

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED CHARTS	05/30/26	R.L.

NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE.
2. WOOD FRAMING, METAL STRUCTURE, STEEL HATS AND MASONRY OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. WOOD, METAL AND CONCRETE OPENING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
3. STEEL HATS TO BE ANCHORED PROPERLY TO TRANSFER ALL LOADS TO STRUCTURE. STEEL HAT DESIGN AND ANCHORING IS THE RESPONSIBILITY OS THE ARCHITECT OR ENGINEER OF RECORD.
4. WHERE SHIM OR BUCK THICKNESS IS LESS THAN 1–1/2” UNITS MUST BE ANCHORED THROUGH THE FRAME IN ACCORDANCE WITH MANUFACTURER’S PUBLISHED INSTALLATION INSTRUCTIONS. ANCHORS SHALL BE SECURELY FASTENED DIRECTLY INTO MASONRY, CONCRETE OR OTHER STRUCTURAL SUBSTRATE MATERIAL.
5. WHERE WOOD BUCK THICKNESS IS 1–1/2” OR GREATER, BUCK SHALL BE SECURELY FASTENED TO MASONRY, CONCRETE OR OTHER STRUCTURAL SUBSTRATE. UNITS MAY BE ANCHORED THROUGH FRAME TO SECURED WOOD BUCK IN ACCORDANCE WITH MANUFACTURER’S PUBLISHED INSTALLATION INSTRUCTIONS.
6. WHERE 1X BUCK IS NOT USED DISSIMILAR MATERIALS MUST BE SEPARATED WITH APPROVED COATING OR MEMBRANE. SELECTION OF COATING OR MEMBRANE IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
7. BUCKS SHALL EXTEND BEYOND UNIT FRAME INTERIOR FACE SO THAT FULL FRAME SUPPORT IS PROVIDED.
8. 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 3/8”.
9. SHIMS SHALL BE LOCATED, APPLIED AND MADE FROM MATERIALS AND THICKNESS CAPABLE OF SUSTAINING APPLICABLE LOADS.
10. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
11. FRAME MATERIAL: EXTRUDED ALUMINUM.
12. UNITS MUST BE GLAZED PER ASTM E1300, WITH SAFETY GLAZING.
13. APPROVED IMPACT PROTECTIVE SYSTEM IS REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.

14. FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #14 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 7/16” MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
15. FOR ANCHORING INTO MASONRY/CONCRETE USE 1/4” TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/4” MINIMUM EMBEDMENT INTO SUBSTRATE WITH 1 1/2” MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
16. FOR ANCHORING INTO METAL STRUCTURE USE #14 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.
17. FOR ANCHORING WITH 3/8” THREADED ROD SEE DETAILS AND NOTES IN SHEET 7
18. ALL FASTENERS TO BE CORROSION RESISTANT.
19. 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:
 - 19.A. WOOD: MINIMUM SPECIFIC GRAVITY OF G=0.55
 - 19.B. CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF 2,000 PSI.
 - 19.C. MASONRY: HOLLOW/FILLED BLOCK PER ASTM C90 WITH Fm=2,000PSI MINIMUM.
 - 19.D. METAL STRUCTURE AND STEEL HAT: 1/4” STEEL FY=36KSI MINIMUM.

SIGNED: 08/05/2026

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SHEET NO.	DESCRIPTION
1	NOTES
2	ELEVATION
3 – 5	CROSS SECTIONS
6 – 8	INSTALLATION DETAILS

NANA WALL SYSTEMS, INC.
100 MEADOWCREEK DRIVE, SUITE 250
CORTE MADERA, CA 94925

HSW 60 SYSTEM
NON-IMPACT
NOTES

DRAWN:
R.L.

