

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE.
2. WOOD FRAMING AND METAL STRUCTURE TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING AND MASONRY OPENING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
3. SHIM AS NEEDED. AT EACH ANCHOR LOCATION WITH LOAD BEARING SHIM. SHIM WHERE SPACE OF 1/16" OR GREATER OCCURS. MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4".
4. SHIMS SHALL BE LOCATED, APPLIED AND MADE FROM MATERIALS AND THICKNESS CAPABLE OF SUSTAINING APPLICABLE LOADS.
5. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
6. FRAME MATERIAL: EXTRUDED RIGID PVC.
7. UNITS MUST BE GLAZED PER ASTM E1300, REFER TO GLAZING DETAIL SHEET 8.
8. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
9. FOR ANCHORING THROUGH FIN INTO WOOD FRAMING OR 2X BUCK USE #8 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1" MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
10. FOR ANCHORING THROUGH FIN INTO METAL STRUCTURE USE #8 SMS OR SELF DRILLING SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE 3 THREADS MINIMUM BEYOND STRUCTURE INTERIOR WALL. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
11. 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 BELOW:

11.1. WOOD: MINIMUM SPECIFIC GRAVITY OF G=0.42

11.2. METAL STRUCTURE: STEEL 18GA (.048") FY=33KSI/FU=52KSI

SIGNED: 10/19/2023

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KRESTMARK INDUSTRIES, L.P.
3950 BASTILLE RD., SUITE 100
DALLAS, TX 75212

4000 VINYL TWIN SINGLE HUNG WINDOW TILT
WITH TRANSOM – IMPACT 72" X 108"
NOTES

DRAWN:
A.R.

DWG NO.
08-03913

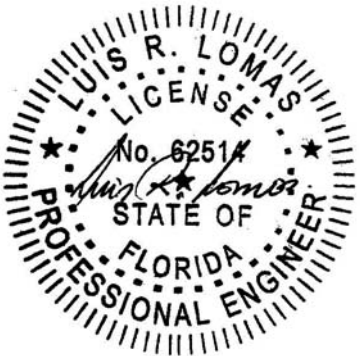
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DATE 06/27/2023

