

# LINEA ROSSA LLC

## LR-210 ALUMINUM SINGLE HUNG WINDOW (HVHZ)(IMPACT)

**LINEA ROSSA**  
WINDOWS & DOORS

1850 NW. 84TH AVE., STE. 114  
DORAL, FL 33126  
PH: (305)815-8797

### GENERAL NOTES:

- THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE CURRENT EDITION FLORIDA BUILDING CODE (FBC), **INCLUDING** HVHZ AND HAS BEEN EVALUATED ACCORDING TO THE FOLLOWING:
  - TAS 201-94
  - TAS 202-94
  - TAS 203-94
- ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY, 2X FRAMING, AND METAL FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
- 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO THE STRUCTURE. BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
- THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT IN NON-HVHZ AREAS.
- APPROVED IMPACT PROTECTIVE SYSTEM **IS NOT REQUIRED** ON THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE.
- WINDOW FRAME MATERIAL: ALUMINUM 6063-T6
- GLASS MEETS THE REQUIREMENTS OF ASTM E 1300 GLASS CHARTS. SEE SHEET 1 FOR GLAZING DETAILS.

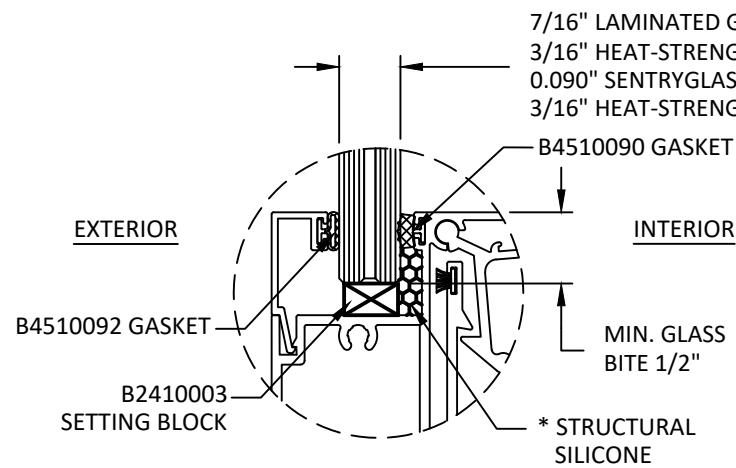
MAX. WINDOW FRAME SIZE		CONFIG.	DESIGN PRESSURE	INTEGRAL MULLION	MISSILE IMPACT RATING
WIDTH	HEIGHT				
42"	90"	O/X	+90/-90 PSF	N/A	LARGE & SMALL MISSILE IMPACT
42"	90"	OX / OX	+65/-65 PSF	LIGHT	
42"	90"	OX / OX	+90/-90 PSF	HEAVY	

NOTE: FOR "OX / OX" CONFIGURATIONS THE MINIMUM DESIGN PRESSURE BETWEEN THE TABLES ON SHEETS 2 & 3 SHALL BE APPLIED TO THE ENTIRE SYSTEM.

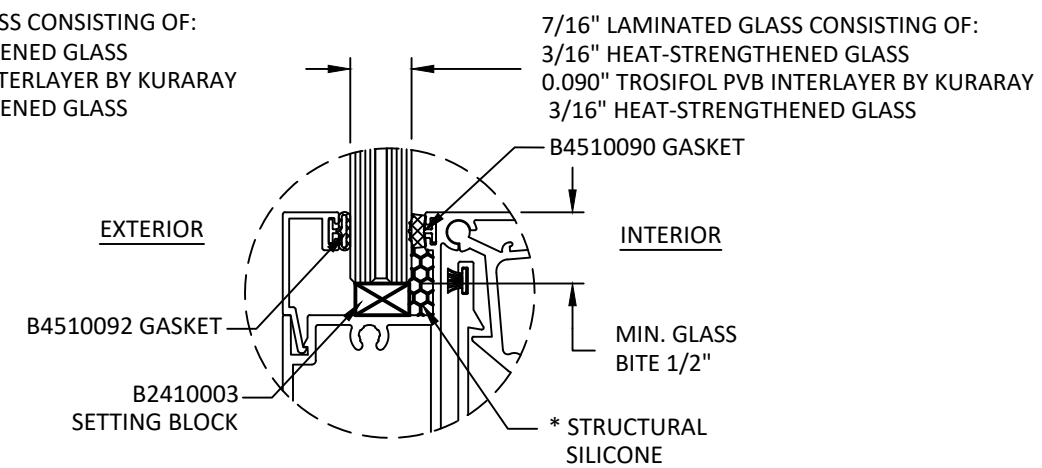
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TITLE: LR-210 ALUMINUM SINGLE HUNG WINDOW (HVHZ) (IMPACT)  
GENERAL NOTES & GLAZING DETAILS

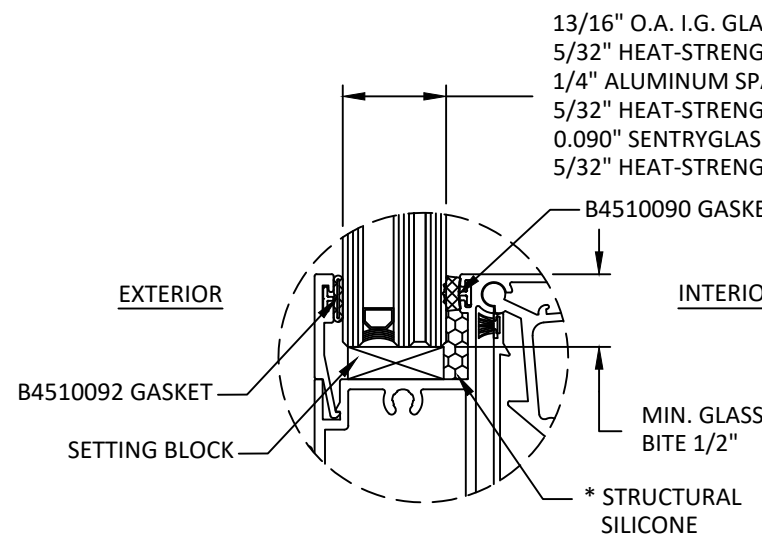
PREPARED BY: BUILDING DROPS, INC.  
398 E. DANIA BEACH BLVD., STE. 338  
DANIA BEACH, FL 33004  
PH: (954)399-8478  
FAX: (954)744-4738  
WEB: www.buildingdrops.com