DWG NO.
08-03968

REV
A

SCALE NTS

DATE 12/17/23

SHEET 1 OF 8

L. ROBERTO LOMAS P.E.
208 7th Ave, INDIALANTIC, FL 32903
434-688-0609 rllomas@lrlomaspe.com

LUIS R. LOMAS

LICENSE

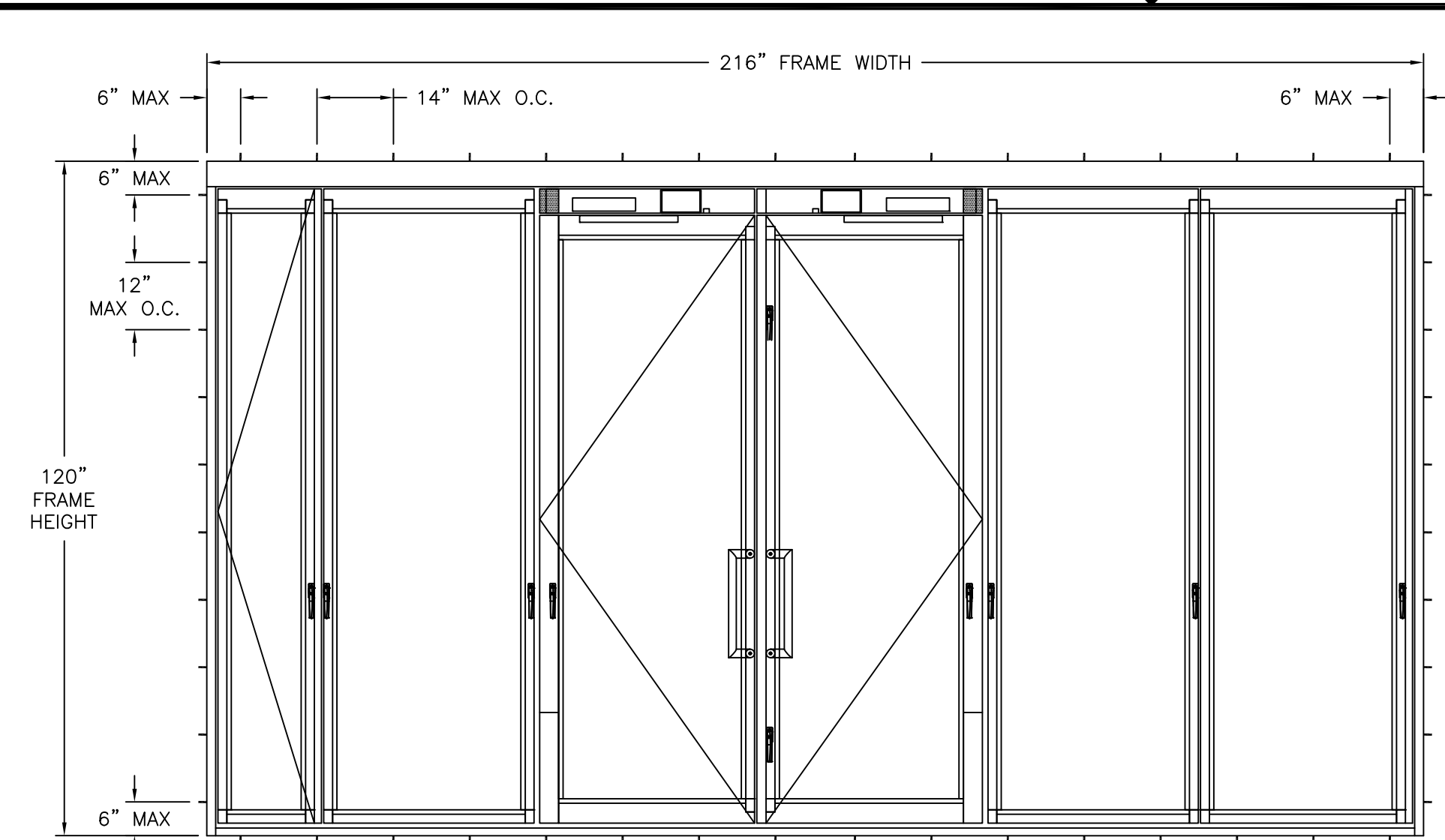
No. 62514

STATE OF

FLORIDA

PROFESSIONAL ENGINEER

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



HSW60 SLIDING/SWING DOOR

INTERIOR VIEW

MULTIPLE PANELS IN MULTIPLE COFIGURATIONS ARE APPROVED AS LONG AS INDIVIDUAL PANEL AREA DOES NOT EXCEED 31.38 FT²

WITH SADDLE SILL

DESIGN PRESSURE RATING	IMPACT RATING
+40.0/-45.0PSF	NONE

WHERE WATER PENETRATION RESISTANCE IS REQUIRED

WITH SADDLE OR FLUSH SILL OR FLOOR SOCKETS

DESIGN PRESSURE RATING	IMPACT RATING
±45.0PSF	NONE

WHERE WATER PENETRATION RESISTANCE IS NOT REQUIRED

HARDWARE SCHEDULE

A	(1) THREE POINT LOCK W/HANDLE AT HEAD, SILL AND JAMB OF SLIDING PANEL JAMB STILE
B	(2) TWO POINT LOCK W/HANDLE AT HEAD AND SILL OF ACCESS DOOR AND SLIDING PANEL
C	(2) TWO POINT LOCK W/HANDLE AT TOP OF SWING DOOR HINGE STILE
D	(2) TWO POINT LOCK W/HANDLE AT SILL OF SLIDING PANEL ADJACENT TO SWING DOOR
E	(1) TWO POINT LOCK W/HANDLE AT HEAD AND SILL OF LEFT SWING PANEL
F	(2) ONE POINT LOCK W/HANDLE AT SILL OF SWING DOOR HINGE STILE
G	(1) ONE POINT LOCK W/HANDLE AT TOP OF RIGHT SWING DOOR PANEL
H	(1) ONE POINT LOCK W/HANDLE AT SILL OF RIGHT SWING DOOR PANEL
I	(1) ONE POINT LOCK W/KEY AT ADJACENT PANEL OF RIGHT SWING PANEL
J	(2) SWING PANEL LOCK ABOVE EACH SWING DOOR
K	(2) DOOR CLOSER ABOVE EACH SWING DOOR
L	(6) DUAL ROLLER SYSTEM AT HEAD OF EACH SLIDING PANEL
M	(2) DUAL ROLLER SYSTEM ABOVE SWING DOOR LOCK STILES
N	(2) DUAL ROLLER W/INTEGRATED HINGE SYSTEM AT SWING DOOR HINGE STILES
O	(5) HINGES AT HINGE STILE 9" AND 20" FROM CORNERS AND MIDSPAN

NOTES:

- PANEL SIZE: 40" X 113"
- SLIDING PANEL D.L.O.: 37 3/4" X 106"
- SWING DOOR PANEL D.L.O.: 37 3/4" X 100"

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Chart #1

Maximum Design pressure (psf)												
Panel Height (in)	Single Panel Width (in)											
	24.00		30.00		36.00		40.00		42.00		48.00	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
80.00	40.0	67.5	40.0	67.5	40.0	67.5	40.0	63.6	40.0	60.5	40.0	53.0
84.00	40.0	67.5	40.0	67.5	40.0	67.3	40.0	60.5	40.0	57.7	40.0	50.4
90.00	40.0	67.5	40.0	67.5	40.0	62.8	40.0	56.5	40.0	53.8	40.0	47.1
96.00	40.0	67.5	40.0	67.5	40.0	58.9	40.0	53.0	40.0	50.4	-	-
98.00	40.0	67.5	40.0	67.2	40.0	57.7	40.0	51.9	40.0	49.4	-	-
102.00	40.0	67.5	40.0	64.1	40.0	55.4	40.0	49.9	40.0	47.5	-	-
108.00	40.0	67.5	40.0	60.0	40.0	51.7	40.0	47.1	-	-	-	-
113.00	40.0	67.5	40.0	56.9	40.0	48.9	40.0	45.0	-	-	-	-
120.00	40.0	60.5	40.0	48.8	40.0	41.2	-	-	-	-	-	-
126.00	40.0	52.2	40.0	42.1	-	-	-	-	-	-	-	-
132.00	40.0	45.3	36.5	36.5	-	-	-	-	-	-	-	-

WITH SADDLE SILL

WHERE WATER PENETRATION RESISTANCE IS REQUIRED

Chart #2

Maximum Design pressure (psf)												
Panel Height (in)	Single Panel Width (in)											
	24.00		30.00		36.00		40.00		42.00		48.00	
	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg	Pos	Neg
80.00	67.5	67.5	67.5	67.5	67.5	67.5	63.6	63.6	60.5	60.5	53.0	53.0
84.00	67.5	67.5	67.5	67.5	67.3	67.3	60.5	60.5	57.7	57.7	50.4	50.4
90.00	67.5	67.5	67.5	67.5	62.8	62.8	56.5	56.5	53.8	53.8	47.1	47.1
96.00	67.5	67.5	67.5	67.5	58.9	58.9	53.0	53.0	50.4	50.4	-	-
98.00	67.5	67.5	67.2	67.2	57.7	57.7	51.9	51.9	49.4	49.4	-	-
102.00	67.5	67.5	64.1	64.1	55.4	55.4	49.9	49.9	47.5	47.5	-	-
108.00	67.5	67.5	60.0	60.0	51.7	51.7	47.1	47.1	-	-	-	-
113.00	67.5	67.5	56.9	56.9	48.9	48.9	45.0	45.0	-	-	-	-
120.00	60.5	60.5	48.8	48.8	41.2	41.2	-	-	-	-	-	-
126.00	52.2	52.2	42.1	42.1	-	-	-	-	-	-	-	-
132.00	45.3	45.3	36.5	36.5	-	-	-	-	-	-	-	-

WITH SADDLE OR FLUSH SILL OR FLOOR SOCKETS

WHERE WATER PENETRATION RESISTANCE IS NOT REQUIRED

SIGNED: 08/05/2026

NANA WALL SYSTEMS, INC.

