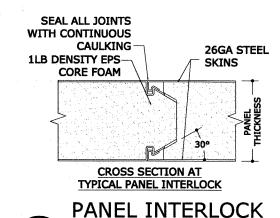
STRUCTURAL PANEL ISOMETRIC

N.T.S. (NOT INTENDED TO DEPICT A COMPLETE STRUCTURE)



DETAIL

DETAIL

DIRECTIVE FOR USE:

- DETERMINE TYPE OF ENCLOSURE TO BE COVERED
- (OPEN, SCREENED WALLS, OR FULLY ENCLOSED).
 DETERMINE THE SITE SPECIFIC REQUIRED DESIGN WIND PRESSURE PROVIDED BY SEPARATE ENGINEERING, BY A LICENSED ENGINEER OR REGISTERED ARCHITECT, IN ACCORDANCE WITH THE FLORIDA BUILDING CODE.
 FIND ALLOWABLE COMPOSITE PANEL CLEAR SPAN
- IN TABLES FOR APPROPRIATE PANEL DEPTH, FACING THICKNESS, AND EPS CORE DENSITY SELECTED.
- 7//// INDICATES VALUES NOT VALID FOR USE.
) INDICATES PRESSURES FOR ROOF PANELS ONLY

DEFLECTION NOTES:

- USE L/120 FOR ALL EXTERIOR WALLS AND INTERIOR PARTITIONS WITH FLEXIBLE FINISHES.
- USE L/180 FOR ALL VERTICAL MEMBERS NOT REQUIRED TO SUPPORT MATERIAL THAT HARDENS IN PLACE, IS BRITTLE OR LACKS RESISTANCE TO CRACKING CAUSED BY BENDING STRAINS. (HVHZ
- USE L/240 FOR ALL EXTERIOR WALLS AND INTERIOR PARTITIONS WITH BRITTLE FINISHES. USE L/80 FOR GROUP R-3 OCCUPANCIES ONLY, WITH WALL PANELS OF CARPORTS, CANOPIES. PATIO COVERS, UTILITY SHEDS AND SIMILAR MINOR STRUCTURES THAT ARE NOT CONSIDERED LIVING AREAS, WHERE THE ROOF PROJECTION IS 12 FEET OR LESS IN THE DIRECTION OF THE SPAN AND FOR MEMBERS SUPPORTING SCREENS ONLY. (HVHZ ONLY).
- (*) INDICATES ROWS FOR USE WITHIN THE HIGH VELOCITY HURRICANE ZONE ONLY. (i.e. MIAMI-DADE OR BROWARD COUNTY. ALL OTHER VALUES LISTED HEREIN SHALL BE USED OUTSIDE THE HVHZ UNLESS NOTED OTHERWISE. FOR ROOF PANELS: L/80 FOR SPANS </=12'-0" L/80 FOR SPANS >12'-0"
- SPAN VALUES GENERATED BASED ON A FACTOR OF

- TABLE 1 NOTES:
 1. THIS TABLE LISTS BOTH ULTIMATE AND ALLOWABLE PRESSURE VALUES (ULTIMATE PRESSURE = 1.67 * ALLOWABLE PRESSURE).

 ULTIMATE PRESSURES SHALL BE USED ONLY WHEN ULTIMATE PRESSURES ARE GIVEN FOR A CITE OFFICER OF A UNITAL ATTORNOOF A CITE OFFICER OF A UNITAL ATTORNOOF A CITE OFFICER OF A UNITAL ATTORNOOF A UNITAL ATTORNOOF A
- WHEN ULTIMATE PRESSURES ARE GIVEN FOR A SITE SPECIFIC INSTALLATION.
 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.
 DEFLECTION LIMITATIONS ARE BASED ON TABLE 1604.3 OF THE FLORIDA BUILDING CODE.
 ALLOWABLE LOADS ARE BASED ON PANEL STRENGTH. PANELS MIST BE INSTALLED WITH A
- STRENGTH. PANELS MUST BE INSTALLED WITH A CONTINUOUS WIDTH SUPPORT OF 1 INCH AT EACH END OF THE PANEL SPAN. CAPACITY OF END CONDITIONS MUST BE EVALUATED ON A SITE SPECIFIC BASIS.
 PANELS WITH THERMAL BARRIERS MUST BE
- INSTALLED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.