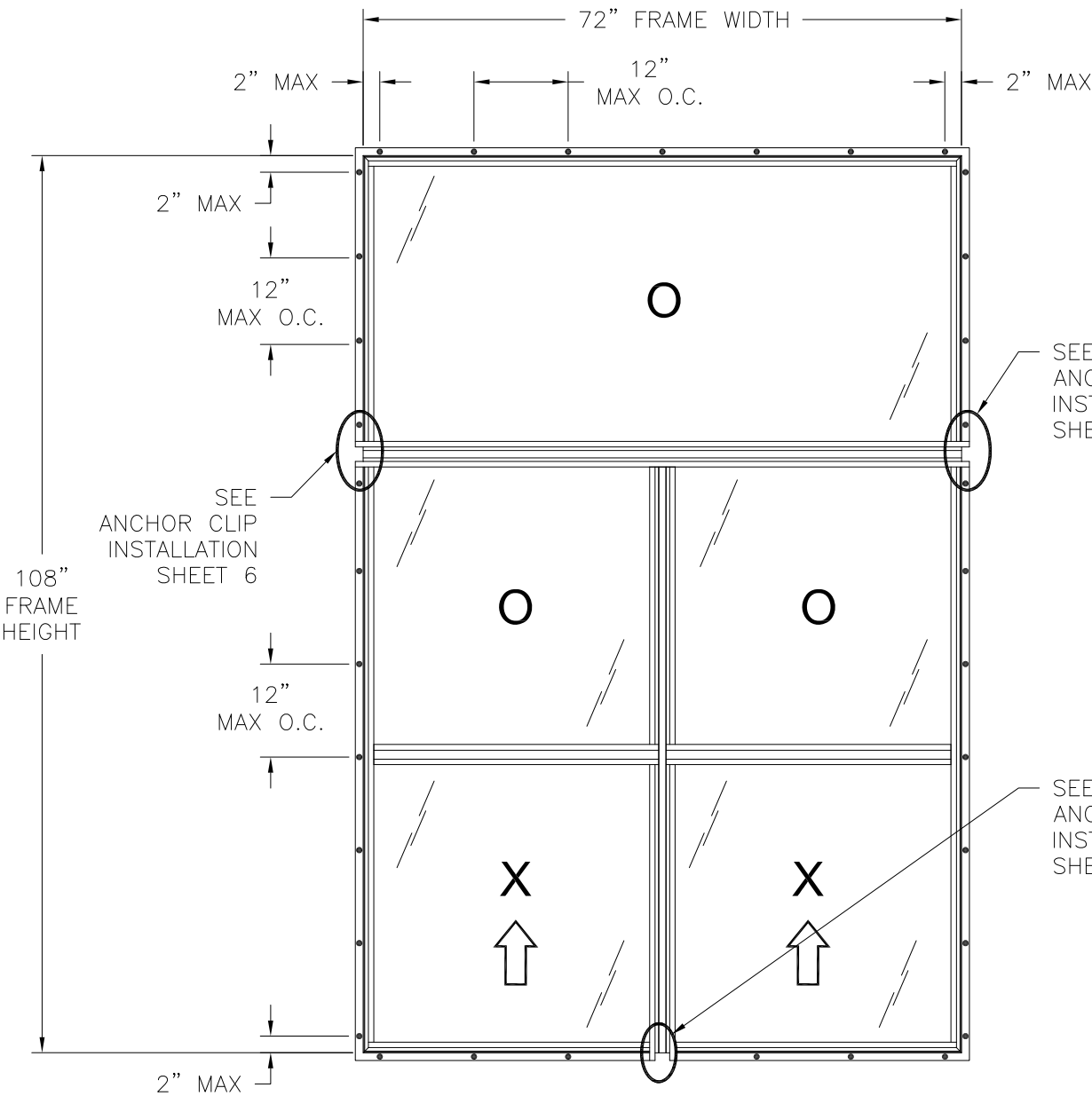
SHEET 1 OF 8

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434-688-0609 rllomas@lrlomaspe.com



Luis R. Lomas P.E.
FL No.: 62514

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NOTES:

1. SASH SIZE: 33 5/8" X 35 3/8"
2. FIXED D.L.O.: 32" X 33 1/8"
3. TRANSOM D.L.O.: 69" X 33 5/8"

4000 VINYL TWIN SINGLE HUNG WINDOW TILT W/TRANSOM
EXTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
±50.0PSF	LARGE & SMALL MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4
FOR ADDITIONAL SIZES SEE CHART #1, #2 AND #3, SHEET 3

HARDWARE SCHEDULE	
A.	METALLIC SWEEP LOCK WITH KEEPER, 5 1/2" FROM EACH END OF SASH TOP RAIL
B.	ONE METALLIC TILT LATCH AT EACH END OF SASH TOP RAIL
C.	ONE BLOCK AND TACKLE TYPE BALANCE PER JAMB
D.	ALUMINUM REINFORCEMENT (203A) INSIDE FIXED INTERLOCK
E.	ALUMINUM REINFORCEMENT (204-B) INSIDE SASH TOP RAIL AND STILES
F.	ALUMINUM REINFORCEMENT (210-A) AT VERTICAL AND HORIZONTAL MULLION

KRESTMARK INDUSTRIES, L.P. 3950 BASTILLE RD., SUITE 100 DALLAS, TX 75212		
4000 VINYL TWIN SINGLE HUNG WINDOW TILT WITH TRANSOM – IMPACT 72" X 108" ELEVATIONS		
DRAWN: A.R.	DWG NO. 08-03913	REV —
SCALE NTS	DATE 06/27/2023	SHEET 2 OF 8
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

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Chart #1
Rating for units with 12 inches transom height (psf)

Window Height (in)	Frame width (in)													
	36.0		48.0		60.0		72.0		80.0		84.0		96.0	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
24.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	41.0	41.0
30.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	35.4	35.4
36.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	31.3	31.3
42.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	48.6	48.6	28.1	28.1
48.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	44.3	44.3	25.6	25.6
54.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	49.6	49.6	40.7	40.7	23.6	23.6
60.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	45.9	45.9	37.6	37.6	21.8	21.8
66.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	42.6	42.6	34.9	34.9	20.3	20.3
72.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	39.8	39.8	32.6	32.6	18.9	18.9	
78.0	50.0	50.0	50.0	50.0	45.2	45.2	38.7	38.7	35.6	35.6	30.6	30.6	17.8	17.8
84.0	50.0	50.0	44.1	44.1	35.9	35.9	30.6	30.6	28.1	28.1	27.0	27.0	16.8	16.8
90.0	47.0	47.0	35.7	35.7	29.0	29.0	24.7	24.7	22.5	22.5	21.6	21.6	-	-
96.0	38.6	38.6	29.3	29.3	23.8	23.8	20.2	20.2	18.4	18.4	17.6	17.6	-	-
108.0	27.0	27.0	20.5	20.5	16.6	16.6	-	-	-	-	-	-	-	-

Chart #2
Rating for units with 24 inches transom height (psf)

