

General Notes:

1. This Product Evaluation Document (PED) represents a Walk-In Cooler/Freezer system analyzed and tested in accordance with the 9th Edition (2026) Florida Building Code, Building (FBC).
2. This PED is not applicable in the High Velocity Hurricane Zone.
3. This PED addresses the structural requirements for compliance with the structural portions of the noted codes. Architectural, fire protection, mechanical, electrical and waterproofing requirements are not part of the evaluation. Specific use of this PED requires the Architect or Engineer of Record to address the architectural, fire protection, mechanical, electrical, and waterproofing requirements for the installation.
4. Design Loads:

A. Roof:

A.1. Dead Load: Roof PanelRP1: 6.5 psf; RP2: 7.0 psf; RP3: 8.5 psf

A.2. Live Load:20 psf

A.3. Mechanical Equipment:330 lbsMaximum per condensing unit.
Space units at least 4'-0" o.c.

B. Walls:

B.1. Dead Load: Wall Panel2.6 psf

C. Floors:

C.1. Dead Load: Floor Panel4 psf

C.2. Live Load: Insulated Floor250 psf

D. Wind loads shall be determined in accordance with the code provisions at the time of permit based on the site specific conditions. See Tables 2 & 3 on Sheet 2 for ASD wind load and force limitations to be used in the design of a specific cooler layout. These ASD loads and forces are based on wind load resistance testing. Wind loads determined in accordance with FBC Section 1609 and ASCE 7-22 shall be multiplied by the ASD load factor of 0.6 for comparison with the allowable loads on these documents.
5. This PED is generic and does not include information prepared for a specific site. Neither Knezevich Consulting, LLC nor John W. Knezevich, PE are, in any way, the Designer of Record for any project on which this PED is used for permitting or design guidance unless retained specifically for that purpose.
6. This PED represents the structural and material properties of the Walk-In Cooler/Freezer components. This PED shall not be applied by the Contractor on a specific site without the involvement of an Architect or Engineer of Record (A/E of Record). The A/E of Record shall be responsible for compliance with the code requirements of a specific installation including but not limited to the following:

A. Verify the site specific wind load requirements are within the criteria used to develop this PED and the unit is configured in compliance with the limitations herein.

B. Verify the foundation design is adequate to resist the foundation loads identified in Table 1.

C. Verify the existing building is adequate to resist the superimposed loads identified in Table 1.

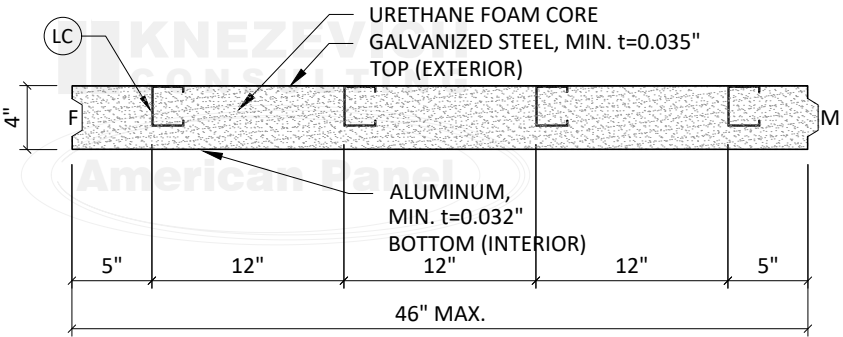
D. Weather protection, architectural, fire protection, mechanical, and electrical requirements are outside the scope of these documents. Determine and/or provide for compliance with the requirements of the Authority Having Jurisdiction.
7. Any modifications or additions to this PED will void the PED.
8. When the site conditions deviate from this PED, the Building Official shall require that site specific documents be prepared, signed, dated and sealed by a licensed engineer or registered architect, which detail and justify the deviation. Said documents shall be submitted to the product engineer for review as a condition of the Building Official granting approval.
9. All bolts, nuts, washers, and screws shall be 300 series stainless steel with a min. tensile strength of 70 ksi.
10. Concrete anchors shall be as specified on the drawings and are for use in uncracked concrete only with a min f'c = 3.5 ksi and a min. 3" edge distance, u.o.n. Embedment lengths noted on the drawings shall not include finish material. Install in accordance with anchor manufacturer's instructions.
11. An allowable stress increase is not used in the design of the cooler/freezer components nor its attachments.
12. Dissimilar metals in contact with aluminum shall be protected in accordance with the Aluminum Design Manual, 2020, Chapter M.7.

Rigid Urethane Foam Sandwich Panel Specifications:

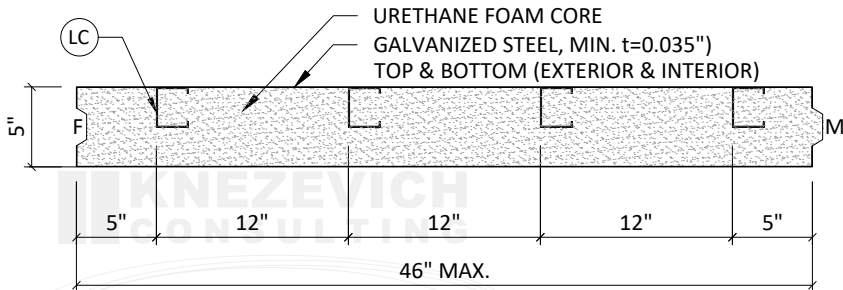
1. Wall & roof composite sandwich panels are comprised of aluminum or steel facings with urethane foam cores. Thickness and material of facings shall be as shown on the drawings.
2. Aluminum facings on wall and roof panels shall be 3105-H254 alloy (min. Fy=26.7 ksi) for interior and exterior use.
3. Aluminum facings on floor panels shall be 5052-H34 alloy with a minimum Fy=30.8 ksi for interior use.
4. Steel facings used on roof panels shall comply with one of the following:

A. ASTM A653 CS, Type B with a min. Fy = 48 ksi, a G90 coating, and a min. total thickness of 0.035".

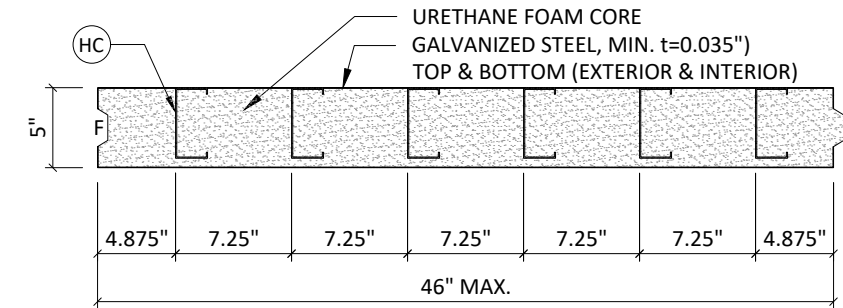
B. ASTM A653 SS, Grade 50, Class 1, with a G90 coating and a min total thickness of 0.035".
5. Steel facings used on floor panels shall be ASTM A653 SS, Grade 33 with a G90 coating and a minimum total thickness of 0.019" for exterior use.
6. Steel inserts and accessories shall be ASTM A653 CS, Type B with a min. Fy = 33 kis and a min thickness as specified herein. Steel that is exposed or not embedded within foam shall have a G90 coating.
7. Polyurethane foam core shall be BASF Elastopor P 52490R resin / Elastopor P 1001U isocyanate rigid urethane foam system with an average in-place density of 2.3 pcf with a range of any given measurement of ± 10%.
8. Polyurethane foam core shall be as approved by UL (R-5692) with a flame spread rating of not more than 25 and a smoke developed rating of not more than 450.
9. For specific requirements of foam plastics in coolers and walk-in coolers, see FBC Section 2603.4.1.2 and 2603.4.1.3.
10. Camlock assemblies and metal facings shall be adhered to foam with an air spray coating of UPACO #1882 (3001881h) adhesive at a rate of 0.147 fluid ounces per square foot.



