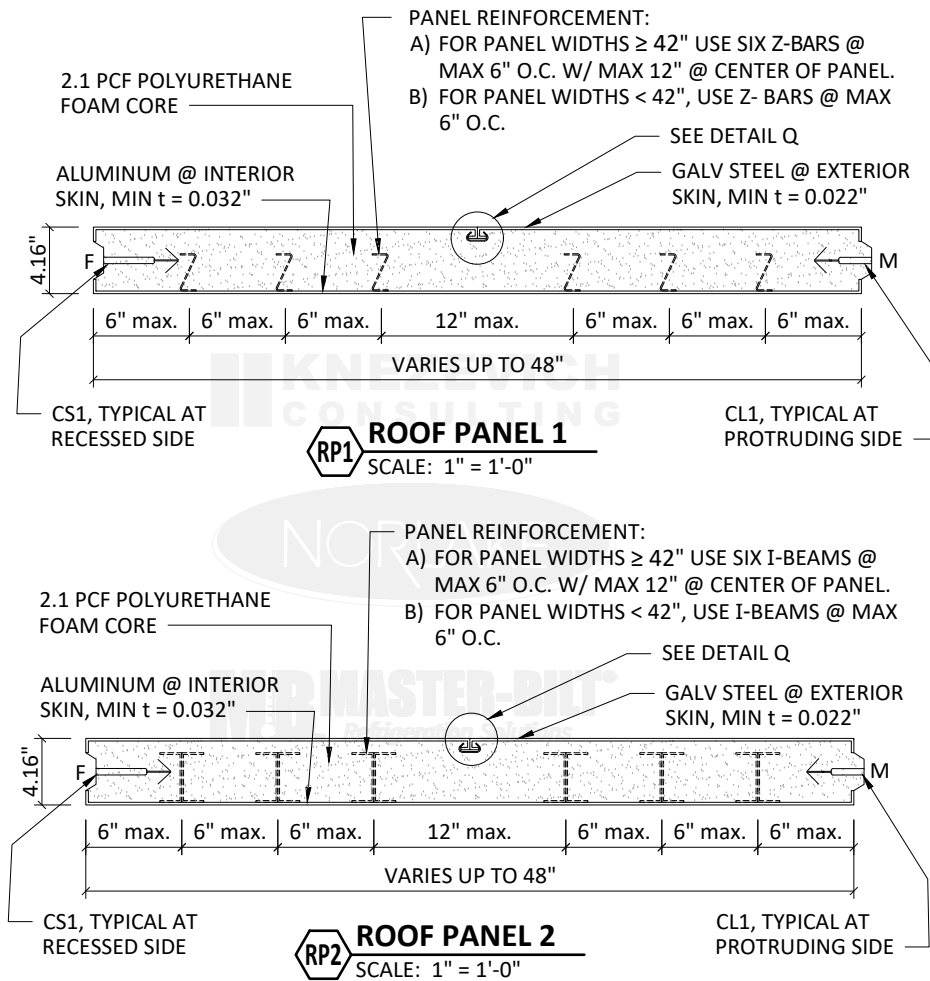
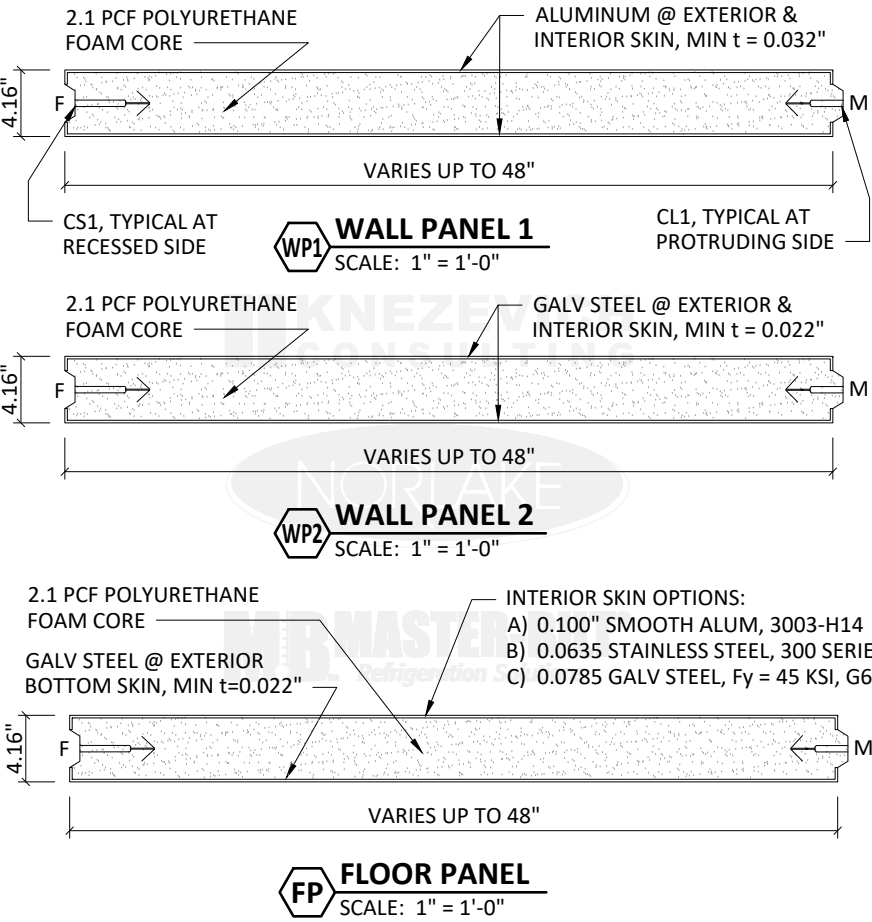


GENERAL NOTES:

1. This Product Evaluation Document (PED) represent a Walk-In Cooler/Freezer system designed and tested in accordance with the Florida Building Code, Building 9th Edition (2026), excluding the High Velocity Hurricane Zone.
2. This PED addresses the structural and material requirements for compliance with the structural portions of the noted codes. Architectural, mechanical, electrical and waterproofing requirements are not part of the evaluation. Specific use of the evaluation requires the Architect or Engineer of Record to address the architectural, mechanical, electrical, and waterproofing requirements for the installation.
3. Design Loads
- A. Roof:
- 1) Live Load 30.0 psf
- 2) Roof Panel Type 1 Dead Load 3.5 psf
- 3) Roof Panel Type 2 Dead Load 5.3 psf
- 4) Ceiling Mechanical Dead Load 300 lbs max
- Maximum of 1 condenser unit per 4 foot panel.
- B. Walls:
- 1) Dead Load Panel Type 1 1.6 psf
- Panel Type 2 2.1 psf
- C. Floor:
- 1) Live Load Insulated Floor 250 psf
- Floorless Slab rating
- Limit LL to rating of concrete slab
- 2) Dead Load Floor Panel 5.0 psf
- D. Wind loads shall be determined in accordance with the Authority Having Jurisdiction and the governing code provisions at the time of permit based on the site specific conditions. See Tables 2, 3, & 4 on Sheet 3 for allowable stress design (ASD) wind loads and forces used in the design outlined within these documents. These ASD loads and forces are based on wind load resistance testing. Wind loads determined in accordance with FBC Section 1609 shall be multiplied by the ASD load factor of 0.6 for comparison with allowable loads and forces on these documents.
4. This PED is generic and does not include information for site specific application of this Walk-in Cooler/Freezer system.

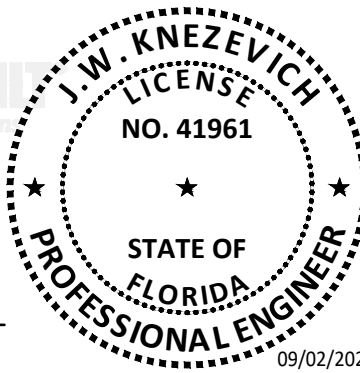
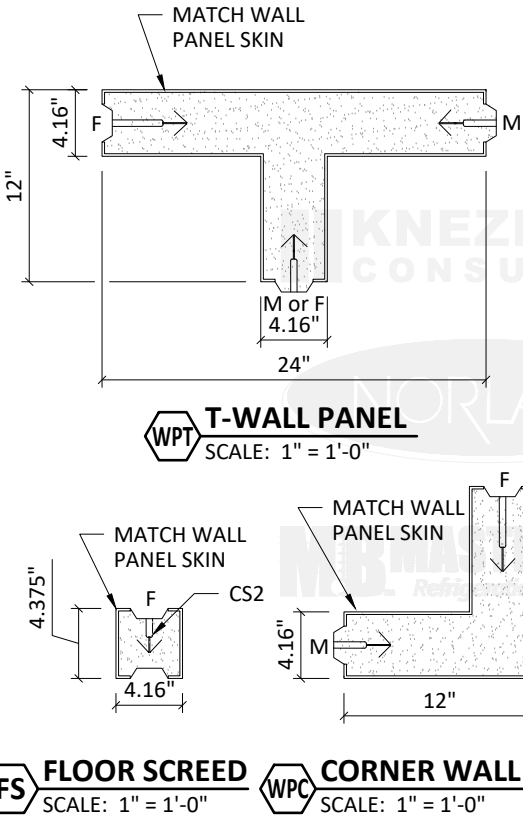


5. This PED shall bear the original or digitally authenticated signature, date and seal of John W. Knezevich, PE and is only valid in the State of Florida.
6. Any modification or additions to this PED will void the documents.
7. This PED shall not be applied by the Contractor on a specific site without 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 structural limitations identified in Tables 2 and 3.
- B. Verify the foundation design is adequate to resist the superimposed 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, mechanical, and electrical requirements are outside the scope of these PEDs. Determine and/or provide for compliance with the requirements of the Authority Having Jurisdiction.
8. When the site conditions deviate from this PED, Site Specific documents shall be prepared, dated and sealed by a Licensed Engineer or Registered Architect, which detail and justify the deviation. Said documents shall be submitted to our office for review and acceptance.
9. All aluminum materials shall comply with the alloys as noted on the drawings.
10. All bolts, nuts, and washers shall be 304 stainless steel complying with ASTM F593A Condition A with a min tensile strength of 75 ksi u.o.n.
11. All screws shall be electro-galvanized steel or 300 series stainless steel with a min. tensile strength of 75 ksi u.o.n. Stainless steel screws shall be used when exposed to the weather.
12. All concrete anchors shall be as specified on the drawings. Embedment lengths noted on the drawings shall not include finish material. Anchors are approved for use in uncracked concrete only with a min. $f'c = 3,000$ psi.
13. An allowable stress increase is not used in the design of the cooler/freezer unit nor its attachments.
14. Dissimilar metals in contact with aluminum shall be protected in accordance with the Aluminum Design Manual, Chapter M.7.



