STRUCTALL BUILDING SYSTEMS

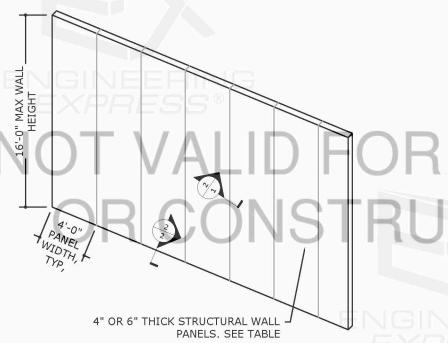
SNAP-N-LOCK EPS FOAM CORE STRUCTURAL WALL PANELS (26GA STEEL SKIN NOT RATED FOR IMPACT RESISTANCE

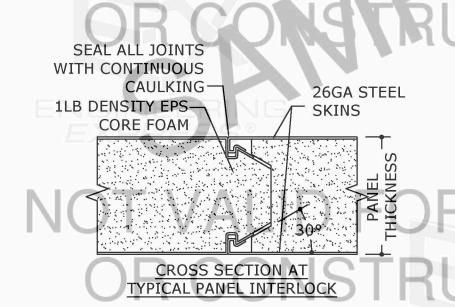
HVHZ / NON-HVHZ

CERTIFYING ENGINEER'S DIGITAL OR PHYSICAL SEAL & DATE OF CERTIFICATION

RIGINAL PE SEAL NOT

NON-SITE-SPECIFIC STRUCTURAL PERFORMANCE EVALUATION. A DESIGN PROFESSIONAL SHALL BE RESPONSIBLE FOR CERTIFYING THE APPLICATION OF THIS INFORMATION TO ANY SITE-SPECIFIC LOCATION.





PANEL INTERLOCK DETAIL DETAIL

	r -		
Total Load*	Deflection Limit (L/)	4" 26ga Steel Skin	6" 26ga Steel Skin
		1-LB EPS	1-LB EPS
	80	16'-0"	16'-0"
+/- 10 PSF	120	16'-0"	16'-0"
17- 10 1-51	180	16'-0"	16'-0"
	240	16'-0"	16'-0"
	80	16'-0"	16'-0"
+/- 15 PSF	120	16'-0"	16'-0"
	180	16'-0"	16'-0"
	240	14'-8"	16'-0"
	80 120	14'-3" 14'-3"	16'-0"
+/- 20 PSF	180	14'-3"	16'-0" 16'-0"
	240	13'-3"	16'-0"
	80	12'-9"	15'-9"
	120	12'-9"	15'-9"
+/- 25 PSF	180	12'-9"	15'-9"
///	240	12'-4"	15'-3"
	80	11'-8"	14'-5"
	120	11'-8"	14'-5"
+/- 30 PSF	180	11'-8"	14'-5"
	240	11'-7"	14'-4"
	80	10'-9"	13'-4"
	120	10'-9"	13'-4"
+/- 35 PSF	180	10'-9"	13'-4"
	240	10'-9"	13'-4"
	80	10'-1"	12'-5"
	120	10'-1"	12'-5"
+/- 40 PSF	180	10'-1"	12'-5"
	240	10'-1"	12'-5"
	80	9'-6"	11'-9"
	120	9'-6"	11'-9"
+/- 45 PSF	180	9'-6"	11'-9"
	240	9'-6"	11'-9"
	80	9'-0"	11'-2"
	120	9'-0"	11'-2"
+/- 50 PSF	180	9'-0"	11'-2"
	240	9'-0"	11'-2"
	80	8'-7"	10'-7"
	120		
+/- 55 PSF	180	8'-7" 8'-7"	10'-7" 10'-7"
	240	8'-7"	10-7"
			10-7
	80	8'-3"	
+/- 60 PSF	120	8'-3"	10'-2"
	180	8'-3"	10'-2"
	240	8'-3"	10'-2"
	80	7'-11"	9'-9"
+/- 65 PSF	120	7'-11"	9'-9"
	180	7'-11"	9'-9"
	240	7'-11"	9'-9"
	80	7'-7"	9'-5"
+/- 70 PSF	120	7'-7"	9'-5"
	180	7'-7"	9'-5"
	240	7'-7"	9'-5"
11 /	80	7'-4"	9'-1"
+/- 75 PSF	120	7'-4"	9'-1"
17-13 PSF	180	7'-4"	9'-1"
	240	7'-4"	9'-1"
	80		8'-10"
00 707	120		8'-10"
+/- 80 PSF	120 180		8'-10" 8'-10"