Window Height (in)	Frame width (in)													
	36.0		48.0		60.0		72.0		80.0		84.0		96.0	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
24.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	31.9	31.9
30.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	49.2	49.2	28.4	28.4
36.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	44.5	44.5	25.7	25.7
42.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	49.9	49.9	40.8	40.8	23.5	23.5
48.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	46.1	46.1	37.7	37.7	21.7	21.7
54.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	42.8	42.8	35.0	35.0	20.2	20.2
60.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	40.0	40.0	32.7	32.7	18.9	18.9
66.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	37.5	37.5	30.7	30.7	17.8	17.8
72.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	35.3	35.3	28.9	28.9	16.7	16.7	
78.0	50.0	50.0	50.0	50.0	45.2	45.2	38.7	38.7	33.3	33.3	27.3	27.3	-	-
84.0	50.0	50.0	44.1	44.1	35.9	35.9	30.6	30.6	28.1	28.1	25.9	25.9	-	-
90.0	47.0	47.0	35.7	35.7	29.0	29.0	24.7	24.7	22.5	22.5	21.6	21.6	-	-
96.0	38.6	38.6	29.3	29.3	23.8	23.8	20.2	20.2	18.4	18.4	17.6	17.6	-	-
108.0	27.0	27.0	20.5	20.5	16.6	16.6	-	-	-	-	-	-	-	-

Chart #3
Rating for units with 36 inches transom height (psf)

Window Height (in)	Frame width (in)													
	36.0		48.0		60.0		72.0		80.0		84.0		96.0	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
24.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	46.8	46.8	26.8	26.8
30.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	42.4	42.4	24.3	24.3
36.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	47.7	47.7	38.9	38.9	22.3	22.3
42.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	44.2	44.2	36.0	36.0	20.6	20.6
48.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	41.2	41.2	33.6	33.6	19.3	19.3
54.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	38.5	38.5	31.5	31.5	18.1	18.1
60.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	36.2	36.2	29.6	29.6	17.0	17.0
66.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	34.2	34.2	27.9	27.9	16.1	16.1
72.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	32.3	32.3	26.4	26.4	-	-
78.0	50.0	50.0	50.0	50.0	45.2	45.2	38.7	38.7	30.7	30.7	25.1	25.1	-	-
84.0	50.0	50.0	44.1	44.1	35.9	35.9	30.6	30.6	28.1	28.1	23.9	23.9	-	-
90.0	47.0	47.0	35.7	35.7	29.0	29.0	24.7	24.7	22.5	22.5	21.6	21.6	-	-
96.0	38.6	38.6	29.3	29.3	23.8	23.8	20.2	20.2	18.4	18.4	17.6	17.6	-	-
108.0	27.0	27.0	20.5	20.5	16.6	16.6	-	-	-	-	-	-	-	-

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3950 BASTILLE RD., SUITE 100
DALLAS, TX 75212

4000 VINYL TWIN SINGLE HUNG WINDOW TILT
WITH TRANSOM – IMPACT 72” X 108”
DESIGN PRESSURE CHARTS

DRAWN:
A.R.

DWG NO.
08-03913

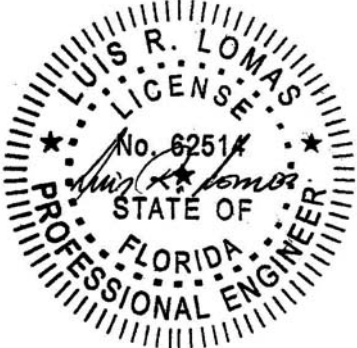
REV
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SCALE NTS

DATE 06/27/2023

SHEET 3 OF 8

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Luis R. Lomas P.E.
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REVISIONS			
REV	DESCRIPTION	DATE	APPROVED

APPROVED SEALANT BEHIND FIN

#8 WOOD SCREW

7/16" MIN EDGE DISTANCE

1" MIN. EMBEDMENT

WOOD FRAMING BY OTHERS

1/4" MAX. SHIM SPACE

EXTERIOR

INTERIOR

7/16" MIN EDGE DISTANCE

#8 WOOD SCREW

APPROVED SEALANT BEHIND FIN

1" MIN. EMBEDMENT

WOOD FRAMING BY OTHERS

1/4" MAX. SHIM SPACE

VERTICAL CROSS SECTION
WOOD FRAMING OR 2X BUCK INSTALLATION

WOOD FRAMING BY OTHERS

#8 WOOD SCREW

1" MIN. EMBEDMENT

APPROVED SEALANT BEHIND FIN

3/8" MIN EDGE DISTANCE

1/4" MAX SHIM SPACE

INTERIOR

EXTERIOR

JAMB INSTALLATION DETAIL
WOOD FRAMING OR 2X BUCK INSTALLATION

NOTES:

1. INTERIOR AND EXTERIOR FINISHES, BY OTHERS, NOT SHOWN FOR CLARITY.
2. PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112