TABLE 1: ALLOWABLE CLEAR SPAN TRANSVERSE LOADS FOR 4" AND 6" THICK STRUCTURAL WALL

			4" Panels	6" Panels
Max	Max	Deflection	26ga Steel	26ga
Ultimate	Allowable	Limit	Skin	Steel Skin
Wall Load	Wall Load	(L/)		
+/- 17 psf	+/- 10 psf	400	1-LB EPS	1-LB EPS
+/- 17 psi +/- 17 psf		120	16'-0"	16'-0"
	+/- 10 psf	180 *	16'-0"	16'-0"
+/- 17 psf	+/- 10 psf	240	16'-0"	16'-0"
+/- 26 psf	+/- 15 psf	120	16'-0"	16'-0"
+/- 26 psf	+/- 15 psf	180 *	16'-0"	16'-0"
+/- 26 psf	+/- 15 psf	240	14'-8"	16'-0"
+/- 34 psf	+/- 20 psf	120	14'-4"	16'-0"
+/- 34 psf	+/- 20 psf	180 *	14'-4"	16'-0"
+/-34 psf	+/- 20 psf	240	13'-4"	16'-0"
+/- 42 psf	+/- 25 psf	120	12'-10"	15'-10"
+/- 42 psf	+/- 25 psf	180 *	12'-10"	15'-10"
+/- 42 psf	+/- 25 psf	240	12'-5"	15'-3"
+/- 51 psf	+/- 30 psf	120	11'-8"	14'-5"
+/- 51 psf	+/- 30 psf	180 *	11'-8"	14'-5"
+/- 51 psf	+/- 30 psf	240	11'-8"	14'-5"
+/- 59 psf	+/- 35 psf	120	10'-10"	13'-4"
+/- 59 psf	+/- 35 psf	180 *	10'-10"	13'-4"
+/- 59 psf	+/- 35 psf	240	10'-10"	13'-4"
+/- 66 psf	+/- 39 psf	120	10'-3"	12'-8"
+/- 66 psf	+/- 39 psf	180 *	10'-3"	12'-8"
+/- 66 psf	+/- 39 psf	240	10'-3"	12'-8"
+/- 76 psf	+/- 45 psf	120	9'-6"	11'-9"
+/- 76 psf	+/- 45 psf			
+/- 76 psf	+/- 45 psf	180 *	9'-6"	11'-9"
+/- 84 psf	+/- 50 psf	240	9'-6"	11'-9"
		120	9'-1"	11'-2"
+/- 84 psf	+/- 50 psf	180 *	9'-1"	11'-2"
+/- 84 psf	+/- 50 psf	240	9'-1"	11'-2"
+/- 92 psf	+/- 55 psf	120	8'-7"	10'-8"
+/- 92 psf	+/- 55 psf	180 *	8'-7"	10'-8"
+/- 92 psf	+/- 55 psf	240	8'-7"	10'-8"
+/- 101 psf	+/- 60 psf	120	8'-3"	10'-2"
+/- 101 psf	+/- 60 psf	180 *	8'-3"	10'-2"
+/- 101 psf	+/- 60 psf	240	8'-3"	10'-2"
+/- 109 psf	+/- 65 psf	120	7'-11"	9'-10"
+/- 109 psf	+/- 65 psf	180 *	7'-11"	9'-10"
+/- 109 psf	+/- 65 psf	240	7'-11"	9'-10"
+/- 117 psf	+/- 70 psf	120	7'-8"	9'-5"
+/- 117 psf	+/- 70 psf	180 *	7'-8"	9'-5"
+/- 117 psf	+/- 70 psf	240	7'-8"	9'-5"
+/- 131 psf	+/- 78 psf	120	7'-3"	8'-11"
+/- 131 psf	+/- 78 psf	180 *	7'-3"	8'-11"
+/- 131 psf	+/- 78 psf	240	7'-3"	8'-11"
+/- 134 psf	+/- 80 psf	120	77777	8'-10"
+/- 134 psf	+/- 80 psf	180 *		8'-10"
+/- 134 psf	+/- 80 psf	240	H/H/H	8'-10"
+/- 142 psf	+/- 85 psf	~~~~~		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
+/- 142 psi +/- 142 psf	+/- 85 psf	120	<i>\////</i>	8'-7"
	+/- 65 psi +/- 85 psf	180 *		8'-7"
+/- 142 psf		240		8'-7"
+/- 151 psf	+/- 90 psf	120		8'-4"
+/- 151 psf	+/- 90 psf	180 *		8'-4"
+/- 151 psf	+/- 90 psf	240		8'-4"
+/- 159 psf	+/- 95 psf	120		8'-1"
+/- 159 psf	+/- 95 psf	180 *		8'-1"
+/- 159 psf	+/- 95 psf	240		8'-1"
(†) +/- 34 psf	(†) +/- 20 psf	(80,180)*	14'-4"	16'-0"
(†) +/- 51 psf	(†) +/- 30 psf	(80,180)*	11'-8"	16'-0"