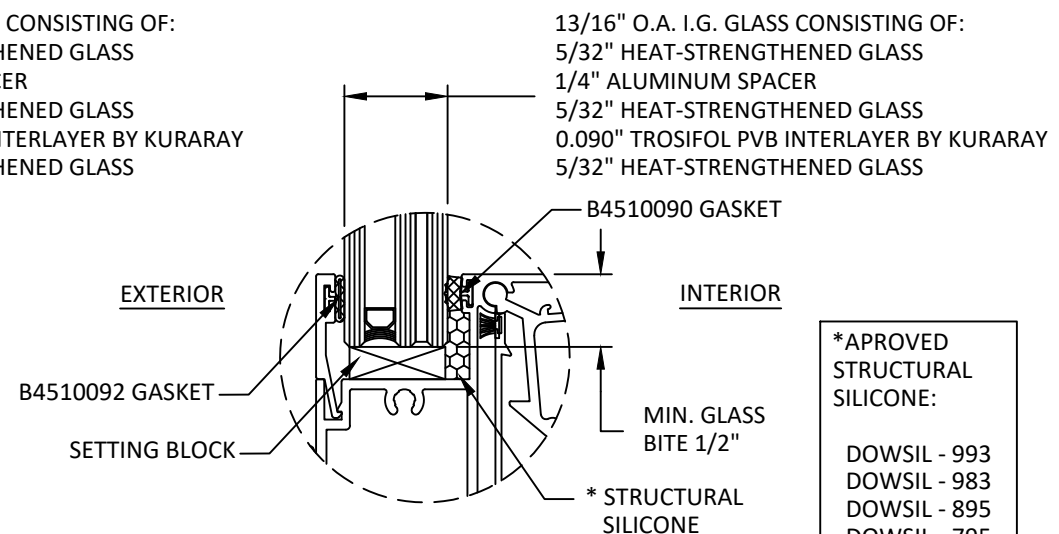
GLAZING DETAIL 1



GLAZING DETAIL 2



GLAZING DETAIL 3



GLAZING DETAIL 4

### GLAZING NOTES:

- GLASS TYPE COMPLIES WITH ASTM E1300 REQUIREMENTS. TEMPER AND SAFETY GLAZING REQUIREMENTS SHALL BE REVIEWED ON A SITE SPECIFIC BASIS.
- SACRIFICIAL LITE SHALL BE TEMPERED WHEN INSTALLED 30' OR HIGHER ABOVE GRADE IN HVHZ.
- SETTING BLOCK DUROMETER HARDNESS OF 70-90 (SHORE A) AS REFERENCED IN FBC CHAPTER 24.
- TWO APPROVED SETTING BLOCKS SHALL BE USED FOR GLASS WIDER THAN 36" AS PER FBC CHAPTER 24.
- D.L.O. AND DESIGN PRESSURES MAY NOT EXCEED MAX VALUES IN DP TABLE ON SHEET 1 AND ELEVATIONS ON SHEETS 2 & 3.

\*APPROVED STRUCTURAL SILICONE:  
DOWSIL - 993  
DOWSIL - 983  
DOWSIL - 895  
DOWSIL - 795

REMARKS	BY	DATE

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HERMES F. NORERO P.E.  
FLORIDA P. E. NO. 73778  
398 E. DANIA BEACH BLVD., STE. 338  
DANIA BEACH, FL 33004  
FBPE CERT. OF AUTHORIZATION NO. 29578

