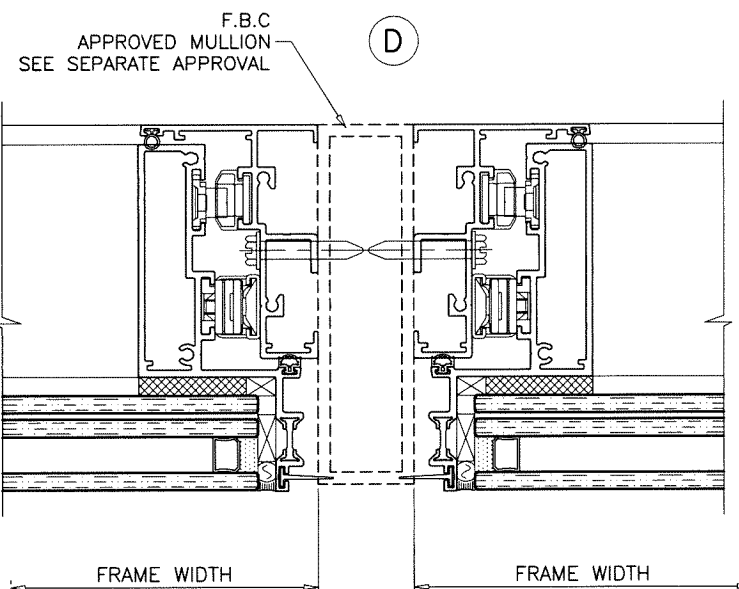
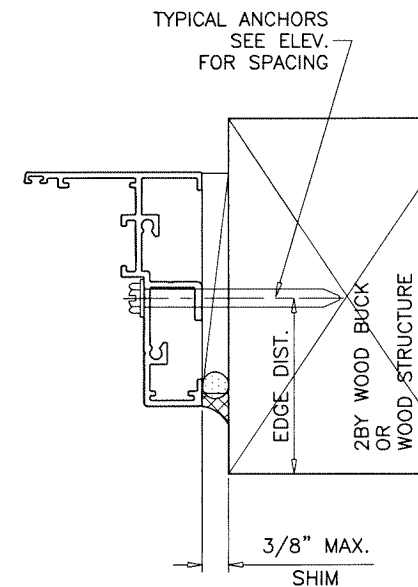
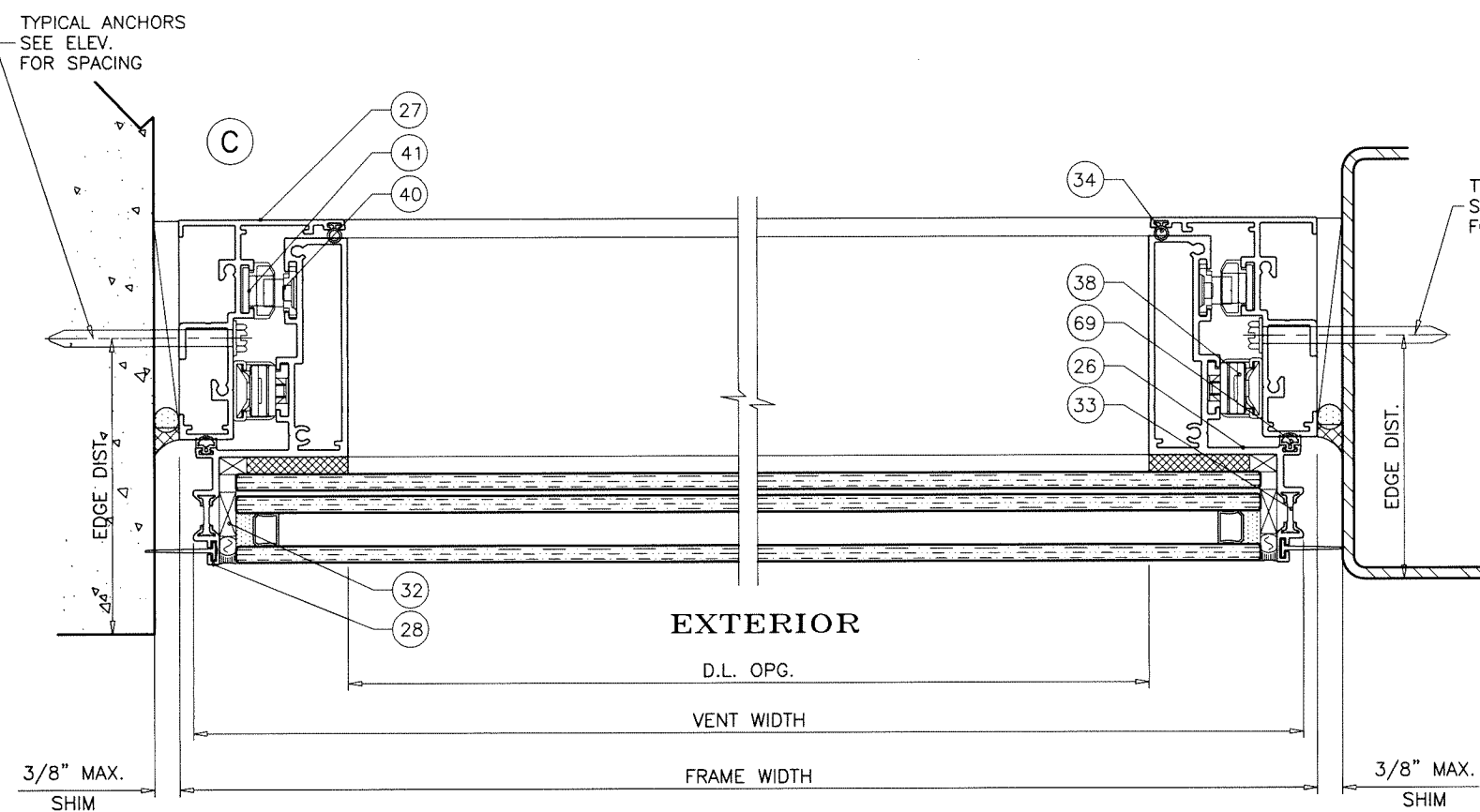
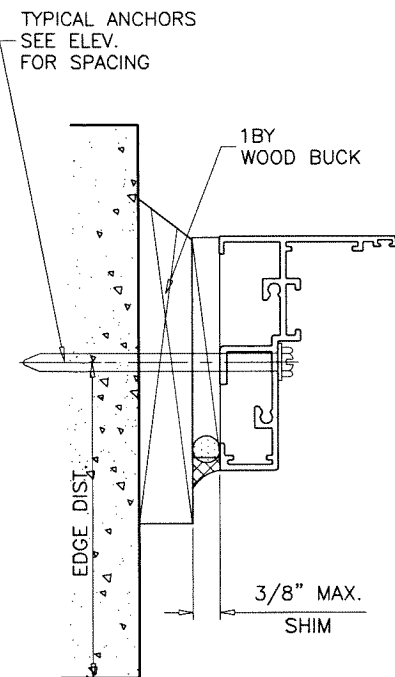