POLYURETHANE FOAM SANDWICH PANEL SPECIFICATIONS:

1. Wall & roof composite sandwich panels are comprised of aluminum or steel facings with foamed-in-place polyurethane cores. Thickness and material of facings shall be as shown.
2. Composite panels are approved for use in walk-in coolers where the aggregate floor area does not exceed 400 square feet. For specific requirements of foam plastics in walk-in coolers, see FBC Section 2603.4.1.3.
3. Aluminum facings shall be 3003-H14 alloy for interior and exterior use.
4. Wall panel steel facings shall comply with ASTM A875 CQ with a min. $F_y = 31.0$ ksi, min. thickness of 0.022" and a G45 coating.
5. Roof panel steel facings on the top side of panel shall comply with ASTM A653 CS with a min. $F_y = 45$ ksi, min. thickness of 0.022" and a G90 coating.
6. Embedded steel plates, bent plates, channels and angles shall comply with ASTM A653 CS with a min. $F_y = 31$ ksi and a G90 coating. Thickness as designated.
7. Foam core shall be a two component polyurethane rigid foam with an average density of 2.1 pcf and a minimum sample density of 1.9 pcf manufactured from any one of the following formulations:
- A) Dow Voracor CD 2101HE (formerly EXP-19-BA0848-24-1) Polyol / Voracor CE108 Isocyanate expanded with HFO-1233zd blowing agent.
- B) BASF Elastopor P 5140R Resin / Elastopor P 1001U Isocyanate expanded with HFO blowing agent.
- C) Dow Voracor CR1140-HE Polyol / CE108 Isocyanate expanded with HFC-245a blowing agent.
- D) Dow EXP-18-BK7334 Polyol / Voracor CE108 Isocyanate expanded with HFO blowing agent.
8. Polyurethane foam core shall have a flame spread rating of not more than 75 and a smoke-developed rating of not more than 450.
9. Metal facings and camlocks shall be adhered to foam with a spray coating of one of the following adhesives:
- A) 3M Hi-Strength 94 ET clear or red adhesive at a rate of 0.547 grams dry weight per square foot.
- B) 3M Neoprene Contact Adhesive 5, green adhesive at a rate of 0.547 grams dry weight per square foot.
9. Tapping plates within door frame shall be 1/2" HDPE plastic with a min. size of 2" x 2" and a maximum size of 2" larger than the screw pattern. Provide tapping plates at all door hardware and steel floor angle locations.



KNEZEVICH CONSULTING

KNEZEVICH CONSULTING, LLC

1600 S. Federal Hwy., Suite 961

Pompano Beach, FL 33062

T 954.772.6224 * COA 27988

www.knezevich.com

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WALK-IN COOLER/FREEZER

REFRIGERATED SOLUTIONS GROUP

727 Second Street

Hudson, WI 54016-0248

TEL: (715) 386-2323

FAX: (715) 386-6149

NORLAKE

MB MASTER-BILT

Refrigeration Solutions

Revisions	
No.	Description
0	09/02/2026 JWK FBC 2026 Update, previously KC26-0613

Scale: AS NOTED

Drawn by: JWK

Date: 09/02/2026

J.W. Knezevich

Professional Engineer

FL License No. PE 41961

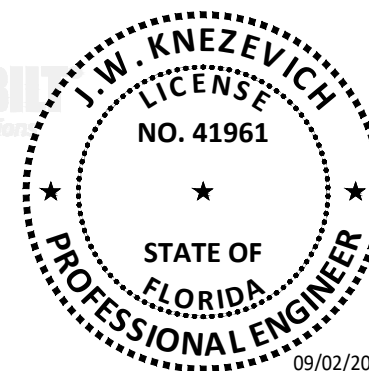
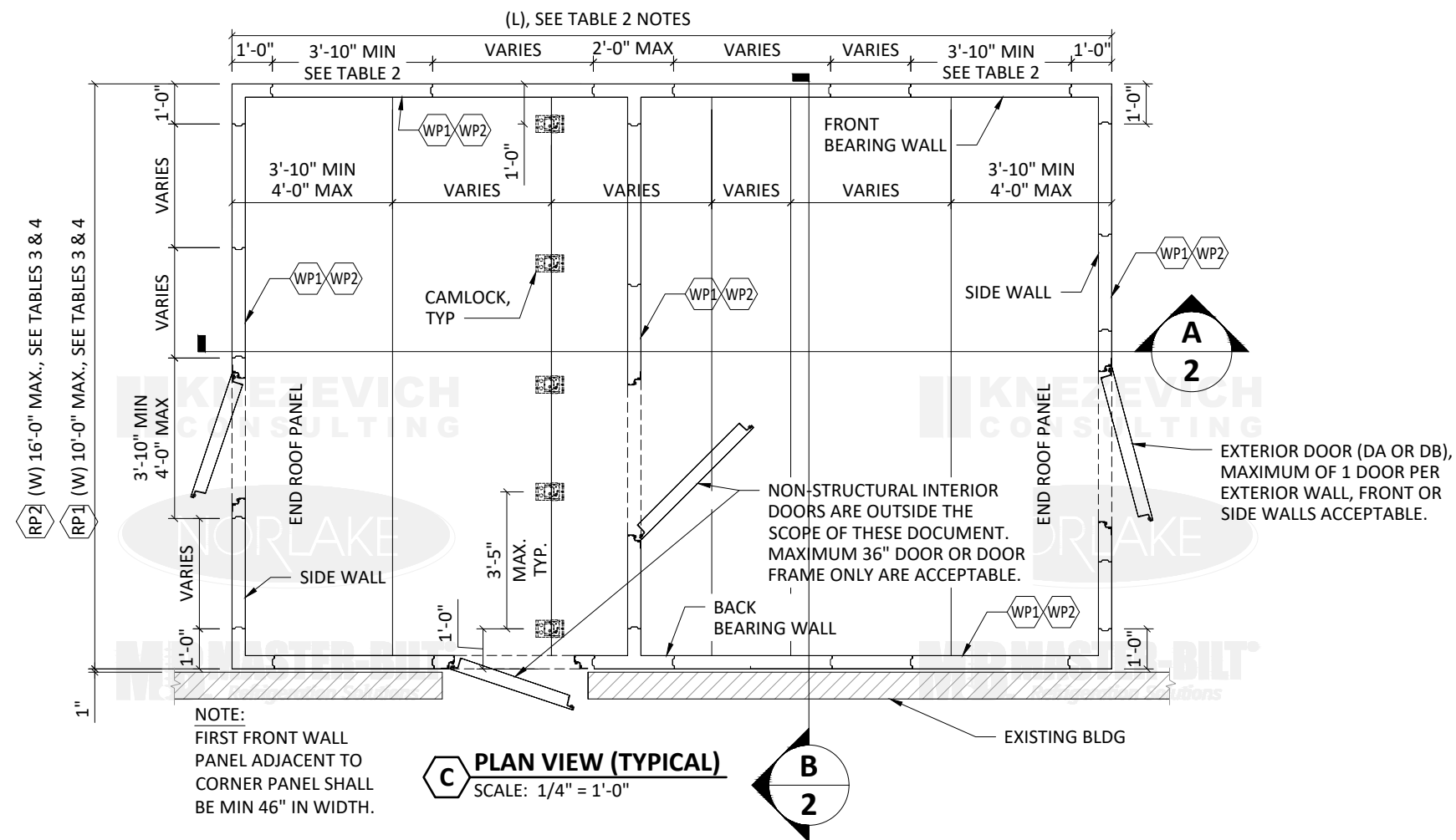
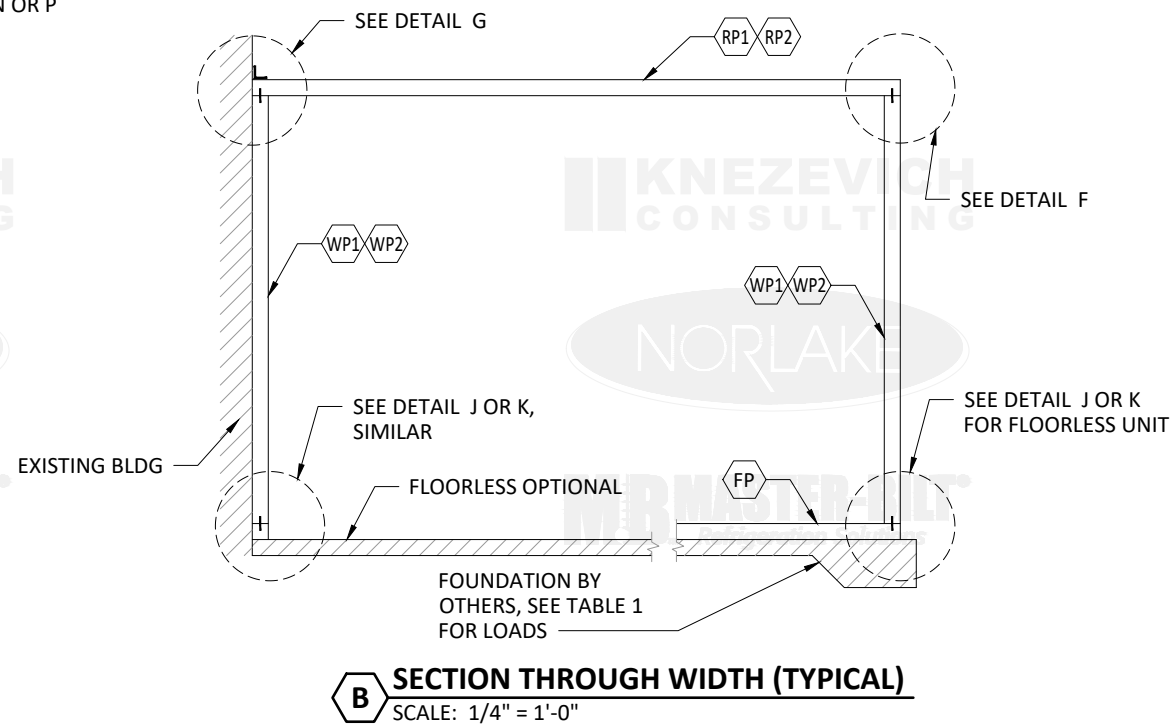
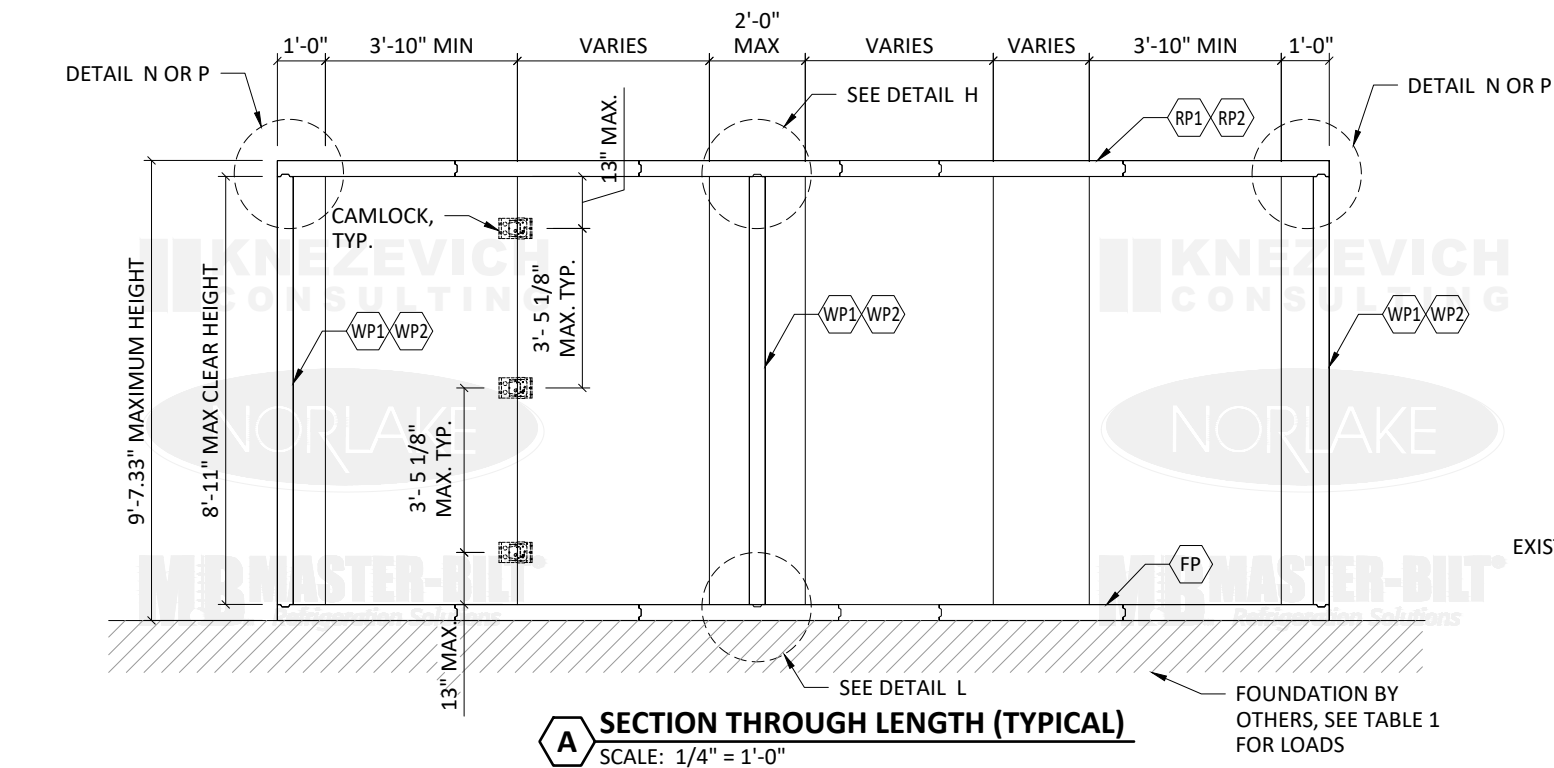
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Digitally signed by John W. Knezevich