**FL39251**

DATE: 10.06.2023

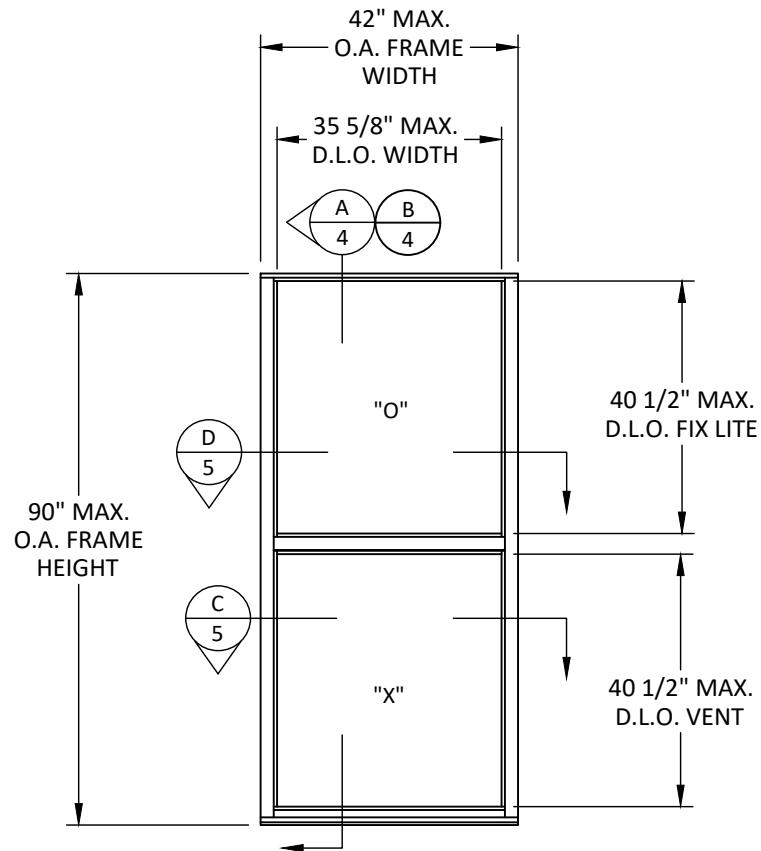
DWG. BY: SH  
CHK. BY: HFN

SCALE: NTS

DWG. #: LRA016

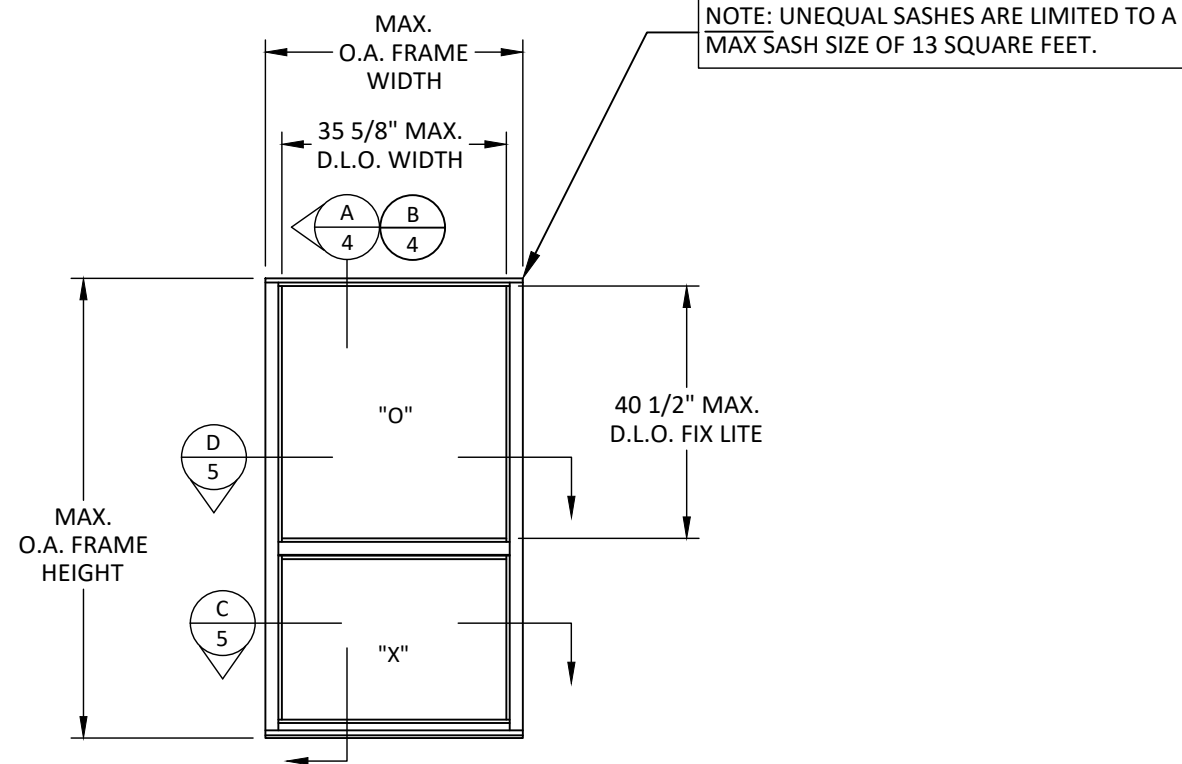
SHEET: 1 OF 7

**1**



**ELEVATION**

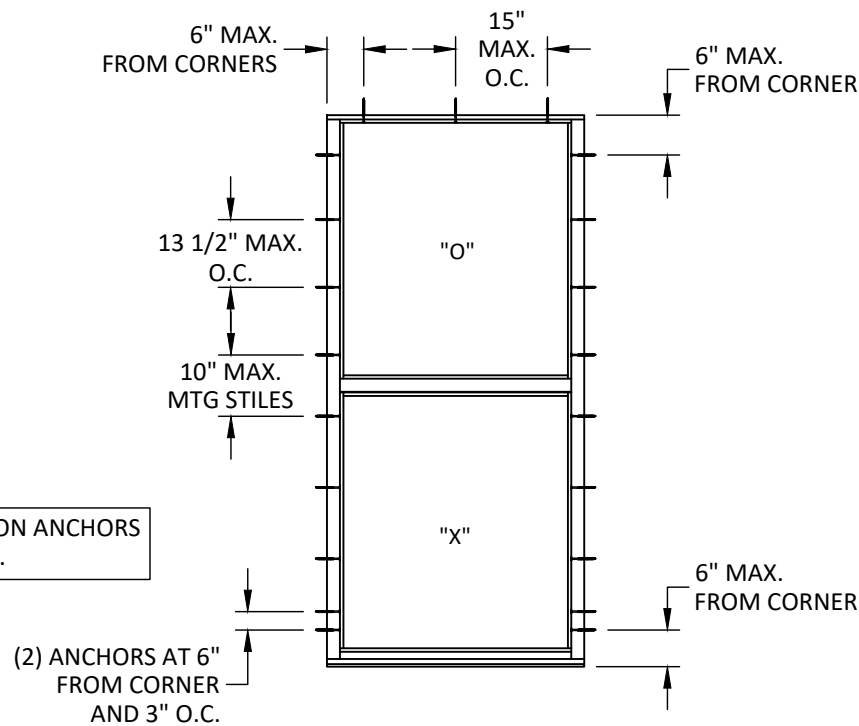
SINGLE HUNG WINDOW - EQUAL SASHES



**ELEVATION**

SINGLE HUNG WINDOW - NON-EQUAL SASHES

NOTE: UNEQUAL SASHES ARE LIMITED TO A MAX SASH SIZE OF 13 SQUARE FEET.



NOTE: NO INSTALLATION ANCHORS REQUIRED AT THE SILL.

**ANCHOR LAYOUT**  
SINGLE-THROUGH FRAME - SINGLE HUNG WINDOW

DESIGN PRESSURE TABLE (+/- PSF)		
WINDOW DIMENSIONS		GLAZING DETAIL
FRAME WIDTH (IN.)	FRAME HEIGHT (IN.)	1/2/3/4
24	54	90.0
30		90.0
36		90.0
42		90.0
48		78.8
54	70.0	
60	60	70.0
66		70.0
24		90.0
30		90.0
36		90.0
42	90.0	
48	78.8	
54	70.0	
60	66	63.0
24		90.0
30		90.0
36		90.0
42		90.0
48	78.8	
54	70.0	
24	72	90.0
30		90.0
36		90.0
42		90.0
48		78.8
24	78	90.0
30		90.0
36		90.0
42		90.0
48		78.8
24	84	90.0
30		90.0
36		90.0
42		90.0
48		78.8
24	90	90.0
30		90.0
36		90.0
42		90.0
48		90.0

**TITLE:** LR-210 ALUMINUM SINGLE HUNG WINDOW (HVHZ) (IMPACT) ELEVATIONS, ANCHOR LAYOUT, & DESIGN PRESSURE TABLE

**PREPARED BY:** BUILDING DROPS, INC.  
398 E. DANIA BEACH BLVD., STE. 338  
DANIA BEACH, FL 33004  
PH: (954)399-8478  
FAX: (954)744-4738  
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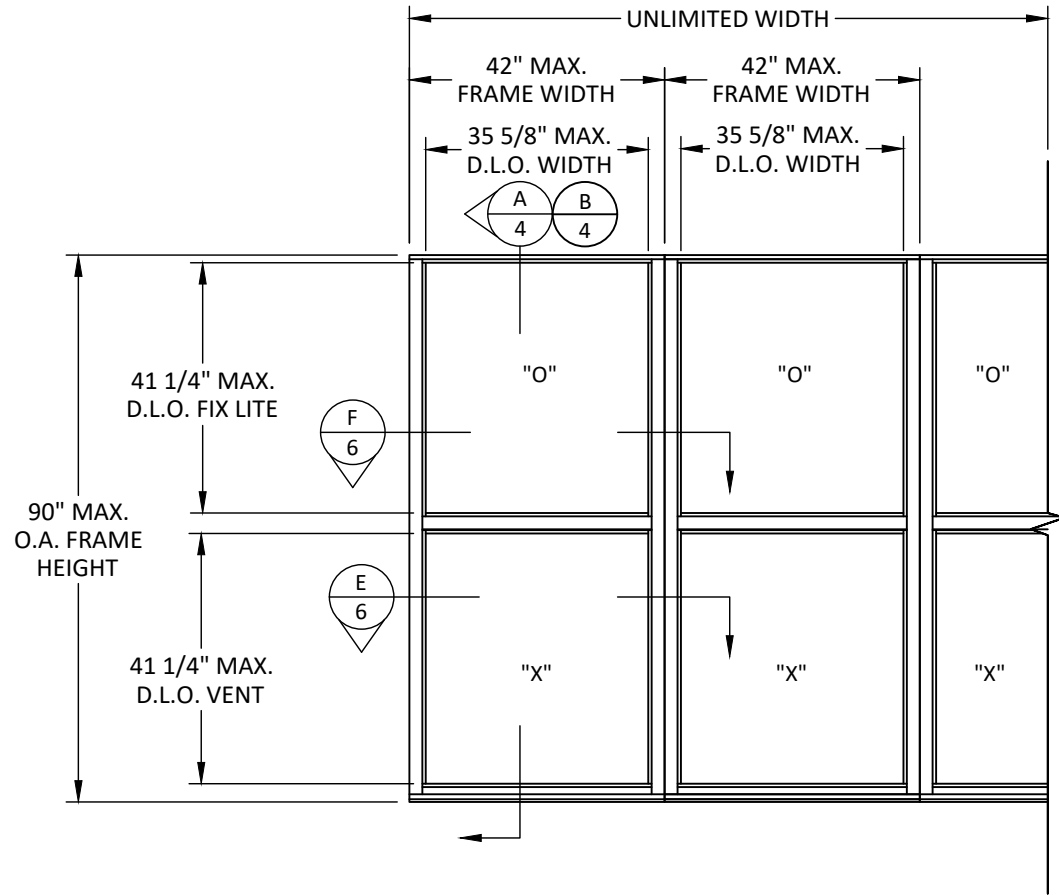
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SCALE: NTS

