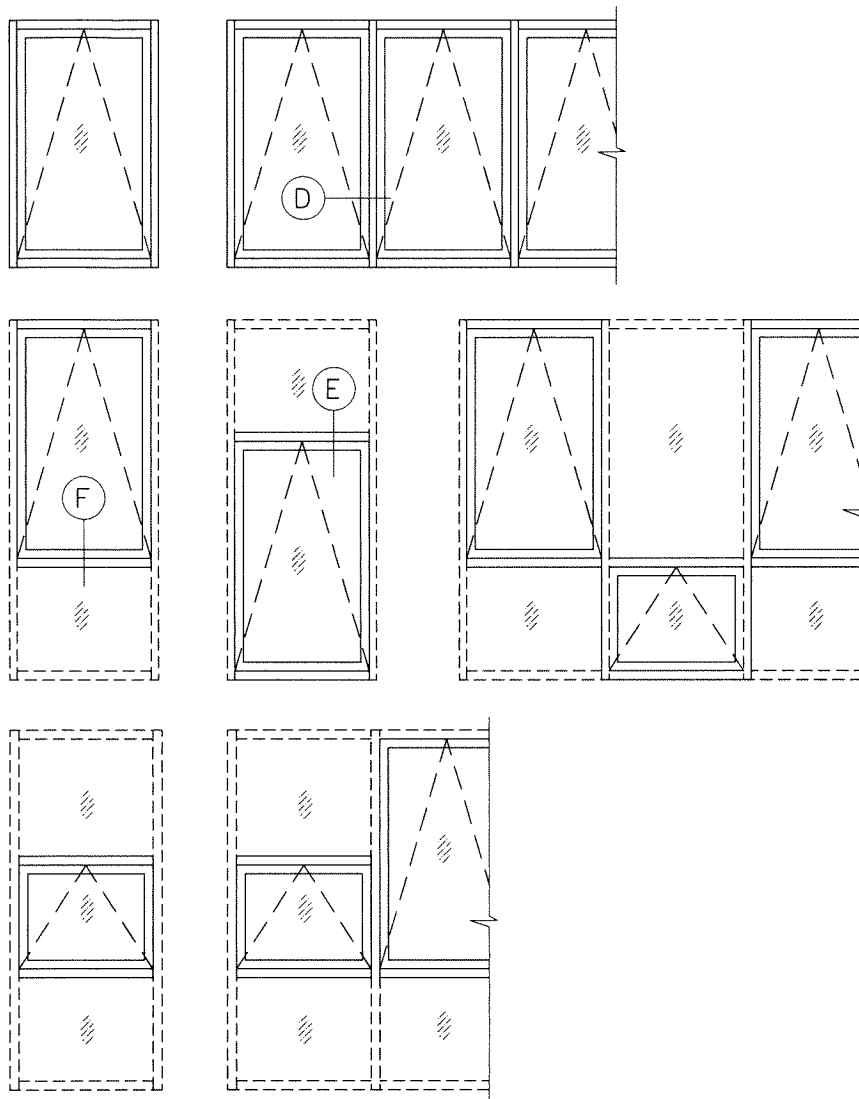




APPROVED CONFIGURATIONS

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

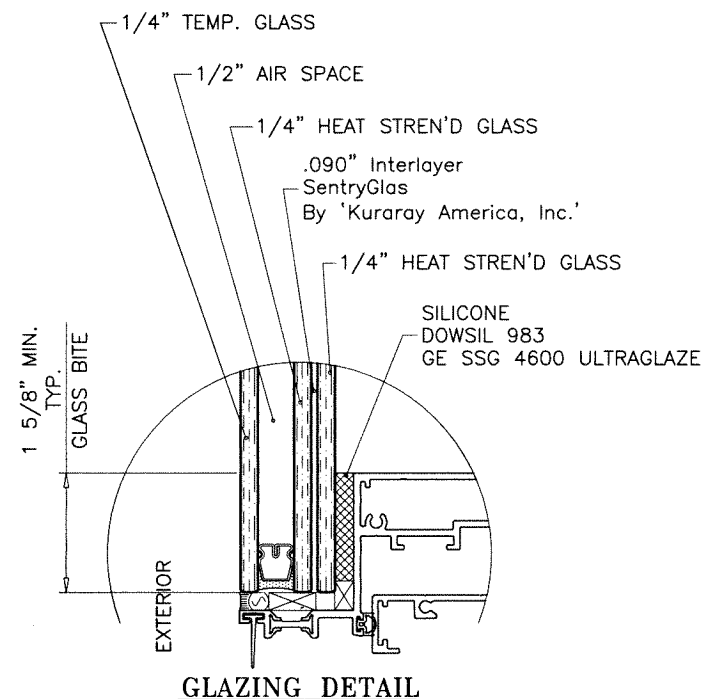
APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS
OF PROJECTED WINDOWS IN MODULES OF TWO OR MORE WINDOWS
FOR WINDOWS CAPACITY SEE ABOVE.

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.

FASTENERS AND CONNECTORS (AS APPLICABLE) SHOWN IN THIS APPROVAL MAY NOT MEET
CORROSION RESISTANCE REQUIREMENTS FOR COASTAL OR SALT WATER EXPOSURE ZONES.
COMPLIANCE WITH THESE CONDITIONS TO BE CHECKED PER FBC 1711.