## TABLE 1:

ALLOWABLE CLEAR SPAN TRANSVERSE LOADS FOR 4" AND 6" THICK STRUCTURAL WALL PANELS

### INSTRUCTION FOR USE:

- DETERMINE TYPE OF ENCLOSURE TO BE COVERED (OPEN, SCREENED WALLS, OR FULLY ENCLOSED). USE QR CODE/WEB ADDRESS BELOW FOR HELP.
- 2. DETERMINE THE SITE SPECIFIC REQUIRED DESIGN PRESSURE PROVIDED BY SEPARATE ENGINEERING, BY A LICENSED ENGINEER OR REGISTERED ÁRCHITECT, IN ACCORDANCE WITH THE APPLICABLE BUILDING CODE. (SEE LINK BELOW RIGHT FOR RESOURCES)
- FIND ALLOWABLE COMPOSITE PANEL CLEAR SPAN IN TABLES FOR APPROPRIATE PANEL DEPTH, FACING THICKNESS, AND EPS CORE DENSITY SELECTED.
- INDICATES VALUES NOT VALID FOR

## TABLE 1 NOTES:

- ALLOWABLE LOAD VALUES ARE BASED ON SIMPLY SUPPORTED SPANS WITH LOADS UNIFORMLY DISTRIBUTED. WHERE NON-UNIFORM LOADS ARE APPLIED TO THE PANEL, AN EQUIVALENT UNIFORM LOAD MUST BE DETERMINED FOR COMPARISON WITH THE VALUES WITHIN THIS TABLE BY A LICENSED PROFESSIONAL
- 2. ALLOWABLE LOADS ARE BASED ON PANEL STRENGTH. PANELS MUST BE INSTALLED WITH A CONTINUOUS MIN. WIDTH SUPPORT OF 1 INCH MIN. AT EACH END OF THE PANEL SPAN, CAPACITY OF END CONDITIONS MUST BE EVALUATED ON A SITE SPECIFIC BASIS.

\*TOTAL LOAD = SUM OF ALL LOADS (WIND, LIVE, DEAD, ETC.) ACTING IN THE WORST CASE LOAD COMBINATION AS DETERMINED PER SEPARATE ENGINEERING.

# NOTE REGARDING USE OF THIS DOCUMENT & USE OUTSIDE FLORIDA:

NON-SITE-SPECIFIC STRUCTURAL PERFORMANCE EVALUATION.
THIS PRODUCT EVALUATION IS VALID FOR USE IN **FLORIDA**ONLY. USE OF THIS EVALUATION REQUIRES A REVIEW &
CERTIFICATION BY A LOCAL DESIGN PROFESSIONAL WHO
SHALL BE RESPONSIBLE FOR THE PROPER ADAPTATION OF
THIS GENERAL PERFORMANCE EVALUATION TO ANY
SITE SPECIFIC PROJECT. CONTACT THIS CREICE AT SITE-SPECIFIC PROJECT. CONTACT THIS OFFICE AT ENGINEERINGEXPRESS.COM/QUOTE FOR ASSISTANCE WITH YOUR PROJECT-SPECIFIC NEEDS & FOR ADAPTATION & CERTIFICATION OF THIS DOCUMENT OUTSIDE OF FLORIDA.