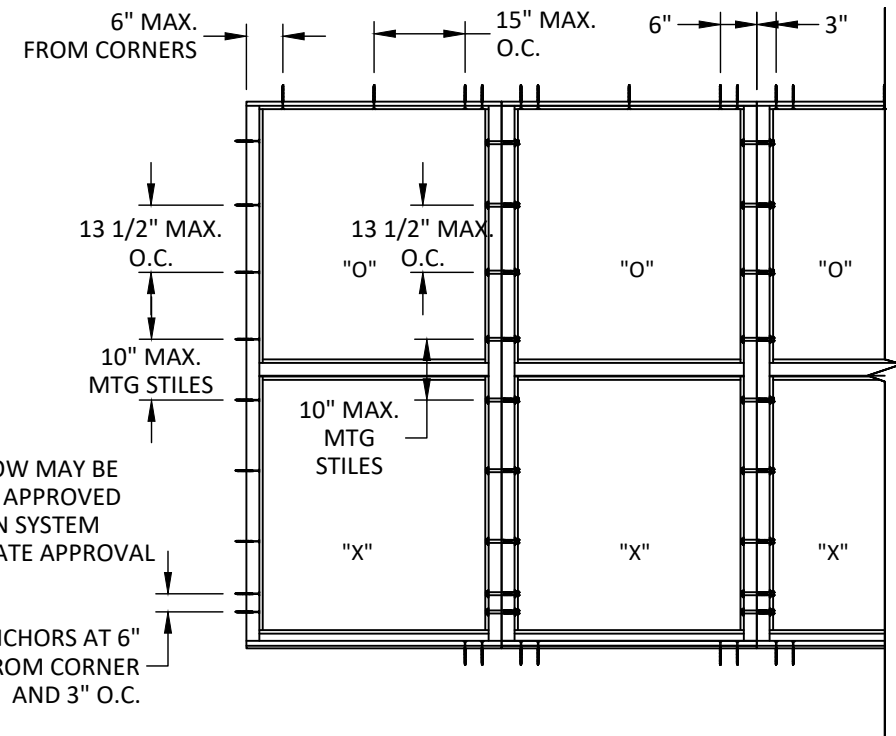
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SHEET:                      OF 7



**ELEVATION**  
MULLED - SINGLE HUNG WINDOW

DESIGN PRESSURE TABLE (+/- PSF)				
WINDOW DIMENSIONS		MULLION		
TRIBUTARY WIDTH (IN.)	FRAME HEIGHT (IN.)	LIGHT REINFORCEMENT	HEAVY REINFORCEMENT	
24	54	65.0	90.0	
30		65.0	90.0	
36		65.0	90.0	
42		65.0	90.0	
48		65.0	90.0	
54		65.0	90.0	
60	60	65.0	90.0	
66		65.0	90.0	
24		66	65.0	90.0
30			65.0	90.0
36			65.0	90.0
42			65.0	90.0
48	65.0		90.0	
54	65.0		90.0	
60	72	65.0	90.0	
66		65.0	90.0	
24		78	65.0	90.0
30			65.0	90.0
36			65.0	90.0
42			65.0	90.0
48	65.0		90.0	
54	65.0		90.0	
60	84	65.0	90.0	
66		65.0	90.0	
24		90	65.0	90.0
30			65.0	90.0
36			65.0	90.0
42			65.0	90.0
48	65.0		90.0	
54	65.0		90.0	



**ANCHOR LAYOUT**

MULLED - THROUGH FRAME - SINGLE HUNG WINDOW

NOTE:  
SINGLE WINDOW MAY BE  
MULLED WITH APPROVED  
TUBE MULLION SYSTEM  
UNDER SEPARATE APPROVAL

NOTE: NO INSTALLATION ANCHORS  
REQUIRED AT THE SILL EXCEPT AT  
MULLION CLUSTER.

