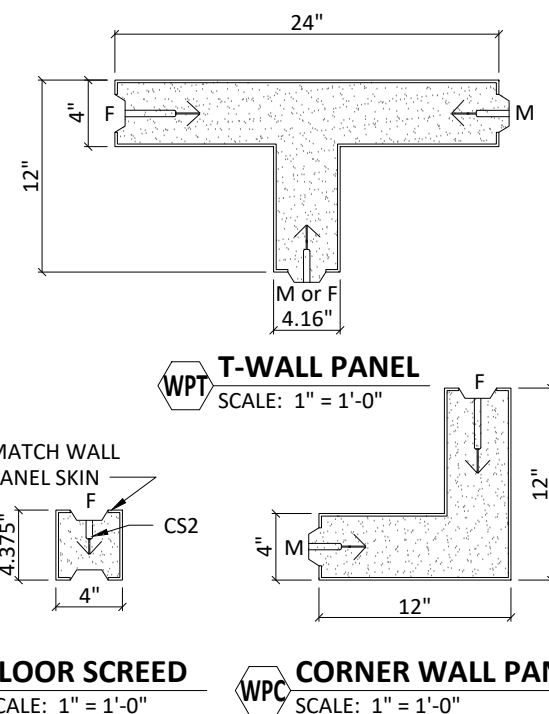


1. These Product Evaluation Documents (PEDs) represent a Free-Standing Walk-In Cooler/Freezer system designed and tested in accordance with the Florida Building Code, Building, 8th Edition (2023), including the High Velocity Hurricane Zone.
2. This PED addresses the structural and material requirements for compliance with the structural portions of the noted codes. Architectural, mechanical, electrical, waterproofing and fire classification 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, waterproofing, and fire classification requirements for the installation.
3. Design Loads
 - A. Roof:
 - 1) Live Load 30.0 psf
 - 2) Roof Panel Type RP-2 Dead Load 5.3 psf
 - 3) Ceiling Mechanical Dead Load 300 lbs max
Maximum of 1 condenser unit per 4 foot panel.
 - B. Walls:
 - 1) Dead Load

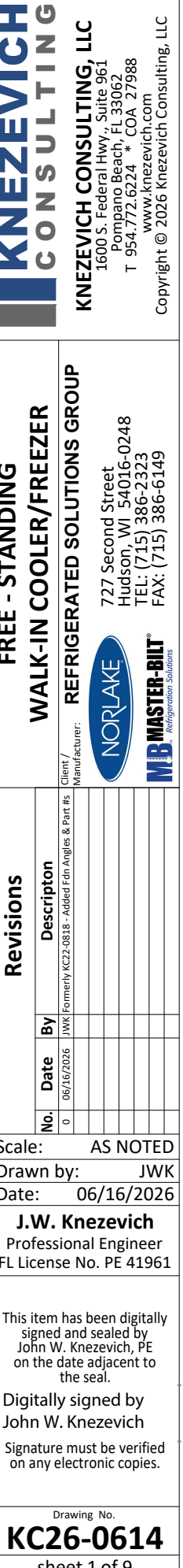
Panel Type 1	1.6 psf
Panel Type 2	2.1 psf
 - C. Floor:
 - 1) Live Load

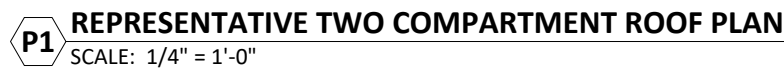
Insulated Floor	250 psf
Floorless	Slab rating
Limit LL to rating of concrete slab	
 - 2) Dead Load

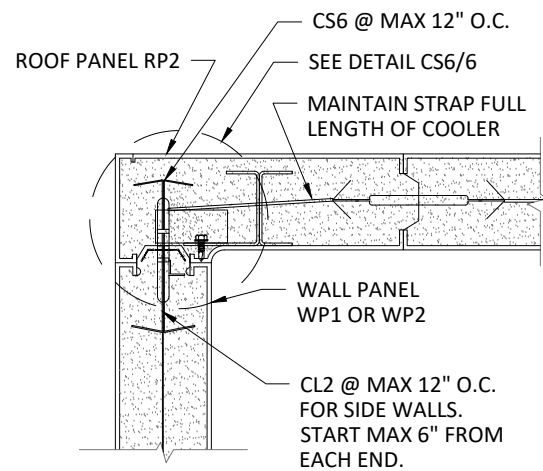
Floor Panel	5.0 psf
-------------	---------
 - D. This free-standing walk-in cooler is designed to resist wind loads determined in accordance with FBC Sections 1609 & 1620 utilizing ASCE 7-22 and the following wind design data.
 - 1) **Outside the High Velocity Hurricane Zone:**
 - a) $V_{ULT} = 180$ mph; $V_{ASD} = 139.4$; Exposure B; Risk Category I or,
 - b) $V_{ULT} = 150$ mph; $V_{ASD} = 116.2$; Exposure C; Risk Category I or,
 - c) $V_{ULT} = 135$ mph; $V_{ASD} = 104.6$; Exposure D; Risk Category I.
 - 2) **Within the High Velocity Hurricane Zone:**
 - a) $V_{ULT} = 165$ mph; $V_{ASD} = 127.8$; Exposure C; Risk Category I
 - E. MWFRS & Component Wind loads are based on the mean roof height of the free-standing walk-in cooler located at grade. The A/E of Record shall confirm these are appropriate for the site specific conditions and are not affected by adjacent or nearby buildings or structures.
 - F. See Wind Load Diagrams on Sheet 3 for allowable stress design (ASD) component wind loads used in the design outlined within this PED. These ASD loads are based on wind load resistance testing. Wind loads determined in accordance with FBC Section 1609 or 1620 shall be multiplied by the ASD load factor of 0.6 for comparison with allowable loads on these documents.
 - G. Design loads, including large missile impact resistance, are verified with testing in accordance with TAS 201, 202, & 203, ASTM E330, & ASTM E72.



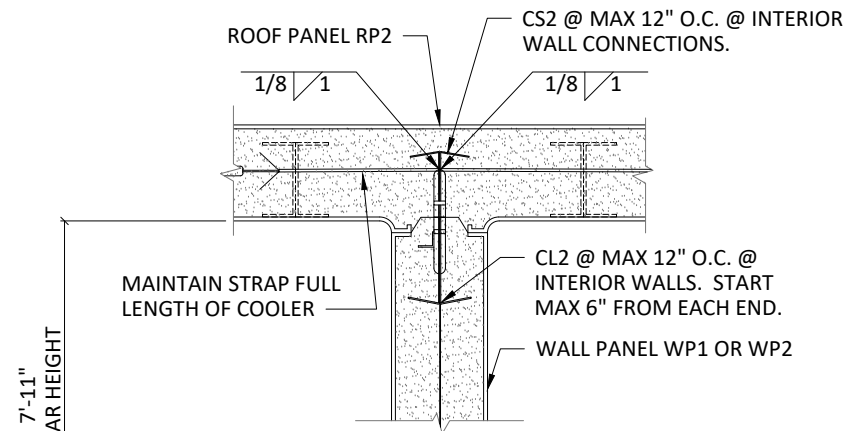
1. Wall & roof composite sandwich panels are comprised of aluminum or steel facings with foamed-in-place polyurethane cores. Thickness and material of facings shall be as shown.
2. Composite panels are approved for use in walk-in coolers where the aggregate floor area does not exceed 400 square feet. For specific requirements of foam plastics in walk-in coolers, see FBC Section 2603.4.1.3.
3. Polyurethane foam core shall have a flame spread rating of not more than 75 and a smoke-developed rating of not more than 450.
4. Aluminum facings shall be 3003-H14 alloy for interior and exterior use.
5. Wall panel steel facings shall comply with ASTM A875 CQ with a min. Fy = 31.0 ksi, min. thickness of 0.022" and a GF45 coating.
6. Roof panel steel facings on the top side of panel shall comply with ASTM A653 CS with a min. Fy = 45 ksi, min. thickness of 0.022" and a G90 coating.
7. Steel plates, bent plates, channels and angles shall comply with ASTM A653 CS with a min. Fy = 31 ksi and a G90 coating. Thickness as designated.
8. 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.
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.
10. Tapping plates within door frame shall be 1/2" HDPE plastic with a min. size of 2" x 2" or 2" larger than the screw pattern. Provide tapping plates at all door hardware.