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Drawing No. **KC26-0708**

sheet 1 of 9



KNEZEVICH CONSULTING
KNEZEVICH CONSULTING, LLC
1600 S. Federal Hwy., Suite 961
Pompano Beach, FL 33062
T 954.772.6224 * COA 27988
www.knezevich.com
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WALK-IN COOLER/FREEZER
REFRIGERATED SOLUTIONS GROUP
727 Second Street
Hudson, WI 54016-0248
TEL: (715) 386-2323
FAX: (715) 386-6149
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Revisions		Description	
No.	Date	By	Date
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Date: 09/02/2026
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Professional Engineer
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Drawing No. **KC26-0708**
sheet 2 of 9

TABLE 1

LOADS FOR FOUNDATION DESIGN	
LOAD	NET WIND FORCES (ASD)
P _V	± 470 LB/FT
P _H	± 145 LB/FT
M _W	± 2,075 FT-LB/PANEL W/ THE NUMBER OF PANELS REQ.

TABLE 2

MAX. ALLOWABLE (ASD) ROOF PANEL DIAPHRAGM FORCES		
PANEL TYPE	MOMENT (FT-LBS/PANEL)	SHEAR (LBS/PANEL)
RP1 RP2	7,420	960
MAX. ALLOWABLE (ASD) WALL PANEL SHEARWALL FORCES		
PANEL TYPE	MOMENT (FT-LBS/PANEL)	SHEAR (LBS/PANEL)
WP1 WP2	2,075	225

TABLE 3

MAXIMUM BENDING MOMENT AND SHEAR VALUES							
PANEL TYPE			MAX. PANEL LENGTH	MAX. ALLOWABLE (ASD) MIDSPAN MOMENT (Unit Width - ft-lbs/ft)		MAX. ALLOWABLE (ASD) END SHEAR (Unit Width - lbs/ft)	
ROOF PANELS	RP1	4" ROOF PANEL 1	10'-0"	+467	-699	+193	-327
	RP2	4" ROOF PANEL 2	16'-0"	+1104	-1689	+310	-474
WALL PANELS	WP1 WP2	4" WALL PANEL (With Adjacent Door)	8'-10.25"	+257	-286	+117	-129
	WP1 WP2	4" WALL PANEL (Without Adjacent Door)	8'-10.25"	+257	-312	+117	-141

TABLE 4

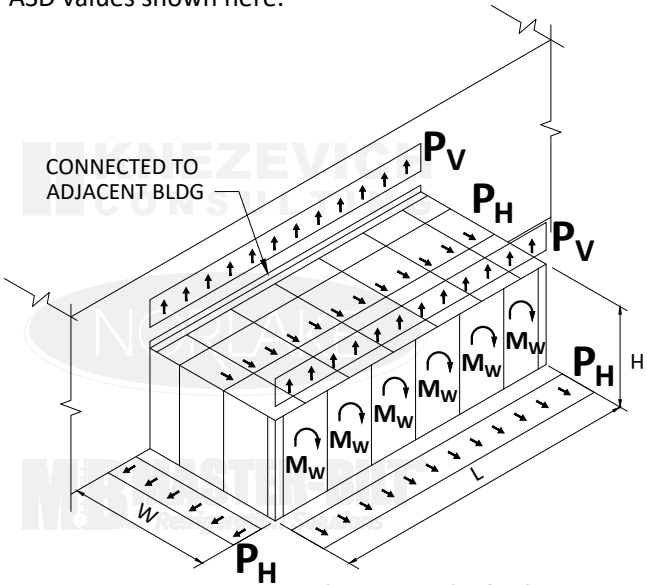
UNIFORM WIND LOAD SPAN TABLE					
PANEL TYPE			PANEL LENGTH	MAX. ALLOWABLE (ASD) WIND LOAD	
				POS (PSF)	NEG (PSF)
ROOF PANELS	RP1	4" ROOF PANEL 1	9'-0"	+ 42.9	-69.0
			10'-0"	+ 37.4	-55.9
	RP2	4" ROOF PANEL 2	14'-0"	+ 44.3	-67.7
			14'-6"	+ 42.0	-64.3
			15'-6"	+ 36.8	-56.2
WALL PANELS	WP1 & WP2	4" WALL PANEL (With Adjacent Door on 1 or 2 Sides of Panel)	8'-10.25"	+ 25.9	-28.8
			7'-10.25"	+ 29.6	-32.6
			6'-10.25"	+ 33.8	-37.3
		4" WALL PANEL (Without Any Adjacent Doors)	8'-10.25"	+ 25.9	-31.4
			7'-10.25"	+ 29.6	-35.6
			6'-10.25"	+ 33.8	-40.8

TABLE 1 NOTES:

1. Net wind forces (ASD) represent the reactions from allowable stress wind wind load combinations assuming maximum roof panel spans and maximum wall panel heights.
2. P_V represents the vertical wind reaction.
3. P_H represents the horizontal wind reaction.
4. M_W represents the shearwall base moment for each required panel.

TABLE 2 NOTES:

1. A sufficient number of 46" to 48" roof panels shall be provided to maintain the roof diaphragm moment and shear in each panel below the maximum ASD values shown here.
2. A sufficient number of 46" to 48" wall panels shall be provided on the front wall to maintain the shearwall moment and shear in each panel below the maximum ASD values shown here.



SEE TABLE 2 FOR SHEARWALL & DIAPHRAGM LIMITATIONS

ISOMETRIC WITH
SUPERIMPOSED WIND LOADS
N.T.S.

TABLE 3 NOTES:

1. Moments and shears from site specific wind loads shall be less than the maximum values shown here.
2. Allowable moments and shears for wall and roof panels are in compliance with FBC Section 1709.3 providing for a factor of safety of 2.0 with a minimum recovery of 75% and a factor of safety of 2.5 on ultimate test loads.
3. Positive moments and shears represent midspan moments and end shears resulting from positive wind load.
4. Negative moments and shears represent midspan moments and end shears resulting from negative wind load.

TABLE 4 NOTES:

1. Allowable wind loads shown represent the maximum ASD component uniform wind loads for each panel span complying with the moment and shear limitations.
2. For site specific non-uniform wind loads, evaluate maximum spans using maximum allowable moments and shears from Table 3.
3. Spans less than the maximum panel length are not governed by deflection.
4. Maximum panel length shall not be exceeded.

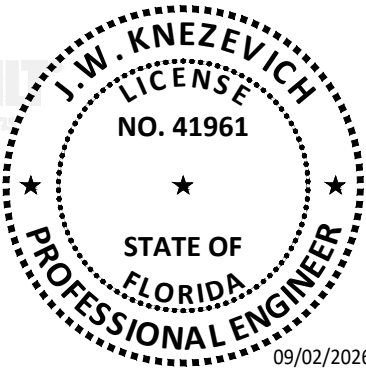
WALK-IN COOLER/FREEZER	
Client / Manufacturer	REFRIGERATED SOLUTIONS GROUP
	727 Second Street Hudson, WI 54016-0248 TEL: (715) 386-2323 FAX: (715) 386-6149
Revisions	DESCRIPTION
	NO. DATE BY
0	09/02/2026 JWK FBC 2026 Update, previously KC26-0613

Scale: AS NOTED
Drawn by: JWK
Date: 09/02/2026
J.W. Knezevich
Professional Engineer
FL License No. PE 41961

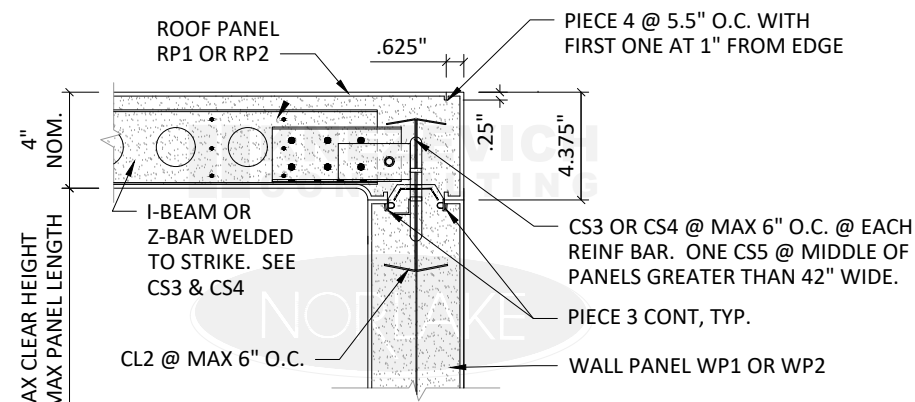
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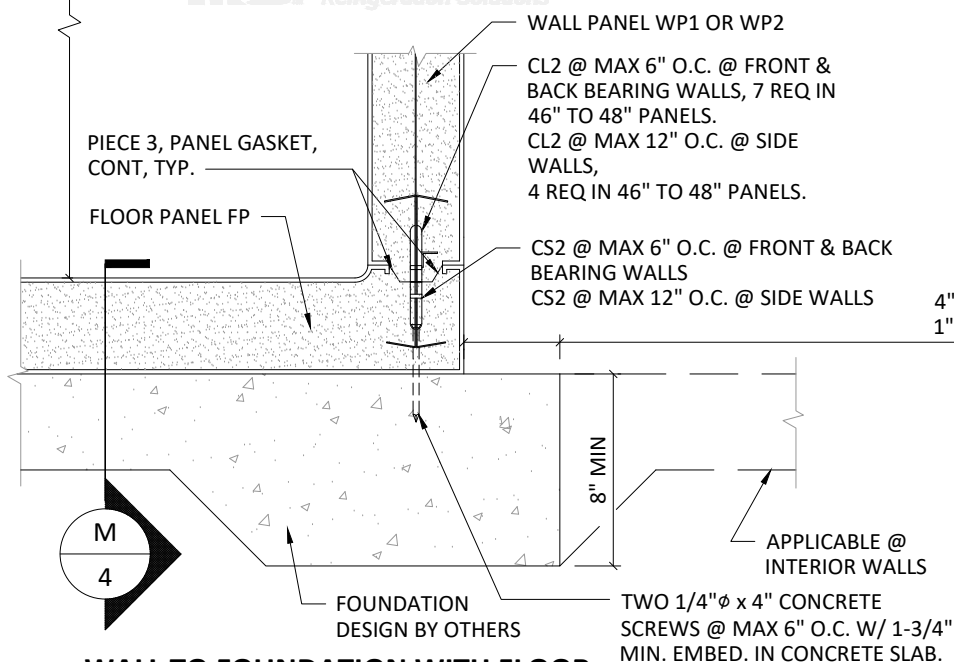
Drawing No.
KC26-0708
sheet 3 of 9