TITLE:  
LR-210 ALUMINUM  
SINGLE HUNG WINDOW  
(HVHZ) (IMPACT)  
ELEVATION, ANCHOR LAYOUT,  
& DESIGN PRESSURE TABLE

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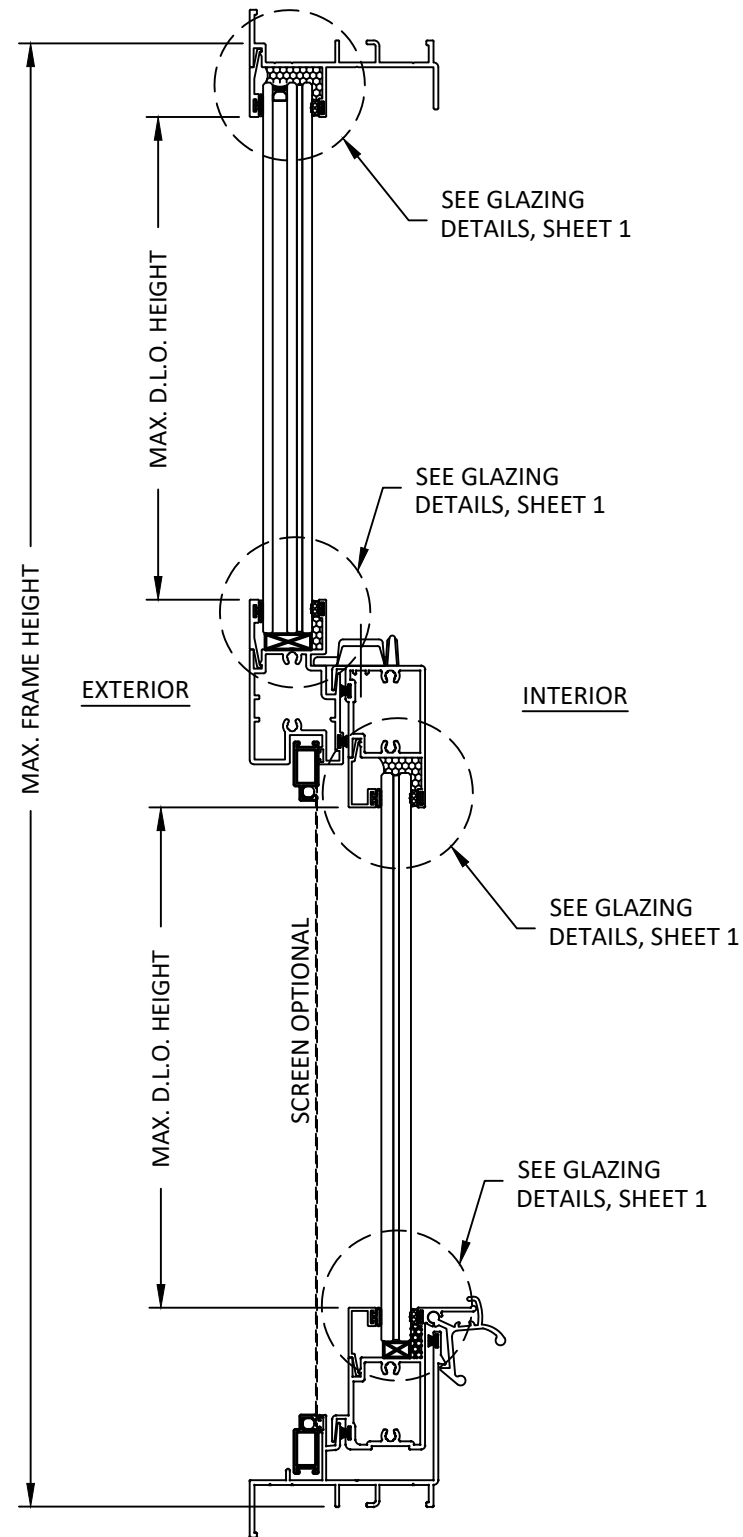
DATE: 10.06.2023

DWG. BY: <b>SH</b>	CHK. BY: <b>HFN</b>
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SCALE: **NTS**