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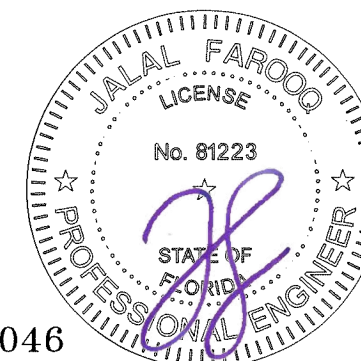
AL-FAROOQ CORPORATION
ENGINEERS & PRODUCT DEVELOPMENT
9360 SUNSET DRIVE, SUITE 220
MIAMI, FLORIDA 33173
TEL. (305) 264-8100 FAX. (305) 262-6978
C.A.N. 3538
COMP-ANL W14-04GWL

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3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

revisions:		no date by description	
date:	02-14-14	scale:	3/8" = 1"
dr. by:	TARIQ	chk. by:	
drawing no.	W14-04		
sheet	2 of 6		



Sealed: 10/18/2023



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no	description

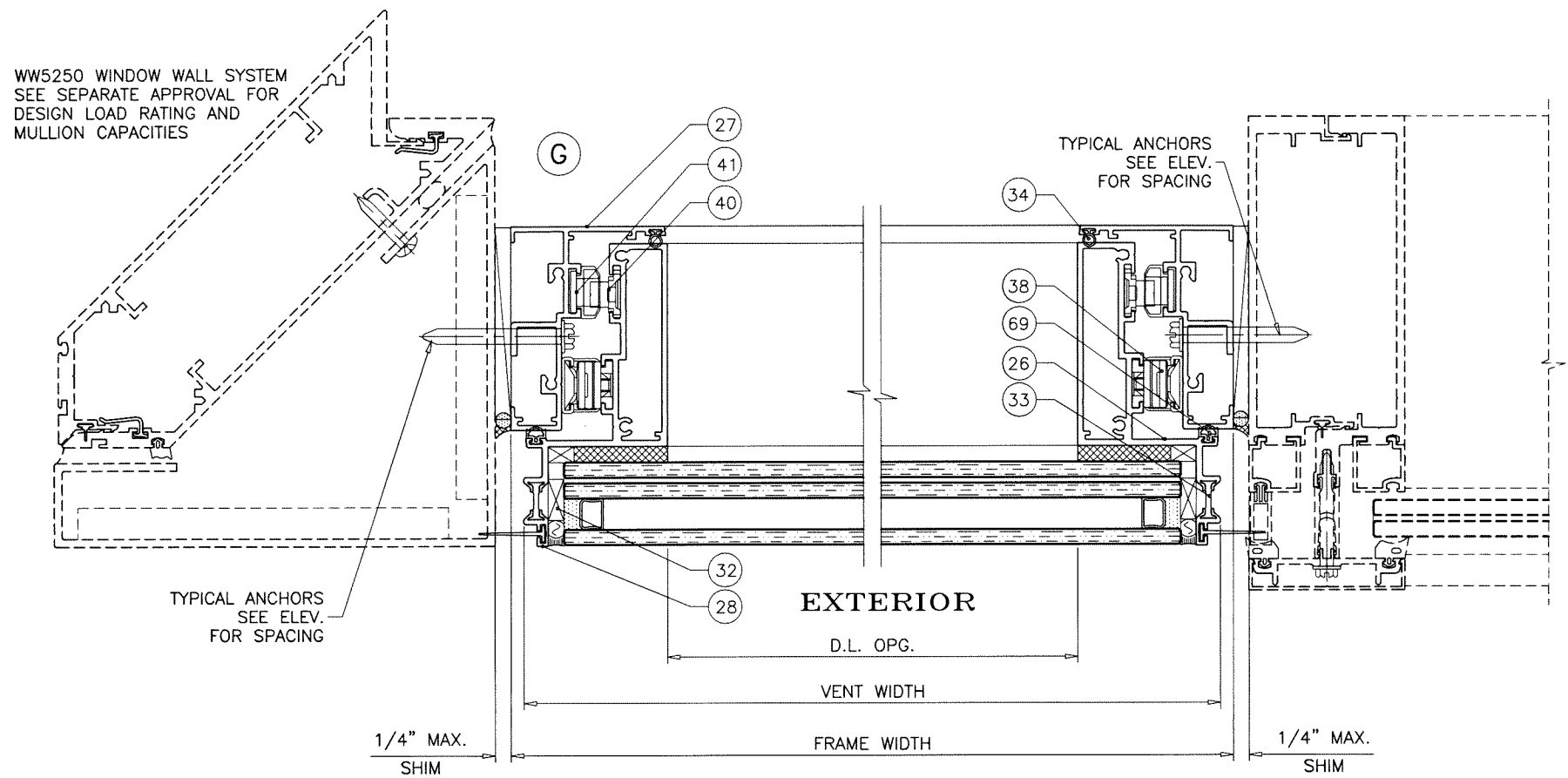
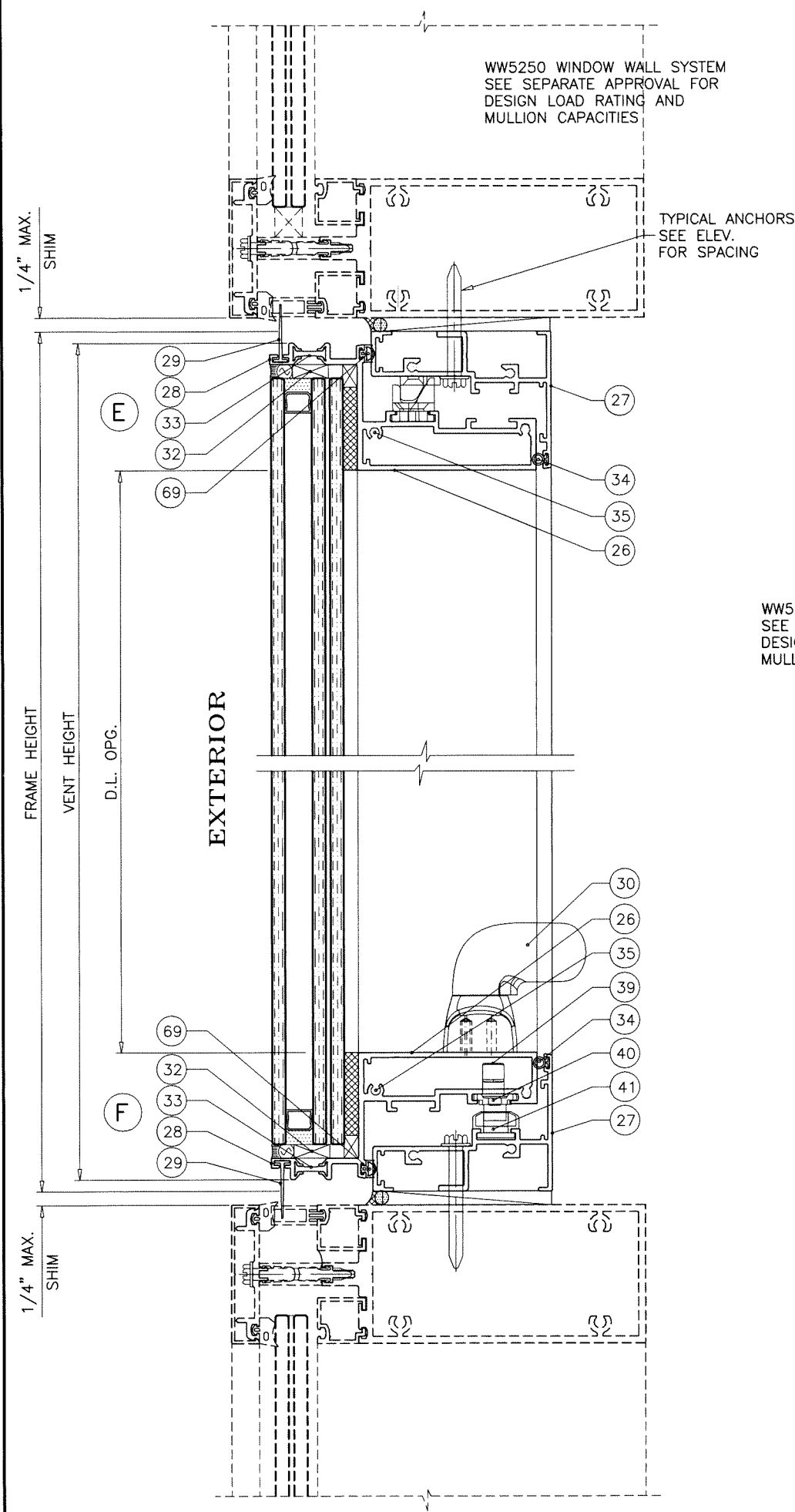
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dr. by: TARIQ
chk. by:

drawing no.
W14-04

sheet 3 of 6

COMP-ANL\W14-04GWL

INSTALLATION DETAILS INTO WW5250 WINDOW WALL SYSTEM



Sealed: 10/18/2023

FL #22046



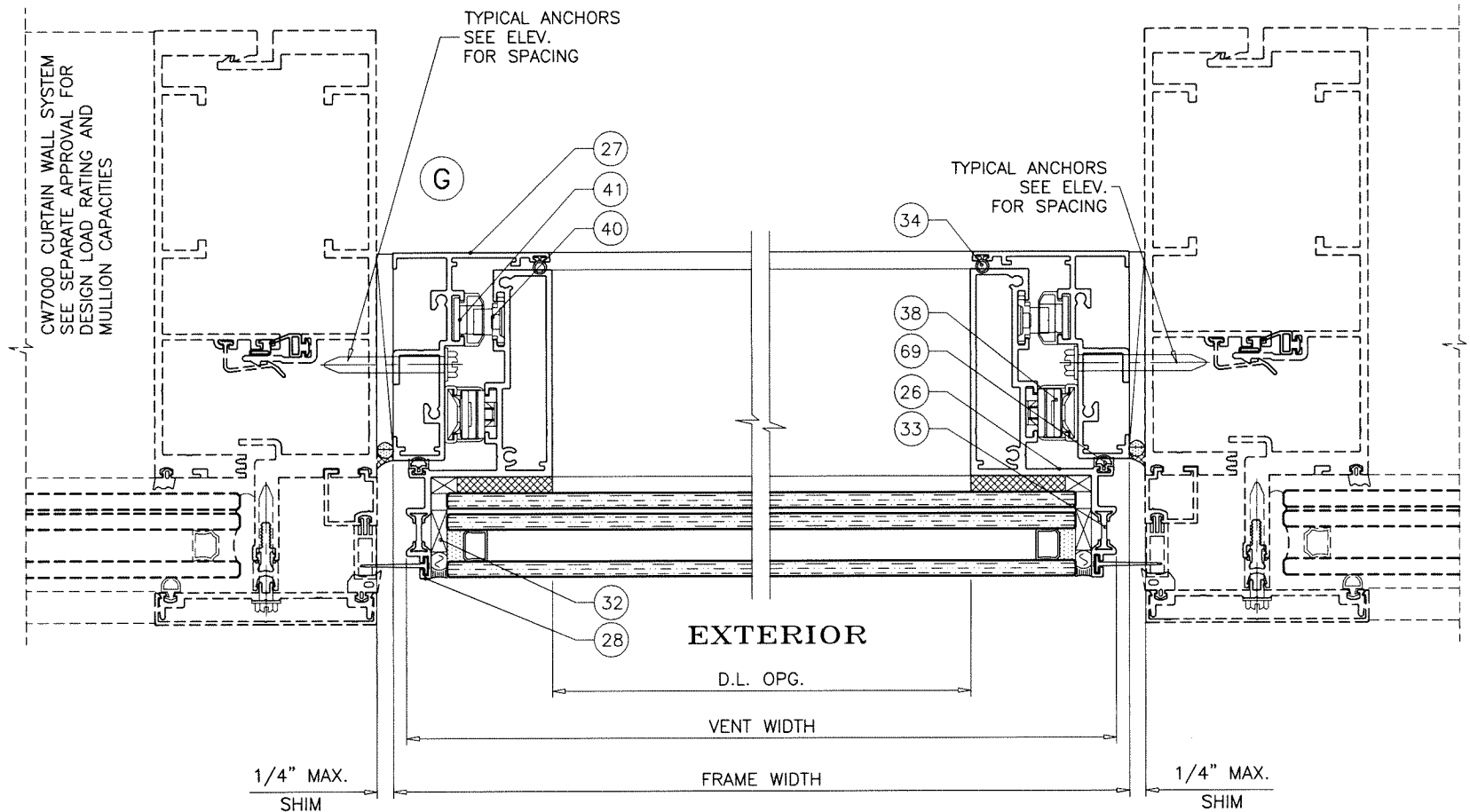
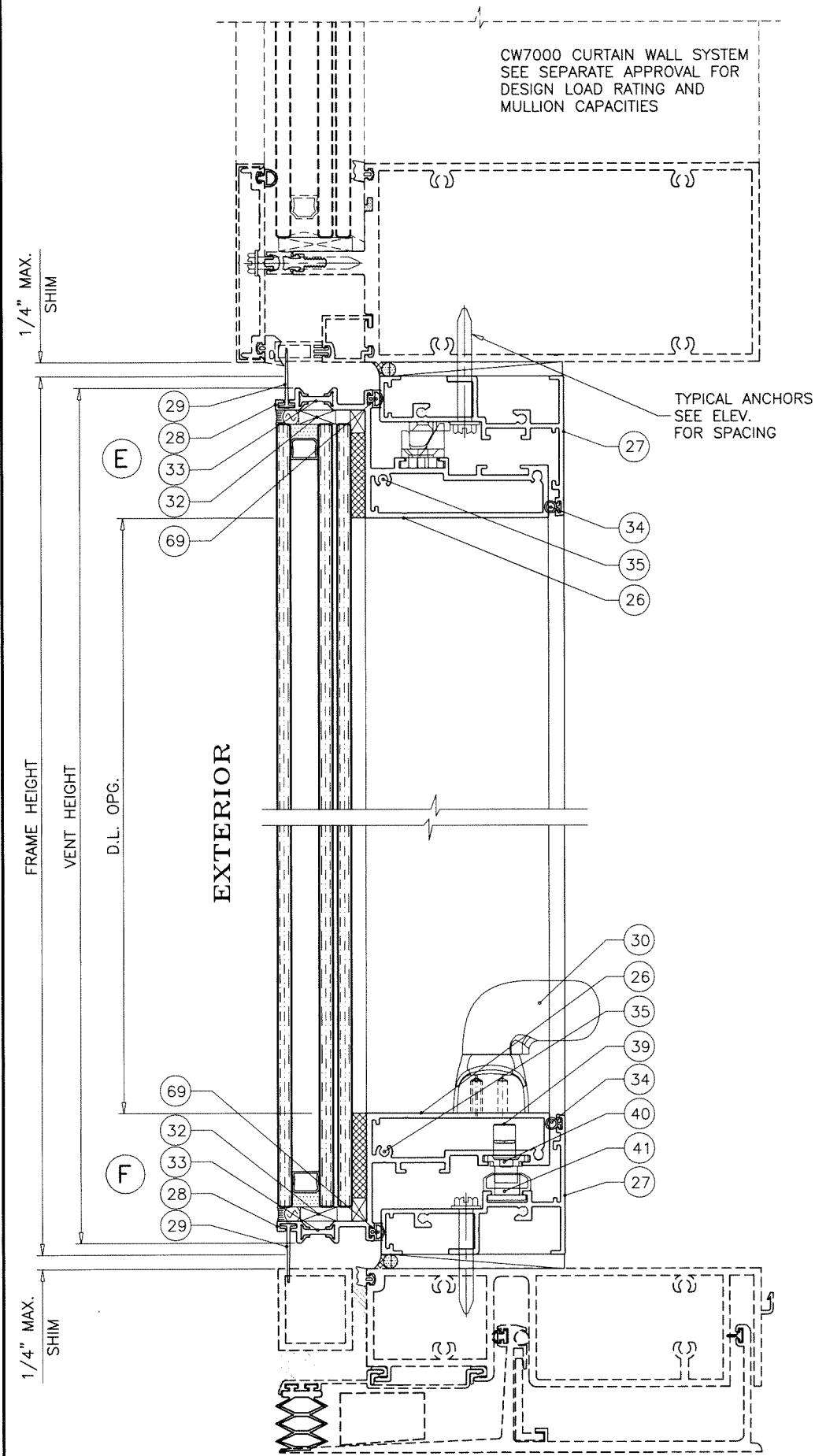
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AL-FAROOQ CORPORATION
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date:	02-14-14	scale:	3/8" = 1"
dr. by:	TARIQ	chk. by:	
drawing no.	W14-04		
sheet	4 of 6		