100 MEADOWCREEK DRIVE, SUITE 250

CORTE MADERA, CA 94925

HSW 60 SYSTEM

NON-IMPACT

ELEVATION

DRAWN: R.L.

DWG NO. 08-03968

REV A

SCALE NTS

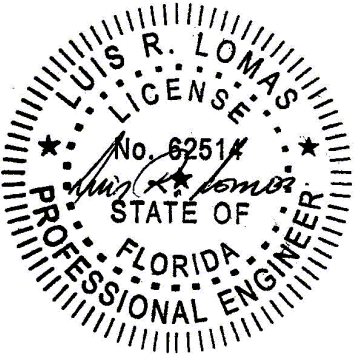
DATE 12/17/23

SHEET 2 OF 8

L. ROBERTO LOMAS P.E.

208 7th Ave, INDIALANTIC, FL 32903

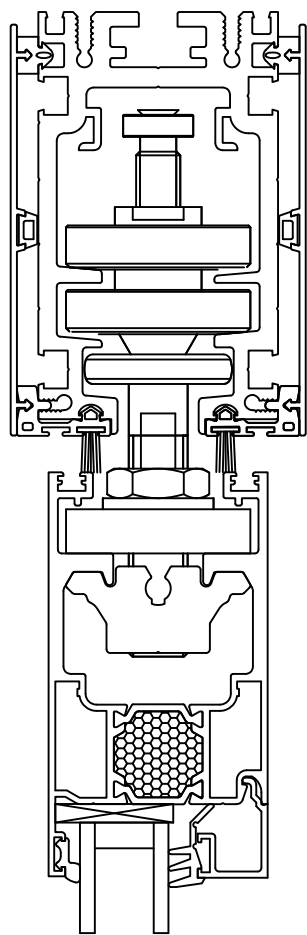
434-688-0609 rllomas@lrlomaspe.com



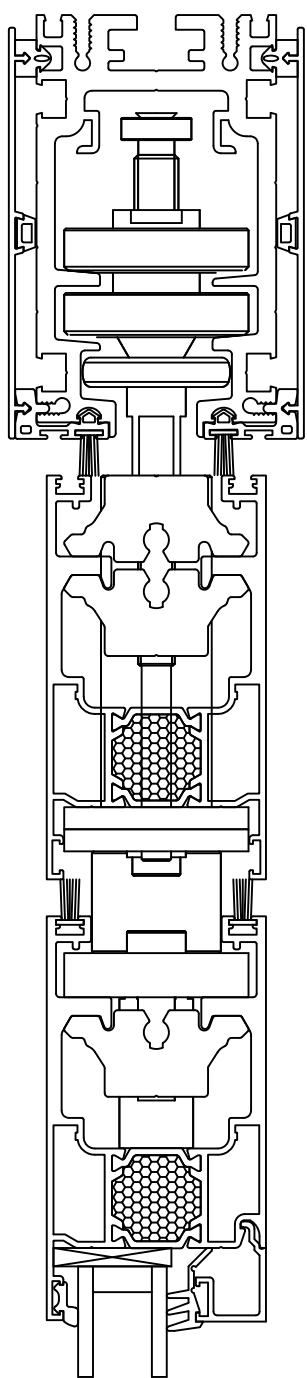
Luis R. Lomas P.E.
FL No.: 62514

FOR ILLUSTRATION PURPOSES ONLY
FOR INSTALLATION DETAILS REFER TO SHEETS 6 - 8

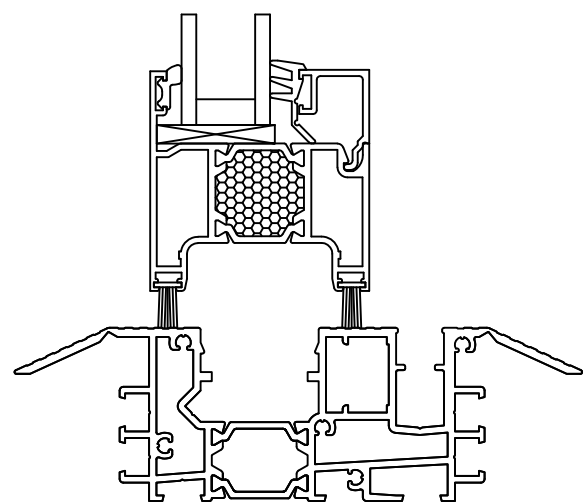
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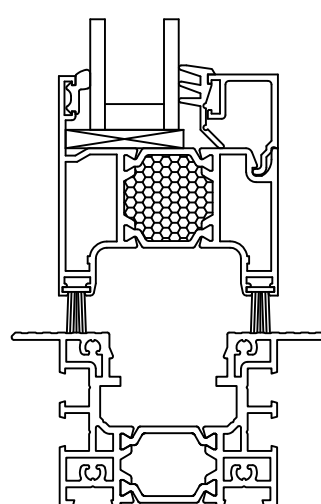
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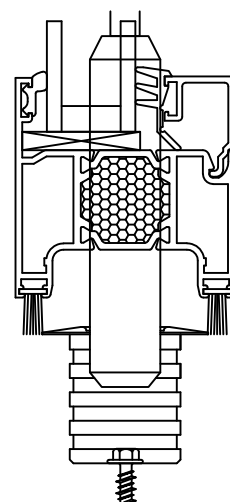
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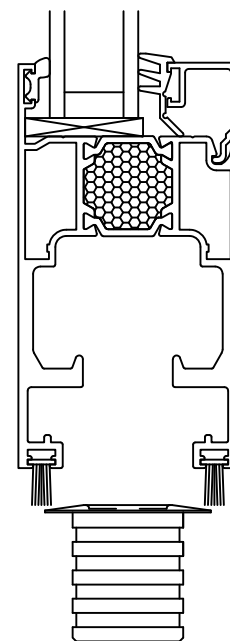
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W/SADDLE SILL



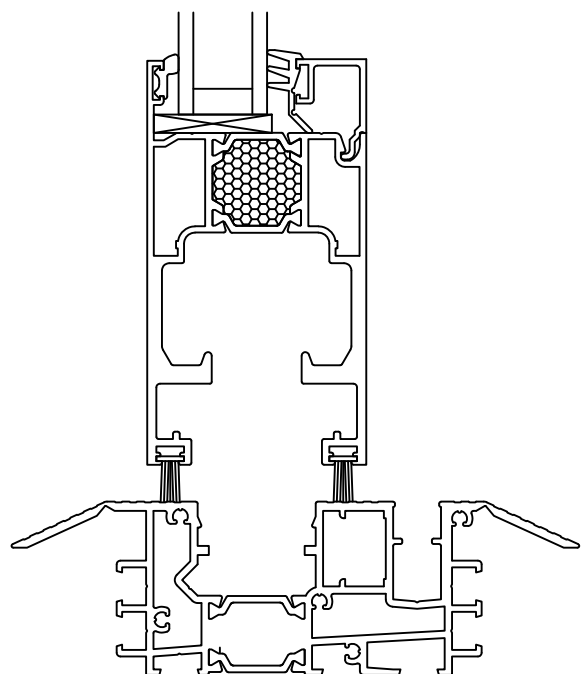
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W/FLUSH SILL