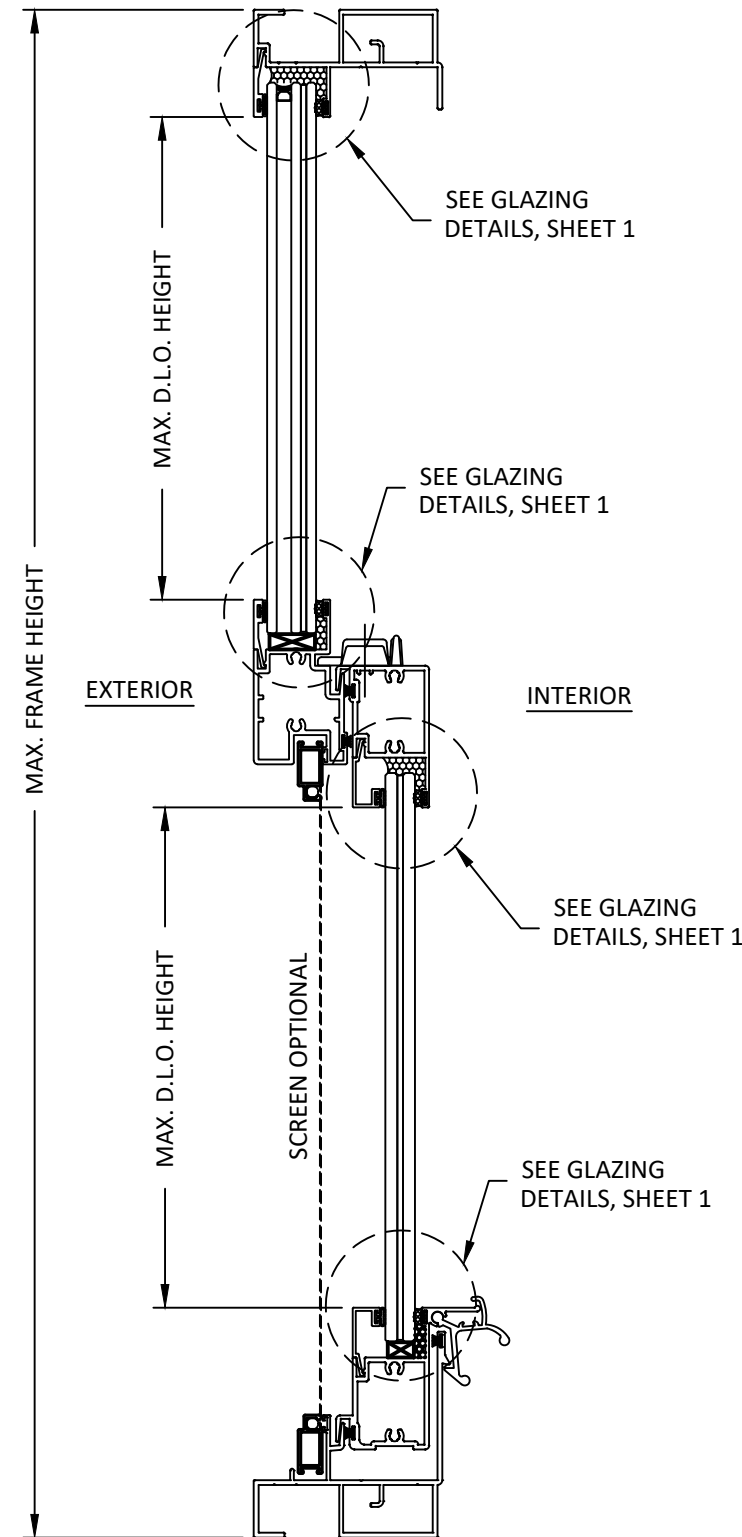
DWG. #: **LRA016**

SHEET: **3** OF 7



**A**  
**4**

**VERTICAL SECTION**  
SINGLE & MULLED SINGLE HUNG WINDOW



**B**  
**4**

**VERTICAL SECTION**  
SINGLE & MULLED SINGLE HUNG WINDOW  
ALTERNATE WINDOW FRAME

TITLE: **LR-210 ALUMINUM  
SINGLE HUNG WINDOW  
(HVHZ) (IMPACT)**  
VERTICAL SECTIONS

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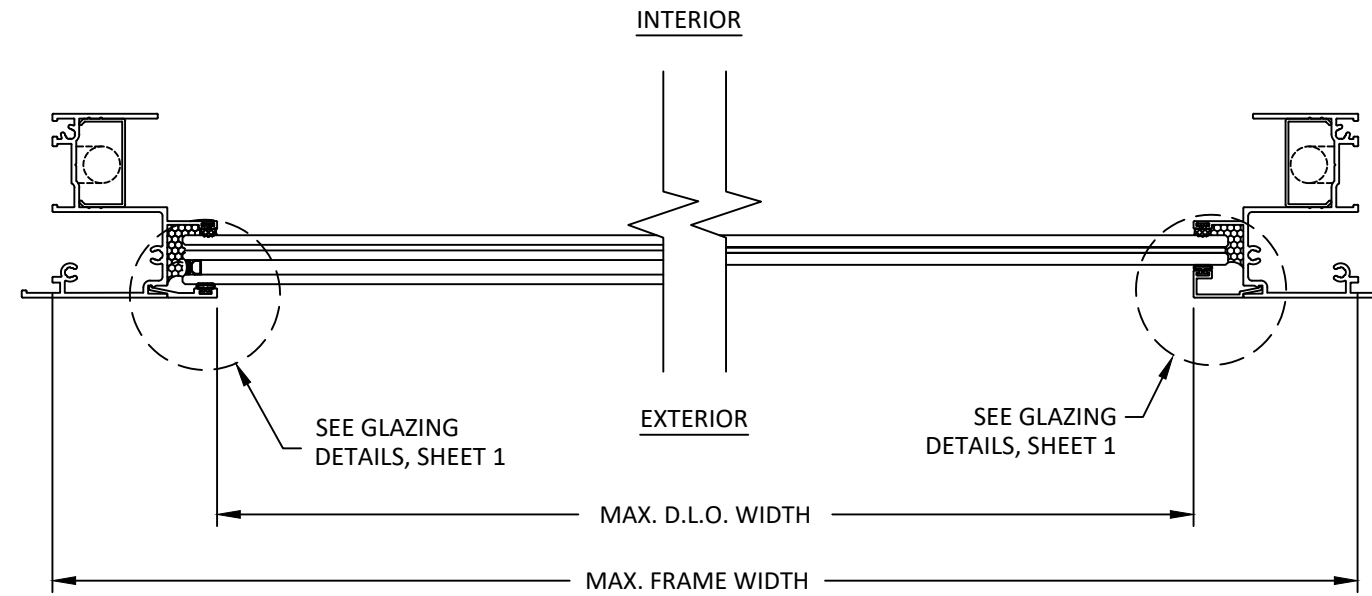
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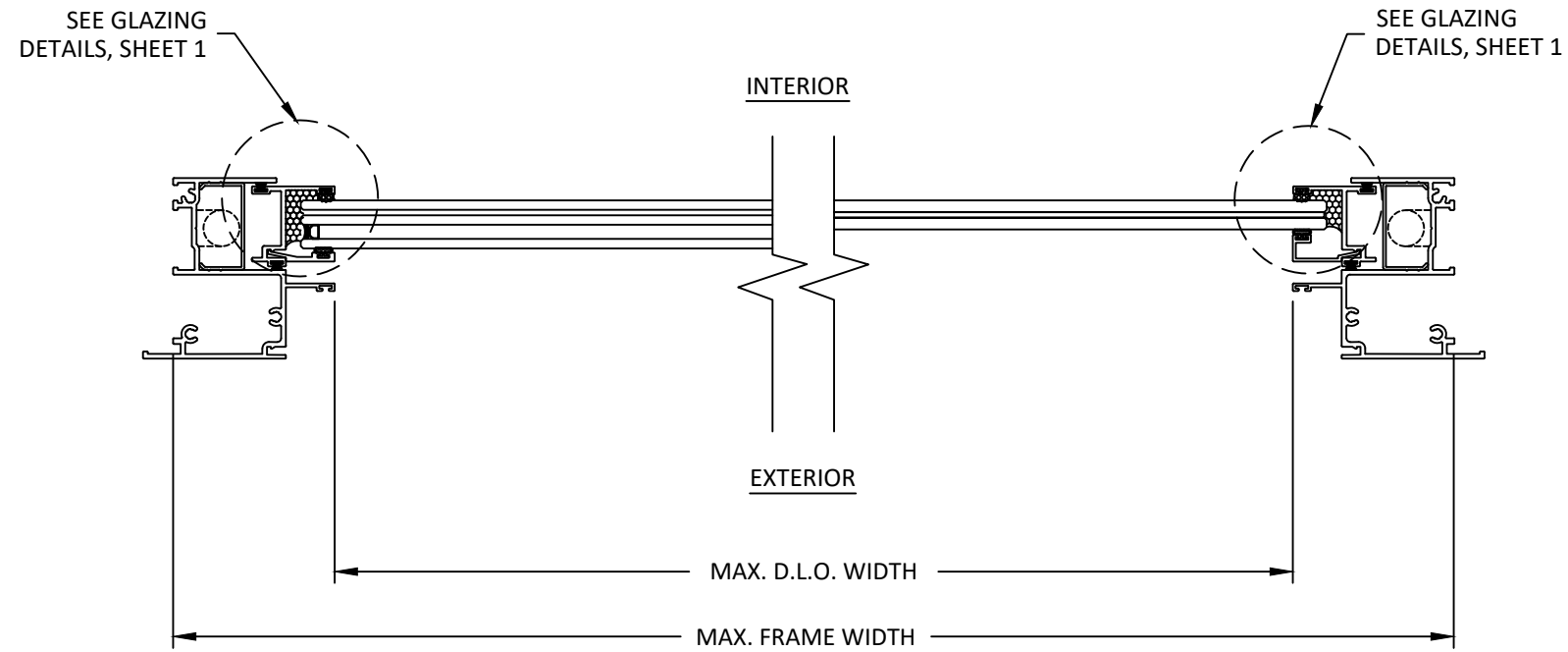
SCALE: **NTS**