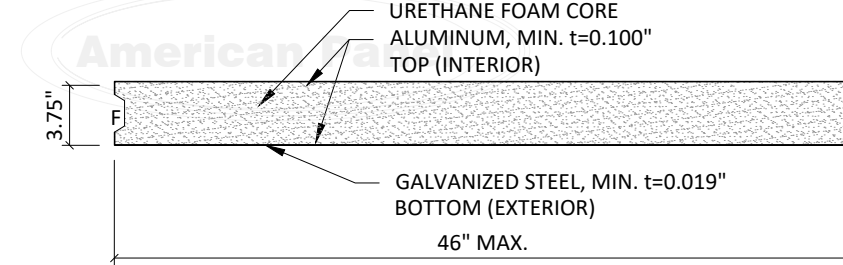
RP1 ROOF PANEL - MAX. LENGTH 11'- 7"
SCALE: 1" = 1'-0"



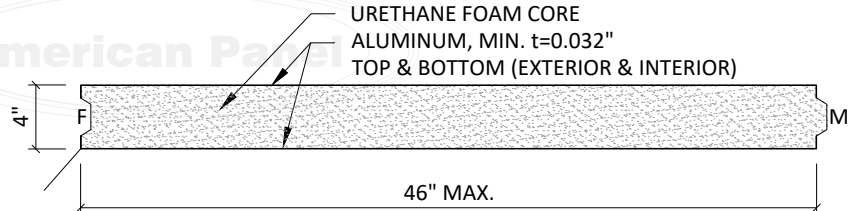
RP2 ROOF PANEL - MAX. LENGTH 14'- 0"
SCALE: 1" = 1'-0"



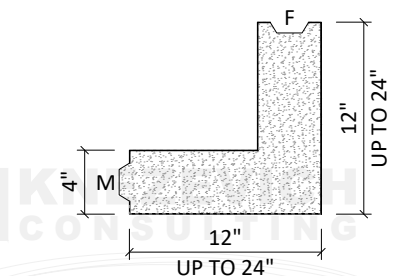
RP3 ROOF PANEL - MAX. LENGTH 15'- 5"
SCALE: 1" = 1'-0"



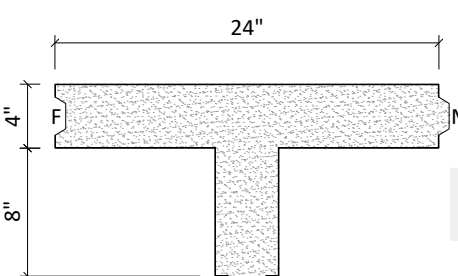
FP FLOOR PANEL - MAX. LENGTH 15'- 5"
SCALE: 1" = 1'-0"



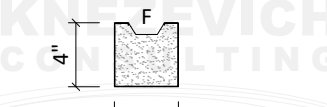
WP WALL PANEL - MAX. LENGTH 9'- 8.25"
SCALE: 1" = 1'-0" (MAX. LENGTH 10'- 0.25" W/OUT FLOOR OR SCREED)



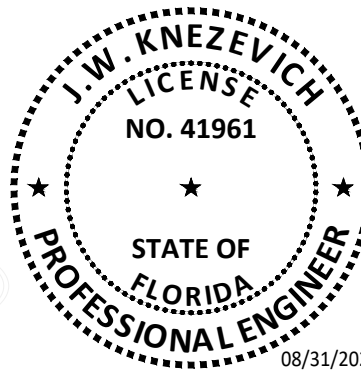
WC WALL PANEL (CORNER SECTION)
SCALE: 1" = 1'-0"



WT WALL PANEL (TEE SECTION)
SCALE: 1" = 1'-0"



FS FLOOR SCREED
SCALE: 1" = 1'-0"



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WALK-IN COOLER / FREEZER

American Panel Corporation

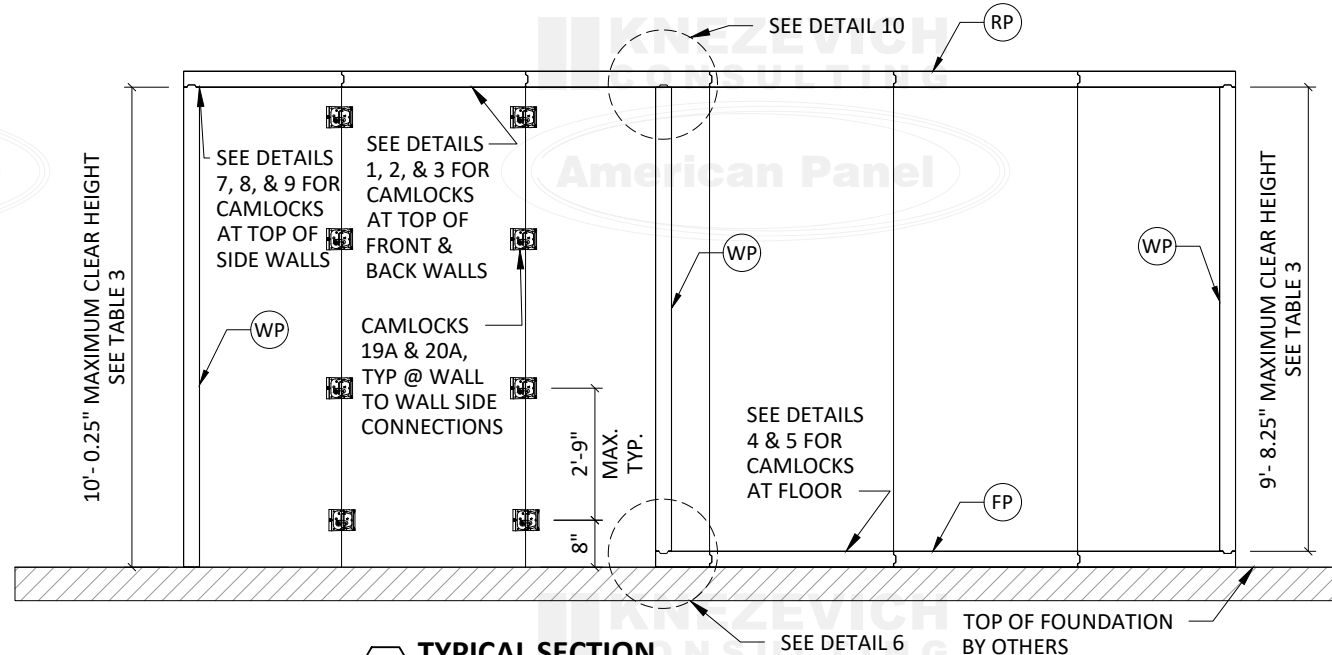
5800 S.E. 78th Street
Ocala, FL 34472
Tel: (352) 245-7055
Fax: (352) 245-0726