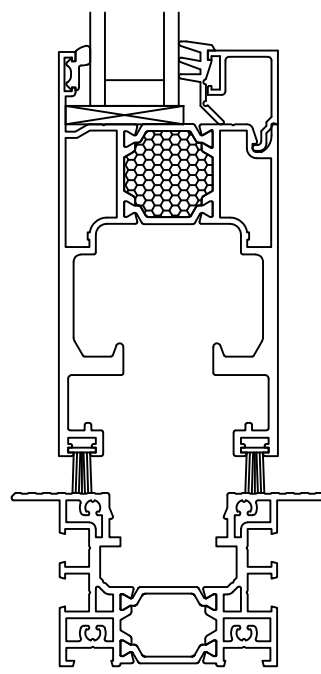
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W/FLOOR SOCKET



SWING PANEL NO SILL
W/FLOOR SOCKET



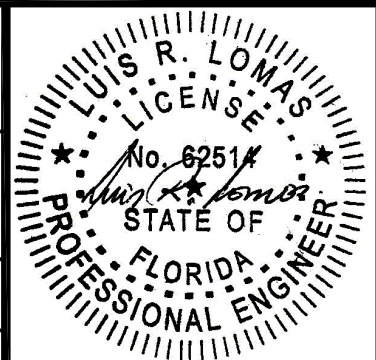
SWING PANEL
W/SADDLE SILL



SWING PANEL
W/FLUSH SILL

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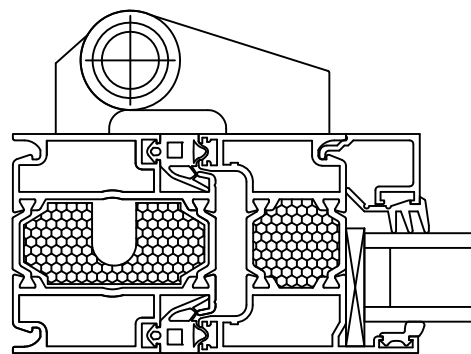
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HSW 60 SYSTEM NON-IMPACT CROSS SECTIONS		
DRAWN: R.L.	DWG NO. 08-03968	REV A
SCALE NTS	DATE 12/17/23	SHEET 3 OF 8
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



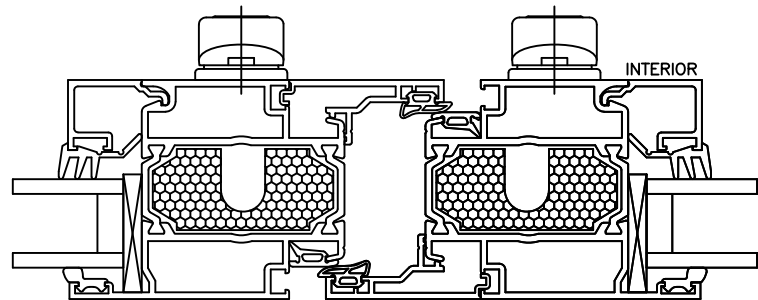
Luis R. Lomas P.E.
FL No.: 62514

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FOR INSTALLATION DETAILS REFER TO SHEETS 6 - 8

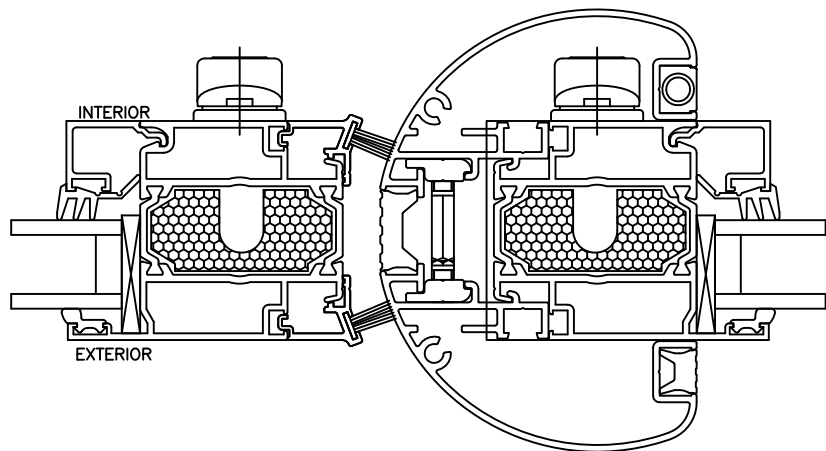
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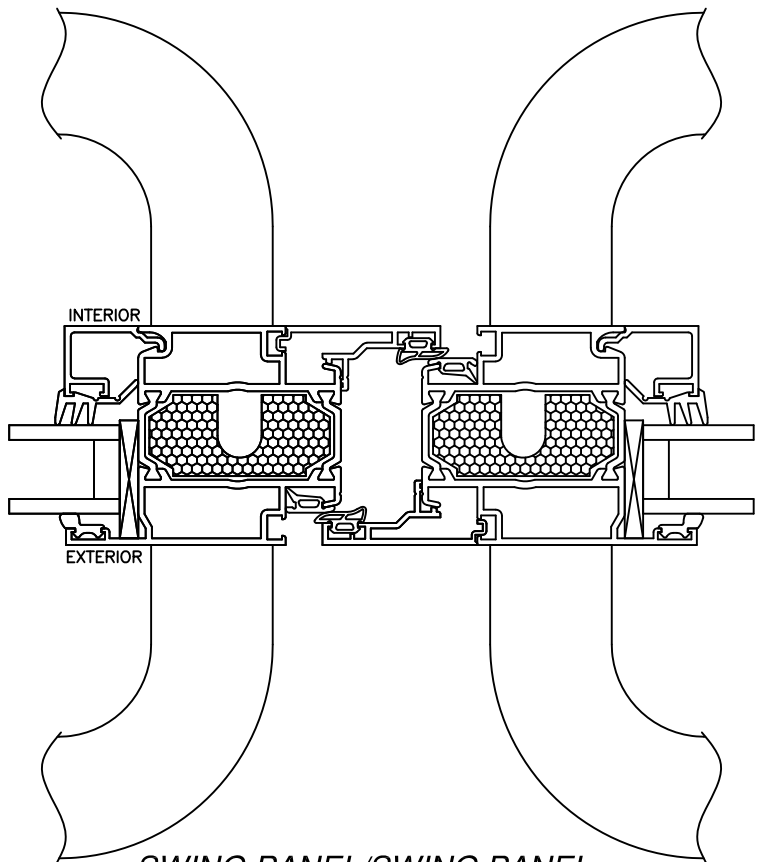
SWING PANEL/SIDE JAMB