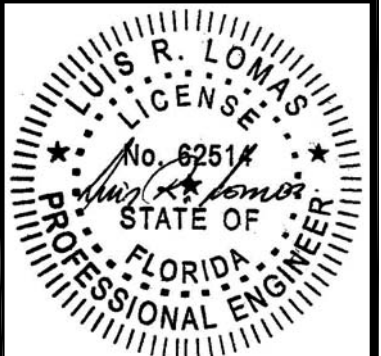
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3950 BASTILLE RD., SUITE 100
DALLAS, TX 75212

4000 VINYL TWIN SINGLE HUNG WINDOW TILT
WITH TRANSOM – IMPACT 72" X 108"
INSTALLATION DETAILS

DRAWN: A.R.	DWG NO. 08-03913	REV -
SCALE NTS	DATE 06/27/2023	SHEET 4 OF 8

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APPROVED SEALANT BEHIND FIN

#8 SMS OR SELF DRILLING SCREW

7/16" MIN EDGE DISTANCE

METAL STRUCTURE BY OTHERS

1/4" MAX. SHIM SPACE

EXTERIOR

INTERIOR

7/16" MIN EDGE DISTANCE

#8 SMS OR SELF DRILLING SCREW

APPROVED SEALANT BEHIND FIN

METAL STRUCTURE BY OTHERS

1/4" MAX. SHIM SPACE

VERTICAL CROSS SECTION
METAL STRUCTURE INSTALLATION

METAL STRUCTURE BY OTHERS

1/4" MAX SHIM SPACE

#8 SMS OR SELF DRILLING SCREW

APPROVED SEALANT BEHIND FIN

7/16" MIN EDGE DISTANCE

INTERIOR

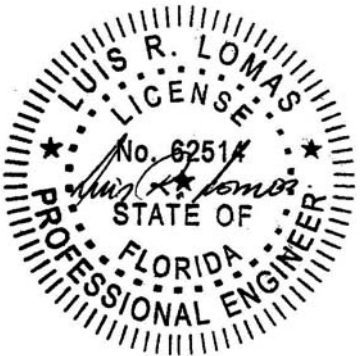
EXTERIOR

JAMB INSTALLATION DETAIL
METAL STRUCTURE INSTALLATION

- NOTES:
- INTERIOR AND EXTERIOR FINISHES, BY OTHERS, NOT SHOWN FOR CLARITY.
 - PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112