MAXIMUM ALLOWABLE **DESIGN PRESSURES:**

AS NOTED IN CLEAR SPAN (TABLE 1)

DESIGN NOTES:

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 GOVERNING CODE. SITE-SPECIFIC LOAD REQUIREMENTS FOR WIND LOAD, SNOW LOAD OR ANY LOAD COMBINATION SHALL BE DETERMINED IN ACCORDANCE WITH ASCE 7 AND THE FLORIDA SHALL BE DETERMINED IN ACCORDANCE WITH ASCE / AND THE FLORIDA BUILDING CODE SIXTH EDITION (2017) (AS APPLICABLE) BY SEPARATE ENGINEERING CERTIFICATION AND SHALL BE LESS THAN OR EQUAL TO THE POSITIVE OR NEGATIVE DESIGN PRESSURE CAPACITY VALUES LISTED HEREIN FOR ANY ASSEMBLY AS SHOWN.

ALLOWABLE LOAD VALUES ARE DERIVED FROM THE TEST REPORTS OUTLINED HEREIN AS WELL AS ICC REPORT #ESR-3152

GENERAL NOTES:

1. THIS SPECIFICATION HAS BEEN DESIGNED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE SIXTH EDITION (2017) FOR USE WITHIN AND OUTSIDE THE HIGH VELOCITY HURRICANE ZONE (HVHZ). CONTRACTOR SHALL INVESTIGATE AND CONFORM TO ALL LOCAL BUILDING CODE AMENDMENTS WHICH MAY APPLY. DESIGN CRITERIA BEYOND AS STATED HEREIN MAY REQUIRE ADDITIONAL SITE-SPECIFIC SEALED ENGINEERING. SEISMIC DESIGN HAS NOT BEEN CONSIDERED.

ADDITIONAL SITE-SPECIFIC SEALED ENGINEERING. SEISMIC DESIGN HAS NOT BEEN CONSIDERED.
2. COMPOSITE PANELS SHALL COMPLY WITH CHAPTER 7 SECTION 720 (2017 FBC), CHAPTER 8 SECTION 803, CLASS A INTERIOR FINISH, AND CHAPTER 26 SECTION 2603 OF THE 2017 FBC.
3. NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM.
4. 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.
5. SEPARATE SYSTE-SPECIEIC' SPALED ENGINEERING SHALL BE PEOLUTED.