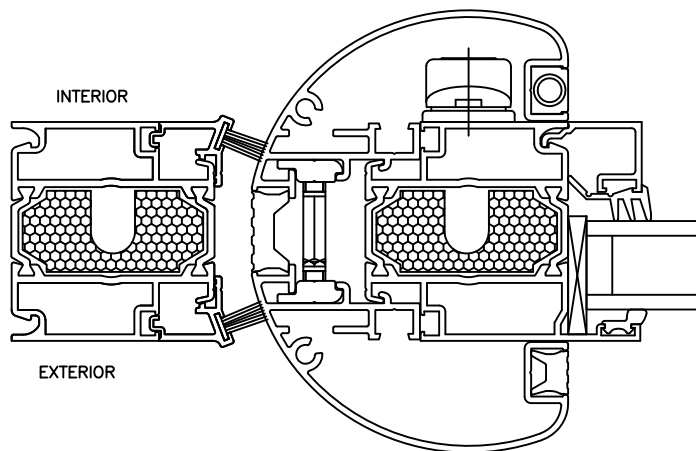
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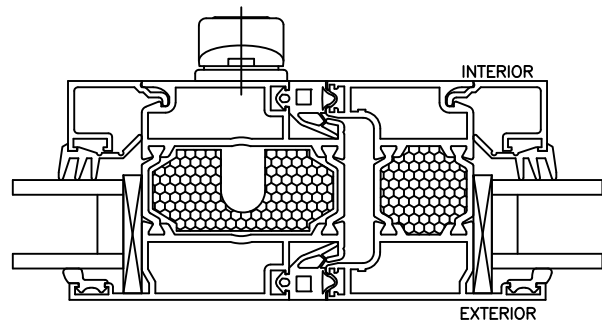
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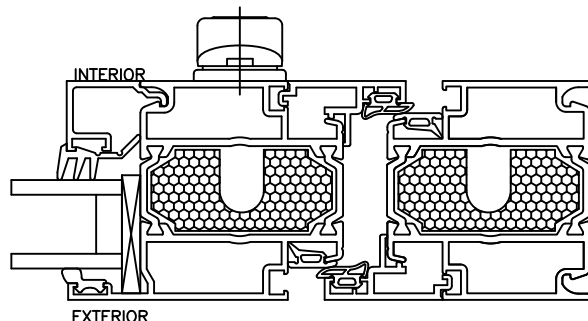
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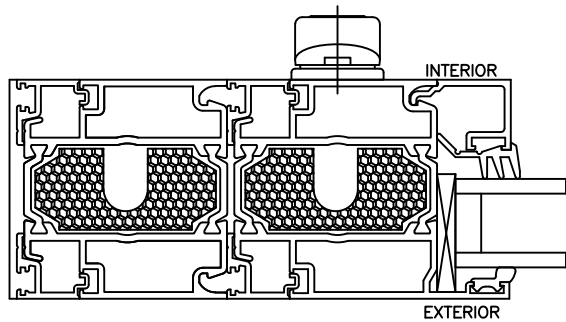
SWING PANEL/SIDE JAMB



SLIDING PANEL/SLIDING PANEL



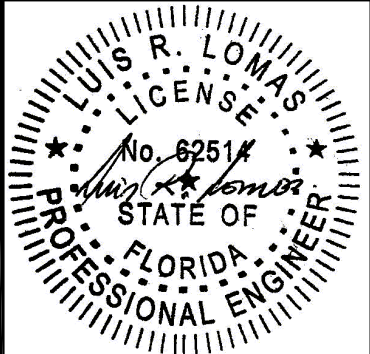
PANEL/SIDE JAMB



SLIDING PANEL WITHOUT JAMB

SIGNED: 08/05/2026

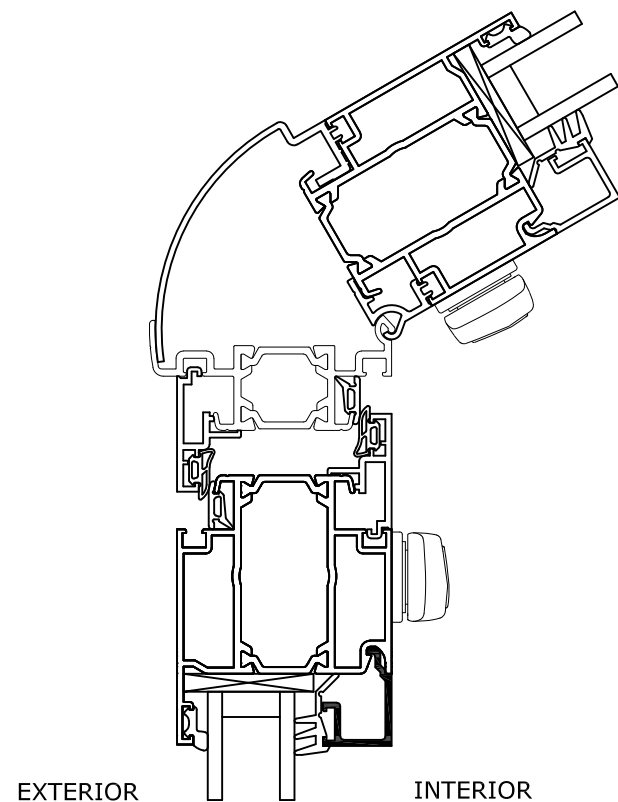
NANA WALL SYSTEMS, INC. 100 MEADOWCREEK DRIVE, SUITE 250 CORTE MADERA, CA 94925		
HSW 60 SYSTEM NON-IMPACT CROSS SECTIONS		
DRAWN: R.L.	DWG NO. 08-03968	REV A
SCALE NTS	DATE 12/17/23	SHEET 4 OF 8
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