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## TERMINOLOGY:

THE FOLLOWING ABBREVIATIONS APPEAR IN THIS APPROVAL: "ALUM" FOR "ALUMINUM, "ASD" FOR "ALLOWABLE STRESS DESIGN", "ASTM" FOR "AMERICAN SOCIETY FOR TESTING AND MATERIALS" "CS" FOR "CARBON STEEL", "EPS" FOR "EXPANDED POLYSTYRENE", "GA" FOR "GAUGE", "HVHZ" FOR "HIGH-VELOCITY HURRICANE ZONE", "L" FOR "LENGTH, "LB" FOR "POUND", "MAX" FOR "MAXIMUM, "N.T.S." FOR "NOT TO SCALE", "PSF" FOR "POUNDS PER SQUARE FOOT (lb/ft2)", "SPECS" FOR "SPECIFICATIONS", "&" FOR "AND". CONTACT ENGINEERING EXPRESS FOR ADDITIONAL ABBREVIATION/TERMINOLOGY CLARIFICATIONS.

## VISIT ECALC.IO/STRUCTALL

FOR SITE-SPECIFIC DEVIATIONS & MORE INFORMATION ABOUT THIS DOCUMENT OR SCAN THIS QR CODE

VISIT ENGINEERINGEXPRESS.COM/STORE FOR ADDITIONAL PLANS, REPORTS & RESOURCES



POSTAL ADDRESS:
2234 NORTH FEDERAL HWY #76
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SNAP-N-LOCK EPS FOAM CORE STRUCTURAL WALL PANELS (26GA STEEL FBC 8TH ED. (2023) - ASCE 7-23 350 BURBANK RD OLDSMAR, FL (813) 855

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MAXIMUM (ASD) ALLOWABLE **DESIGN PRESSURES:** 

VARIES AS NOTED IN TABLE 1

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VALID FOR PERMIT

## **DESIGN NOTES:**

1. POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY OTHERS ON A JOB-SPECIFIC BASIS IN ACCORDANCE WITH THE STRUCTURAL REQUIREMENTS OF THE 8TH EDITION FLORIDA BUILDING CODE (2023), AS WELL AS CURRENT VERSIONS OF THE FLORIDA RESIDENTIAL CODE, THE INTERNATIONAL BUILDING CODE AND THE INTERNATIONAL RESIDENTIAL CODE.

WORK HAS BEEN DESIGNED IN ACCORDANCE WITH THE STRUCTURAL REQUIREMENTS OF THE 2012/2015/2018/2021 INTERNATIONAL BUILDING & RESIDENTIAL CODES, AS WELL AS CURRENT VERSIONS OF THE FL, MN, NC, NJ, NY, OH, SC, & VA BUILDING CODES AS APPLICABLE. CODE ENFORCED COMPLIES WITH STATE OF SEAL AND IF MULTIPLE VERSIONS LISTED THEN MOST STRINGENT APPLIES. ASCE 7-10, 7-16, & 7-22 LOAD COMBINATIONS AS APPLICABLE

- SEISMIC DESIGN HAS NOT BEEN CONSIDERED.
- PRESSURE VALUES ON THIS APPROVAL ARE (ASD) ALLOWABLE DESIGN PRESSURES.
- DESIGN PRESSURES AS NOTED HEREIN ARE BASED ON A MAXIMUM TESTED PRESSURE DIVIDED BY A 2.0 FACTOR OF SAFETY. THEY SHALL BE ADJUSTED ACCORDINGLY AS NEED FOR SPECIFIC APPLICATIONS.
- 6. TO DEVIATE FROM LOADS, DEFLECTIONS, OR SPANS CONTAINED HEREIN. LINEAR INTERPOLATION OF THE ALLOWABLE SPAN TABLES LISTED HEREIN SHALL NOT BE PERMITTED. CONTACT A LICENSED ENGINEER OR REGISTERED ARCHITECT FOR ALTERNATE SPAN CALCULATIONS AS MAY BE REQUIRED