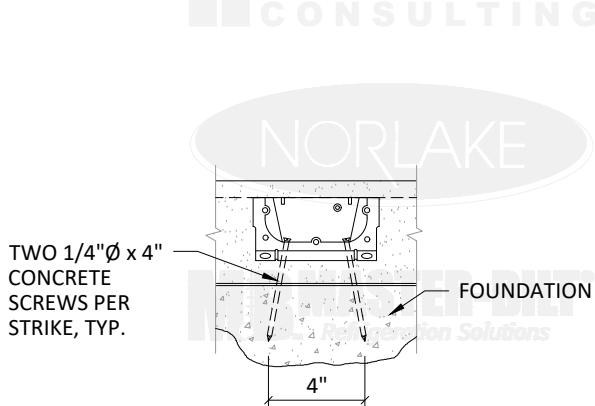
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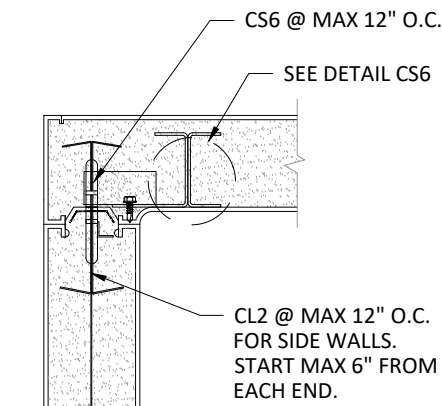
F FRONT BEARING WALL TO ROOF PANEL
1.5" = 1'-0"



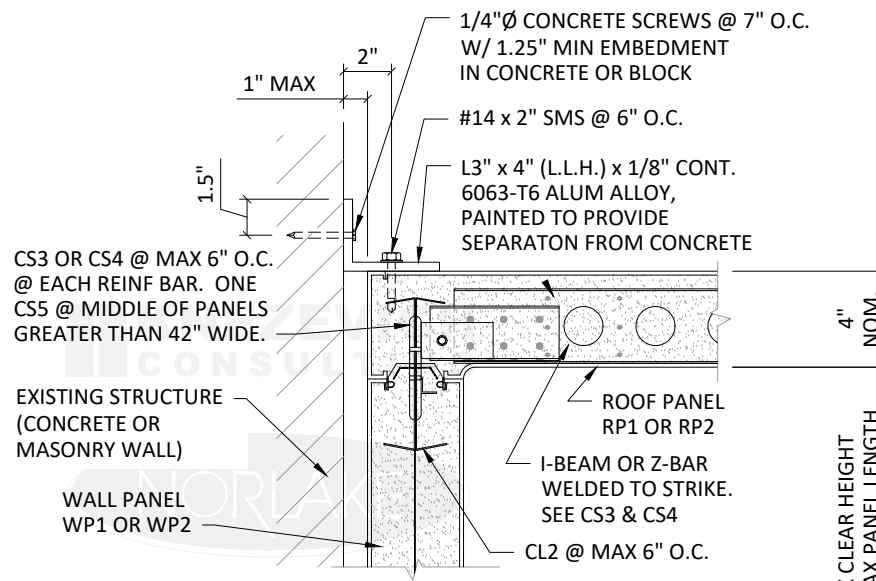
J WALL TO FOUNDATION WITH FLOOR
1.5" = 1'-0"



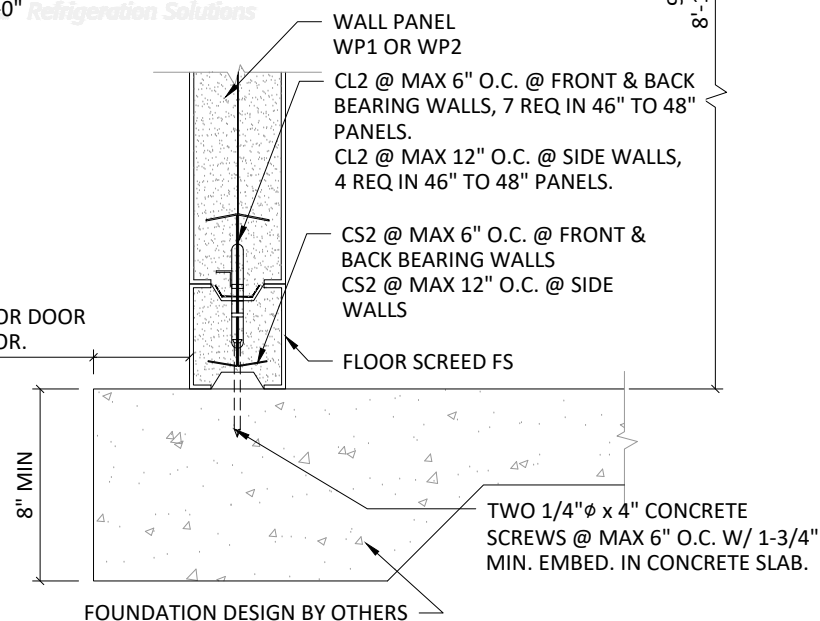
M FLOOR OR SCREED TO CONCRETE
1.5" = 1'-0"



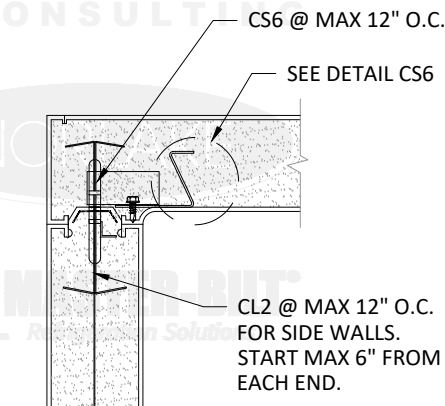
N SIDE WALL TO ROOF PANEL WITH I-BEAM
1.5" = 1'-0"



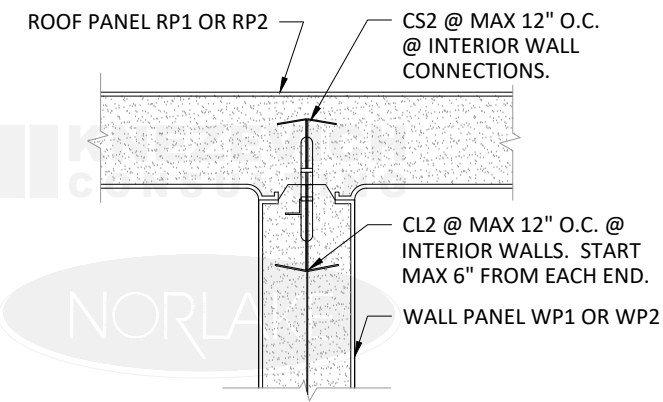
G BACK BEARING WALL TO EXISTING BUILDING
1.5" = 1'-0"



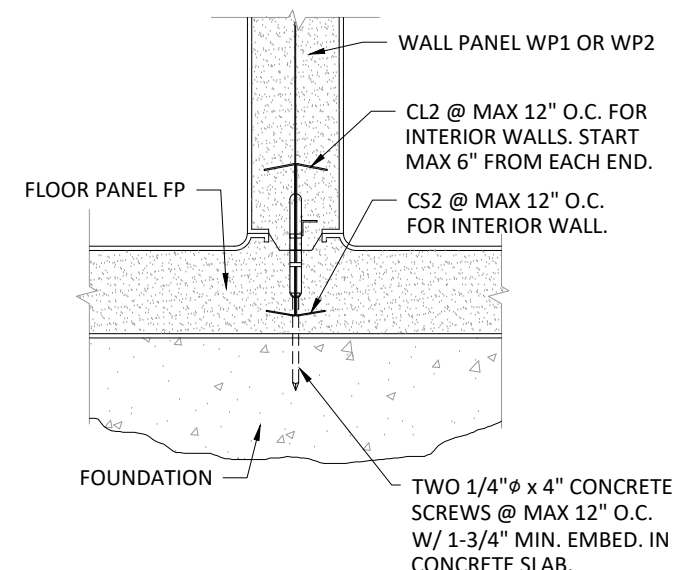
K WALL TO FOUNDATION WITH FLOOR SCREED
1.5" = 1'-0"



P SIDE WALL TO ROOF PANEL WITH Z-BAR
1.5" = 1'-0"



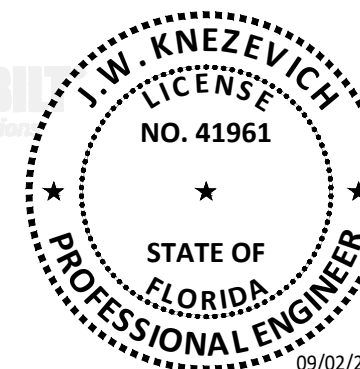
H INTERIOR WALL TO CEILING
1.5" = 1'-0"



L INTERIOR WALL TO FOUNDATION WITH FLOOR
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.