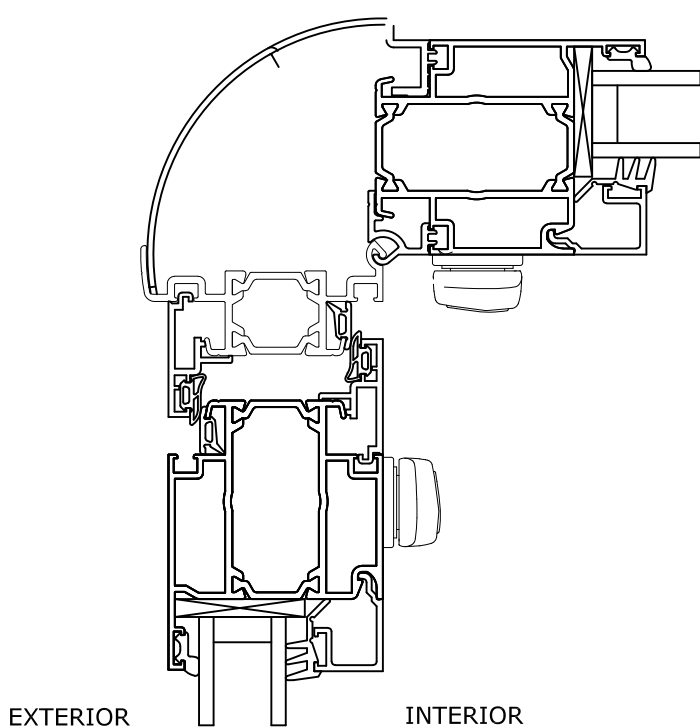
Luis R. Lomas P.E.
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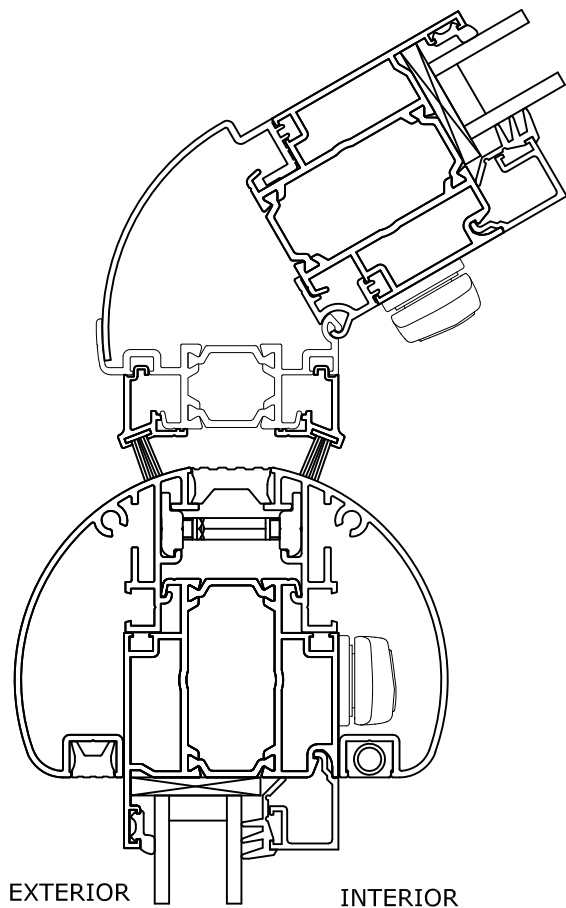
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A	REVISED CHARTS	05/30/26	R.L.



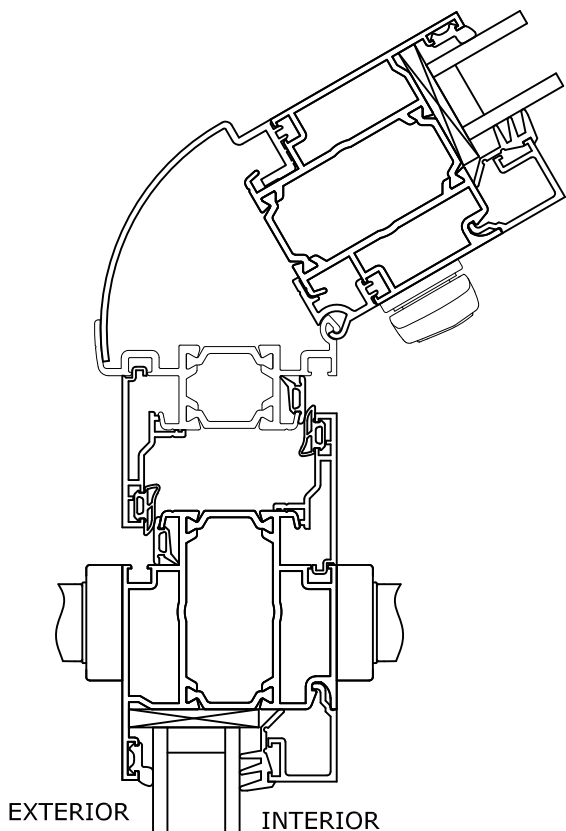
SLIDING PANELS
AT SEGMENTED ANGLE



SLIDING PANELS
AT 90°



SLIDING PANEL/SWING PANEL
AT SEGMENTED ANGLE

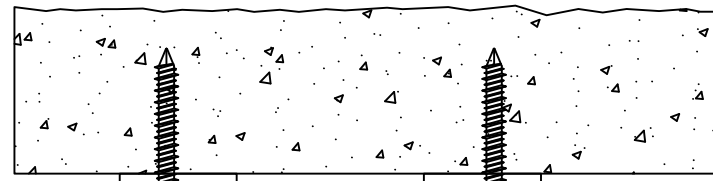


SLIDING PANEL/SWING PANEL
AT SEGMENTED ANGLE

SIGNED: 08/05/2026

NANA WALL SYSTEMS, INC. 100 MEADOWCREEK DRIVE, SUITE 250 CORTE MADERA, CA 94925		
HSW 60 SYSTEM NON-IMPACT CROSS SECTIONS		
DRAWN: R.L.	DWG NO. 08-03968	REV A
SCALE NTS	DATE 12/17/23	SHEET 5 OF 8
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		

Professional Engineer Seal for Luis R. Lomas, State of Florida, License No. 62514.



HAT CHANNEL
BY OTHERS
SEE NOTES
SHEET 1

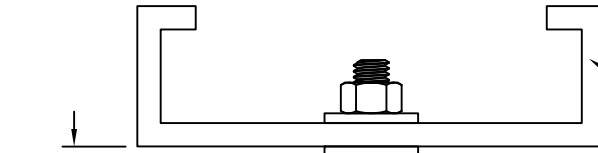
3/8" THREADED ROD
WITH NUTS AND
WASHERS
SEE NOTE 1
THIS SHEET

1 9/16"
MAX

HEAD INSTALLATION DETAIL

CONCRETE

STANDARD HEAD SHOWN, HEAD AT SWING SIMILAR



METAL STRUCTURE
BY OTHERS
SEE NOTES SHEET 1

3/8" THREADED ROD
WITH NUTS AND
WASHERS
SEE NOTE 1
THIS SHEET

1 9/16"
MAX

HEAD INSTALLATION DETAIL

METAL STRUCTURE

STANDARD HEAD SHOWN, HEAD AT SWING SIMILAR

NOTES:

1. FOR ANCHORING WITH RODS USE 3/8" ALL THREADED RODS WITH NUTS AND WASHERS, WITH MINIMUM $F_y=50\text{KSI}$ AND $F_u=100\text{KSI}$. LOCATE RODS PER SHEET 2 ELEVATION.
2. INTERIOR AND EXTERIOR FINISHES, BY OTHERS, NOT SHOWN FOR CLARITY.
3. PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112

REVISIONS

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NANA WALL SYSTEMS, INC.