EPS CORE COMPOSITE PANELS SHALL BE CONSTRUCTED USING TYPE ASTM A653, CS, TYPE B HOT DIP GALVANIZED G90 COATED STEEL FACINGS. EXPANDED POLYSTYRENE FOAM SHALL HAVE TYPICAL DENSITY OF 1.0 PCF. THE EPS FOAM SHALL BE ADHERED TO THE STEEL FACING WITH MORAD M640 SERIES ADHESIVE (BY ROHM AND HAAS COMPANY). FABRICATION SHALL BE IN ACCORDANCE WITH APPROVED FABRICATION METHODS BY MANUFACTURER FOR ALL PANELS.

IF APPLICABLE, COMPOSITE PANELS SHALL COMPLY WITH CHAPTER 7 SECTION 720, CHAPTER 8 SECTION 803, CLASS A INTERIOR FINISH, AND CHAPTER 26 SECTION 2603 OF THE APPLICABLE INTERNATIONAL BUILDING CODE.

\*TOTAL LOAD = SUM OF ALL LOADS (WIND, LIVE, DEAD, ETC.) ACTING IN THE WORST CASE LOAD COMBINATION AS DETERMINED PER SEPARATE ENGINEERING.

## **GENERAL NOTES:**

- 1. THIS ENGINEERED PLAN IS COMPLIANT WITH THE STRUCTURAL REQUIREMENTS OF THE FLORIDA BUILDING CODE EIGHTH EDITION (2023)
- 2. FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE (HVHZ).
- THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
- 4. DESIGN CRITERIA BEYOND AS STATED HEREIN MAY REQUIRE ADDITIONAL SITE-SPECIFIC SEALED ENGINEERING.
- THIS DOCUMENT IS NOT INTENDED TO SERVE AS A COMPLETE PACKAGE FOR PERMIT. IT SHALL BE COMBINED WITH OTHER ENGINEERING TO DEVELOP A SYSTEM FOR DESIGN.
- 6. THE ARCHITECT/ENGINEER OF RECORD FOR THE PROJECT SUPERSTRUCTURE WITH WHICH THIS DESIGN IS USED SHALL BE RESPONSIBLE FOR THE INTEGRITY OF ALL SUPPORTING SURFACES TO THIS DESIGN WHICH SHALL BE COORDINATED BY THE PERMITTING CONTRACTOR.
- 7. THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS PERFORMANCE EVALUATION DOCUMENT.
- 8. THE CONTRACTOR SHALL CAREFULLY CONSIDER POSSIBLE IMPOSING LOADS, INCLUDING BUT NOT LIMITED TO ANY CONCENTRATED LOADS WHICH MAY JUSTIFY GREATER DESIGN CRITERIA. THIS ADDITIONAL LOAD CRITERIA SHALL BE PROPERLY ANALYZED BY A LICENSED ENGINEER OR REGISTERED ARCHITECT.
- 9. THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.
- 10. ENGINEER SEAL AFFIXED HERETO VALIDATE STRUCTURAL DESIGN AS SHOWN ONLY. USE OF THIS SPECIFICATION BY CONTRACTOR, et. al. INDEMNIFIES & SAVES HARMLESS THIS ENGINEER FOR ALL COST & DAMAGES INCLUDING LEGAL FEES & APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, & CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL. STATE & FEDERAL CODES & FROM DEVIATIONS OF THIS PLAN.
- 11. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
- ALTERATIONS ADDITIONS OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION
- 13. SAFEGUARDS MUST BE OBSERVED (NOT IN THIS CERTIFICATION