American Panel

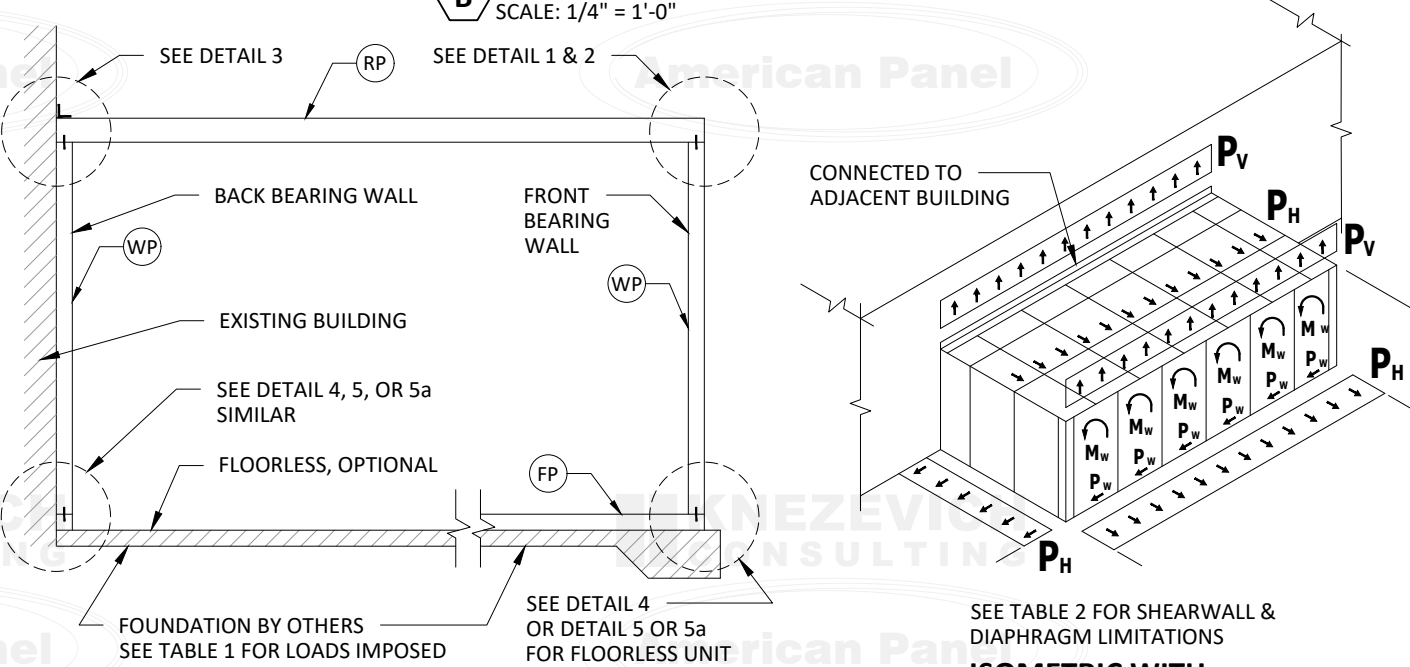
Revisions		description		by		date		no	

Scale: AS NOTED
Drawn by: JWK
Date: 08/31/2026
J.W. Knezevich
Professional Engineer
FL License No.: PE 41961

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Digitally signed by John W. Knezevich
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B **TYPICAL SECTION**
SCALE: 1/4" = 1'-0"



ISOMETRIC WITH FOUNDATION WIND LOADS

TABLE 3 NOTES:

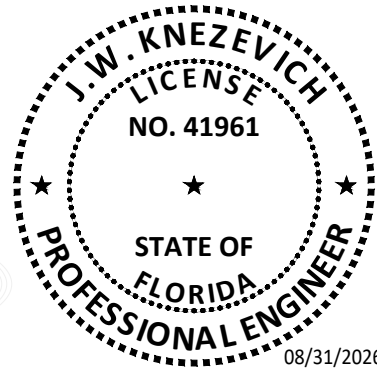
1. Allowable wind loads shown represent the maximum ASD component uniform wind loads for each panel span.
2. To determine compliance, USD site specific wind loads shall be multiplied by the load factor 0.6 when comparing to these ASD values. Reference General Notes 4D and 6A.
3. For non-uniform loads, moments and shears from site specific wind loads shall be less than those resulting from the loads and spans shown here.
4. Allowable wind loads are based on FBC Section 1709.3 providing a factor of safety of 2.0 with a minimum recovery of 75% for wall and roof panels and a factor of safety of 2.5 on ultimate test loads.

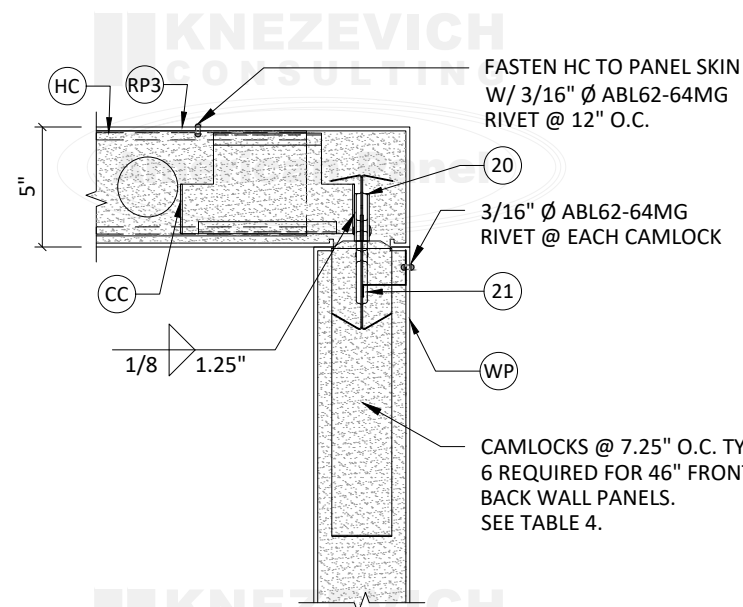
TABLE 2

MAX. ALLOWABLE (ASD) ROOF PANEL DIAPHRAGM FORCES		
PANEL TYPE	MOMENT (FT-LBS/PANEL)	SHEAR (LBS/PANEL)
RP1 4" ROOF PANEL	5,600	1,000
RP2 5" ROOF PANEL	6,800	1,000
RP3 5" ROOF PANEL	9,000	1,200
MAX. ALLOWABLE (ASD) FRONT WALL PANEL SHEARWALL FORCES		
PANEL TYPE	MOMENT (FT-LBS/PANEL)	SHEAR (LBS/PANEL)
WP 4" WALL PANEL (w/ Detail 5)	2,400	240
WP 4" WALL PANEL (w/ Detail 5A)	6,000	600