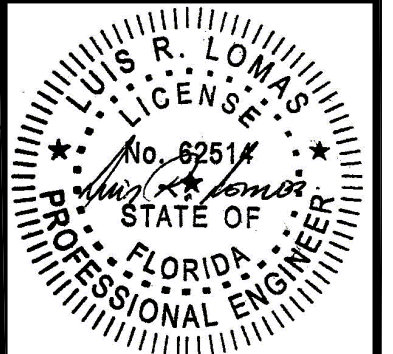
100 MEADOWCREEK DRIVE, SUITE 250
CORTE MADERA, CA 94925

HSW 60 SYSTEM
NON-IMPACT
INSTALLATION DETAILS, HEAD WITH ROD

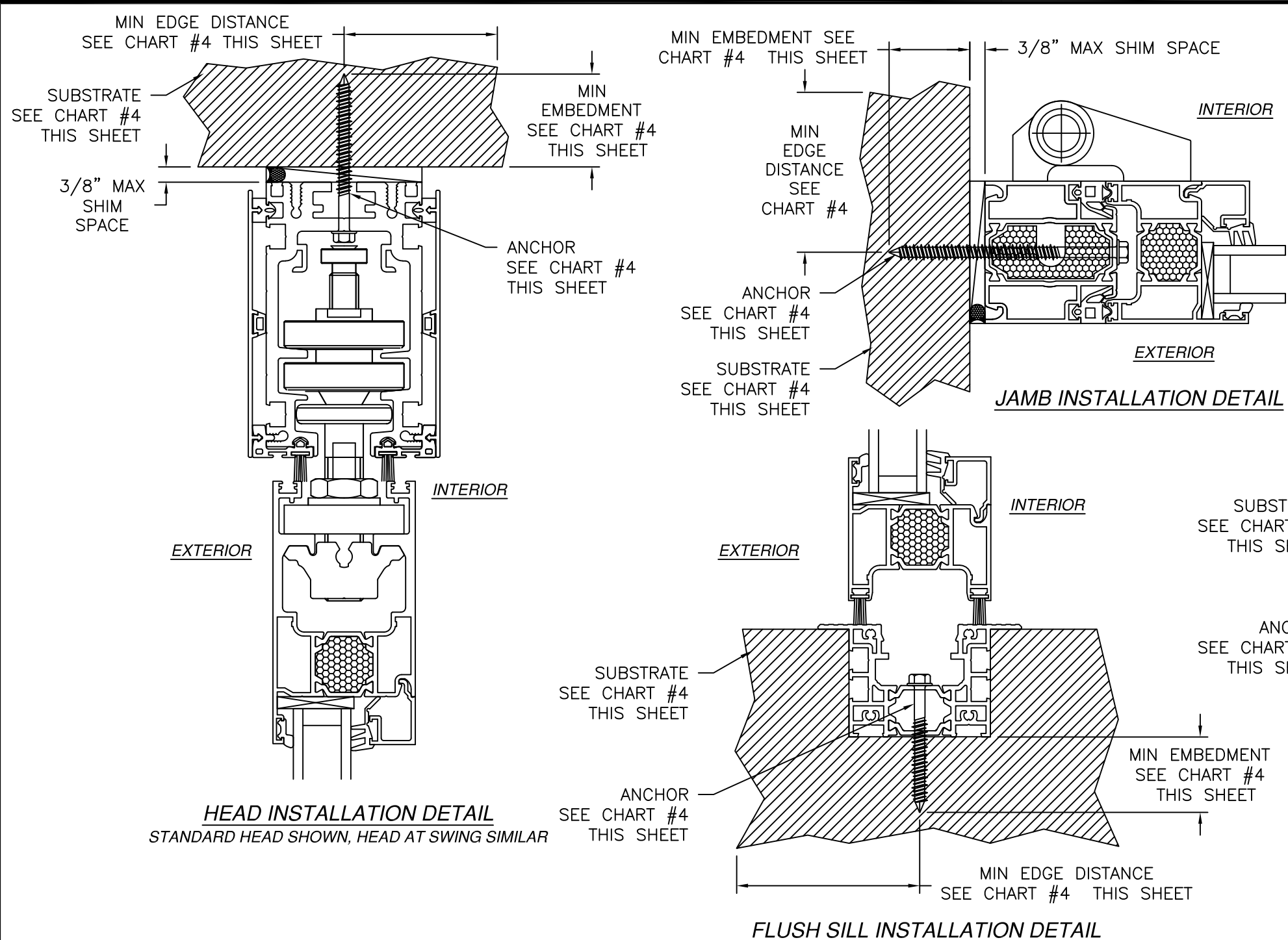
DRAWN: R.L.	DWG NO. 08-03968	REV A
SCALE NTS	DATE 12/17/23	SHEET 6 OF 8

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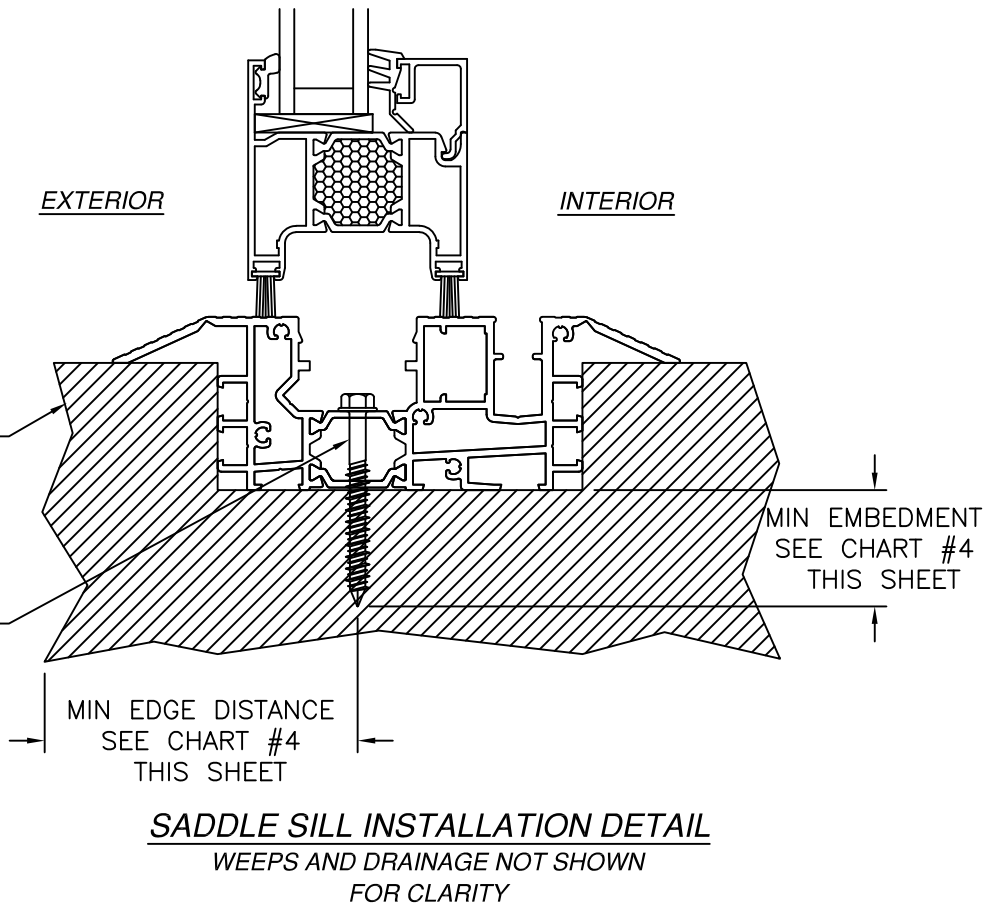
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- NOTES:
- INTERIOR AND EXTERIOR FINISHES, BY OTHERS, NOT SHOWN FOR CLARITY.
 - PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112

CHART #4

SUBSTRATE	ANCHOR TYPE	MIN EDGE DISTANCE	MIN EMBEDMENT
WOOD	#14 WOOD SCREW	1/2"	1 7/16"
1/4" STEEL	#14 SMS OR SELF DRILLING SCREW	1/2"	(3) THREADS MIN BEYOND INSIDE WALL
CONCRETE	1/4" CONCRETE ANCHOR	1 1/2"	1 3/4"

NANA WALL SYSTEMS, INC.