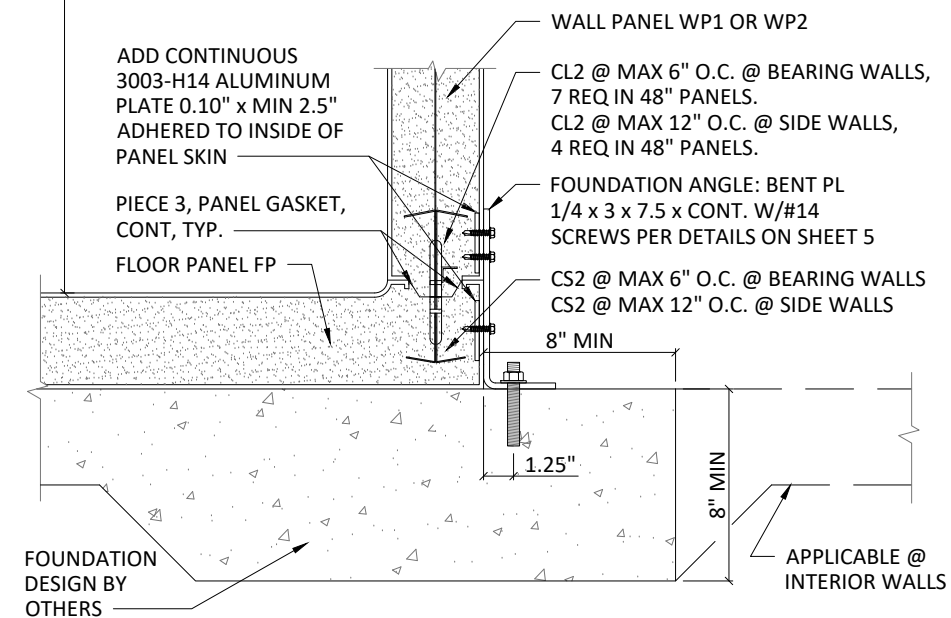




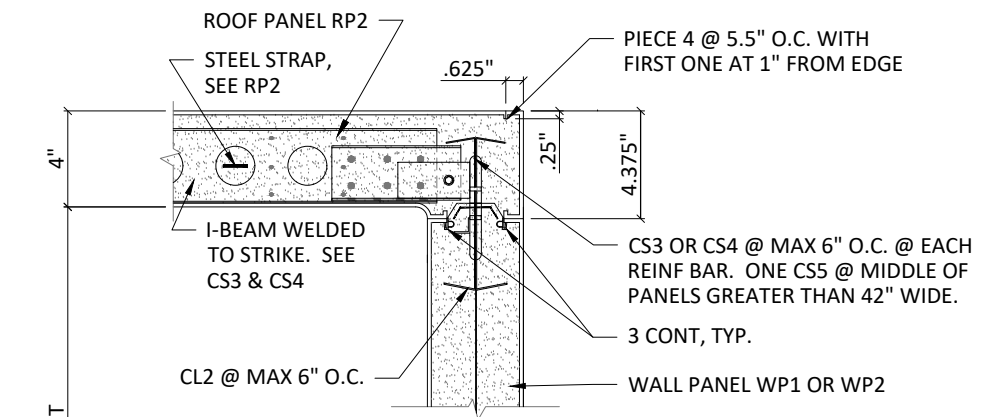
A SIDE WALL TO ROOF PANEL
1.5" = 1'-0"



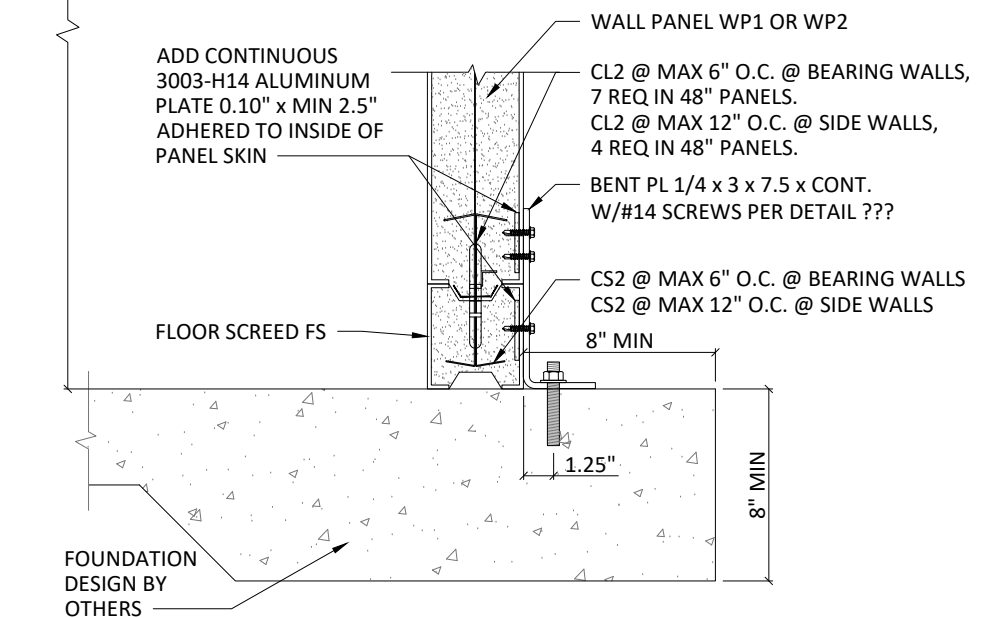
B INTERIOR WALL TO CEILING
1.5" = 1'-0"



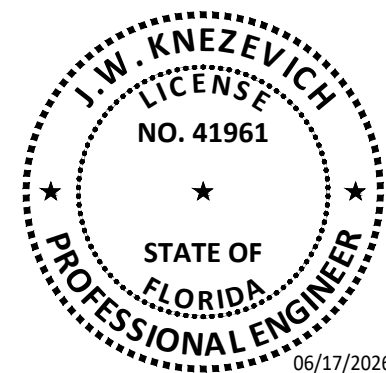
D WALL TO FOUNDATION WITH FLOOR
1.5" = 1'-0"



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



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

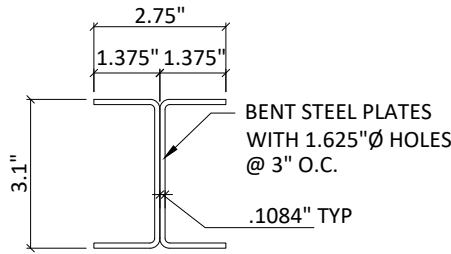


Revisions		Description	
No.	Date	By	
0	06/16/2026	JWK	Formerly KC22-0818 - Added Fin Angles & Part #s