GLAZING DETAIL

1/2" AIR SPACE CONSISTING OF:

EDGE SPACER:

'HELIMA' LOW PROFILE ALUMINUM SPACER
BY 'LINGERMANN GMBH'
AROUND THE PERIMETER OF THE GLASS.

EDGE SEALANT

5/16" HIGH SILICONE MIN.
ULTIMATE TENSILE STRENGTH PER ASTM C1135=150 PSI MIN.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE
REQUIREMENTS OF THE 2023 (8TH EDITION)/2026 (9TH 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.

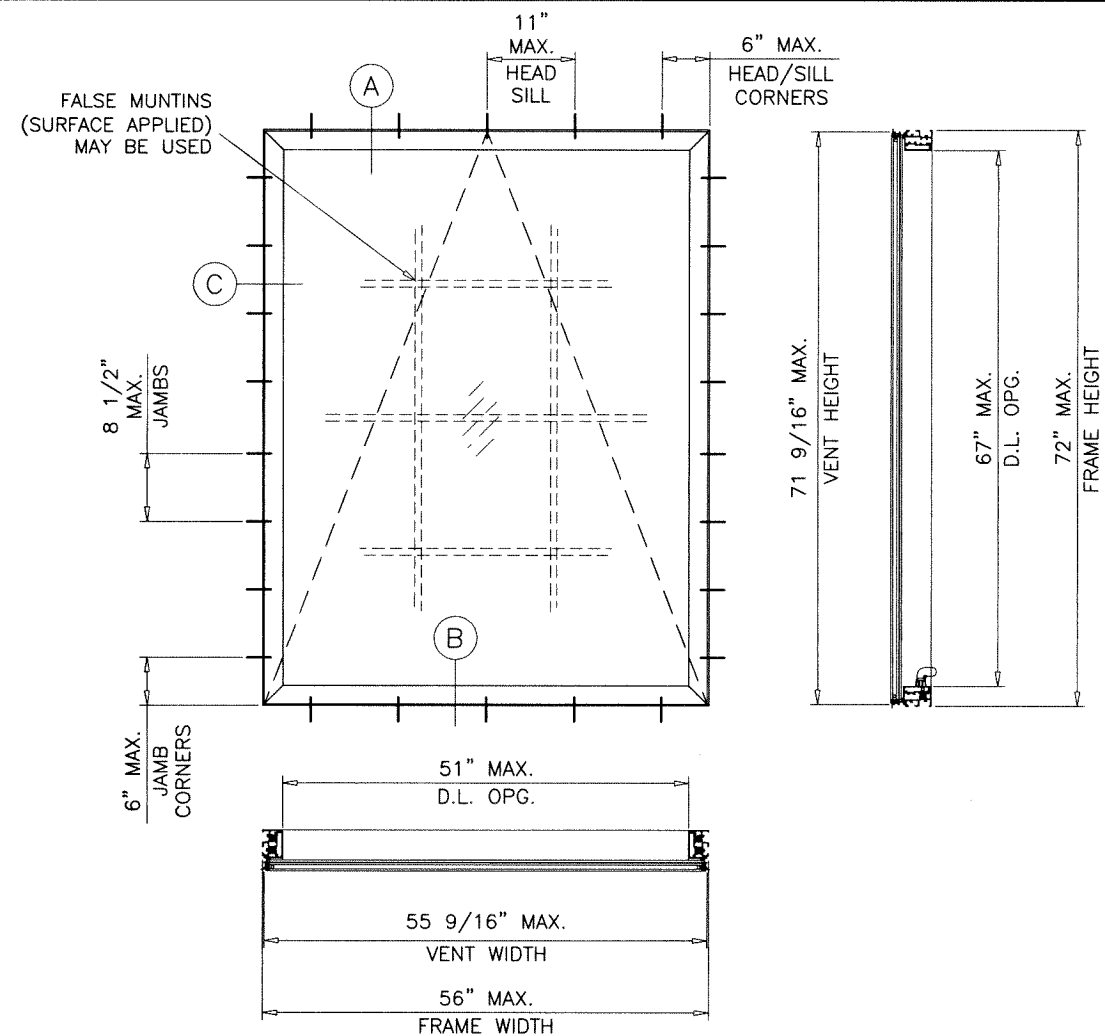
ALL SHIMS TO BE LOAD-BEARING, (HIGH DENSITY PLASTIC/COMPOSITE, METAL
OR OTHER RIGID MATERIALS).

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT
COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE
REQUIREMENTS OF THE 2023/2026 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

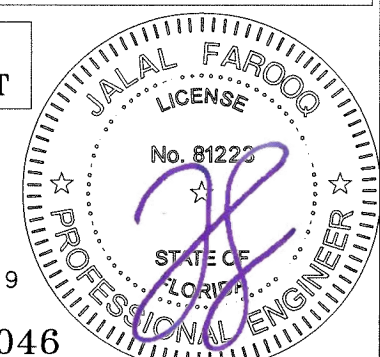
PRODUCT COMPLIES WITH REQUIREMENTS OF ANSI Z97.1.
SAFEGUARD REQUIREMENTS TO BE VERIFIED.