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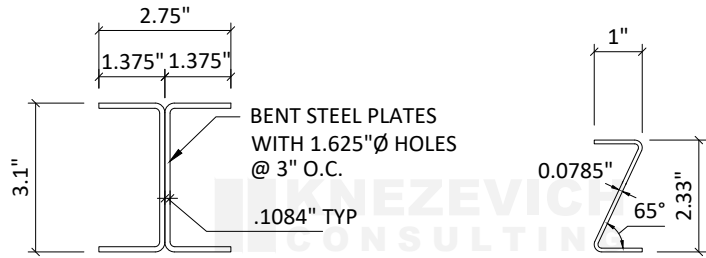
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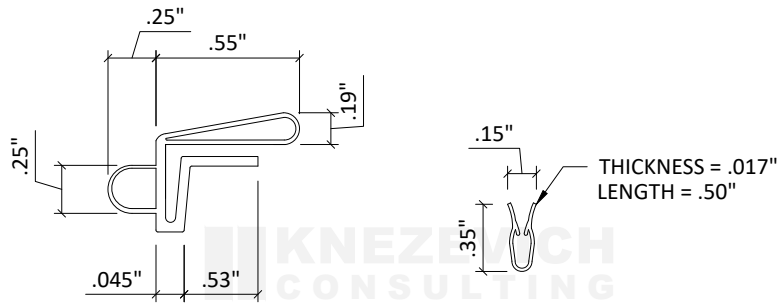
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sheet 4 of 9



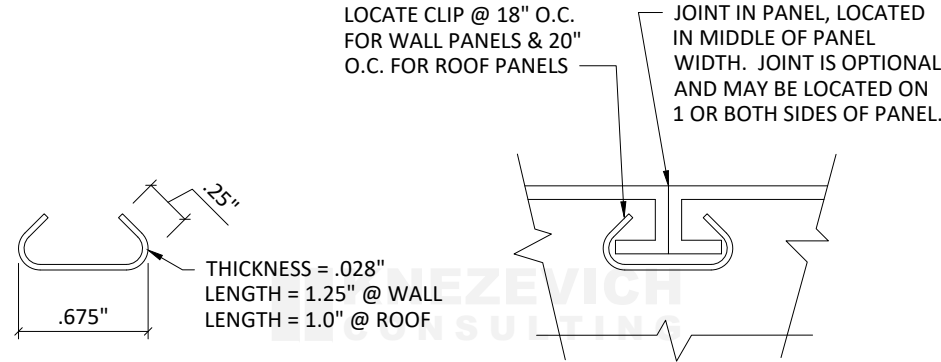
1 I-BEAM (STEEL)
3" = 1'-0" UNGALVANIZED

2 Z-BAR (STEEL)
3" = 1'-0" UNGALVANIZED



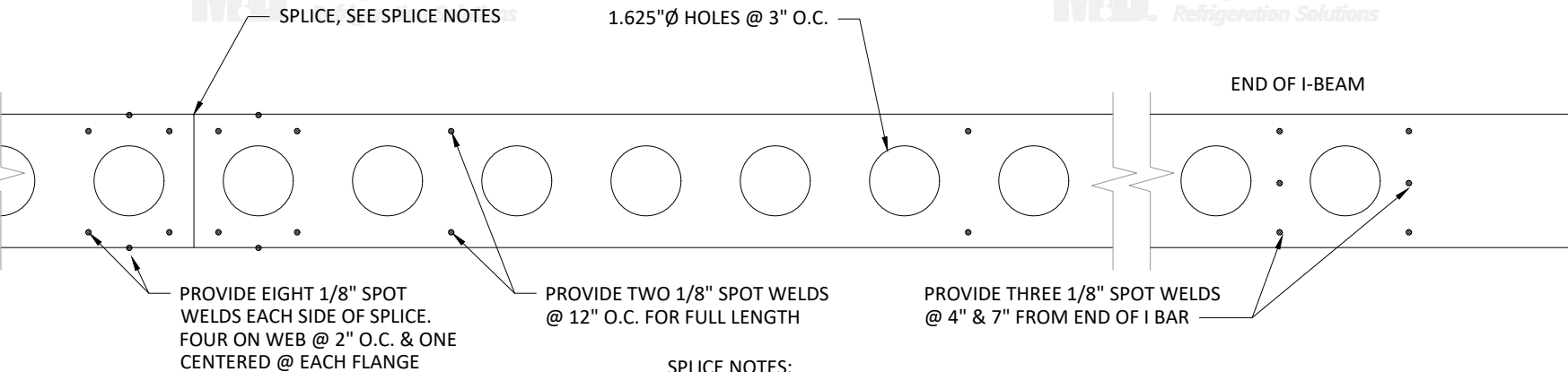
3 PANEL GASKET
FULL SCALE FLEXIBLE PVC
PLACE CONTINUOUS AT
MALE END OF PANEL JOINTS

4 STRAIGHT EDGE SKIN CLIP
FULL SCALE UNGALVANIZED STEEL



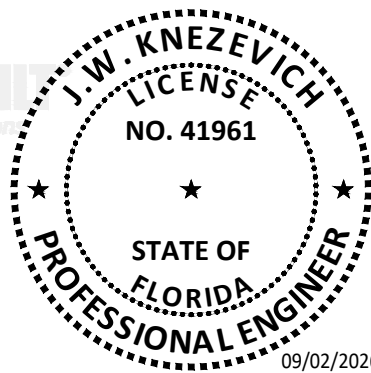
5 PANEL SKIN CLIP
FULL SCALE UNGALVANIZED STEEL

6 PANEL SKIN CLIP DETAIL
FULL SCALE



7 I-BEAM ELEVATION DETAIL
3" = 1'-0"

- SPLICE NOTES:**
- I-BEAM CHANNELS MAY BE SPLICE AS FOLLOWS:
 - ONE CHANNEL MAY BE SPLICED AT 1/4 POINT ($\pm 6"$) OF THE FULL PANEL LENGTH.
 - SECOND CHANNEL MAY BE SPLICE AT 3/4 POINT ($\pm 6"$) OF THE FULL PANEL LENGTH

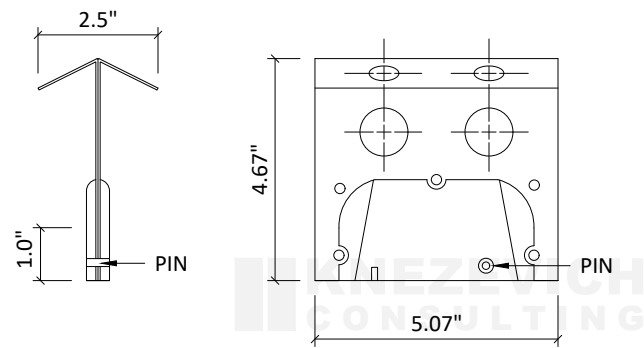


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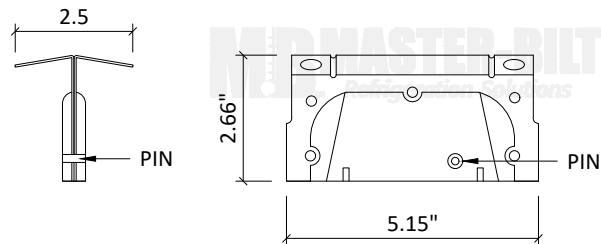
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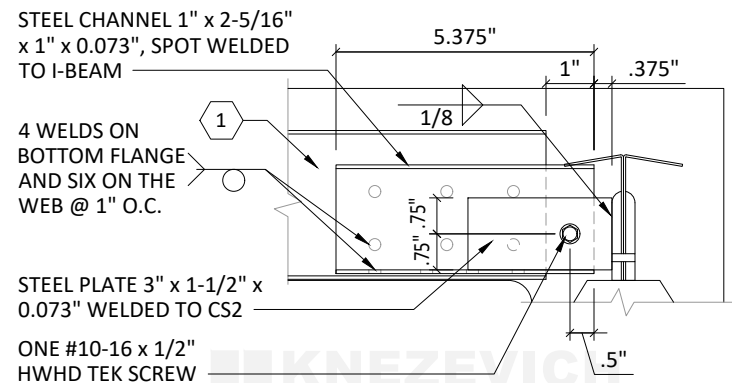
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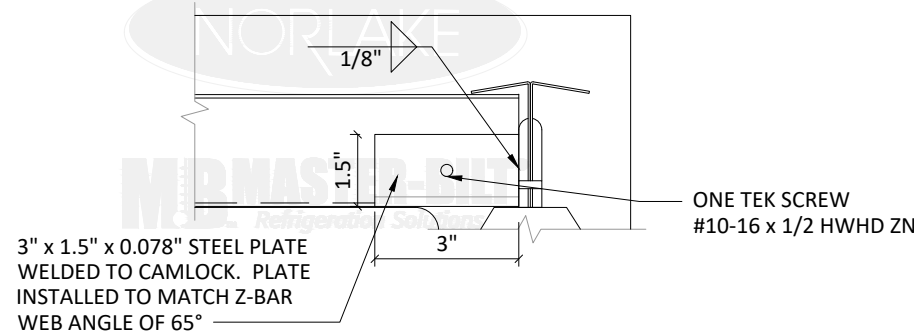
**CS1 CAMLOCK
RSG WIDE MOUTH DEEP STRIKE**
SCALE: 3" = 1'-0"



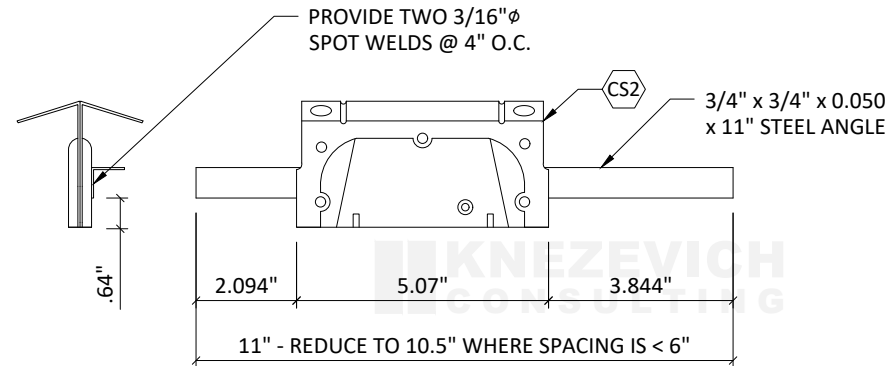
**CS2 CAMLOCK
RSG WIDE MOUTH STRIKE**
SCALE: 3" = 1'-0"



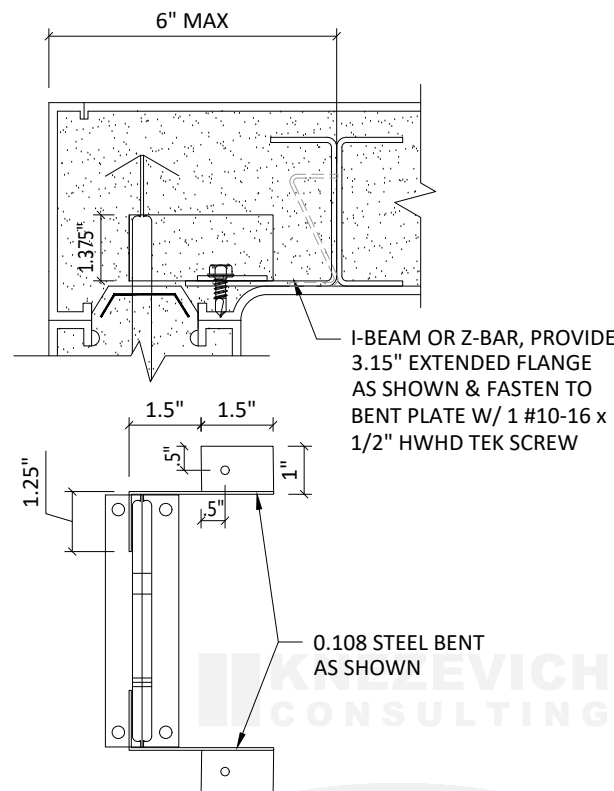
CS2 TO I-BEAM
SCALE: 3" = 1'-0"



CS2 TO Z-BAR
SCALE: 3" = 1'-0"