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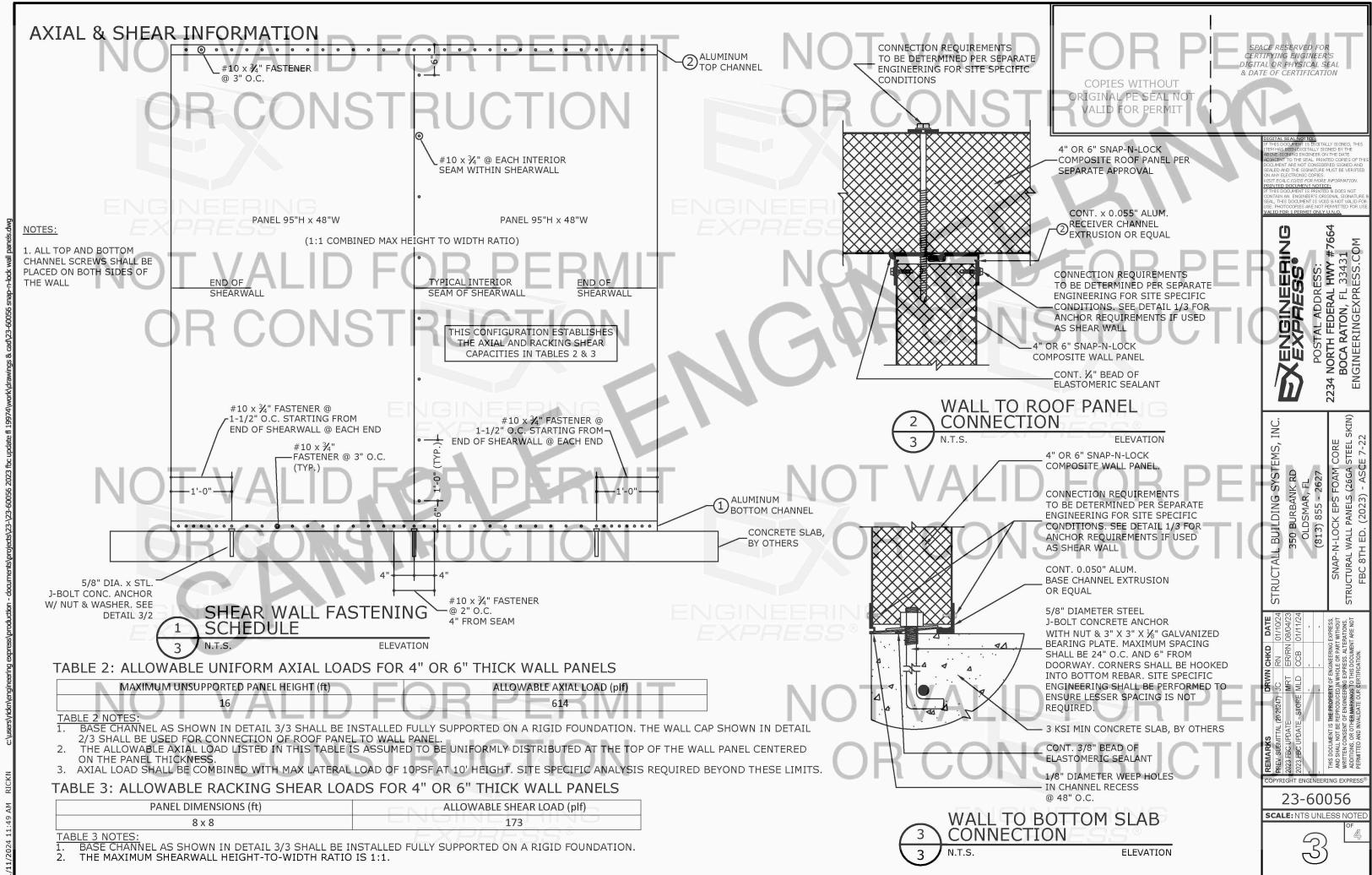