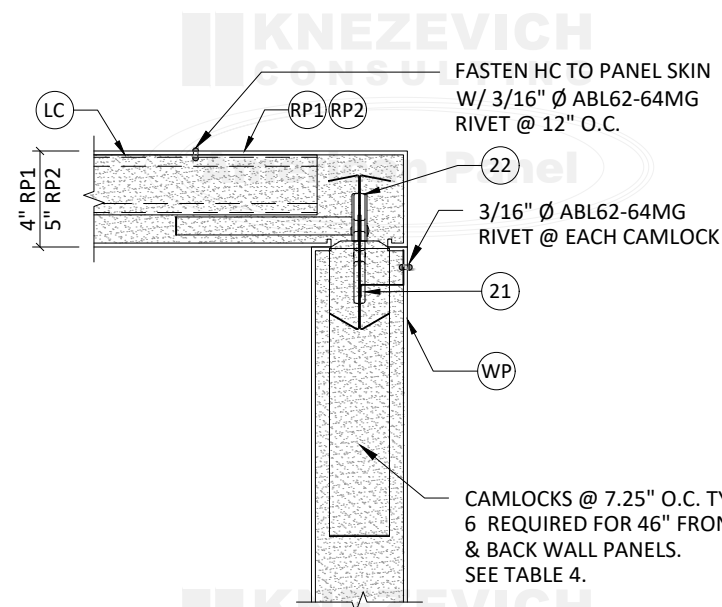
PANEL TYPE		MAX. PANEL LENGTH	MAX. ALLOWABLE (ASD) WIND LOAD	
			POS (PSF)	NEG (PSF)
ROOF PANELS	RP1 4" END ROOF PANEL (3-SIDED SUPPORT)	11'-7"	+ 44.0	- 58.9
	RP1 4" INTERIOR ROOF PANEL (2-SIDED SUPPORT)	11'-7"	+ 44.0	- 41.2
	RP2 5" ROOF PANEL (ALL CONDITIONS)	14'-0"	+ 54.0	- 54.7
	RP3 5" ROOF PANEL (ALL CONDITIONS)	15'-5"	+ 34.0	- 70.2
WALL PANELS	WP 4" WALL PANEL (PANELS W/OUT SCREED OR FLOOR PANEL PER DETAIL 5A MAY BE 4" LONGER THAN TABLE VALUE)	9'-2.25"	+ 35.3	- 35.3
		9'-8.25"	+ 33.5	- 33.5

TABLE 1	
LOADS FOR FOUNDATION DESIGN	
LOAD	NET WIND FORCES (ASD)
P_V	$\pm 400 \text{ LB/FT (RP1 \& RP2); } \pm 540 \text{ LB/FT (RP3)}$
P_H	$\pm 180 \text{ LB/FT}$
P_W	$\pm 240 \text{ LB/PANEL (w/ Detail 4 or 5)}$
P_W	$\pm 600 \text{ LB/PANEL (w/ Detail 5A)}$
M_W	$\pm 1,900 \text{ FT-LB/PANEL (w/ Detail 4 or 5)}$
M_W	$\pm 6,000 \text{ FT-LB/PANEL (w/ Detail 5A)}$

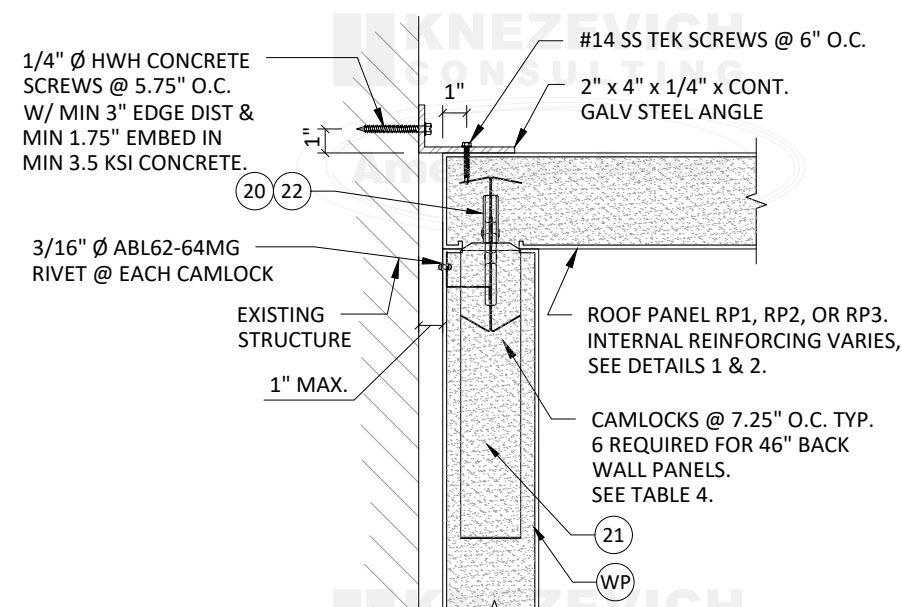




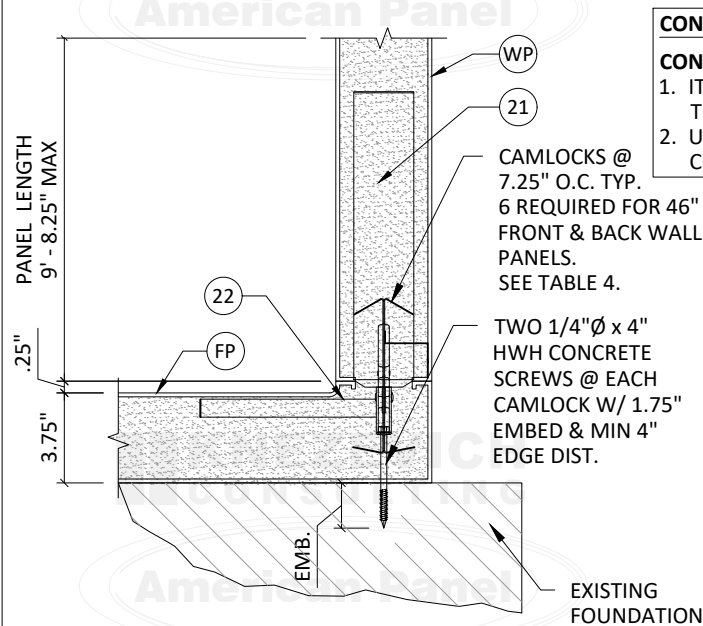
1 RP3 ROOF TO BEARING WALL
SCALE: 1.5" = 1'-0"