100 MEADOWCREEK DRIVE, SUITE 250
CORTE MADERA, CA 94925

HSW 60 SYSTEM
NON-IMPACT
INSTALLATION DETAILS

DRAWN:
R.L.

DWG NO.
08-03968

REV
A

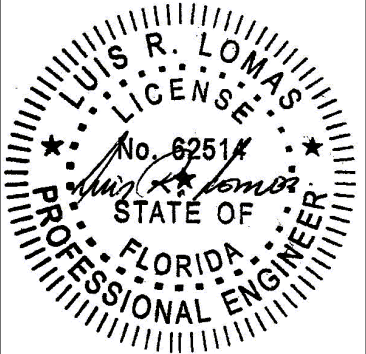
SCALE
NTS

DATE
12/17/23

SHEET
7 OF 8

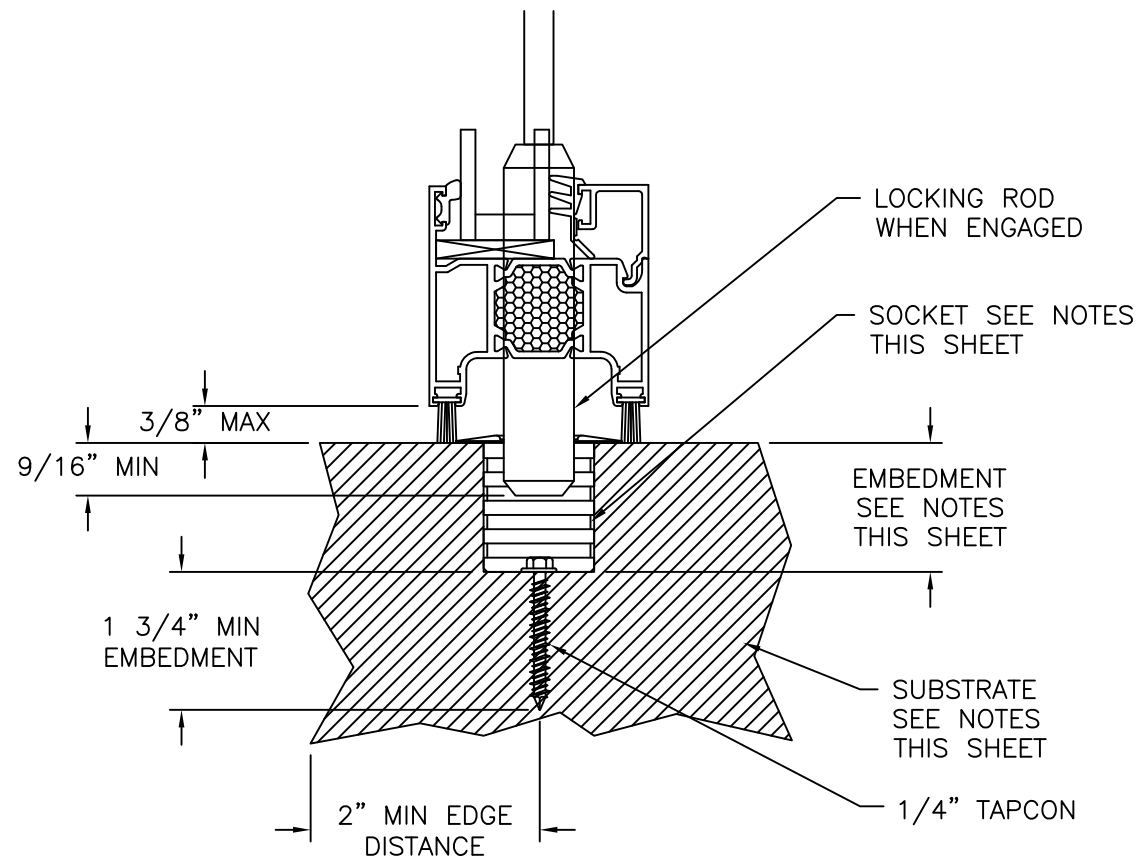
L. ROBERTO LOMAS P.E.
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434-688-0609 rllomas@lrlomaspe.com

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

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REVISED CHARTS	05/30/26	R.L.

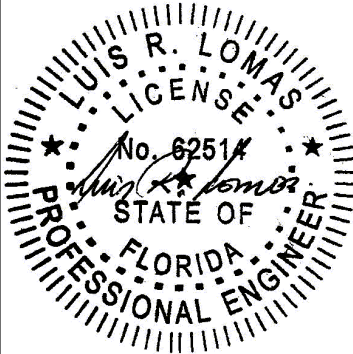


SOCKET INSTALLATION DETAIL
TO BE USED AT EACH LOCKING ROD AND WHERE
WATER PENETRATION RESISTANCE IS NOT REQUIRED

- NOTES:
1. INSTALL A SOCKET AT EACH LOCKING ROD LOCATION.
 2. CONCRETE SLABS AND WOOD STRUCTURE SHALL BE A MINIMUM OF 4" THICK.
 3. MINIMUM SOCKET EMBEDMENT IS 1" WITH A MINIMUM EDGE DISTANCE OF 2"
 4. WHEN SOCKET EMBEDMENT IS 2" MINIMUM EDGE DISTANCE MAY BE 1"
 5. ANY DRILLING INTO CONCRETE IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
 6. INTERIOR AND EXTERIOR FINISHES, BY OTHERS, NOT SHOWN FOR CLARITY.
 7. PERIMETER AND JOINT SEALANT BY OTHERS TO BE DESIGNED IN ACCORDANCE WITH ASTM E2112

SIGNED: 08/05/2026

NANA WALL SYSTEMS, INC. 100 MEADOWCREEK DRIVE, SUITE 250 CORTE MADERA, CA 94925		
HSW 60 SYSTEM NON-IMPACT INSTALLATION DETAILS		
DRAWN: R.L.	DWG NO. 08-03968	REV A
SCALE NTS	DATE 12/17/23	SHEET 8 OF 8
L. ROBERTO LOMAS P.E. 208 7th Ave, INDIALANTIC, FL 32903 434-688-0609 rllomas@lrlomaspe.com		



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