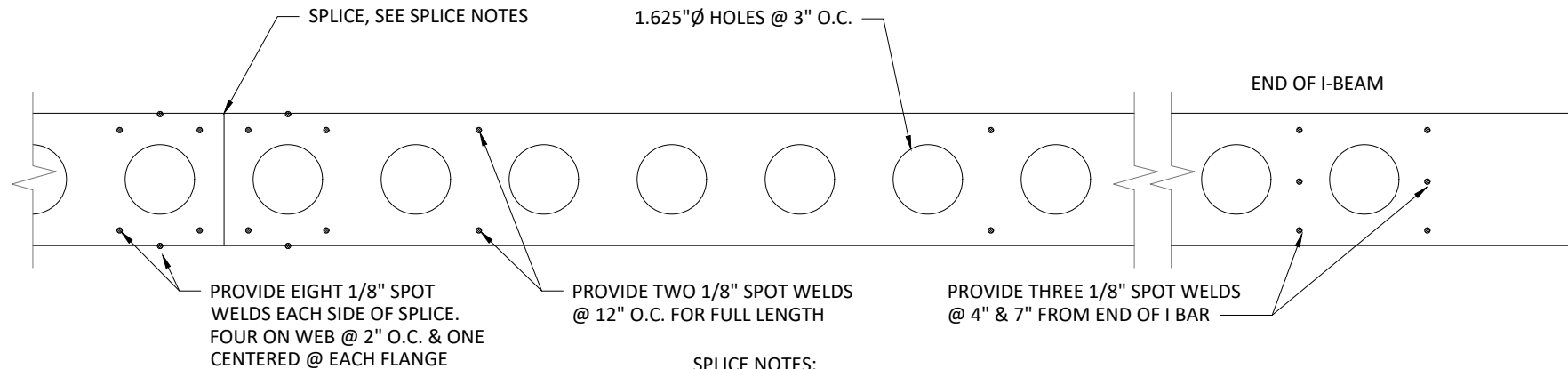
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Drawn by: JWK
Date: 06/16/2026
J.W. Knezevich
Professional Engineer
FL License No. PE 41961

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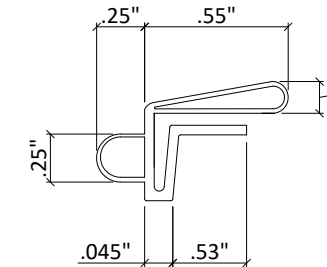
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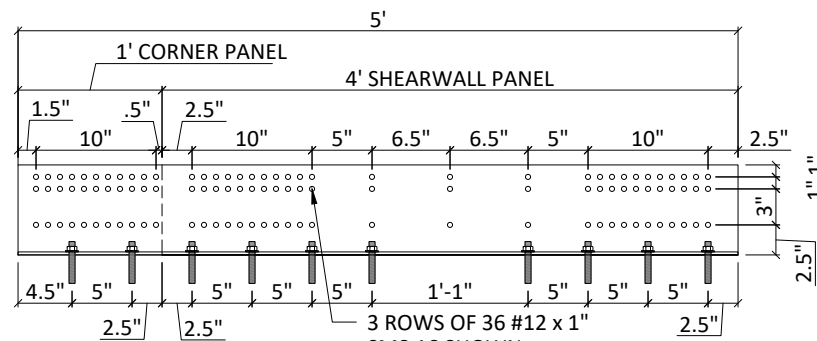
1 I-BEAM (STEEL)
3" = 1'-0" UNGALVANIZED



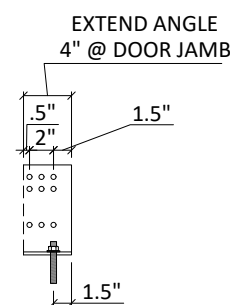
2 I-BEAM ELEVATION DETAIL
3" = 1'-0"



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



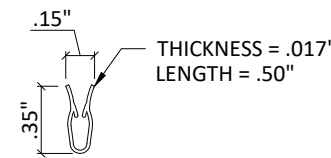
7 BEARING SHEARWALL CORNER FOUNDATION ANGLE
3/4" = 1'-0"



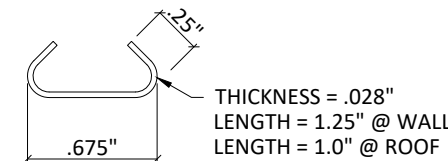
7.1 TYPICAL DOOR JAMB EXTENSION
3/4" = 1'-0"

FOUNDATION ANGLE NOTES:

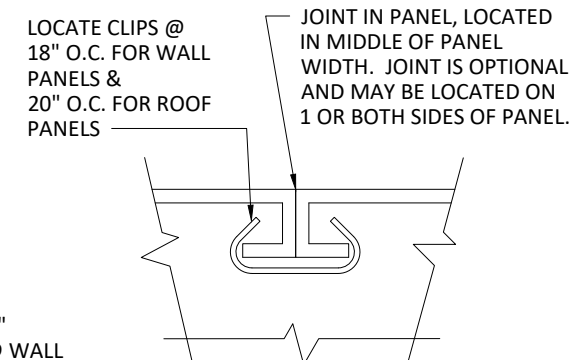
- Foundation angle shall be a bent plate 1/4" x 3" x 7.5".
- Foundation angle shall be fabricated from steel conforming to ASTM A36 or A572 GR50.
- Foundation angle shall be shop painted utilizing an SSPC-SP1 surface preparation and painted with one coat of Sherwin Williams POWDURA RAL Series Superdurable Polyester TGIC-Free Powder Coating to a min. 2 mil dry film thickness.
- Anchor foundation angle to foundation with 1/2" Ø Hilti Kwik Bolt TZ2, SS 304 or 316, with 3" nominal embedment, 2.5" effective embedment after tightening. Provide minimum 6.75" edge distance in minimum 3,000 psi cracked or uncracked concrete with a minimum concrete depth of 8". install per ESR-4266.
- Locate anchors and screws as shown.



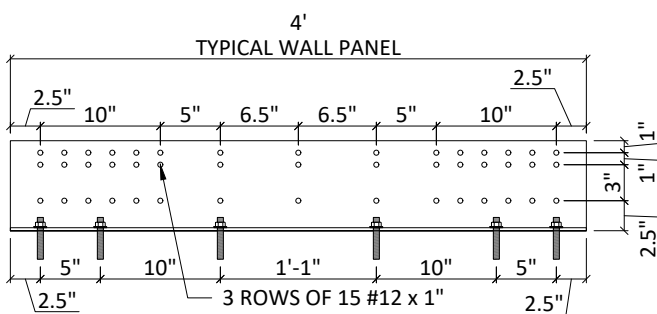
4 STRAIGHT EDGE SKIN CLIP
FULL SCALE UNGALVANIZED STEEL



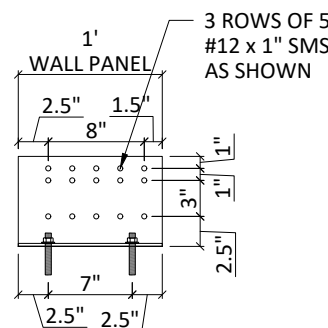
5 PANEL SKIN CLIP
FULL SCALE UNGALVANIZED STEEL



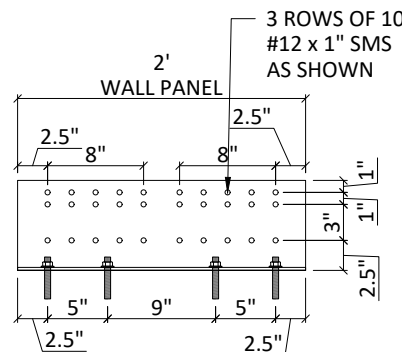
6 PANEL SKIN CLIP DETAIL
FULL SCALE



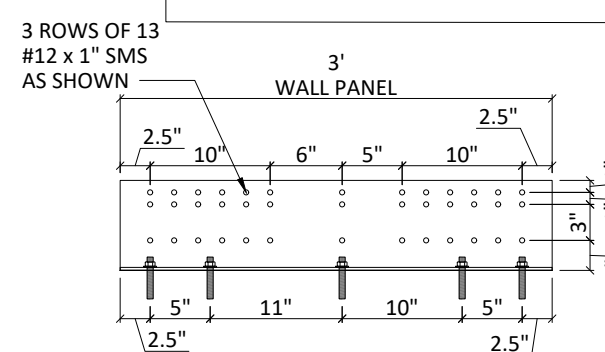
8 WALL PANEL FOUNDATION ANGLE
3/4" = 1'-0"