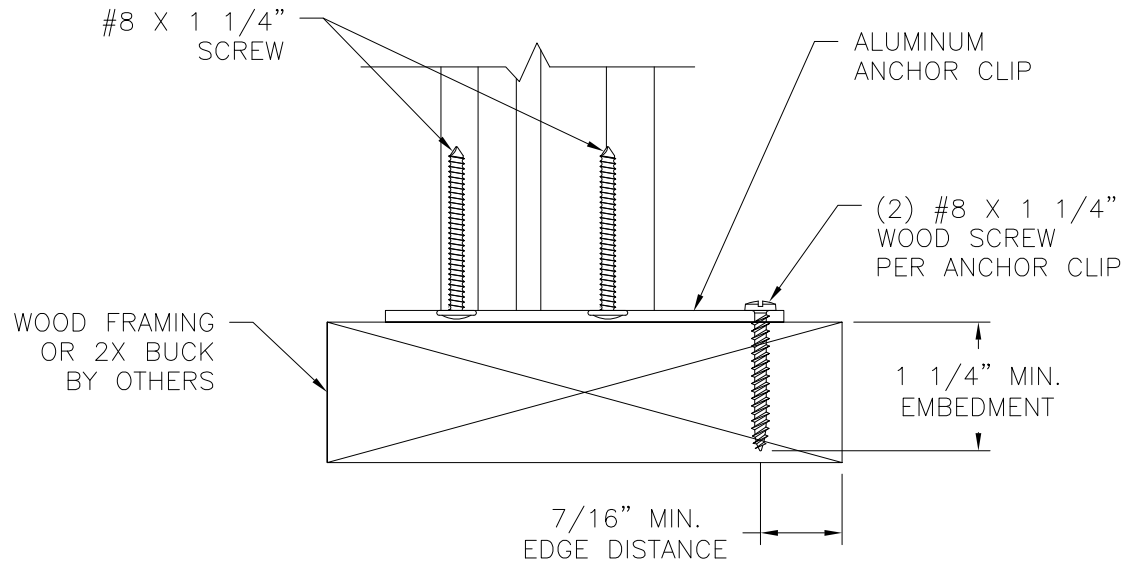
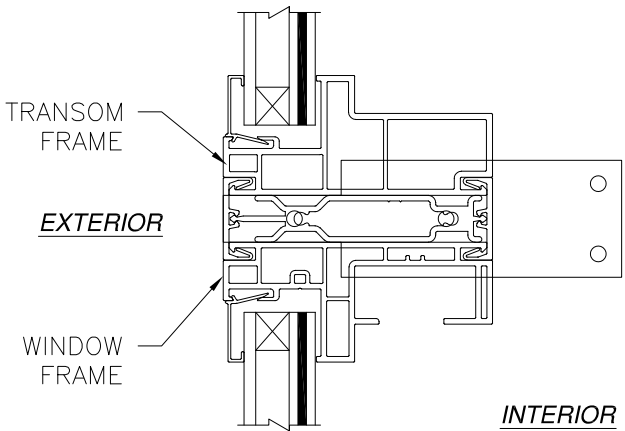
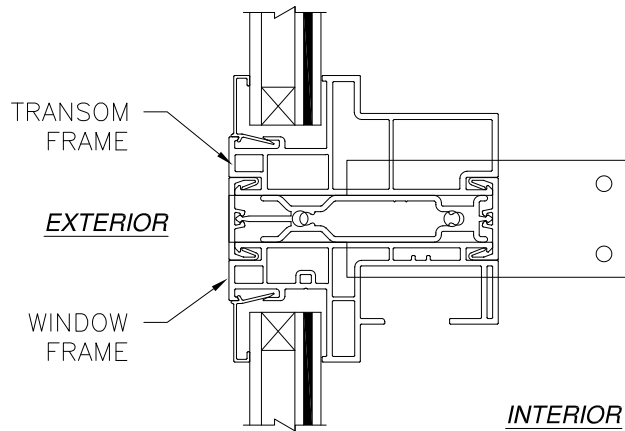
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4000 VINYL TWIN SINGLE HUNG WINDOW TILT WITH TRANSOM - IMPACT 72" X 108" INSTALLATION DETAILS		
DRAWN: A.R.	DWG NO. 08-03913	REV -
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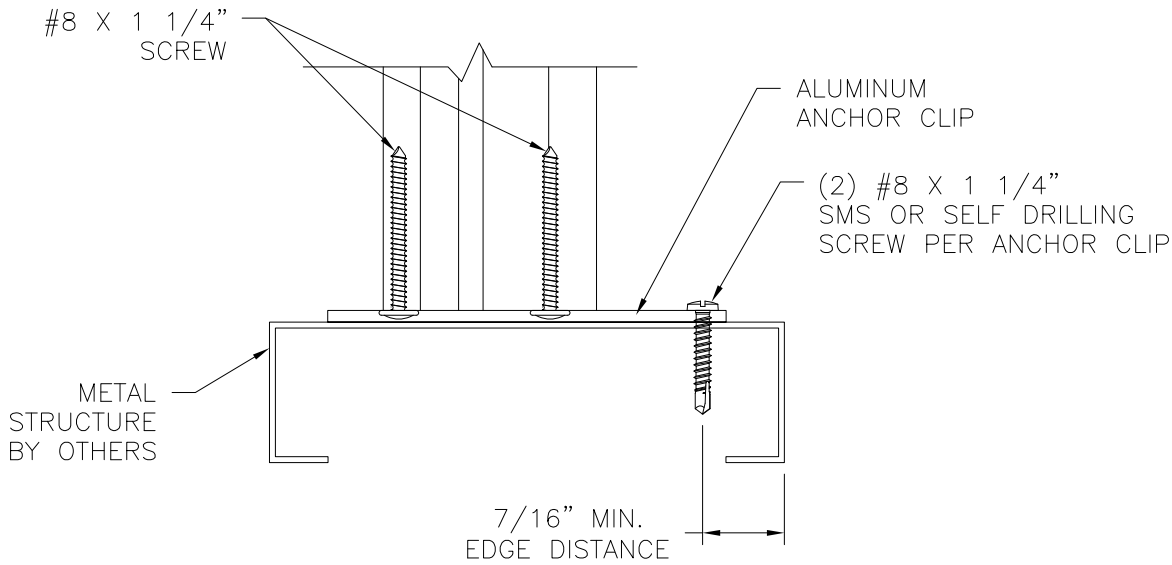


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HORIZONTAL MULLION ANCHOR CLIP DETAIL
WOOD FRAMING OR 2X BUCK INSTALLATION



HORIZONTAL MULLION ANCHOR CLIP DETAIL
METAL STRUCTURE INSTALLATION

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INSTALLATION DETAILS

DRAWN: A.R.