DESIGN WHICH SHALL BE COORDINATED BY THE PERMITTING CONTRACTOR.

5. SEPARATE 'SITE-SPECIFIC' SEALED ENGINEERING SHALL BE REQUIRED IN ORDER TO DEVIATE FROM LOADS, DEFLECTIONS, OR SPANS CONTAINED HEREIN. LINEAR INTERPOLATION OF THE ALLOWABLE SPAN TABLES LISTED HEREIN SHALL NOT BE PERMITTED. CONTACT THIS ENGINEER FOR ALTERNATE SPAN CALCULATIONS AS MAY BE REQUIRED.

6. 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.

7. 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

CRITERIA SHALL BE PROPERLY ANALYZED BY A LICENSED ENGINEER OR REGISTERED ARCHITECT.

REGISTERED ARCHITECT.

8. 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 MANUIFACTUREP FOR ALL PANELS.

SHALL BE IN ACCORDANCE WITH APPROVED FABRICATION METHODS BY MANUFACTURER FOR ALL PANELS.

9. THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALL MEMBERS FROM DISSIMILAR MATERIALS TO PREVENT ELECTROLYSIS.

10. ENGINEER SEAL AFFIXED HERE TO VALIDATES 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 EARDLOATION. SYSTEM EDECTION. & CONSTBUCTION PRACTICES. MATERIAL FABRICATION, SYSTEM ERECTION, & CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, & FEDERAL CODES

SETOND 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.

12. ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT
ARE NOT PERMITTED AND INVALIDATE THIS CERTIFICATION.

TABLE VALUE DERIVATIONS:

PANEL PROPERTIES:

1. PANEL STRUCTURAL PROPERTIES DERIVED FROM CERTIFIED TEST REPORTS TT509014A, TT509014B & TT506010 BY TERRAPIN TESTING; TEST REPORT #STRL-001-02-02 BY PRI CONSTRUCTION MATERIALS TECHNOLOGIES; TEST REPORTS TT-506027B, 506027C, 506027D, 509014A, 509014B BY TERRAPIN TESTING, ESP012351P-1, ESP012351P-2, ESP012351P-3, ESP012351P-6, EXP012351P-6, EXP012351P-6, EXP012351P-6, EXP012351P-6, EXP012351P-9A BY ELEMENT MATERIALS TECHNOLOGY. ELEMENT MATERIALS TECHNOLOGY.

PANEL DEAD LOADS HAVE NOT BEEN FACTORED INTO
CALCULATIONS FOR WALL PANEL PROPERTIES.

PANEL DEAD LOADS HAVE BEEN FACTORED INTO CALCULATIONS

FRANK L. BENNARDO, P.E.