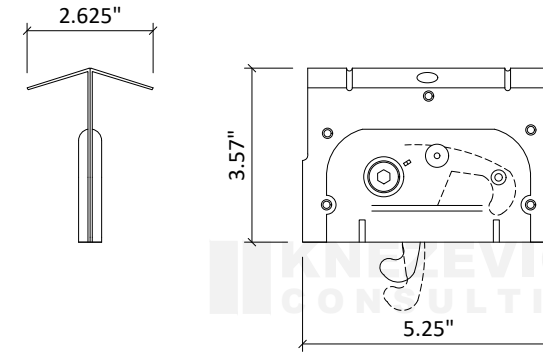


CS2 WITH ANGLE
SCALE: 3" = 1'-0"

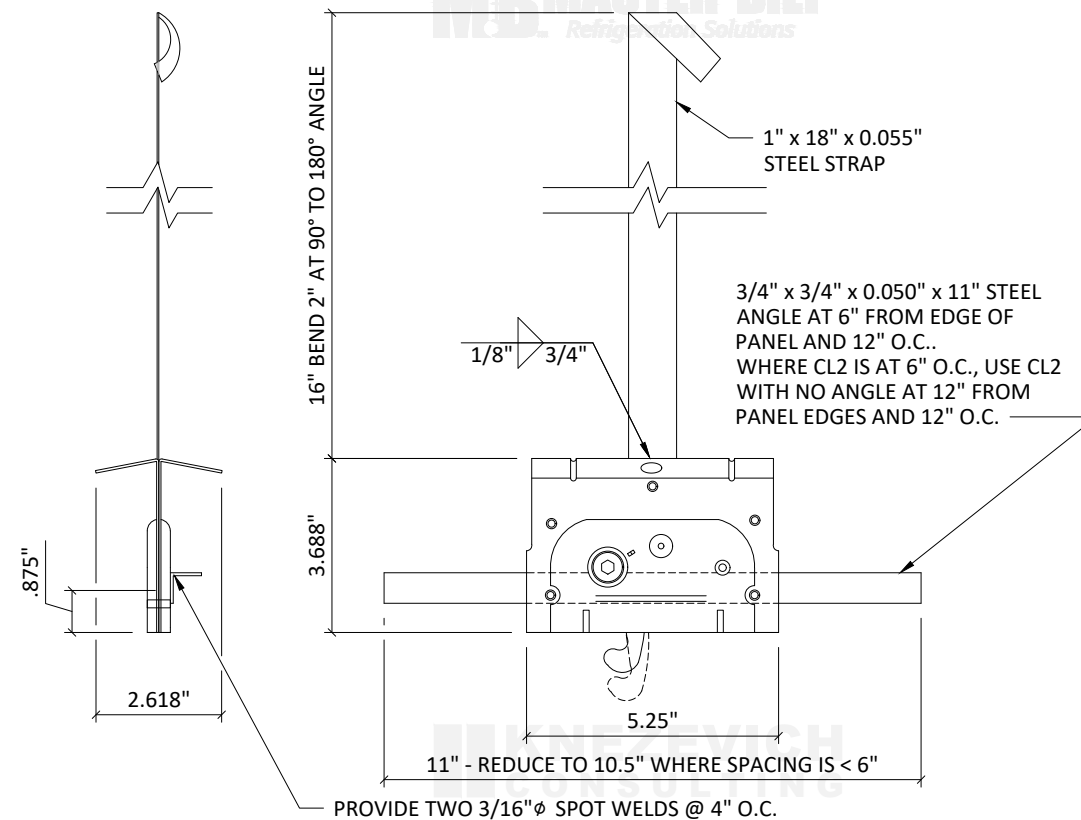


CS2 WITH BENT PLATE
SCALE: 3" = 1'-0"

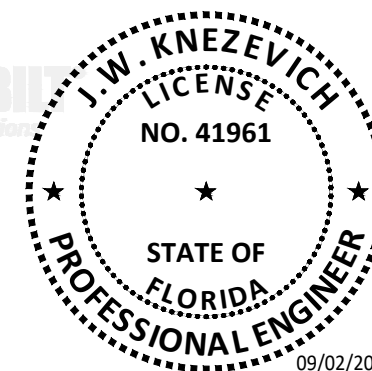
CAMLOCK NOTES:
1. Camlocks and attached straps shall be sprayed with adhesive.



**CL1 CAMLOCK
RSG LOCKING POINT**
SCALE: 3" = 1'-0"

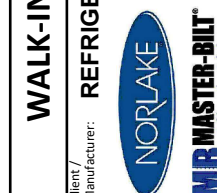


CL1 WITH STRAP & ANGLE
SCALE: 3" = 1'-0"