2 RP1 & RP2 ROOF TO BEARING WALL
SCALE: 1.5" = 1'-0"

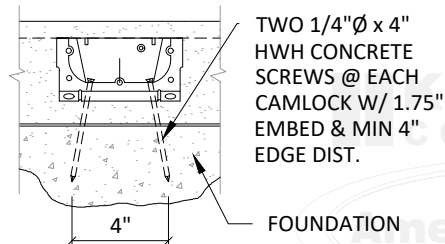


3 TYP. ROOF PANEL TO EXISTING BLDG
SCALE: 1.5" = 1'-0"

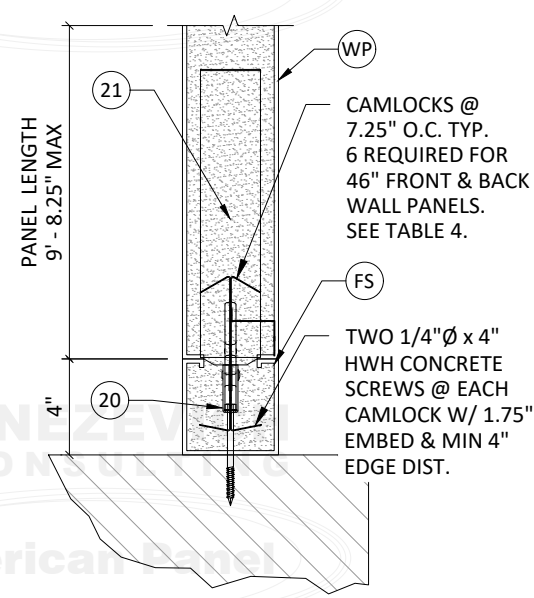


4 WALL TO FLOOR PANEL
SCALE: 1.5" = 1'-0"

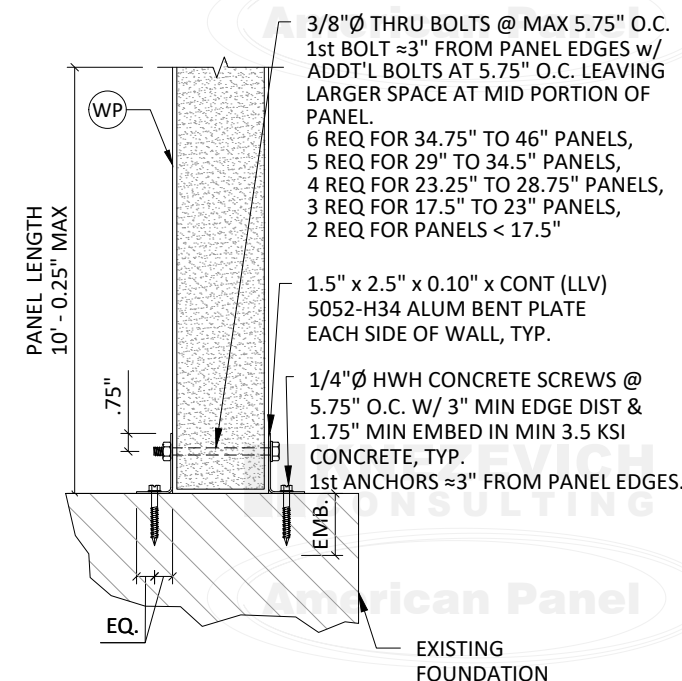
CONCRETE ANCHOR NOTES:
CONCRETE SCREWS SHALL BE AS FOLLOWS:
1. ITW TAPCON OR ULTRA CON SS4 IF GREATER THAN 3,000 FEET FROM A COASTAL SHORELINE.
2. ULTRA CON SS4 IF 3,000 FEET OR LESS FROM A COASTAL SHORELINE.



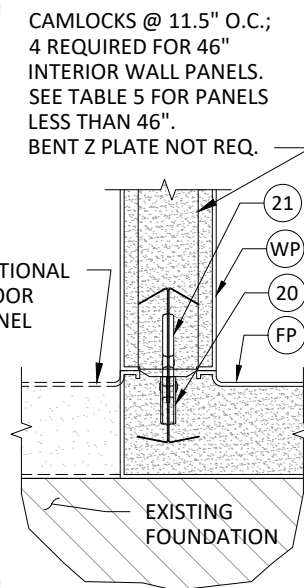
4A FLOOR OR SCREED CAMLOCK TO CONCRETE
SCALE: 1.5" = 1'-0"



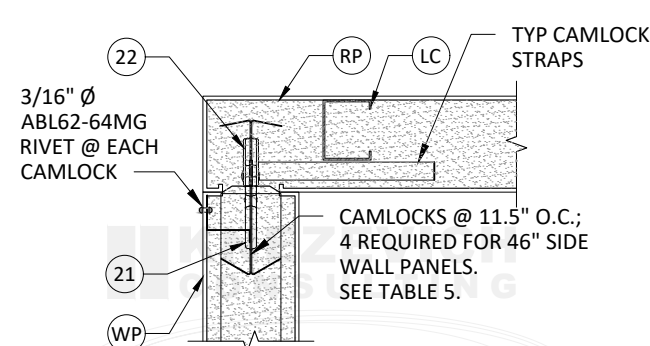
5 WALL TO FLOOR WITH SCREED
SCALE: 1.5" = 1'-0"



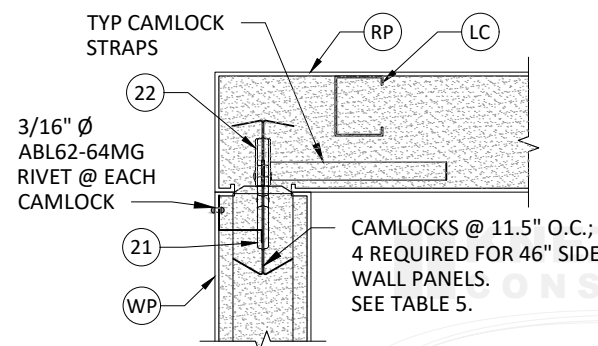
5A WALL TO FLOOR
SCALE: 1.5" = 1'-0"



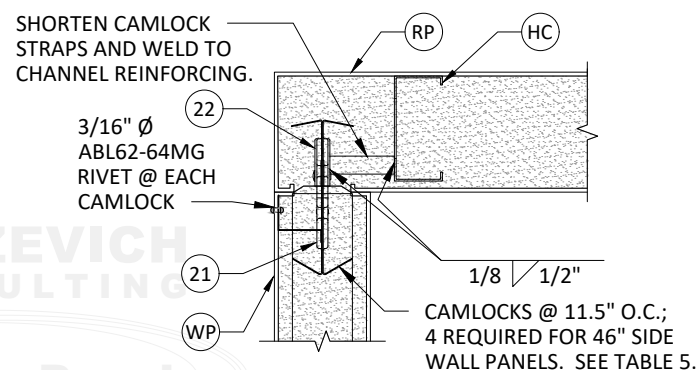
6 INTERIOR WALL TO FLOOR PANEL
SCALE: 1.5" = 1'-0"