INSTALLATION DETAILS INTO CW7000 CURTAIN WALL SYSTEM



Sealed: 10/18/2023



FL #22046

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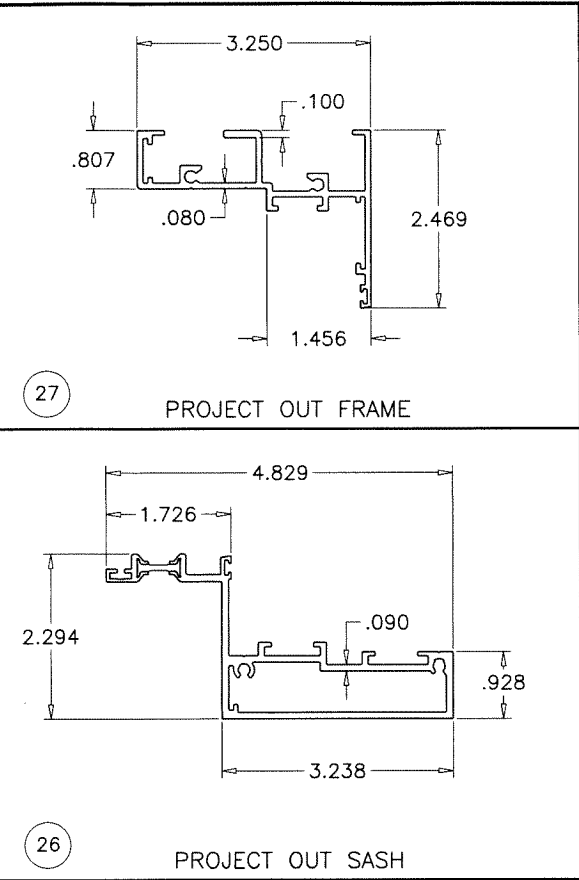
SERIES 2650 ALUMINUM PROJECT OUT WDW. (L.M.I.)