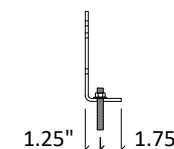
8.1 1' WALL PANEL FDN ANGLE
3/4" = 1'-0"



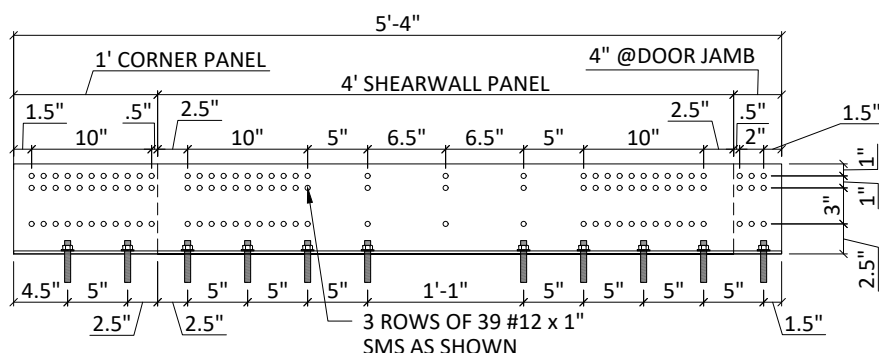
8.2 2' WALL PANEL FDN ANGLE
3/4" = 1'-0"



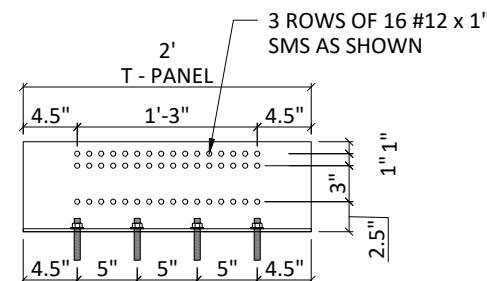
8.3 3' WALL PANEL FDN ANGLE
3/4" = 1'-0"



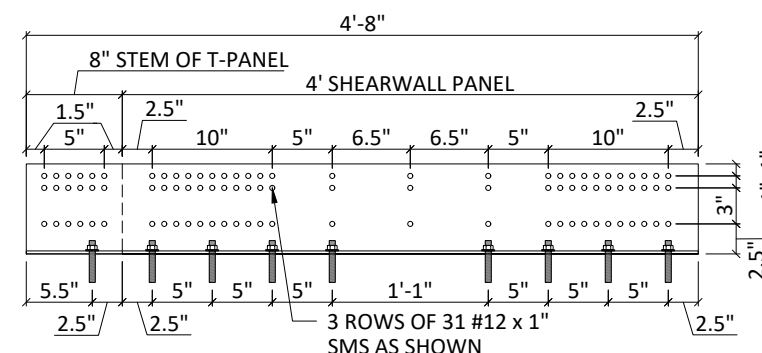
12 TYPICAL CONCRETE ANCHOR LOCATION
3/4" = 1'-0"



9 SIDE SHEARWALL WITH DOOR FOUNDATION ANGLE
3/4" = 1'-0"



10 BEARING WALL FOUNDATION ANGLE @ T - PANEL
3/4" = 1'-0"



11 INTERIOR SHEARWALL FOUNDATION ANGLE
3/4" = 1'-0"

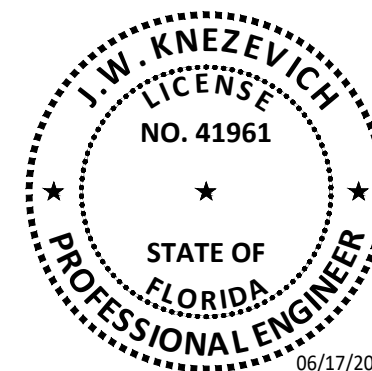
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No.	Date	By	Manufacturer
0	06/16/2026	JWK	Formerly KC22-0818 - Added Fdn Angles & Part #s

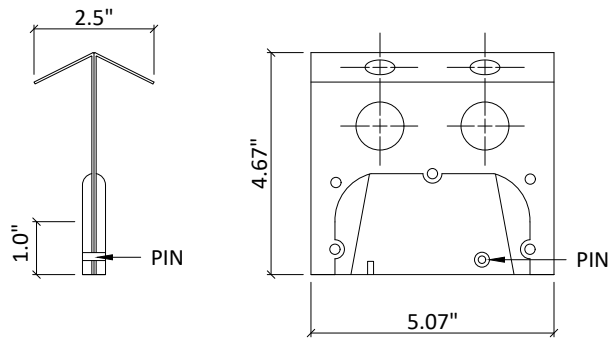
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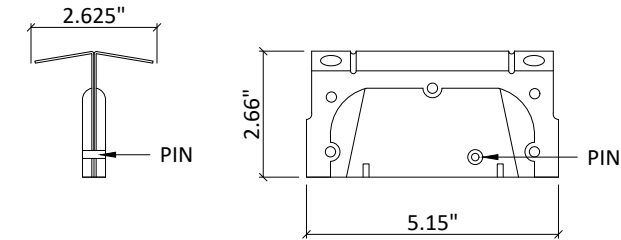
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Drawing No.
KC26-0614
sheet 5 of 9

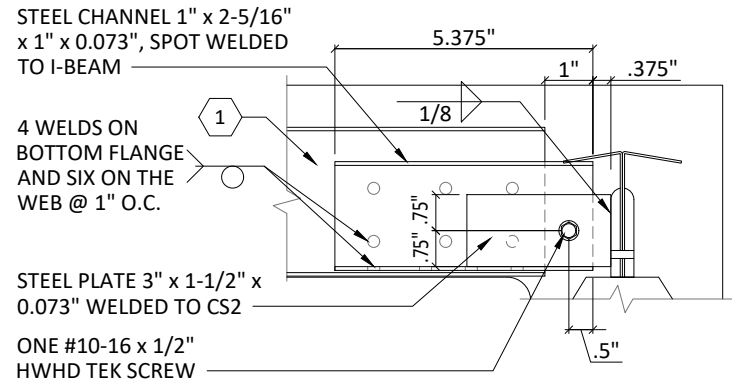




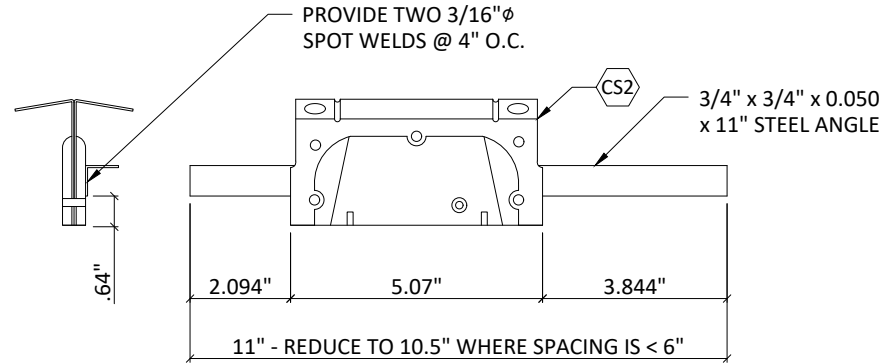
**CS1 CAMLOCK
RSG WIDE MOUTH DEEP STRIKE**
SCALE: 3" = 1'-0"