DWG. #: **LRA016**

SHEET: **4** OF 7



**D**  
**5** HORIZONTAL SECTION  
SINGLE - SINGLE HUNG WINDOW FIX LITE



**C**  
**5** HORIZONTAL SECTION  
SINGLE - SINGLE HUNG WINDOW VENT

TITLE: LR-210 ALUMINUM  
SINGLE HUNG WINDOW  
(HVHZ) (IMPACT)  
HORIZONTAL SECTIONS

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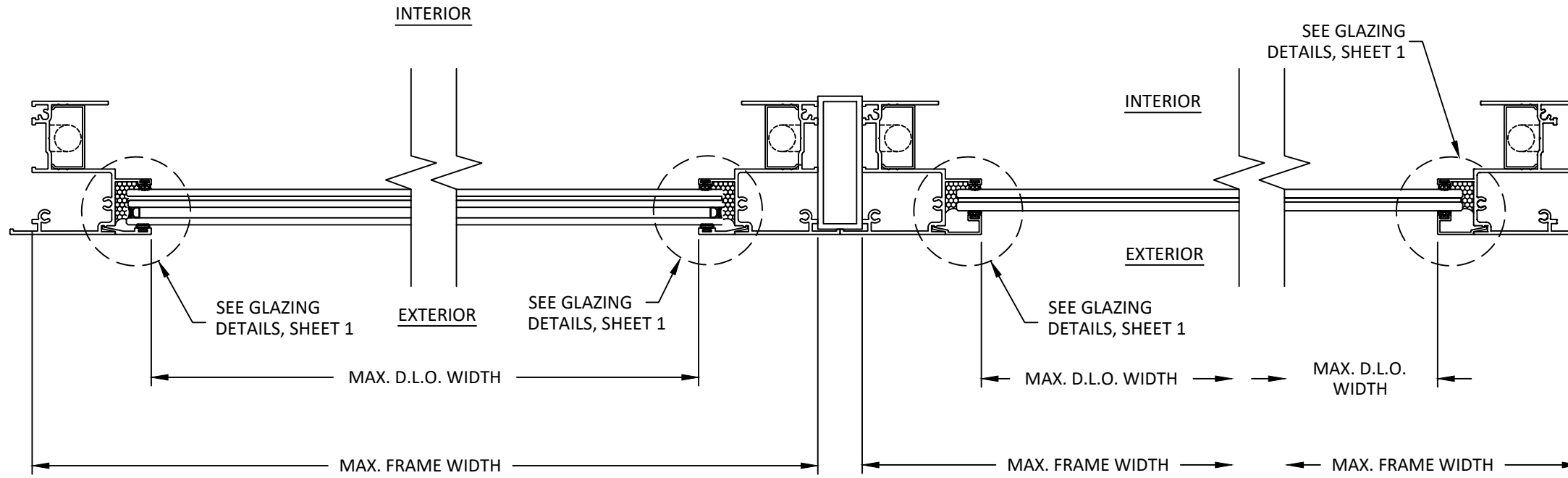
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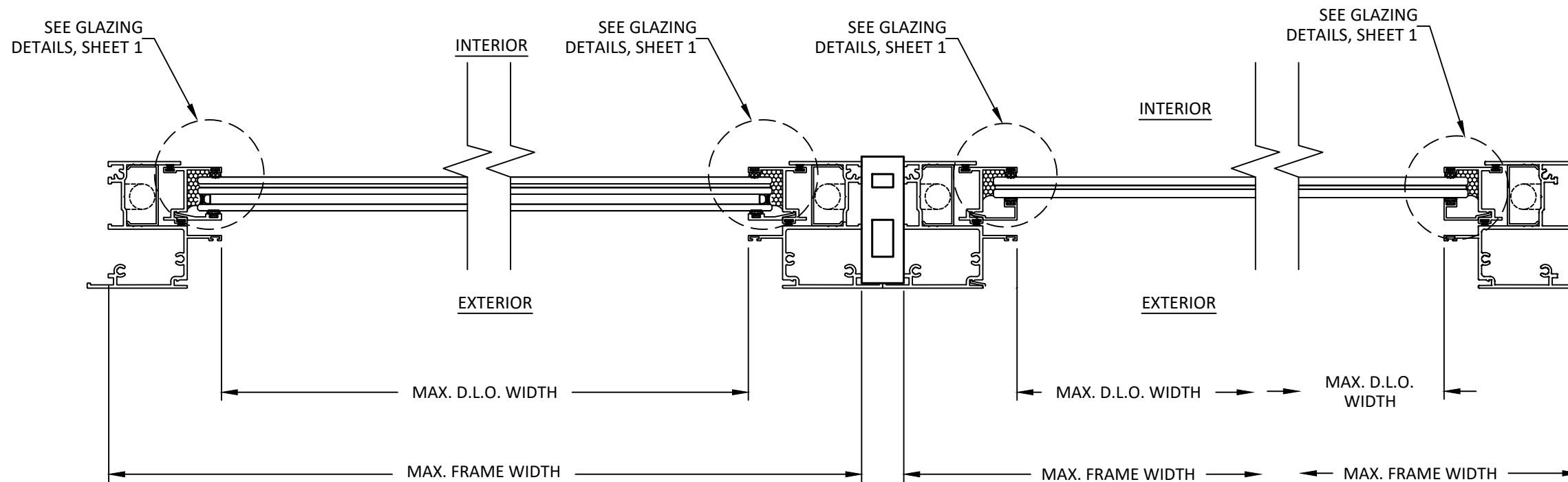
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DWG. #: LRA016

SHEET: 5 OF 7



**F**  
**6** **HORIZONTAL SECTION**  
LIGHT MULLER - SINGLE HUNG WINDOW FIXED LITE  
ALTERNATE WINDOW FRAME SHOWN ON RIGHT



**E**  
**6** **HORIZONTAL SECTION**  
HEAVY MULLER - SINGLE HUNG WINDOW VENT  
ALTERNATE WINDOW FRAME SHOWN ON RIGHT

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SINGLE HUNG WINDOW  
(HVHZ) (IMPACT)  
HORIZONTAL SECTIONS

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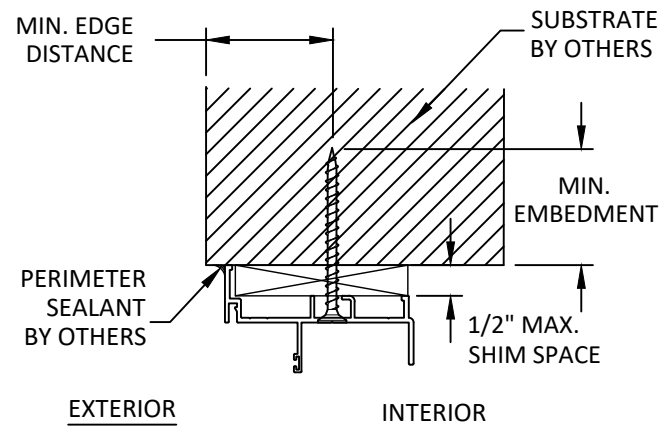
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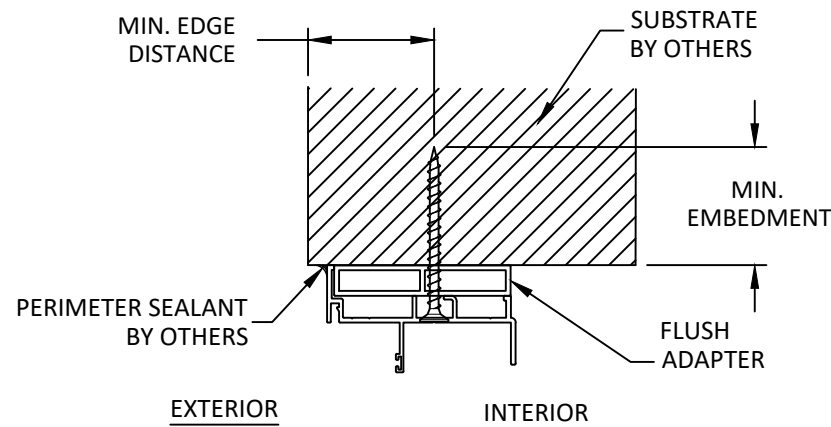
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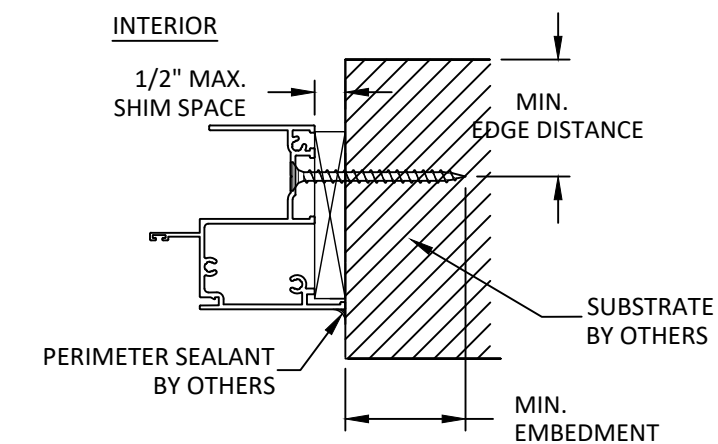
SHEET: OF 7