DWG NO. 08-03913

REV -

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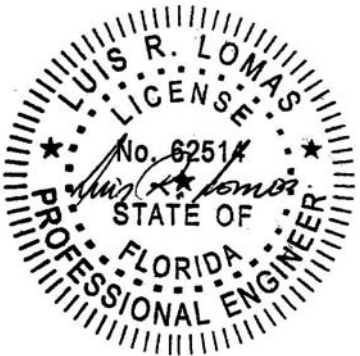
DATE 06/27/2023

SHEET 6 OF 8

L. ROBERTO LOMAS P.E.

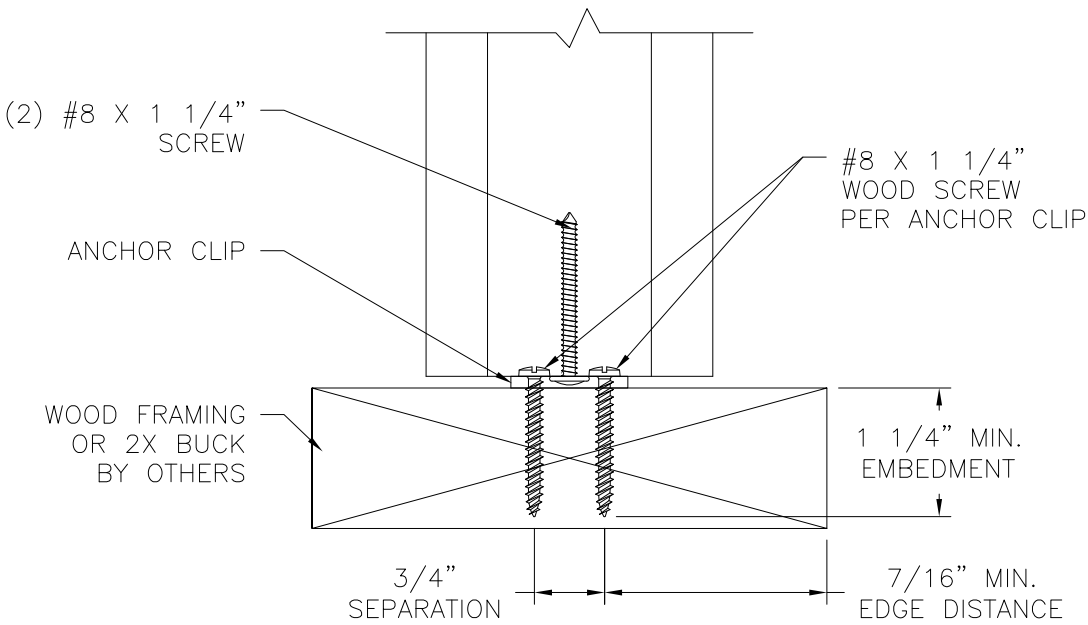
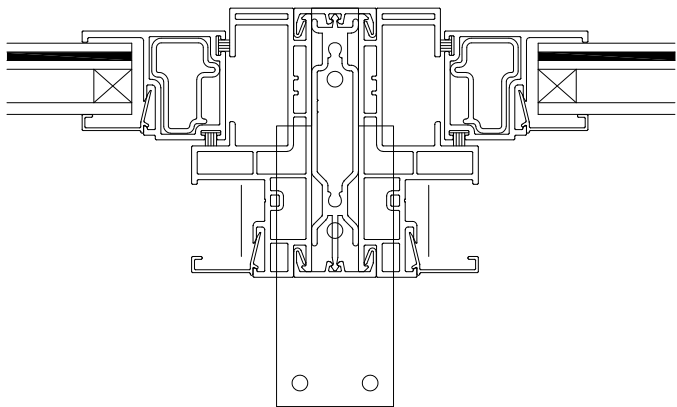
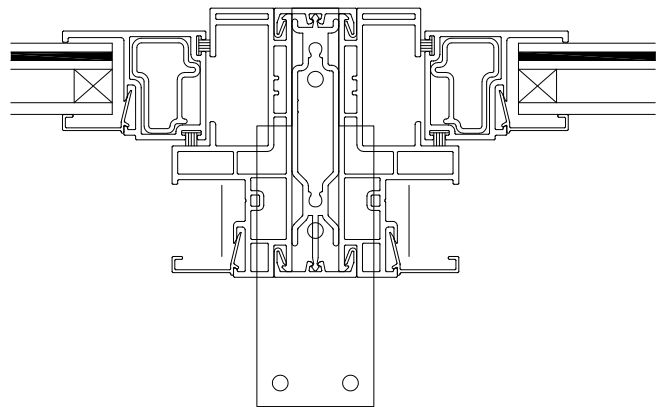
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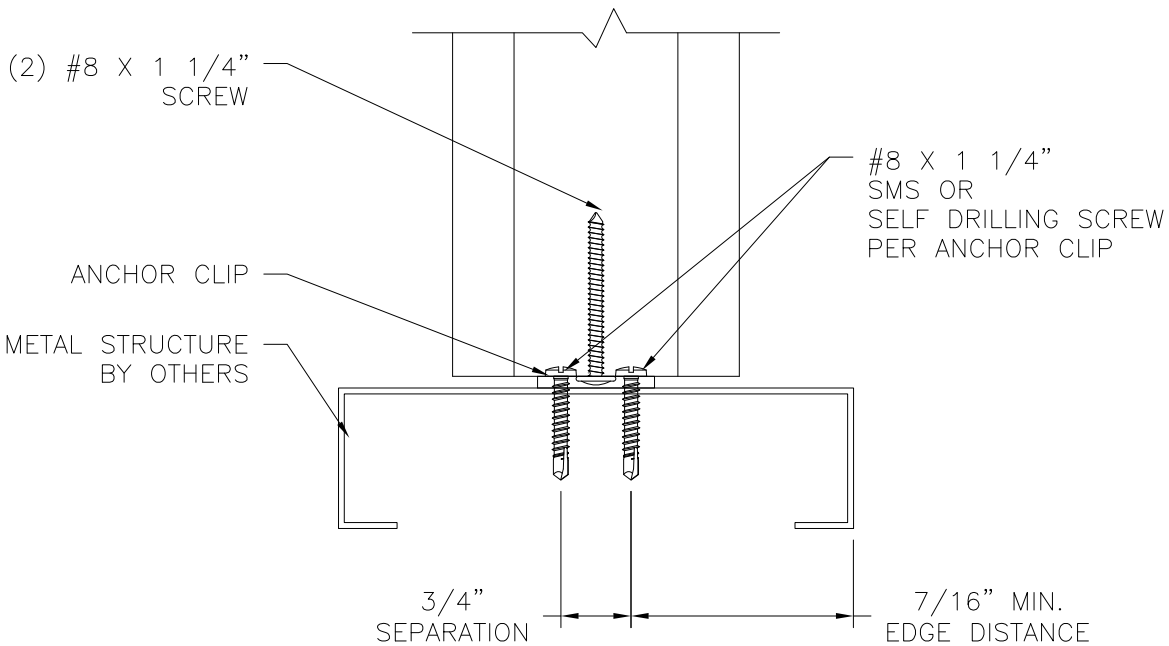