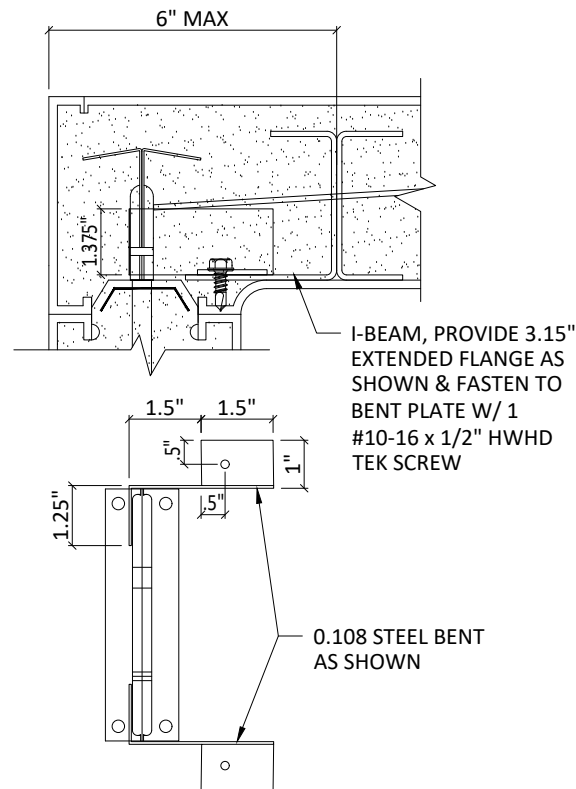
**CS2 CAMLOCK
RSG WIDE MOUTH STRIKE**
SCALE: 3" = 1'-0"



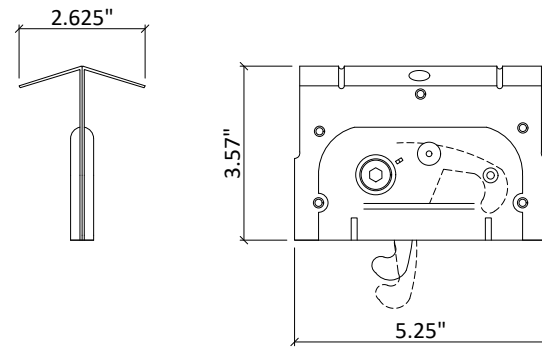
CS3 CS2 TO I-BEAM
SCALE: 3" = 1'-0"



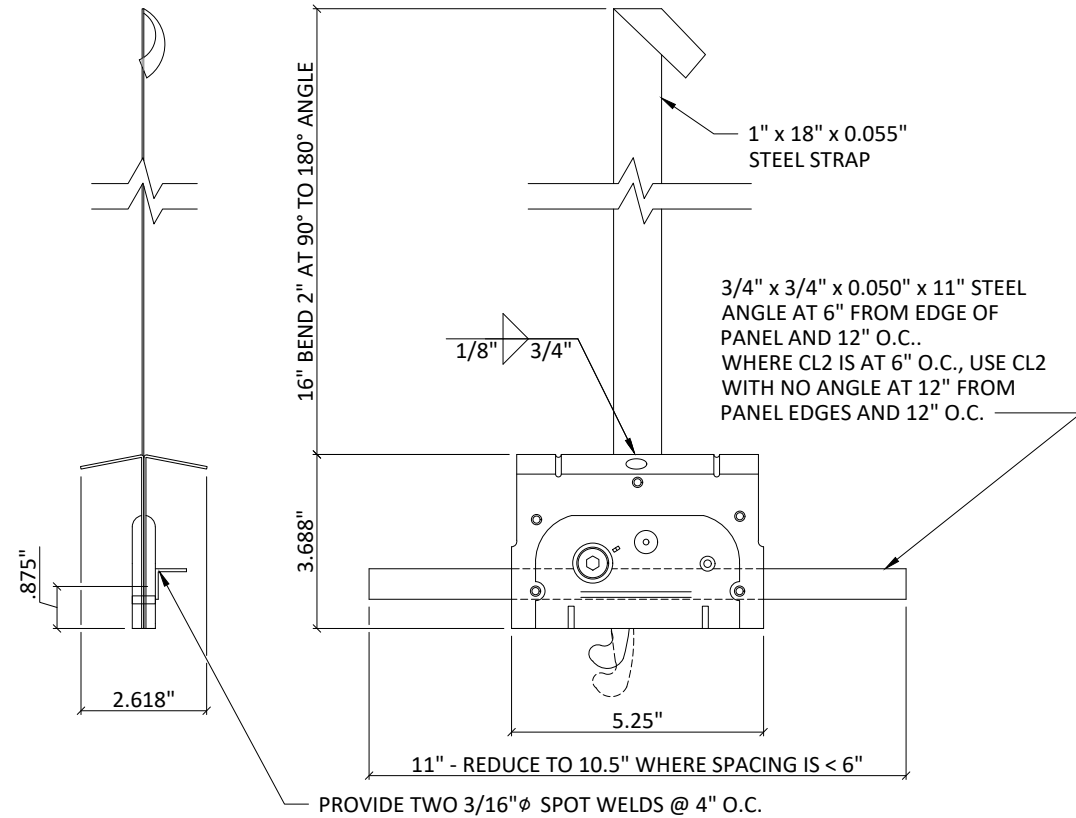
CS5 CS2 WITH ANGLE
SCALE: 3" = 1'-0"



CS6 CS2 WITH BENT PLATE
SCALE: 3" = 1'-0"

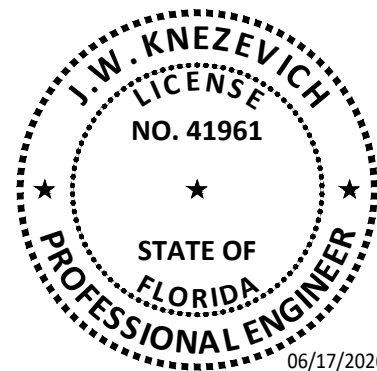


**CL1 CAMLOCK
RSG LOCKING POINT**
SCALE: 3" = 1'-0"



CL2 CL1 WITH STRAP & ANGLE
SCALE: 3" = 1'-0"

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



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**FREE - STANDING
WALK-IN COOLER/FREEZER**
REFRIGERATED SOLUTIONS GROUP
Client / Manufacturer:
NORLAKE
MB MASTER-BILT®
727 Second Street
Hudson, WI 54016-0248
TEL: (715) 386-2323
FAX: (715) 386-6149