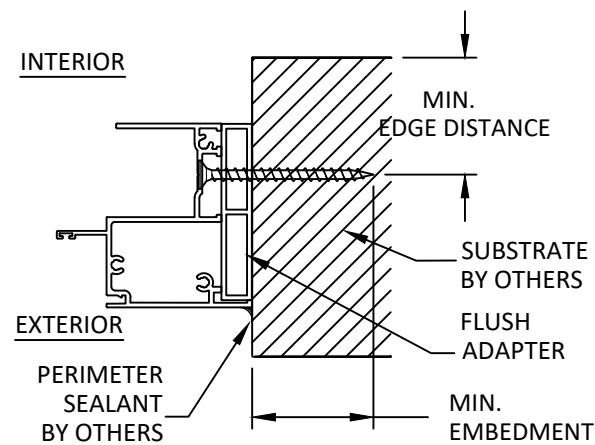
**A**  
7  
**ANCHOR DETAIL**  
THROUGH FRAME (HEAD)



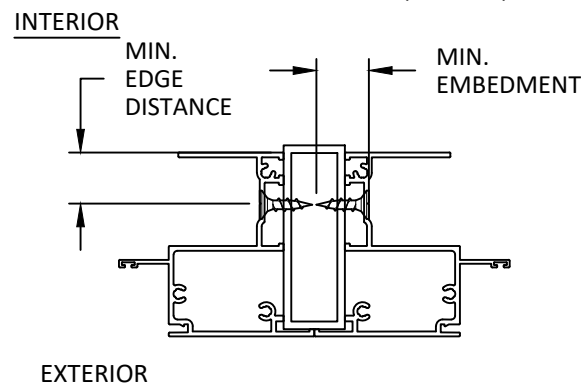
**B**  
7  
**ANCHOR DETAIL**  
THROUGH FRAME (HEAD)  
W/ FLUSH ADAPTOR  
ALTERNATE WINDOW FRAME (SIMILAR)



**C**  
7  
**ANCHOR DETAIL**  
THROUGH FRAME (JAMB)



**D**  
7  
**ANCHOR DETAIL**  
THROUGH FRAME (JAMB)  
W/ FLUSH ADAPTOR  
ALTERNATE WINDOW FRAME (SIMILAR)



**E**  
7  
**ANCHOR DETAIL**  
THROUGH FRAME (JAMB MULLION)  
LIGHT MULLION SHOWN, HEAVY MULLION SIMILAR

**INSTALLATION NOTES:**

- ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN.
- THE NUMBER OF INSTALLATION ANCHORS DEPICTED IS THE MINIMUM NUMBER OF ANCHORS TO BE USED FOR PRODUCT INSTALLATION OF THE MAXIMUM SIZE LISTED.
- INSTALL INDIVIDUAL INSTALLATION ANCHORS WITHIN A TOLERANCE OF  $\pm 1/2$  INCH THE DEPICTED LOCATION & SPACING IN THE ANCHOR LAYOUT DETAILS (I.E., WITHOUT CONSIDERATION OF TOLERANCES). TOLERANCES ARE NOT CUMULATIVE FROM ONE INSTALLATION ANCHOR TO THE NEXT.
- SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM(S). MAXIMUM ALLOWABLE SHIM STACK TO BE 1/2" INCH. SHIM WHERE SPACE OF 1/16 INCH OR GREATER OCCURS. SHIM(S) SHALL BE CONSTRUCTED OF HIGH DENSITY PLASTIC OR BETTER.
- FOR MASONRY OR CONCRETE OPENINGS, 1X WOOD BUCK MAY BE USED (OPTIONAL AS LONG AS THE MINIMUM EMBEDMENT AND EDGE DISTANCE REQUIREMENTS ARE STILL MET WITHIN THE CORRESPONDING HOST SUBSTRATE. SEE GENERAL NOTE #3 ON SHEET 1 FOR MORE INFORMATION.
- MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER, AND SIDING.
- INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING.
- FOR HOLLOW BLOCK AND GROUT FILLED BLOCK, DO NOT INSTALL INSTALLATION ANCHORS INTO MORTAR JOINTS. EDGE DISTANCE IS MEASURED FROM FREE EDGE OF BLOCK OR EDGE OF MORTAR JOINT INTO FACE SHELL OF BLOCK.
- INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BY THE ANCHOR MANUFACTURER.
- FOR INSTALLATION ANCHORS ABOVE THE MEETING RAIL IN THE INTERIOR JAMB TRACK, USE FLAT HEAD ANCHORS.

ANCHOR SCHEDULE					
METHOD	SUBSTRATE TYPE	SUBSTRATE	ANCHOR TYPE	MIN EMBEDMENT	MIN. EDGE DISTANCE
THROUGH FRAME	A	WOOD: MIN. SG = 0.55	5/16" DEWALT ULTRACON	1.50"	1.25"
	B	METAL: 18 GAUGE STEEL, MIN. Fy = 33KSI ALUMINUM .125" MIN, 6063-T5 MIN	5/16" SELF-DRILLING SCREW GR. 5	3 THREADS MIN. PENETRATION BEYOND METAL	0.75"
	C	CONCRETE: f'c=3000PSI	5/16" DEWALT ULTRACON	1.75"	2.50"
	D	MASONRY: CMU per ASTM C90 MIN. 2000 PSI		1.75"	3.125"
MULLIONS	E	ALUMINUM 6063-T6	1 / 4" DEWALT DRILL-FLEX	3 THREADS MIN. PENETRATION BEYOND METAL	0.75"

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SHEET: 7 OF 7