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VERTICAL MULLION ANCHOR CLIP DETAIL
WOOD FRAMING OR 2X BUCK INSTALLATION



VERTICAL MULLION ANCHOR CLIP DETAIL
METAL STRUCTURE INSTALLATION

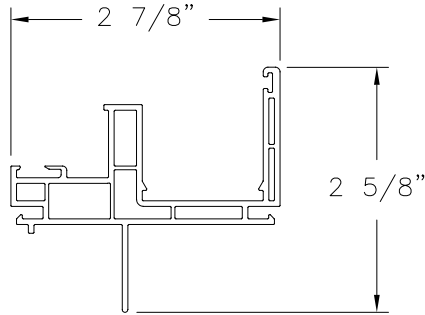
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KRESTMARK INDUSTRIES, L.P. 3950 BASTILLE RD., SUITE 100 DALLAS, TX 75212		
4000 VINYL TWIN SINGLE HUNG WINDOW TILT WITH TRANSOM - IMPACT 72" X 108" INSTALLATION DETAILS		
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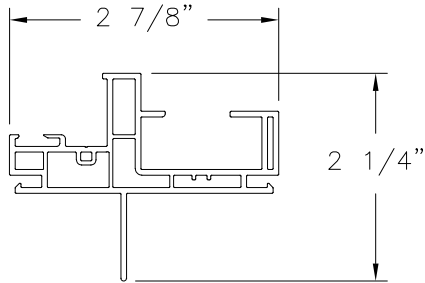


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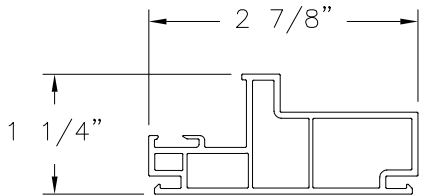
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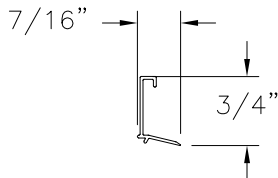
SILL (BP4002)
EXTRUDED RIGID PVC



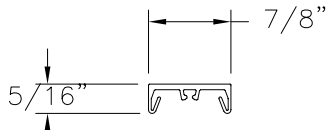
HEAD AND JAMB (BP4000)
EXTRUDED RIGID PVC