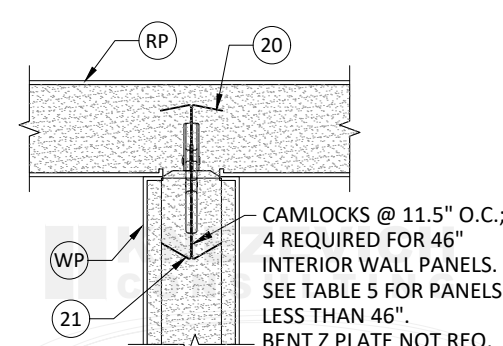
7 RP1 ROOF TO SIDE WALL
SCALE: 1.5" = 1'-0"



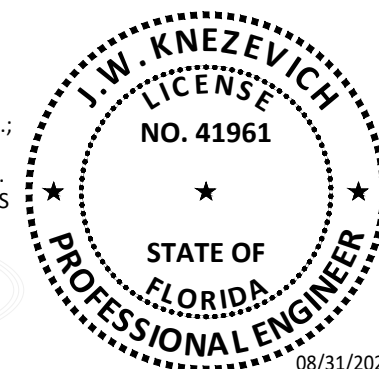
8 RP2 ROOF TO SIDE WALL
SCALE: 1.5" = 1'-0"



9 RP3 ROOF TO SIDE WALL
SCALE: 1.5" = 1'-0"



10 ROOF TO INTERIOR WALL
SCALE: 1.5" = 1'-0"



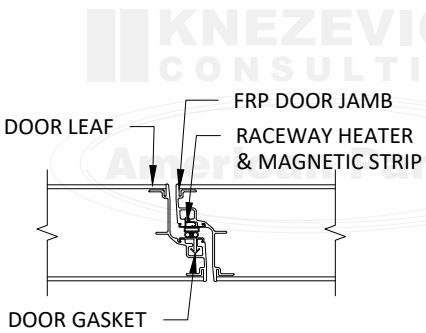
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no	date	by
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Date: 08/31/2026

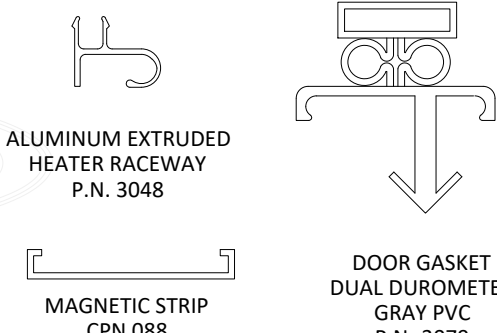
J.W. Knezevich
Professional Engineer
FL License No.: PE 41961

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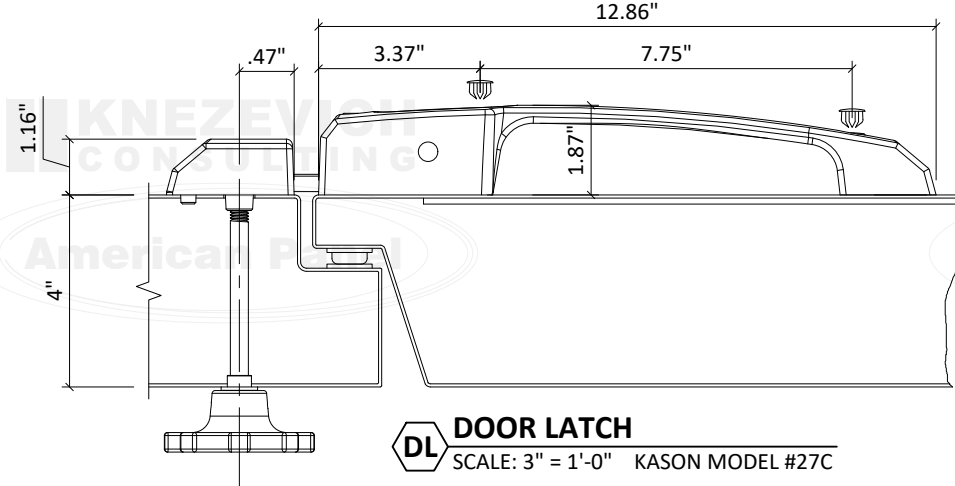
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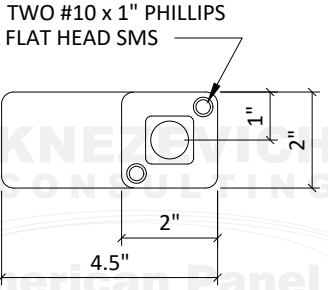
11 DOOR SEAL
1.5" = 1'-0"



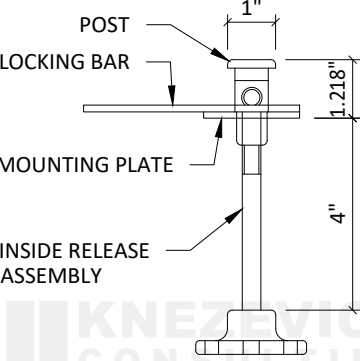
12 DOOR SEAL PARTS
FULL SCALE



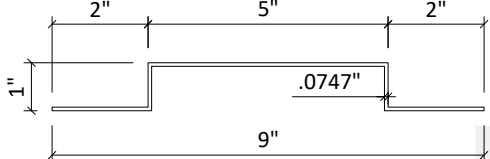
DL DOOR LATCH
SCALE: 3" = 1'-0" KASON MODEL #27C



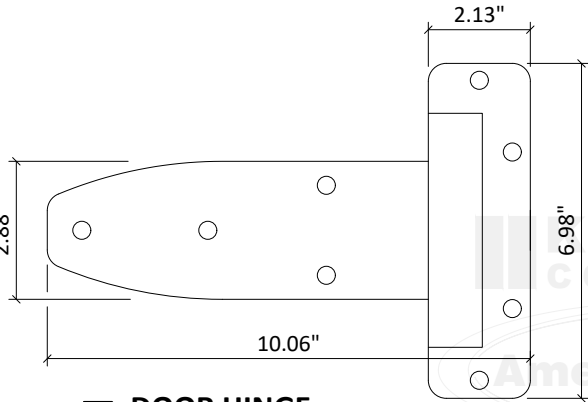
RC DOOR PANEL REINF. CHANNEL
SCALE: 3" = 1'-0" GALV STEEL