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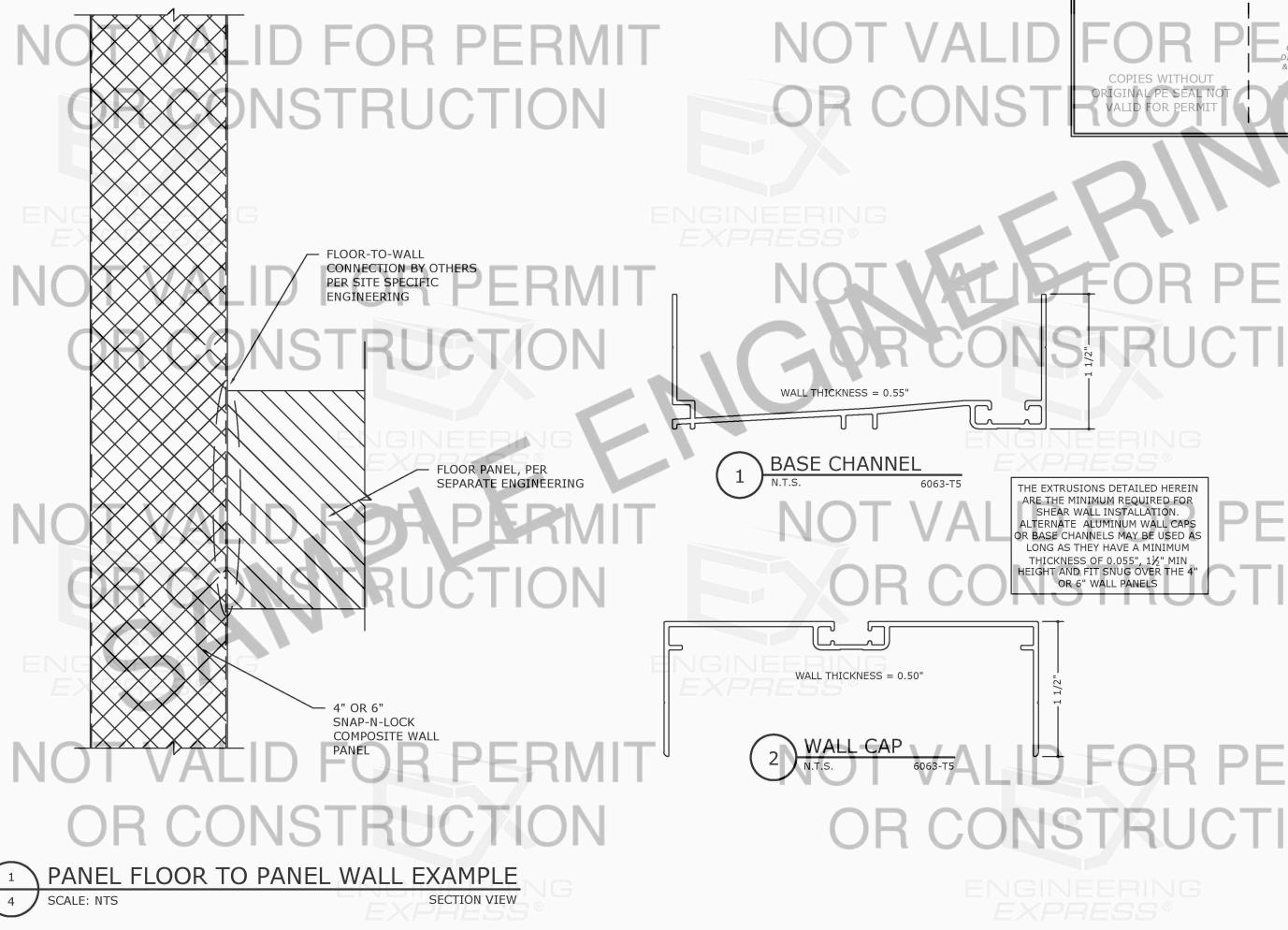
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