- 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

NOTE:
GLASS CAPACITIES ARE BASED ON
ASTM E1300-16 (3 SEC. GUSTS)
AND FLORIDA BUILDING COMMISSION
DECLARATORY STATEMENT DCA05-DEC-219

Sealed: 10/15/2026 FL #22046



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

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

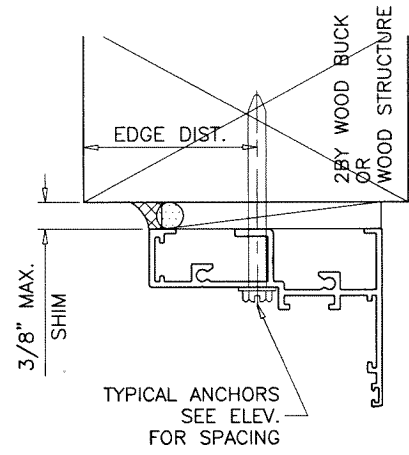
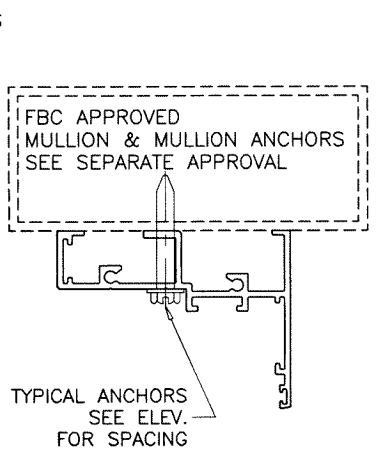
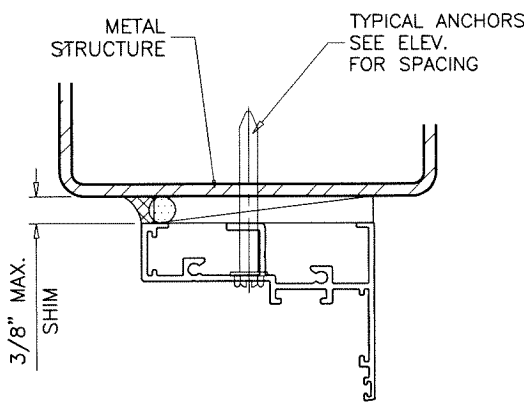
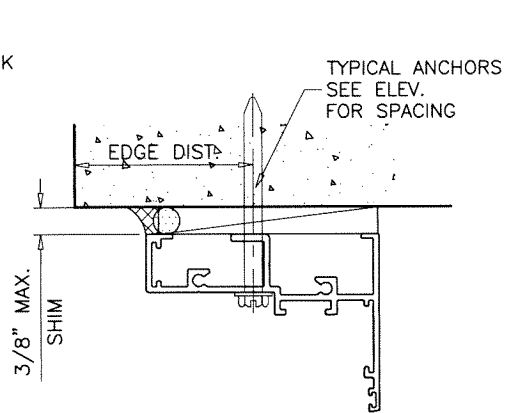
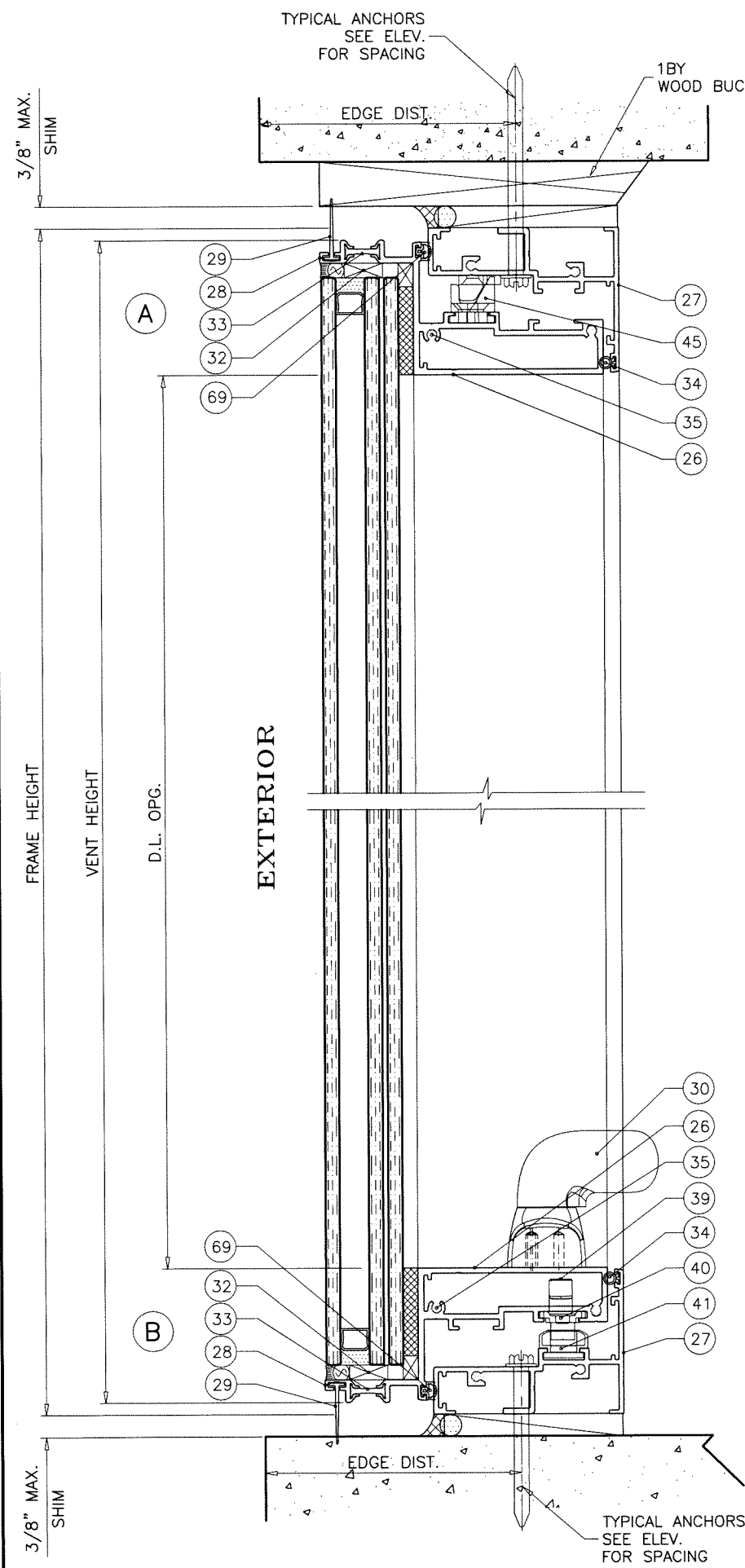
SERIES 2650 ALUMINUM PROJECT OUT WDW. (L.M.I.)