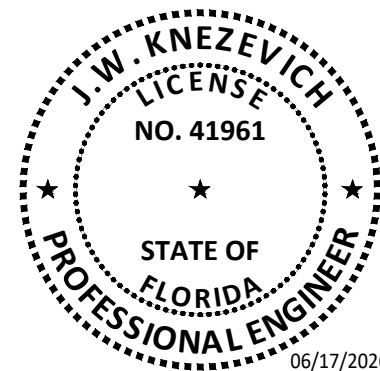
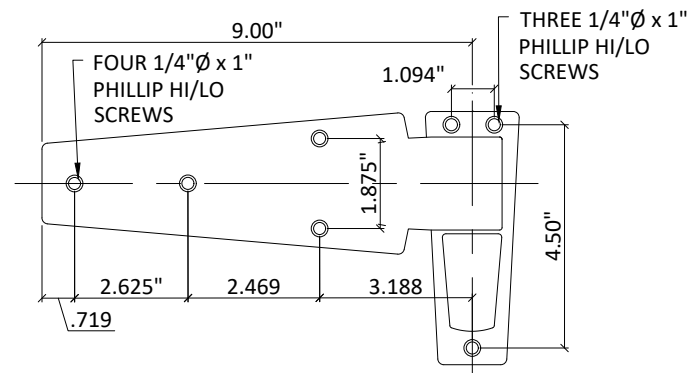
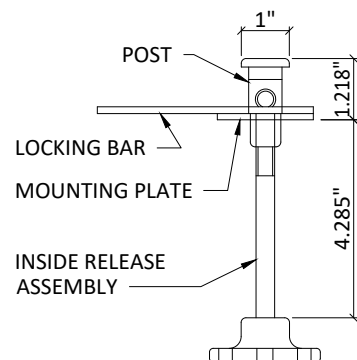
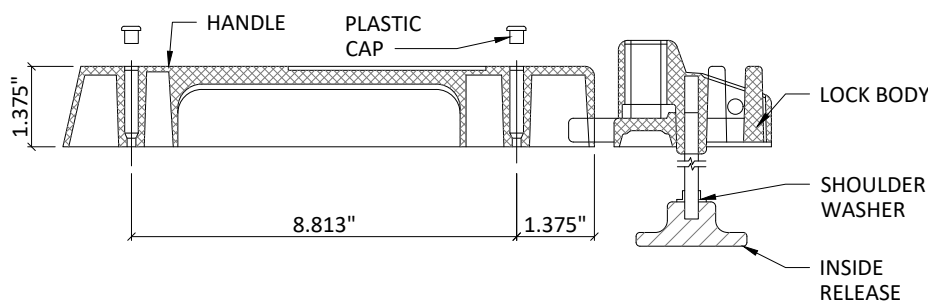
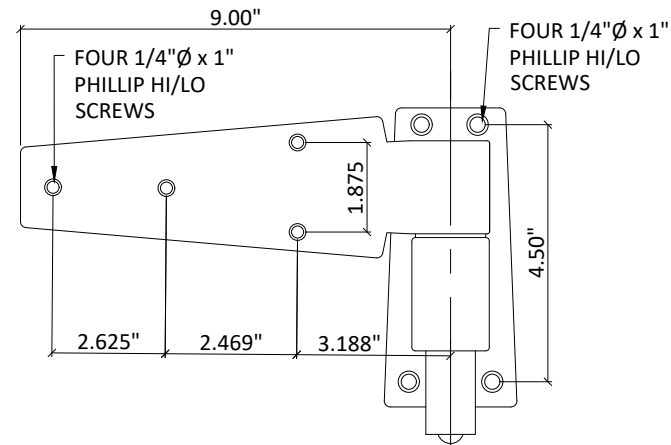
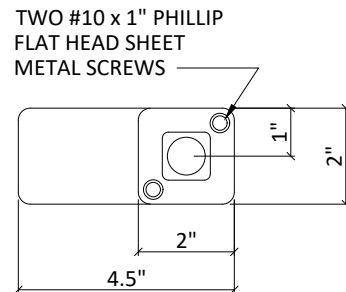
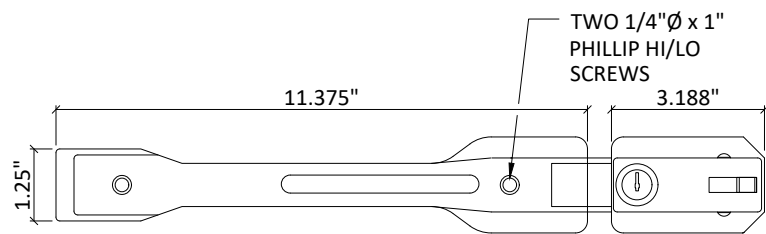
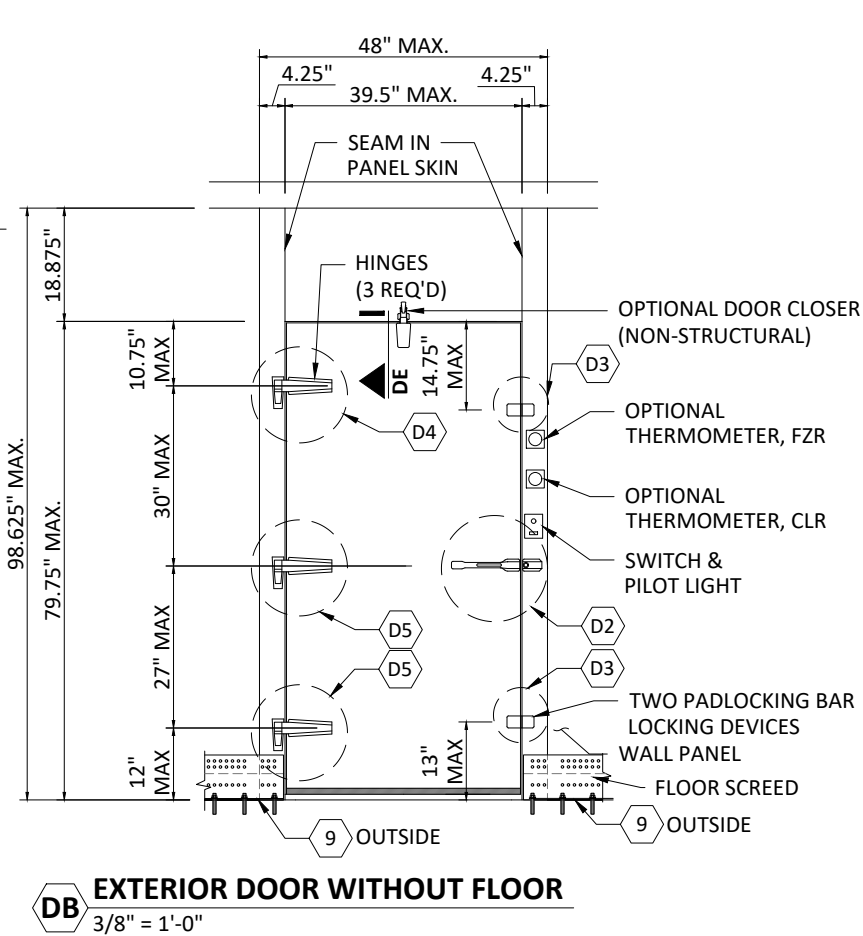
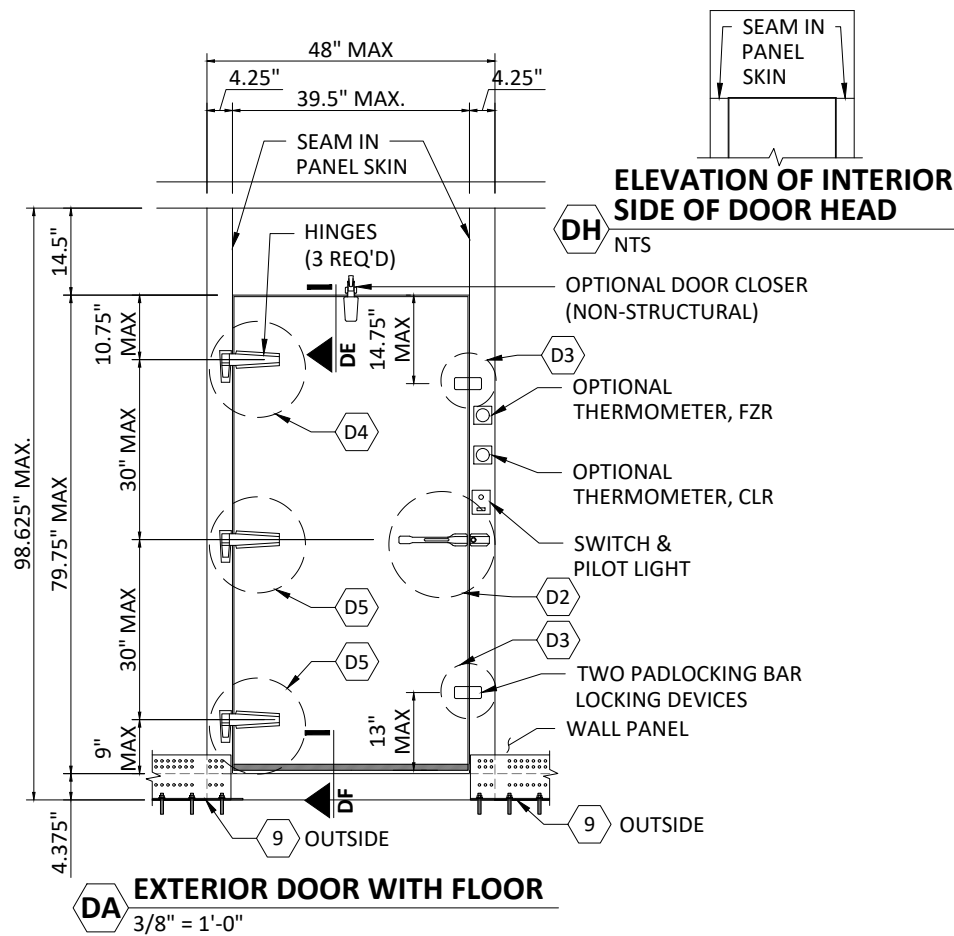
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No.	Date	By	
0	06/16/2026	JWK	Formerly KC22-0818 - Added Fdn Angles & Part #s