**KNEZEVICH
CONSULTING**
KNEZEVICH CONSULTING, LLC
1600 S. Federal Hwy., Suite 961
Pompano Beach, FL 33062
T 954-772-6224 * COA 27988
www.knezevich.com
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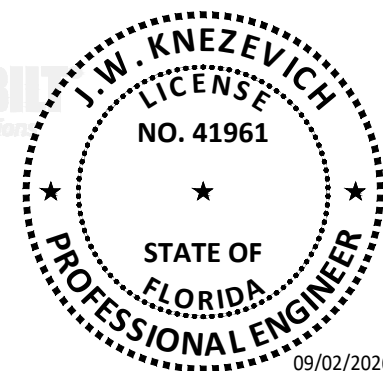
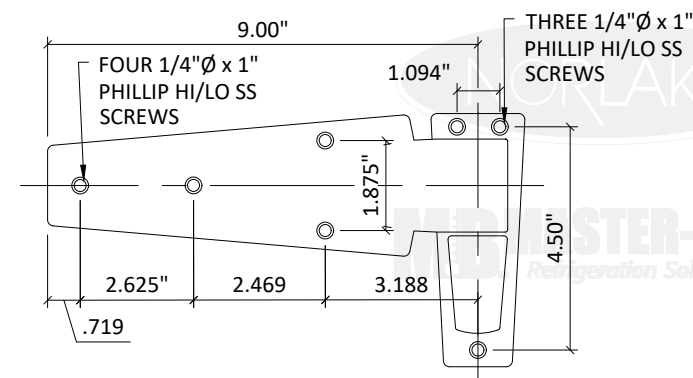
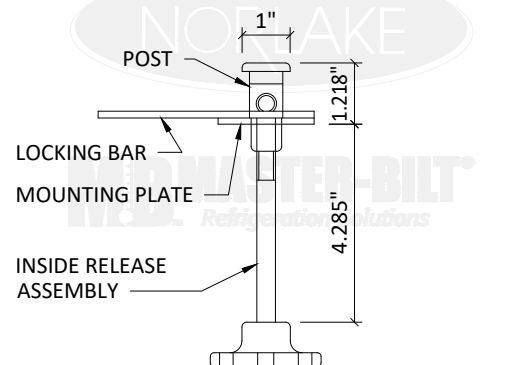
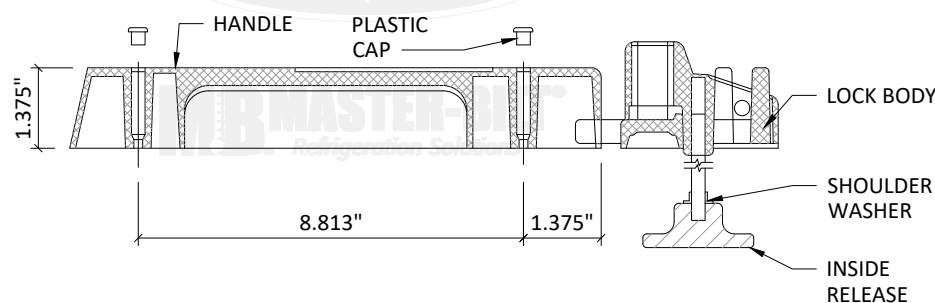
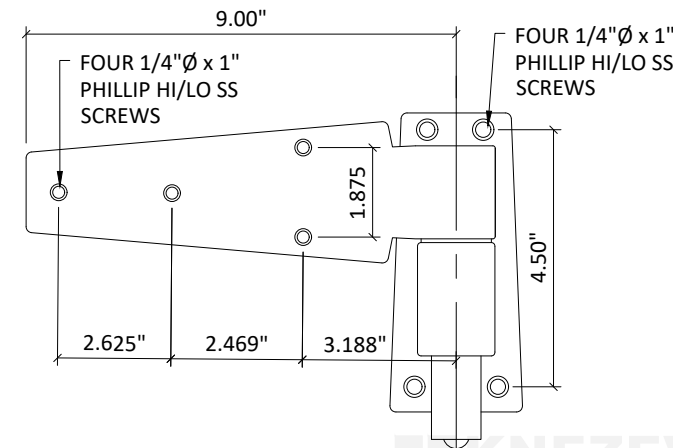
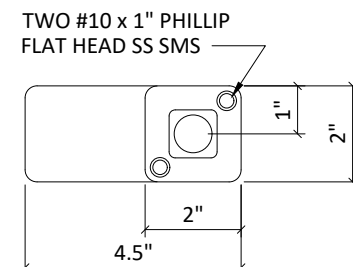
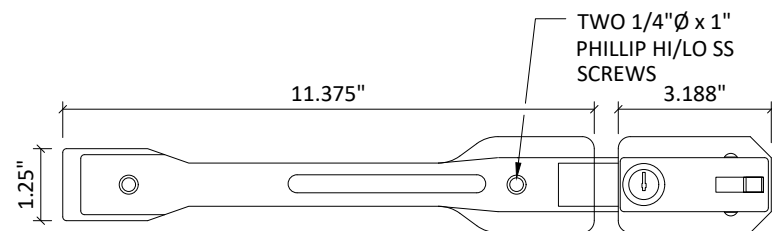
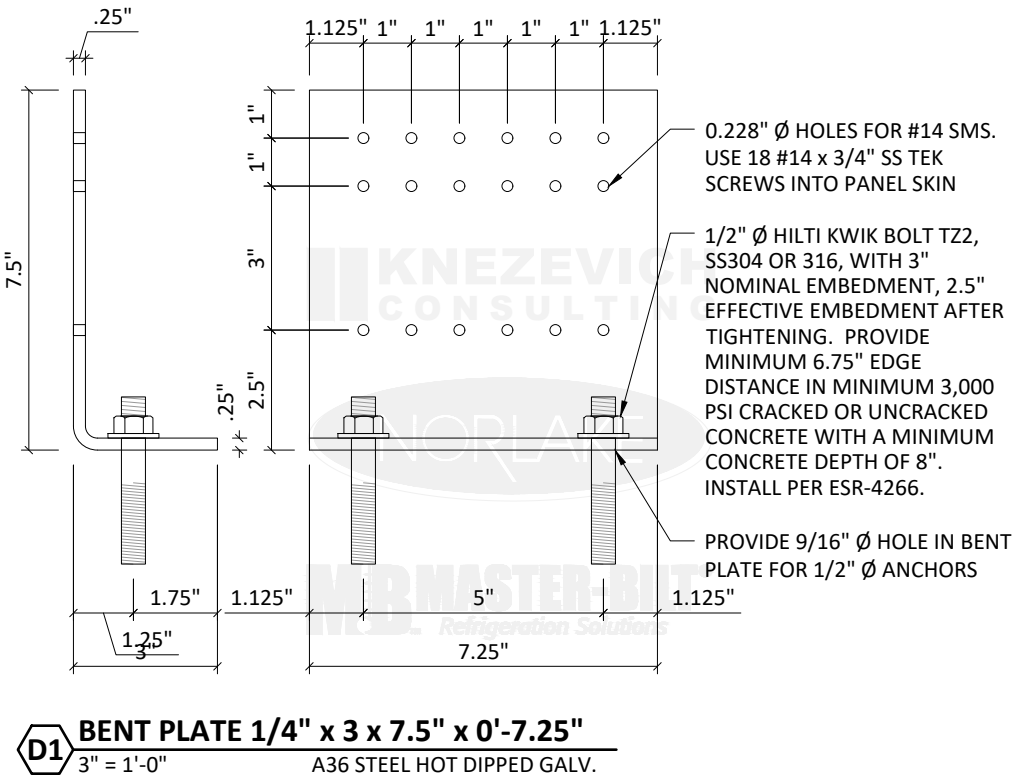
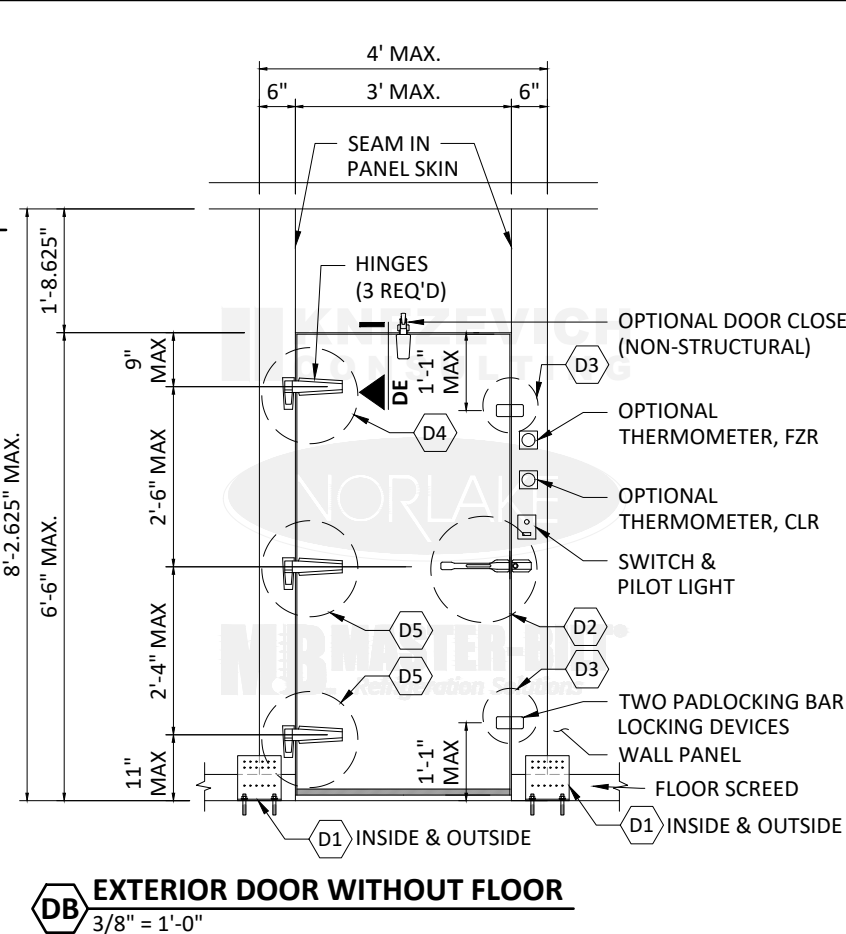
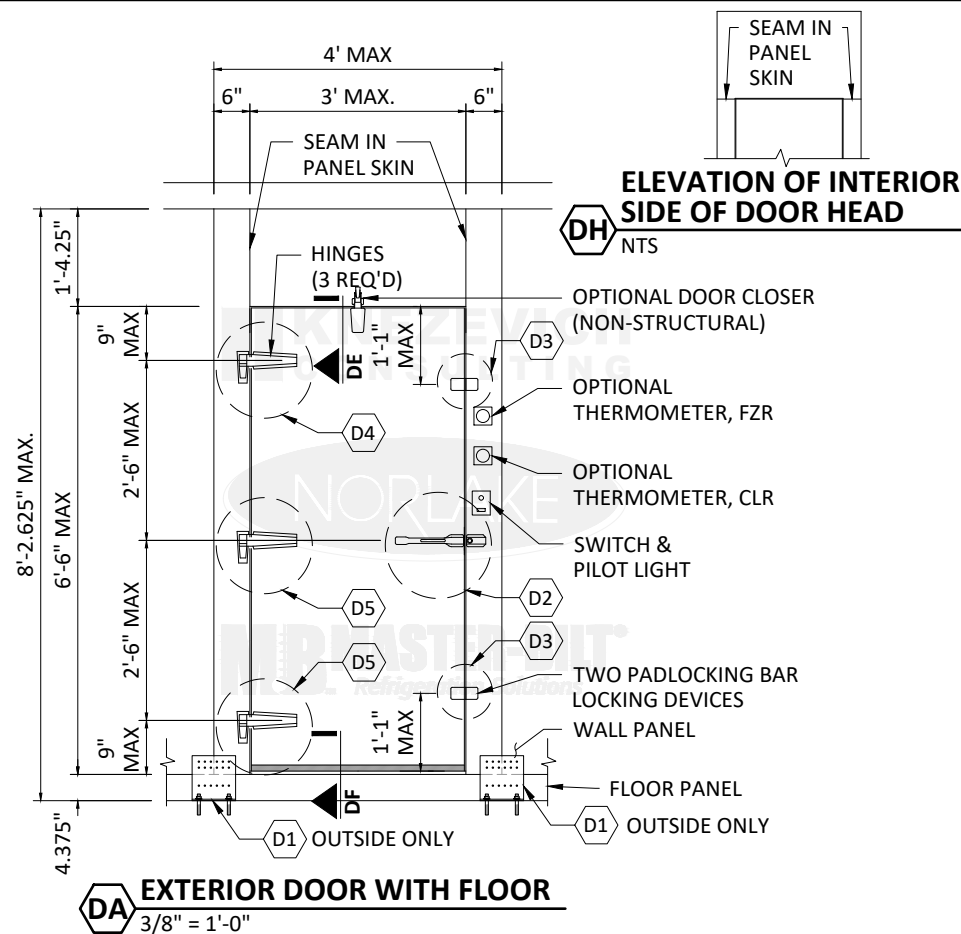
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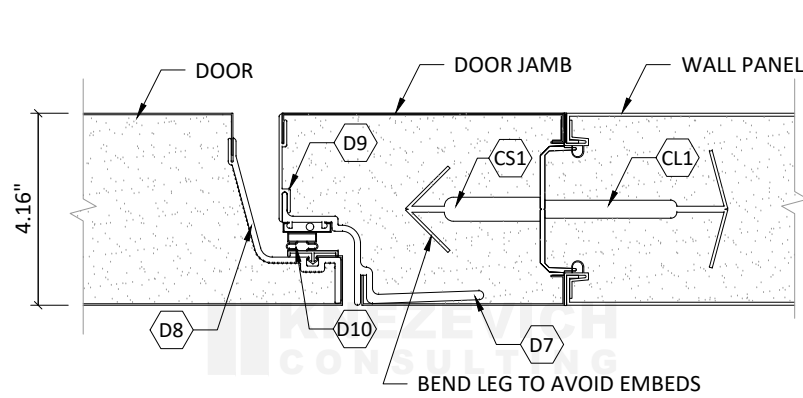
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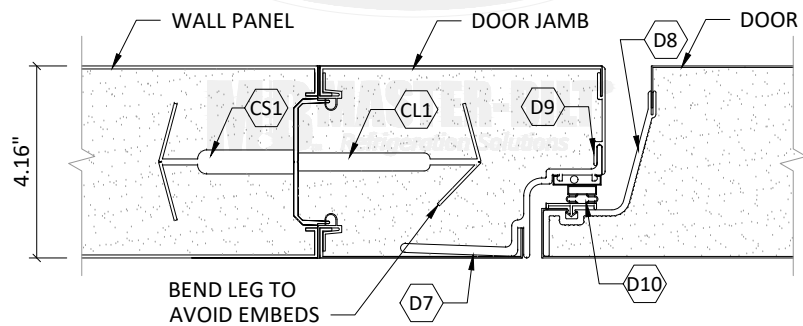
Drawing No.
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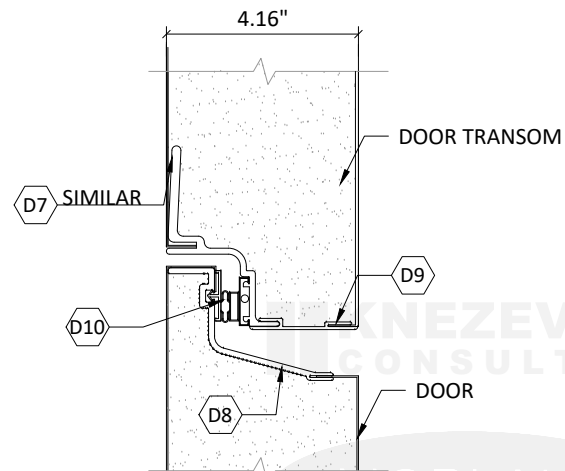
KNEZEVICH CONSULTING		KNEZEVICH CONSULTING, LLC 1600 S. Federal Hwy., Suite 961 Pompano Beach, FL 33062 T 954.772.6224 * COA 27988 www.knezevich.com	
WALK-IN COOLER/FREEZER		REFRIGERATED SOLUTIONS GROUP	
Revisions		Client / Manufacturer: NORLAKE MB MASTER-BILT® Refrigeration Solutions	
No.	Date	By	Description
0	09/02/2026	JWK	FBC 2026 Update, previously KC26-0613
Scale:		AS NOTED	
Drawn by:		JWK	
Date:		09/02/2026	
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sheet 7 of 9		09/02/2026	



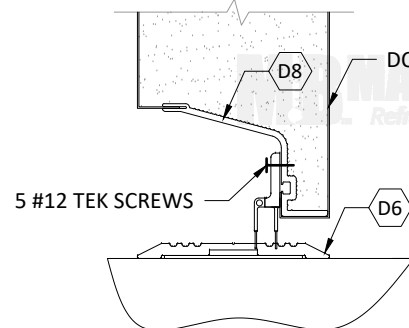
DC DOOR FRAME AT HINGE
3" = 1'-0"



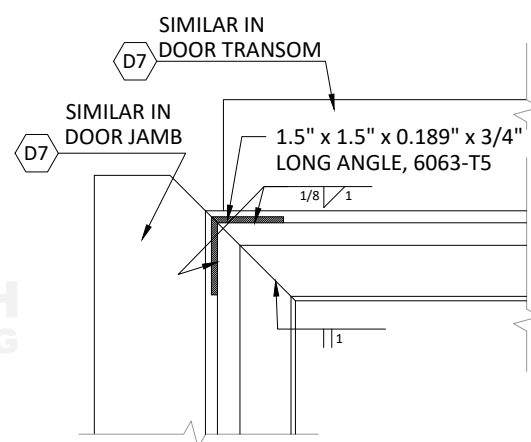
DD DOOR FRAME AT HANDLE
3" = 1'-0"