no	date	by	description
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
E	10.13.26		UPDATED TO 2026 FBC

date: 02-14-14
scale: 1/2"=1'-0"
dr. by: TARIQ
chk. by:

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.

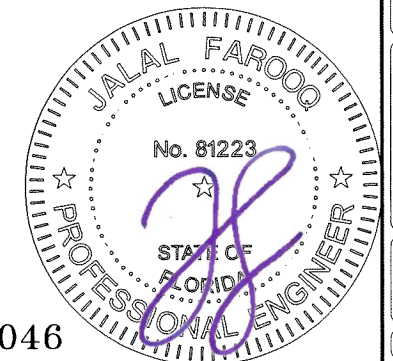
TYPICAL ANCHORS: SEE ELEV. FOR SPACING
1/4" DIA. KWIK-CON II+ BY 'HILTI' (Fu=138 KSI, Fy=137 KSI)
INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
1-1/2" MIN. PENETRATION INTO WOOD (HEAD/SILL/JAMBS)
THRU 1BY BUCKS INTO CONC. OR BLOCKS
1-1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
1-1/4" MIN. EMBED INTO BLOCKS (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: 10/15/2026



FL #22046

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TEL. (305) 264-8100 FAX. (305) 262-6978
C.A.N. 3538

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

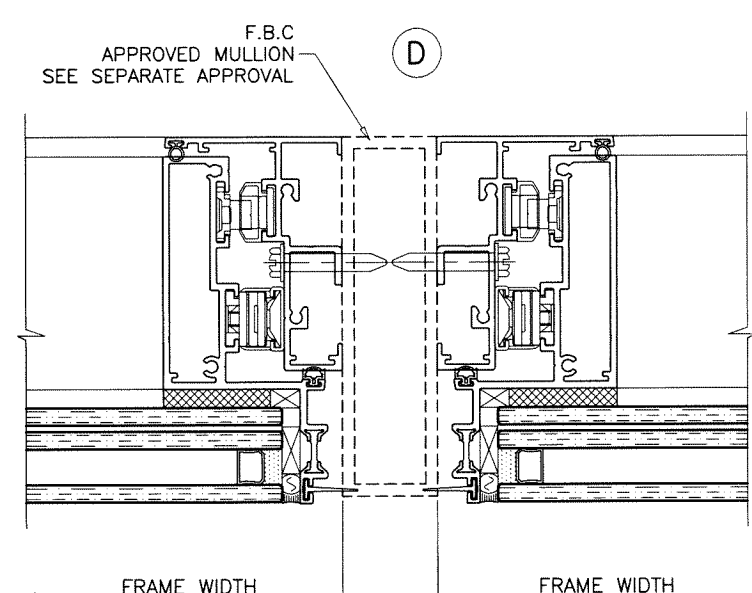
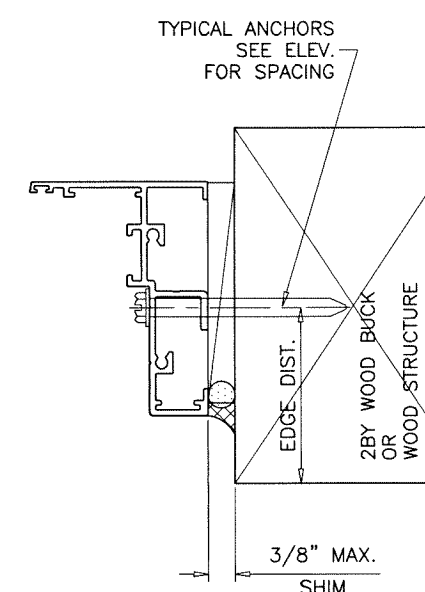
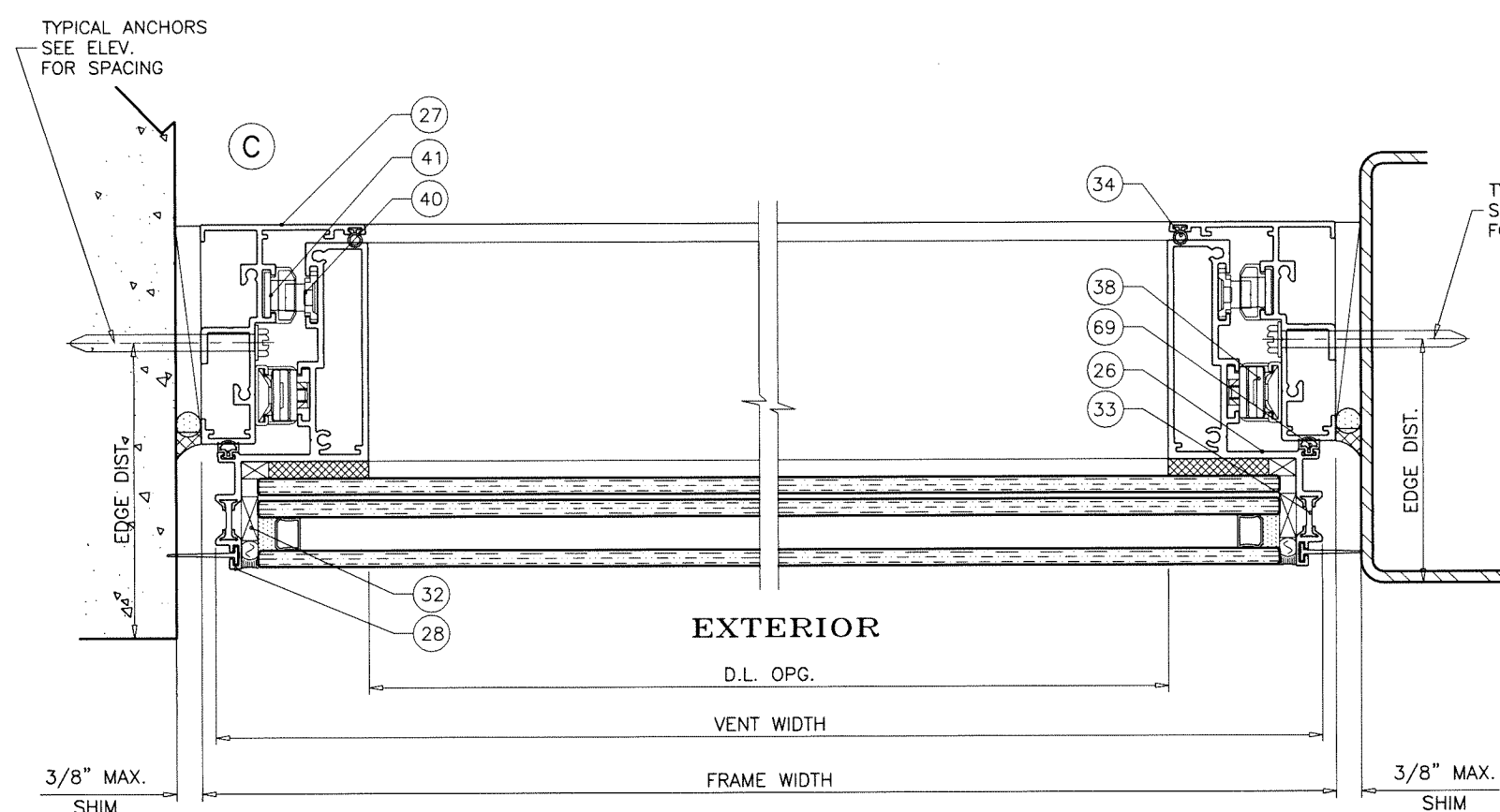
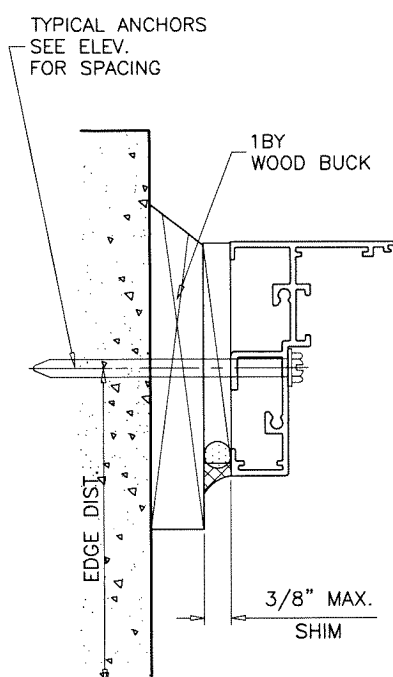
scale: 3/8" = 1"

dr. by: TARIQ

chk. by:

drawing no.
W14-04

sheet 2 of 6



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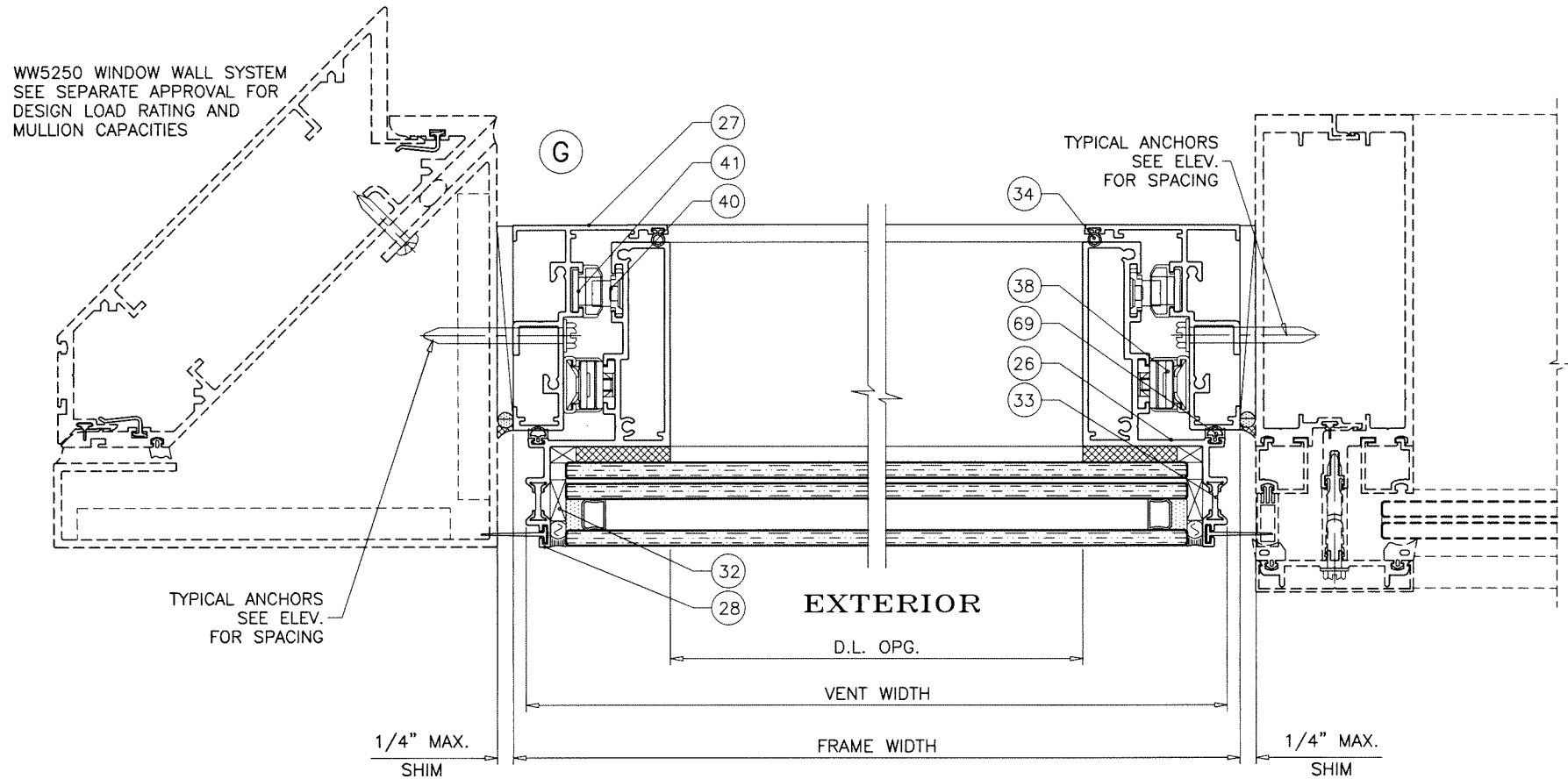
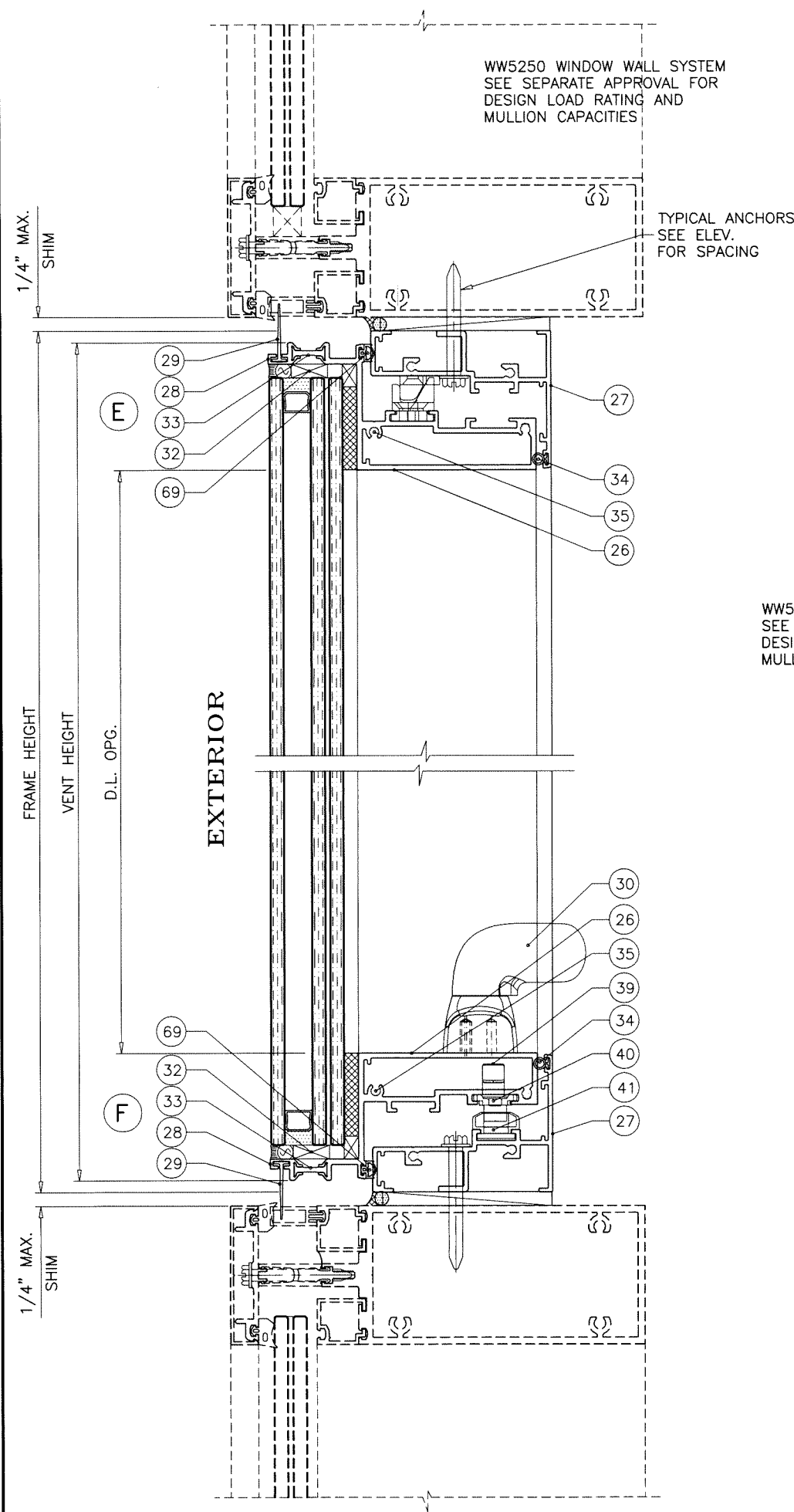
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revisions:		no.		date		by		description	