Scale: AS NOTED
Drawn by: JWK
Date: 06/16/2026
J.W. Knezevich
Professional Engineer
FL License No. PE 41961

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Drawing No.
KC26-0614
sheet 6 of 9

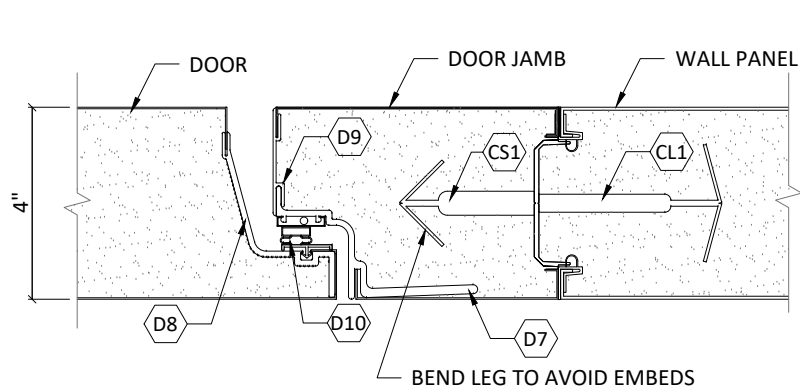


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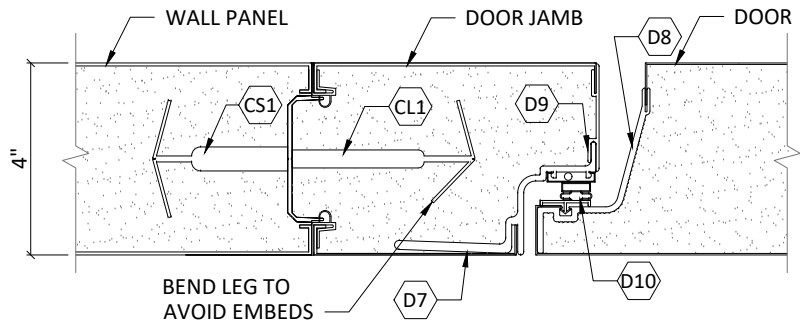
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Date: 06/16/2026
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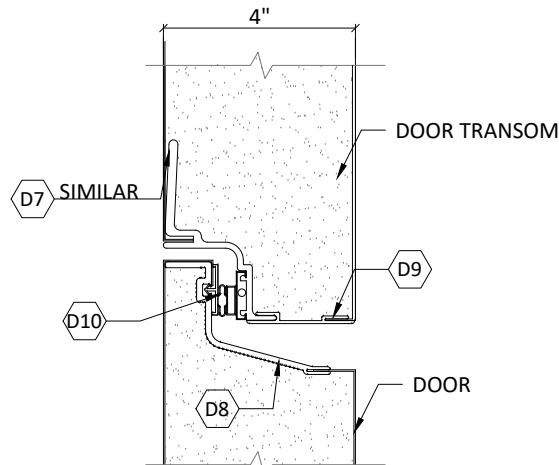
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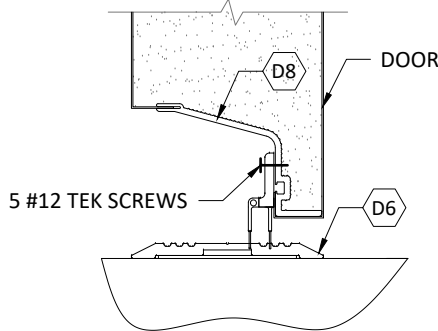
DC DOOR FRAME AT HINGE
3" = 1'-0"



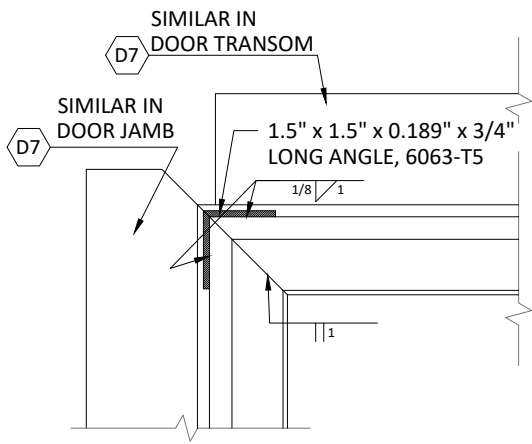
DD DOOR FRAME AT HANDLE
3" = 1'-0"



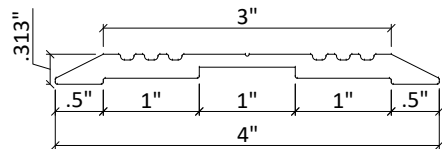
DE DOOR HEADER
3" = 1'-0"



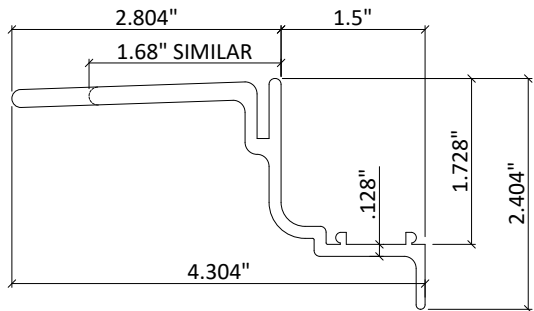
DF DOOR SILL
3" = 1'-0"



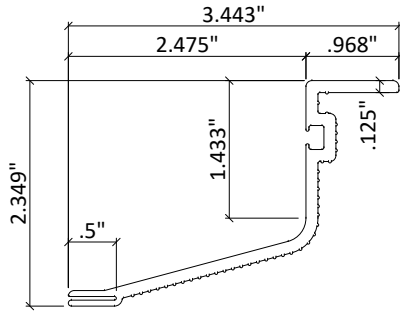
DG DOOR JAMB TO DOOR TRANSOM
3" = 1'-0"



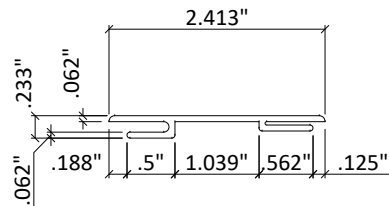
D6 DOOR THRESHOLD
HALF SCALE 6063-T5 ALUM