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SYSTEMS,

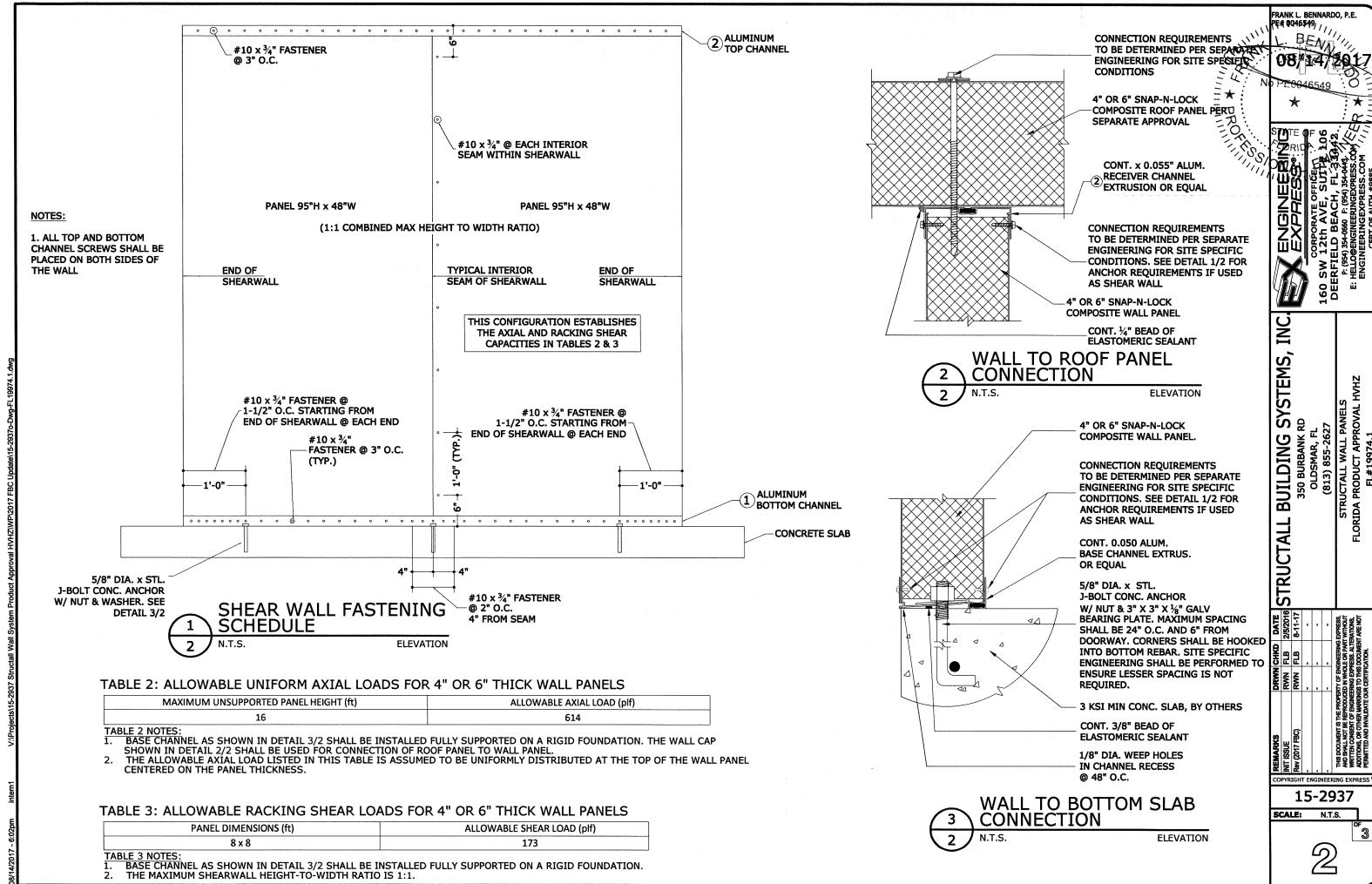
BUILDING

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SCALE: N.T.S.

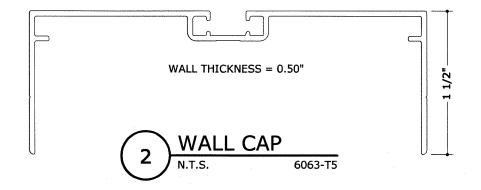
3



WALL THICKNESS = 0.55"

BASE CHANNEL 6063-T5

THE EXTRUSIONS DETAILED HEREIN
ARE THE MINIMUM REQUIRED FOR
SHEAR WALL INSTALLATION.
ALTERNATE ALUMINUM WALL CAPS
OR BASE CHANNELS MAY BE USED AS LONG AS THEY HAVE A MINIMUM THICKNESS OF 0.055", $1\frac{1}{2}$ " MIN HEIGHT AND FIT SNUG OVER THE 4" OR 6" WALL PANELS





FRANK L. BENNARDO, P.E. PE# 0046549

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SCALE: N.T.S.