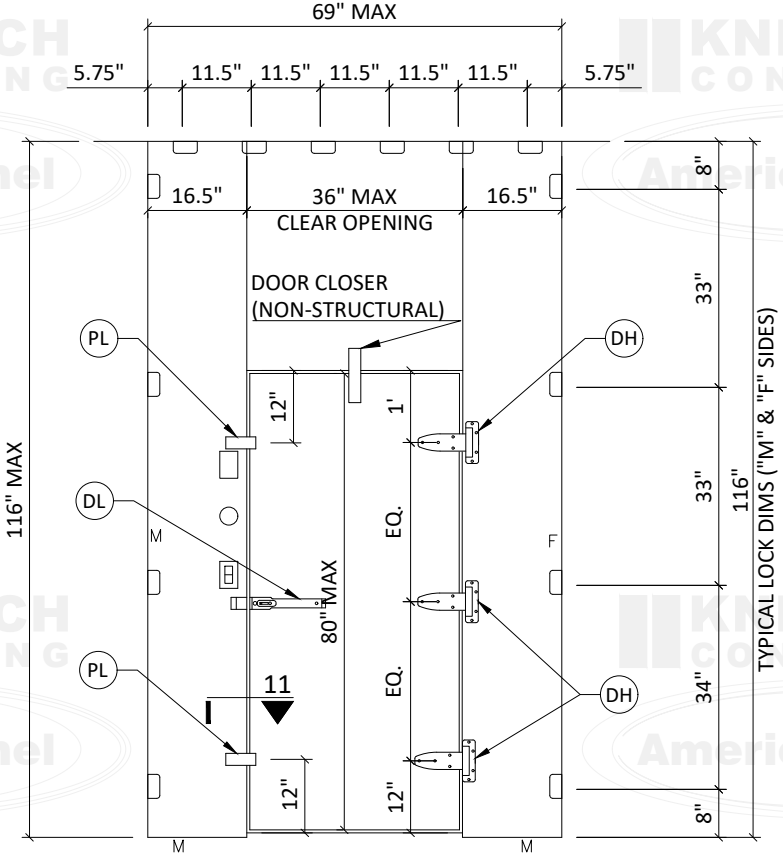
PL PAD LOCK
SCALE: 3" = 1'-0" KASON #0036



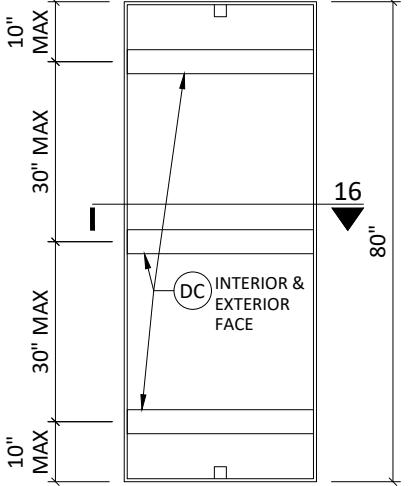
DC DOOR CHANNEL
SCALE: 3" = 1'-0" GALV STEEL



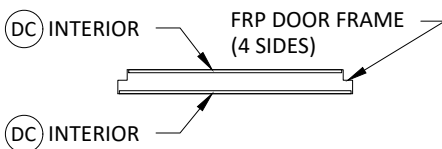
DH DOOR HINGE
SCALE: 3" = 1'-0" DENT MODEL #D69B



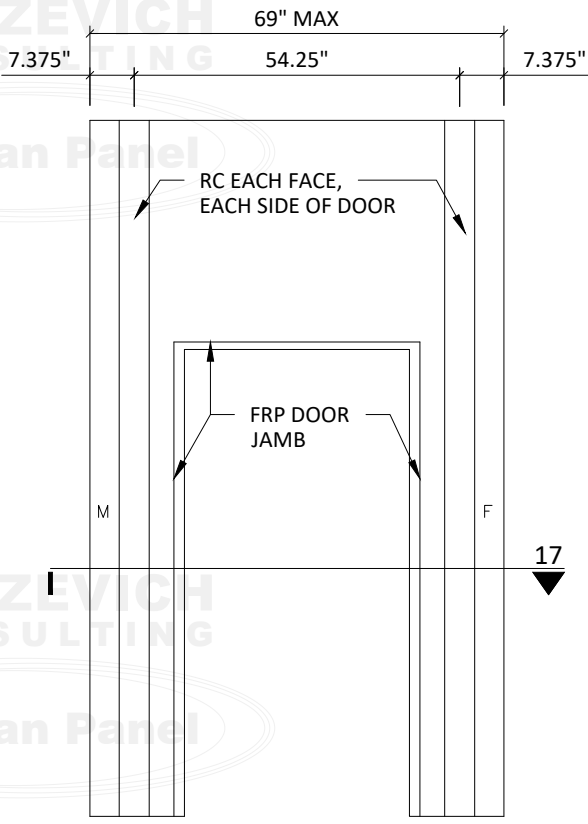
13 DOOR ELEVATION (EXTERIOR)
SCALE: 3/8" = 1'-0"



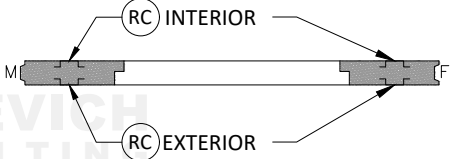
15 DOOR LEAF SHOWING CHANNEL REINFORCEMENT
SCALE: 3/8" = 1'-0"



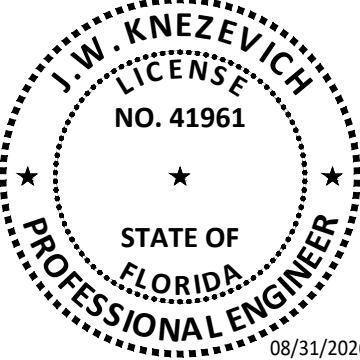
16 SECTION THRU DOOR LEAF
SCALE: 3/8" = 1'-0"



14 DOOR PANEL W/ REINFORCEMENT
SCALE: 3/8" = 1'-0"



17 SECTION THRU DOOR PANEL
SCALE: 3/8" = 1'-0"



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WALK-IN COOLER / FREEZER

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American Panel

Revisions

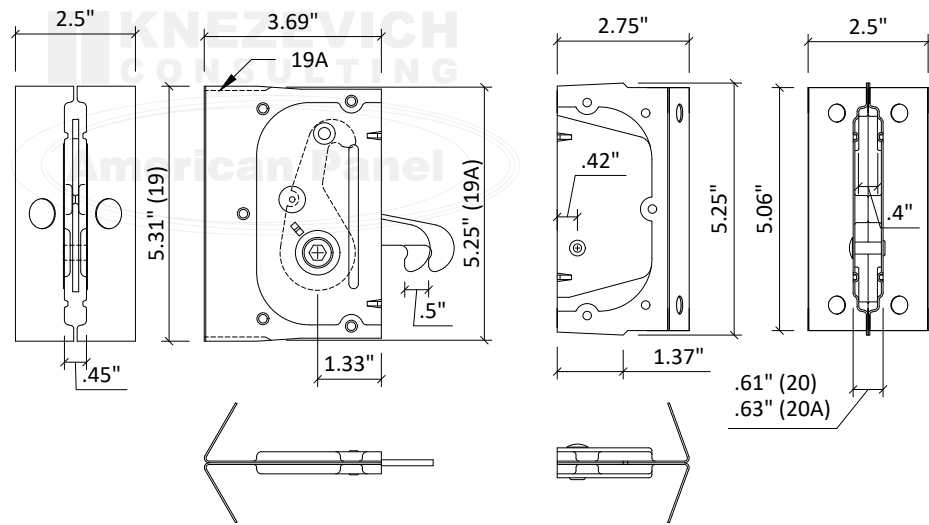
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Scale: AS NOTED
Drawn by: JWK
Date: 08/31/2026
J.W. Knezevich
Professional Engineer
FL License No.: PE 41961