TECNOGLASS, LLC
3550 N.W. 49 STREET
MIAMI, FL. 33142
TEL. (305) 638-5151 FAX. (305) 638-5158

revisions:	
no	date by description

date: 02-14-14	scale: 3/8" = 1"	dr. by: TARIQ	chk. by:
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drawing no.
W14-04
sheet 5 of 6



ITEM #	DESCRIPTION	PART No.	MANUFACTURED	MATERIAL
26	PROJECT OUT SASH	2650-001	SAPA	ALUMINUM 6063-T6
27	PROJECT OUT FRAME	2650-002	SAPA	ALUMINUM 6063-T6
28	PROJECT OUT THERMAL BREAK ADAPTER	2650-003	SAPA	ALUMINUM 6063-T6
29	MULLION SEAL FLAP GASKET	2650-G01	TREMCO	EPDM
30	HANDLE	1249RR	ADVANTAGE MANUFACTURING	-
32	1/4" SETTING BLOCK	-	-	-
33	ISOBAR	-	-	-
34	INTERIOR BULB GASKET	E202	ULTRAFAB	EPDM
35	# 10 X 1" PHILLIPS SCREW FOR SHEET METAL	90184A378	-	ST/ST
38	HINGE	228SG	ADVANTAGE MANUFACTURING	-
39	HANDLE CONNECTOR	8021-430	ADVANTAGE MANUFACTURING	-
40	DRIVE ROD	8038	ADVANTAGE MANUFACTURING	-
41	KEEPER	1303-305-2	ADVANTAGE MANUFACTURING	-
42	VENT CHANNEL BRACKET	1663-32	ADVANTAGE MANUFACTURING	-
43	FRICTION ADJUSTER	1198	ADVANTAGE MANUFACTURING	-
44	EURO BRACKET	994B	ADVANTAGE MANUFACTURING	-
45	SNUBBER	1549-3	ADVANTAGE MANUFACTURING	-
46	SNUBBER DRIVER SHIM	1664-1	ADVANTAGE MANUFACTURING	-
47	POSITIONING BLOCK	1429-595	ADVANTAGE MANUFACTURING	-
48	CORNER DRIVE	8062	ADVANTAGE MANUFACTURING	-
49	DRIVE PLATES	1315-S3	ADVANTAGE MANUFACTURING	-
50	1/8" THK. ALUM. COVER FINISH TO MATCH WW	-	-	BRAKE METAL
69	EXTERIOR GASKET	F201	PRO-LON	FABRIC COATED FOAM

SEALANT:

ALL JOINTS AND FRAME CONNECTIONS SEALED WITH SILICONE.

LOCKS:

SURFACE MOUNT METALLIC MULTIPOINT LOCK
WITH LEVER TYPE ACTIVATING HANDLE
LOCATED AT MID WIDTH OF BOTTOM RAIL
FASTENED WITH (2) #10-24 X 3/8" SH MS

SURFACE MOUNT METALLIC KEEPERS
(2) AT EACH JAMB AT 22-3/8" & 42-1/4" FROM BOTTOM
AND (3) AT FRAME SILL AT 6" FROM EACH END
AND AT MID WIDTH
EACH KEEPER FASTENED WITH (1) #10 X 3/4" PH SMS

HINGES:

SURFACE MOUNT METALLIC 3 BAR HINGES
LOCATED AT FRAME JAMBS AT 60" FROM BOTTOM
FASTENED WITH (4) #10 X 1" PH SMS

OPERATOR:

SURFACE MOUNT METALLIC HOLD OPEN BAR
LOCATED AT EACH JAMB RAIL AT 11" FROM BOTTOM
FASTENED WITH (2) #10 X 1" PH SMS

SNUBBERS:

SURFACE MOUNT METALLIC 2-1/2" LONG ANTI BLOW OUT CLIPS
LOCATED AT VENT TOP RAIL LOCATED AT 6-3/4"
FROM EACH END AND AT MID WIDTH.
FASTENED TO VENT WITH (3) #10-24 X 1" FH MS
FASTENED TO FRAME WITH (2) #10-24 X 1" FH MS

FL #22046





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drawing no.	W14-04
sheet	6 of 6