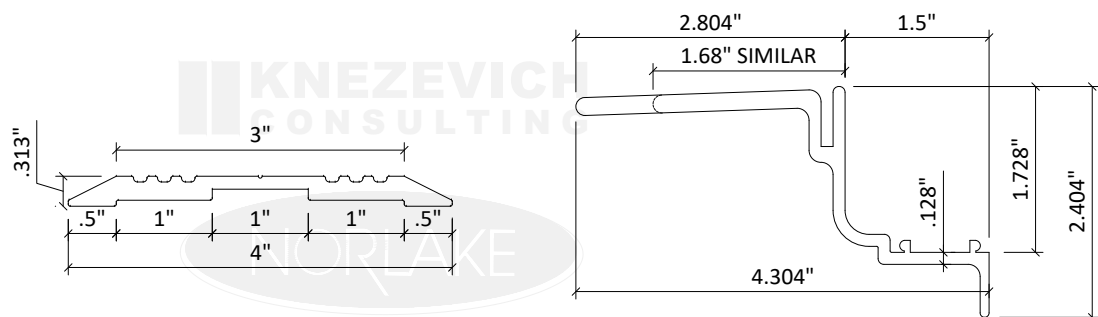
DE DOOR HEADER
3" = 1'-0"



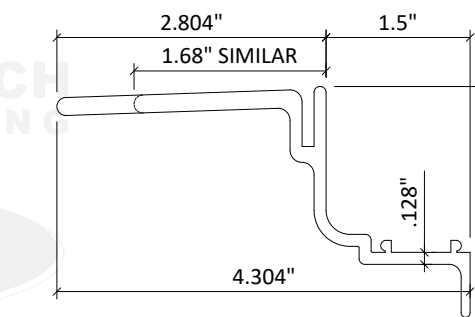
DF DOOR SILL
3" = 1'-0"



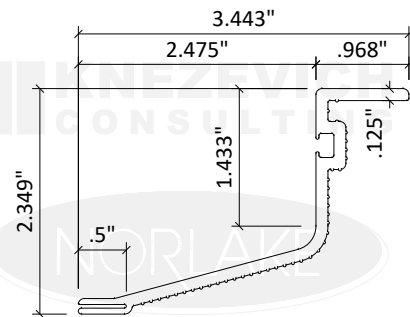
DG DOOR JAMB TO DOOR TRANSOM
3" = 1'-0"



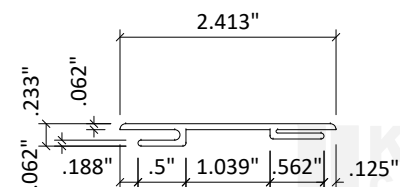
D6 DOOR THRESHOLD
HALF SCALE



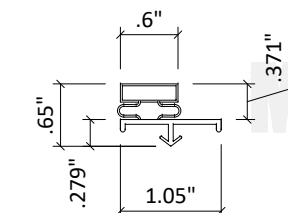
D7 EXTERIOR JAMB EXTRUSION
HALF SCALE



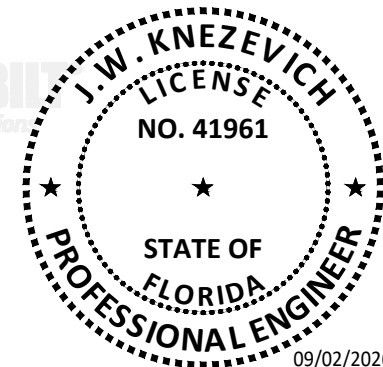
D8 DOOR PAN BREAKER
HALF SCALE



D9 JAMB BREAKER
HALF SCALE RIGID PVC



D10 DOOR GASKET
HALF SCALE FLEXIBLE PVC



Revisions		Description	
No.	Date	By	Description
0	09/02/2026	JWK	FBC 2026 Update, previously KC26-0613

Scale: AS NOTED

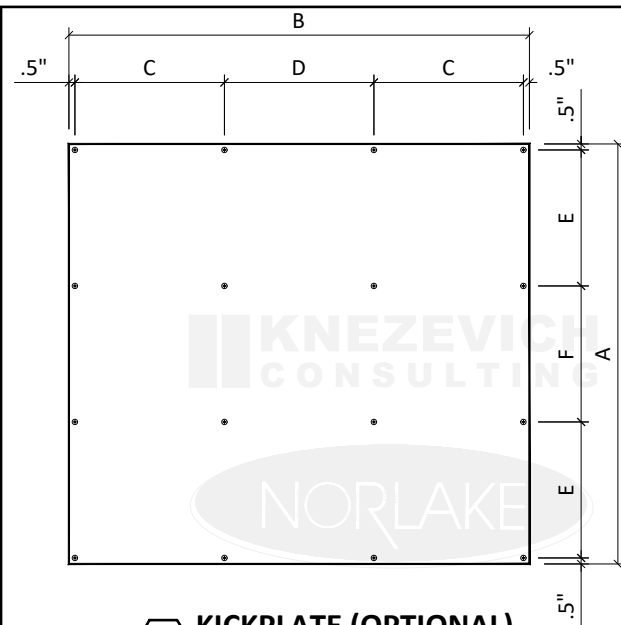
Drawn by: JWK

Date: 09/02/2026

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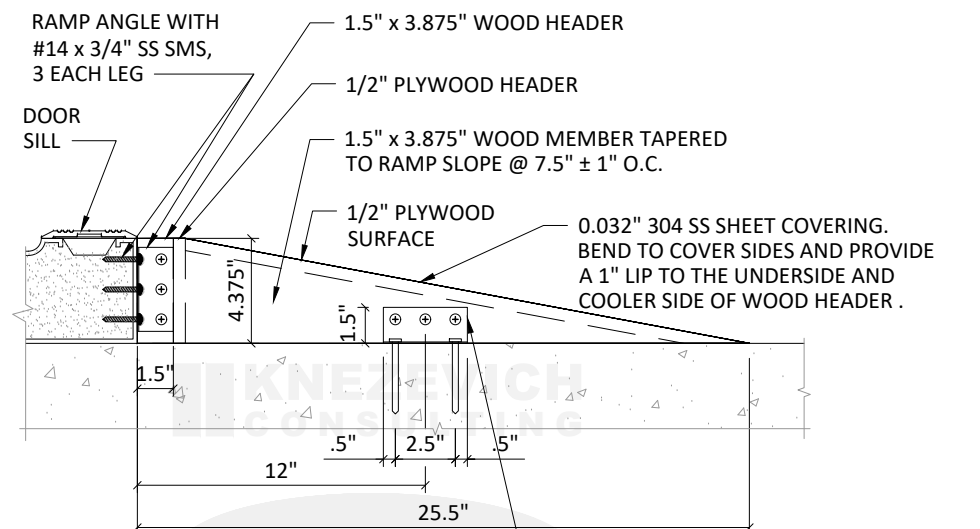


KICKPLATE FASTENER SPACING SCHEDULE			
NOMINAL HEIGHT	A	E	F
36"	35"	11.25"	11.5"
30"	30"	9.75"	9.5"
NOMINAL WIDTH	B	C	D
36	38.375"	12.5"	12.375
30	32.375"	10.5"	10.375
26	28.75"	13.875"	-

K1 KICKPLATE (OPTIONAL)
3/4" = 1'-0"

KICKPLATE NOTES:

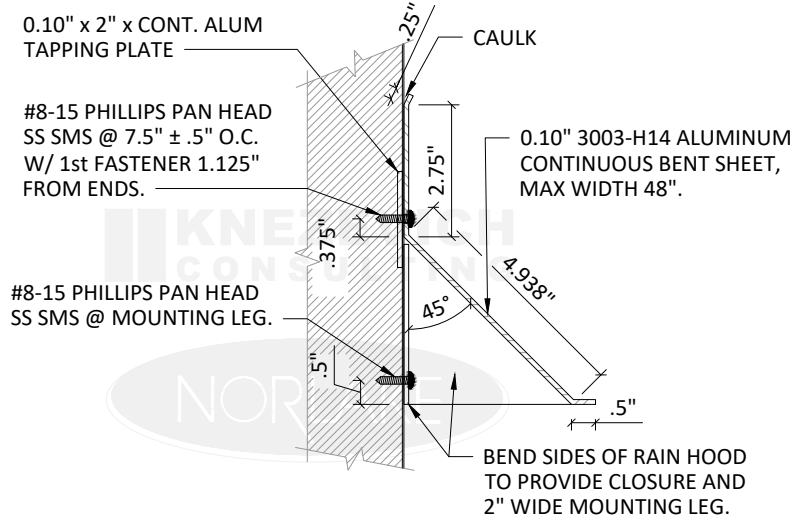
- Kickplates shall be 0.010" 3003-H14 aluminum raised pattern (diamond plate) sheet.
- Kickplates shall be fastened to door panel with #8-18 x 3/4" flat head SS SMS.
- Provide 7/32" Ø holes in kickplate with countersunk surface.
- 0.010" 3003-H14 aluminum tapping plate required at kickplate location in door or wall panel.
- Use #27 pilot holes in tapping plate.
- If holes occur on a raised surface, relocate to adjacent flat surface.



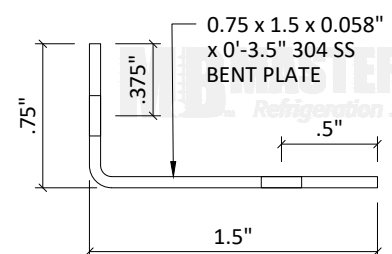
R1 RAMP (OPTIONAL)
SCALE: 1.5" = 1'-0"

RAMP NOTES:

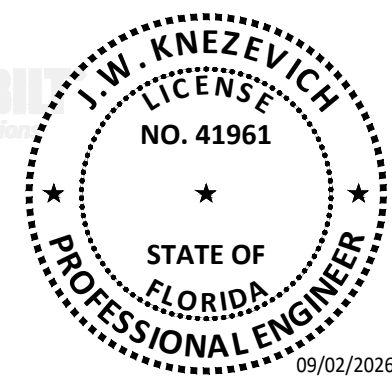
- Maximum ramp width is 3'-6".
- Wood members shall be pressure treated construction grade lumber.
- Plywood shall be exterior grade.
- Fasten plywood surface to tapered 2x4 members with staples @ 8" o.c.
- Fasten plywood header to tapered 2x4 members with 2 staples @ each member.
- Fasten plywood header to wood header with staples @ 8" o.c.
- Staples shall be 0.097" Ø x 1.5" heat treated steel staples.
- Adhere stainless steel sheet to plywood surface with Sikaflex-1A and staple lip with .097" Ø x 1.5" staples @ 8" o.c.
- Provide slip resistant surface as required by the architect or manufacturer.



H1 RAIN HOOD (OPTIONAL)
SCALE: 3" = 1'-0"



RA RAMP ANGLE
SCALE: 1'-0" = 1'-0"



KNEZEVICH CONSULTING

KNEZEVICH CONSULTING, LLC
1600 S. Federal Hwy., Suite 961
Pompano Beach, FL 33062
T 954.772.6224 * COA 27988
www.knezevich.com

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WALK-IN COOLER/FREEZER

REFRIGERATED SOLUTIONS GROUP

Client / Manufacturer: NORLAKE

727 Second Street
Hudson, WI 54016-0248
TEL: (715) 386-2323
FAX: (715) 386-6149

MB MASTER-BILT
Refrigeration Solutions

Revisions		No.	Date	By	Description
		0	09/02/2026	JWK	FBC 2026 Update, previously KC26-0613

Scale: AS NOTED
Drawn by: JWK
Date: 09/02/2026
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FL License No. PE 41961

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Drawing No.
KC26-0708
sheet 9 of 9