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Drawing No. **KC26-0706**
sheet 4 of 5



19 LOCKING POINT CAMLOCK
SCALE: 3" = 1'-0" KASON MODEL #1188RBP

20 STRIKE CAMLOCK
SCALE: 3" = 1'-0" KASON MODEL #1188RP

19A LOCKING POINT CAMLOCK
SCALE: 3" = 1'-0" KASON MODEL #1168RBP

20A STRIKE CAMLOCK
SCALE: 3" = 1'-0" KASON MODEL #1178RP

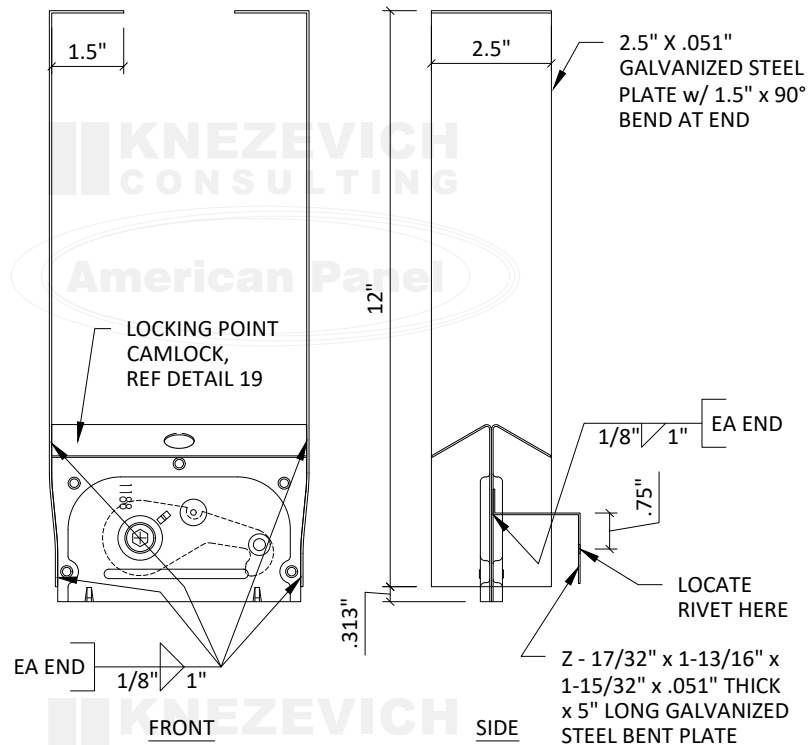
PIECE 19A & 20A ARE USED ONLY AT THE ROOF TO ROOF SIDE OF PANEL CONNECTIONS AND WALL TO WALL SIDE OF PANEL CONNECTIONS, SEE DETAILS A/2 AND B/2.

HC HEAVY CHANNEL INSERT
SCALE: 3" = 1'-0" GALV STEEL

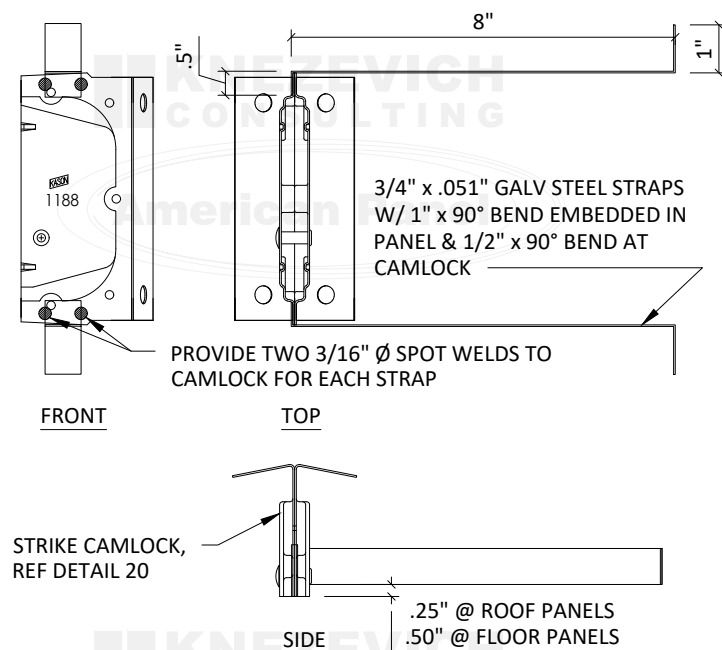
CC CONNECTOR CHANNEL INSERT
SCALE: 3" = 1'-0" GALV STEEL

LC LIGHT CHANNEL INSERT
SCALE: 3" = 1'-0" GALV STEEL

23 CONNECTOR CHANNEL INSERT TO HEAVY CHANNEL INSERT
SCALE: 3" = 1'-0"



21 LOCKING POINT CAMLOCK REINFORCING
SCALE: 3" = 1'-0"



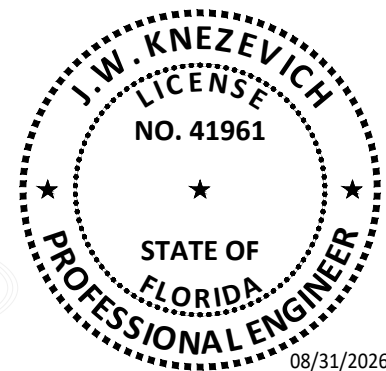
22 STRIKE CAMLOCK REINFORCING
SCALE: 3" = 1'-0"

TABLE 4

PANEL REINFORCING & CAMLOCK SCHEDULE			
PANEL TYPE	PANEL WIDTH 'W'	No. of REINF INSERTS REQ.	No. of CAMLOCKS REQ. AT ENDS
RP1 & RP2	$W \leq 7"$	1	1
	$7" < W \leq 11"$	1	2
	$11" < W \leq 15"$	2	2
	$15" < W \leq 23"$	2	3
	$23" < W \leq 30"$	3	4
	$30" < W \leq 34"$	3	5
RP3	$34" < W \leq 38"$	4	5
	$38" < W \leq 46"$	4	6
	$W \leq 7"$	1	1
	$7" < W \leq 15"$	2	2
	$15" < W \leq 23"$	3	3
	$23" < W \leq 30"$	4	4
	$30" < W \leq 38"$	5	5
	$38" < W \leq 46"$	6	6

TABLE 5

SIDE OF ROOF PANEL TO WALL PANEL CAMLOCK SCHEDULE		
PANEL TYPE	PANEL WIDTH 'W'	No. of CAMLOCKS REQ. AT SIDES
RP1 RP2 RP3	$W \leq 11"$	1
	$11" < W \leq 23"$	2
	$23" < W \leq 34"$	3
	$34" < W \leq 46"$	4



no	date	by	description
0	08/31/2026	JWK	FBC 2026 Update, formerly KC25-0123