date: 02-14-14
scale: 3/8" = 1"
dr. by: TARIQ
chk. by:

drawing no.
W14-04
sheet 3 of 6

INSTALLATION DETAILS INTO WW5250 WINDOW WALL SYSTEM



Sealed: 10/15/2026

FL #22046



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COMP-ANL\W14-04CWL

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revisions:	
no	date by description

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dr. by: TARIQ

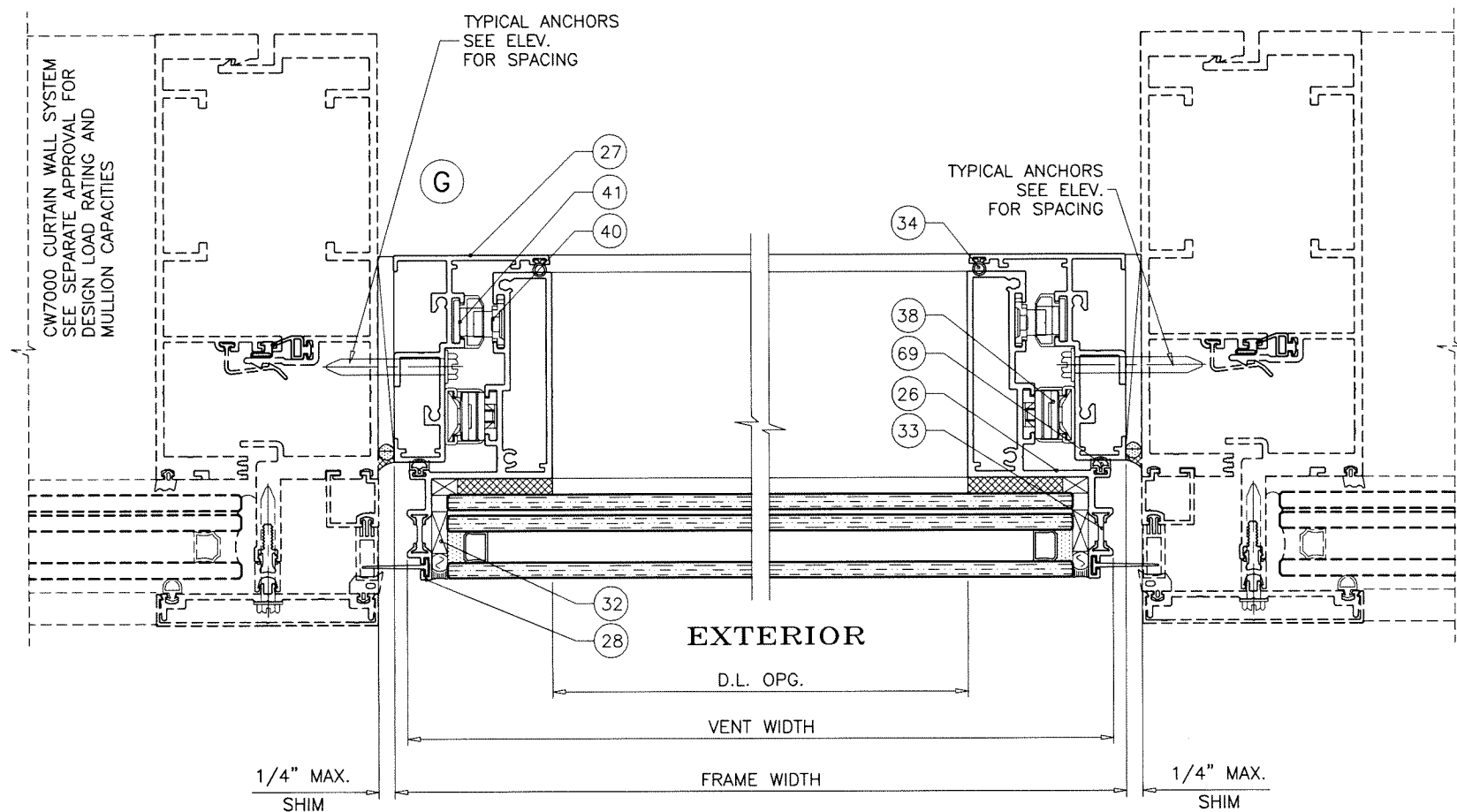
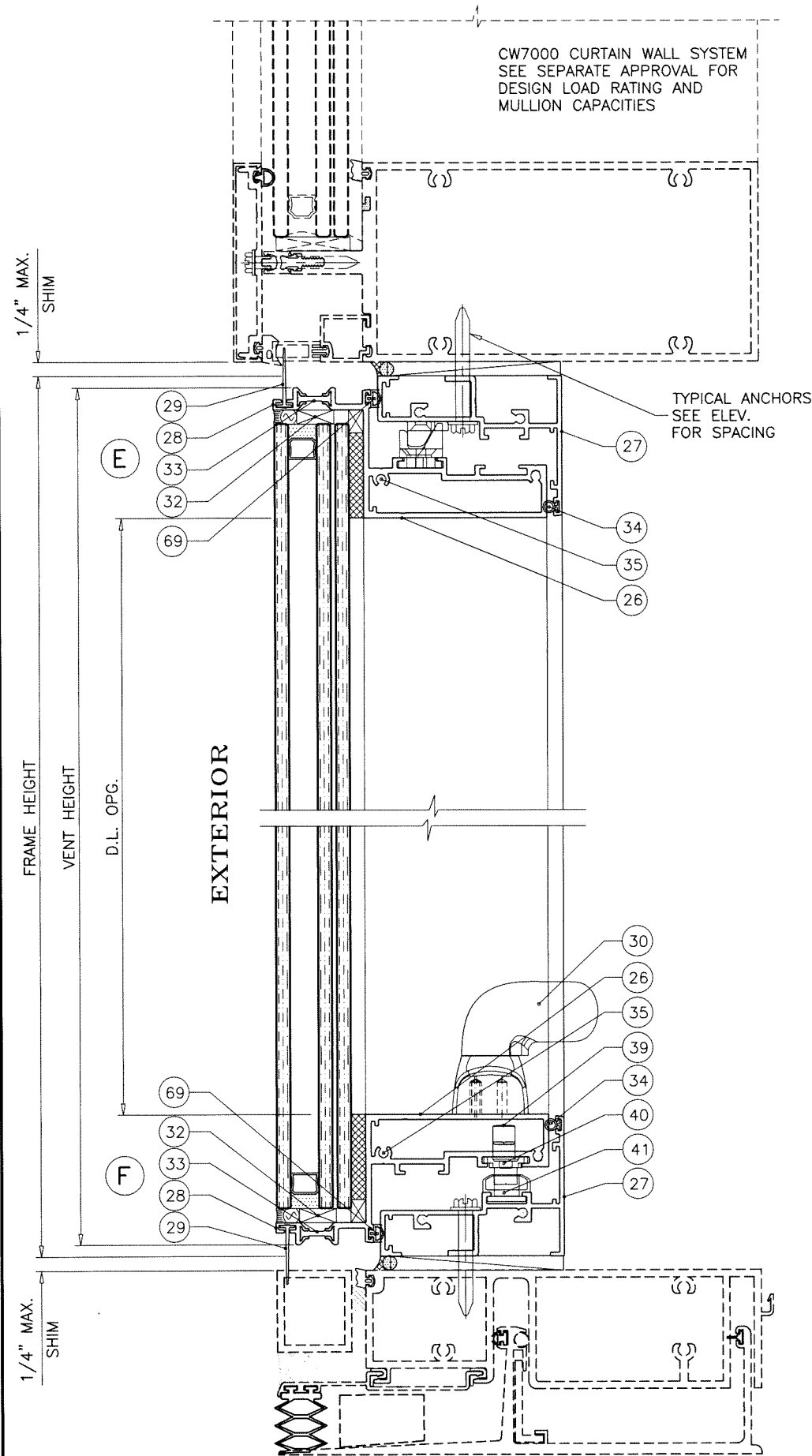
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drawing no.

W14-04

sheet 4 of 6

INSTALLATION DETAILS INTO CW7000 CURTAIN WALL SYSTEM



Sealed: 10/15/2026

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(C.A.N. 3538)
COMP-ANL\W14-04GWL

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revisions:	
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scale: 3/8" = 1"

dr. by: TARIO

chk. by:

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	TRESCO	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



afcc

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sheet 6 of 6