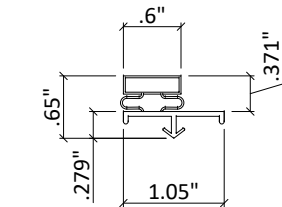
D7 EXTERIOR JAMB EXTRUSION
HALF SCALE 6063-T5 ALUM



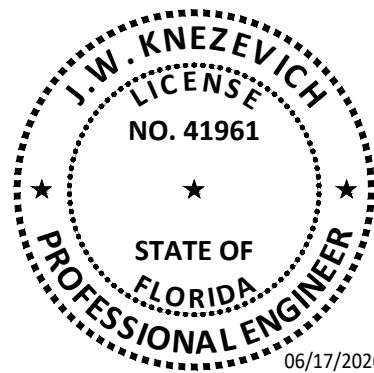
D8 DOOR PAN BREAKER
HALF SCALE 6063-T5 ALUM



D9 JAMB BREAKER
HALF SCALE RIGID PVC



D10 DOOR GASKET
HALF SCALE FLEXIBLE PVC

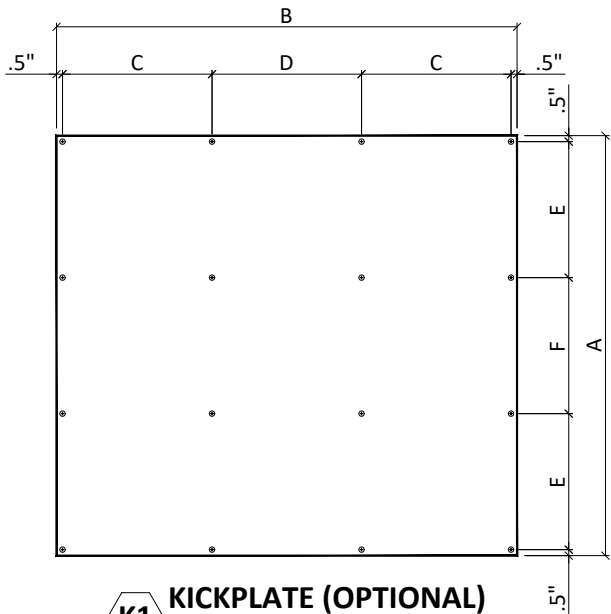


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No.	Date	By	
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Scale: AS NOTED
Drawn by: JWK
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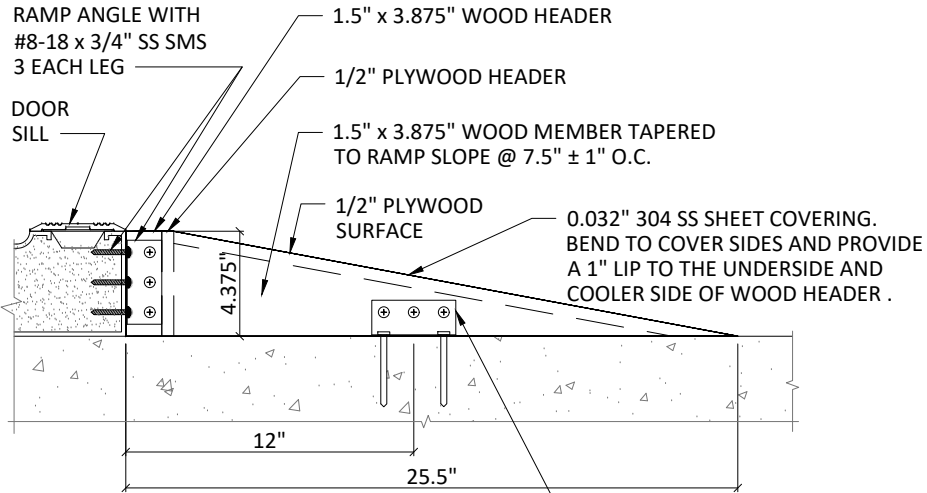


KICKPLATE FASTENER SPACING SCHEDULE			
NOMINAL HEIGHT	A	E	F
36"	35"	11.25"	11.5"
30"	30"	9.75"	9.5"
NOMINAL WIDTH	B	C	D
36	38.375"	12.5"	12.375
30	32.375"	10.5"	10.375
26	28.75"	13.875"	-

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

KICKPLATE NOTES:

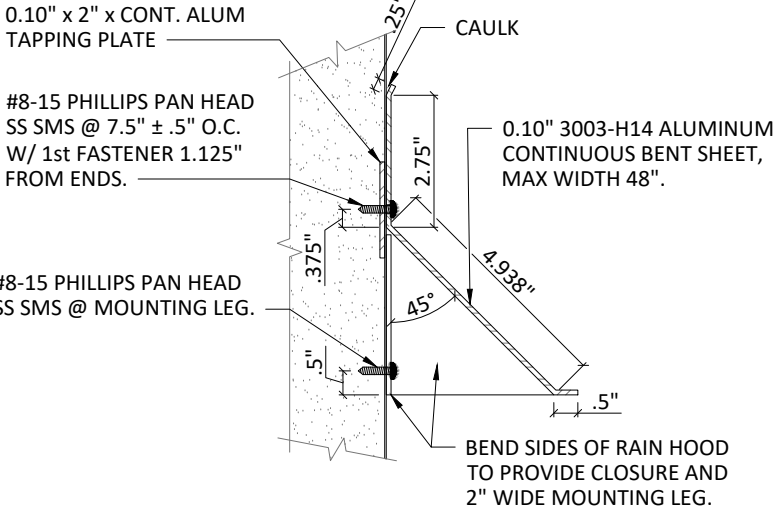
- Kickplates are designed for a ±73 psf USD (43.8 ASD) wind load.
- Kickplates shall be 0.010" 3003-H14 aluminum raised pattern (diamond plate) sheet.
- Kickplates shall be fastened to door panel with #8-18 x 3/4" flat head SS SMS.
- Provide 7/32" Ø holes in kickplate with countersunk surface.
- 0.010" 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:

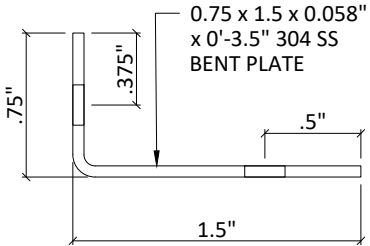
- Ramp is designed for a 48 psf USD (28.8 ASD) uplift wind load.
- Maximum ramp width is 3'-6".
- Wood members shall be pressure treated construction grade lumber.
- Plywood shall be exterior grade.
- Fasten plywood surface to tapered 2x4 members with staples @ 8" o.c.
- Fasten plywood header to tapered 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.



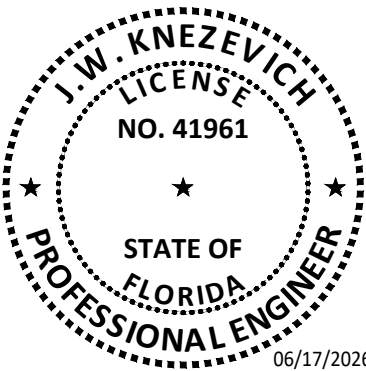
H1 RAIN HOOD (OPTIONAL)
SCALE: 3" = 1'-0"

RAINHOOD NOTES:

- Rainhood is designed for a -108.5 psf USD (84.0 ASD) uplift wind load.



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



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Revisions		Description	
No.	Date	By	
0	06/16/2026	JWK	Formerly KC22-0818 - Added Fin Angles & Part #s

Scale: AS NOTED

Drawn by: JWK

Date: 06/16/2026

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

This item has been digitally signed and sealed by John W. Knezevich, PE on the date adjacent to the seal.

Signature must be verified on any electronic copies.

Drawing No.

KC26-0614

sheet 9 of 9