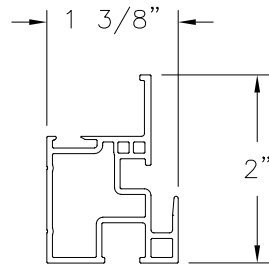
TRANSOM FRAME (BP4003)
EXTRUDED RIGID PVC



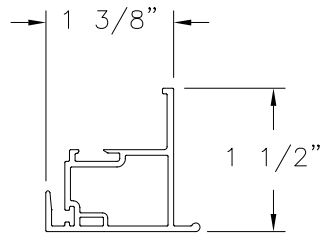
GLAZING BEAD (DT1720-R)
EXTRUDED RIGID PVC



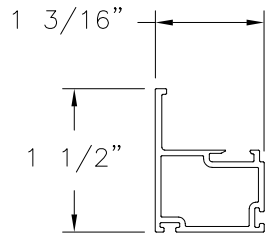
MULLION CAP (1847R)
EXTRUDED RIGID PVC



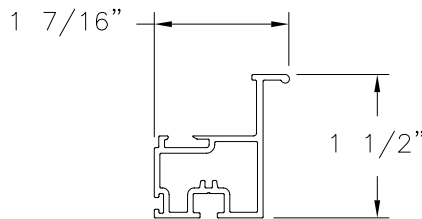
MEETING RAIL (BP4004)
EXTRUDED RIGID PVC



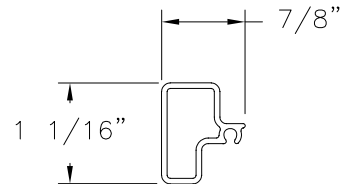
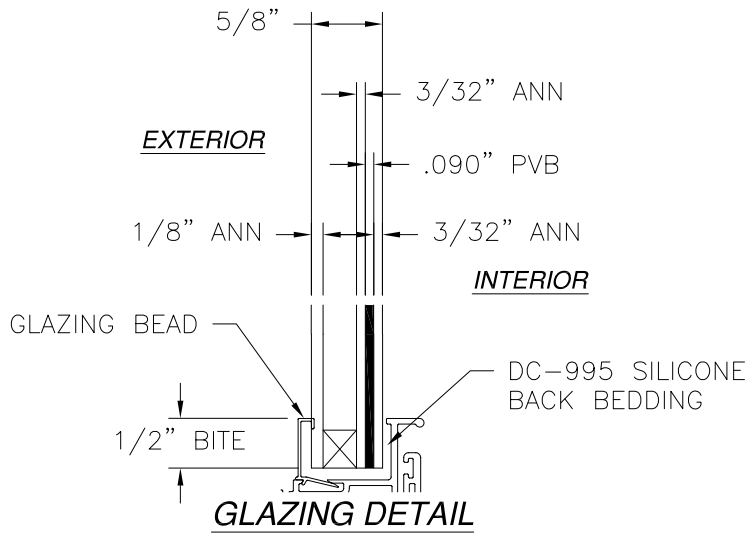
LOCK RAIL (BP4007)
EXTRUDED RIGID PVC



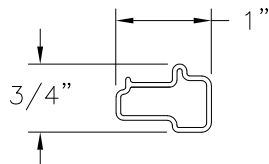
SASH STILE (BP4005)
EXTRUDED RIGID PVC



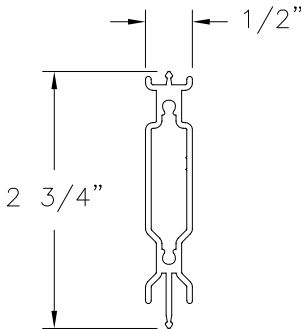
LIFT RAIL (BP4006)
EXTRUDED RIGID PVC



**MEETING RAIL
REINFORCEMENT (203-A)**
ALUMINUM 6063-T5



**LOCK RAIL/ STILE
REINFORCEMENT (204-B)**
ALUMINUM 6063-T5



REINFORCEMENT (210-A)
ALUMINUM 6063-T5

KRESTMARK INDUSTRIES, L.P.

3950 BASTILLE RD., SUITE 100
DALLAS, TX 75212

4000 VINYL TWIN SINGLE HUNG WINDOW TILT
WITH TRANSOM – IMPACT 72" X 108"
COMPONENTS

DRAWN: A.R.

DWG NO. 08-03913

REV -

SCALE NTS

DATE 06/27/2023

SHEET 8 OF 8

L. ROBERTO LOMAS P.E.

208 7th Ave, INDIALANTIC, FL 32903

434-688-0609 rllomas@lrlomaspe.com

SIGNED: 10/19/2023



Luis R. Lomas P.E.
FL No.: 62514