

CONNECTOR TABLE

Uplift SP	Uplift SPF	Truss Connector	To Plate	To Truss/Rafter
805	905	SDWC15600		
400	290	H2	4-131"x1 1/2"	4-131"x1 1/2"
625	540	H2A	5-131"x1 1/2"	5-131"x1 1/2"
1040	1015	H10A	9-148"x1 1/2"	9-148"x1 1/2"
645	515	LTS12-20	6-148"x1 1/2"	6-148"x1 1/2"
950	850	MTS12-30	7-148"x1 1/2"	7-148"x1 1/2"
1415	1215	HTS16-30	8-148"x1 1/2"	8-148"x1 1/2"
1235	1235	LSTA21	8-148"x1 1/2"	8-148"x1 1/2"
1640	1460	MSTA24	9-148"x1 1/2"	9-148"x1 1/2"
1030	1030	CS20	7-148"x1 1/2"	7-148"x1 1/2"

Uplift SP Uplift SPF Stud Plate Ties

Uplift SP	Uplift SPF	Stud Plate Ties	To Stud	To Plate
552	535	SP1	4-148"x3"	4-148"x3"
1010	805	SP2	6-148"x3"	6-148"x3"
1280	1100	SP44B	12-148"x1 1/2"	wrap under or over plate
771	771	SP42A	10-148"x1 1/2"	wrap under or over plate
1235	1235	LSTA24	14-148"x1 1/2"	wrap under or over plate

Uplift SP Uplift SPF Holdowns @ Stemwall

Uplift SP	Uplift SPF	Holdowns @ Stemwall	To Stud / Post	To Plate
4235	3640	HTT4	18-162"x2 1/2"	12"x12" Titen HD
2145	1835	DTT22	8-SDS 1/4"x1 1/2"	12"x12" Titen HD
4235	3640	HTT4	18-162"x2 1/2"	12"x12" Titen HD
2145	1835	DTT22	8-SDS 1/4"x1 1/2"	12"x12" Titen HD

Uplift SP Uplift SPF Post Bases @ Stemwall

Uplift SP	Uplift SPF	Post Bases @ Stemwall	To Post	Anchor
1900	1900	ABU44Z	12-162"x3 1/2"	5/8"x7" Drill & Epoxy
2475	2475	ABU66Z	12-162"x3 1/2"	5/8"x7" Drill & Epoxy

Uplift SP Uplift SPF Post Bases @ Mono

Uplift SP	Uplift SPF	Post Bases @ Mono	To Post	Anchor
1900	1900	ABU44Z	12-162"x3 1/2"	5/8"x7" Drill & Epoxy
2475	2475	ABU66Z	12-162"x3 1/2"	5/8"x7" Drill & Epoxy

EXTERIOR WALL STUD TABLE FOR SPF #2 STUDS

THIS STUD HEIGHT TABLE IS PER 2012 WFCM, TABLE 3.20B5, EXTERIOR LOAD BEARING & NON LOAD BEARING STUD LENGTHS FOR WALLS WITH OSB EXTERIOR AND 1/2" GYP INTERIOR RESISTING INTERIOR ZONE WINDLOADS, 130 MPH EXPOSURE C, STUD DEFLECTION LIMIT H/40 (NOT OK FOR BRITTLE FINISH). STUD SPACINGS SHALL BE MULTIPLIED BY 0.8 FOR FRAMING LOCATED WITHIN 4 FEET OF CORNERS FOR END ZONE LOADING. (END ZONE EXAMPLE 16" O.C. x 0.8 = 12.8" O.C.)

Uplift	Stud Height
(1) 2x4 @ 16" OC	TO 10'-1" STUD HEIGHT
(1) 2x4 @ 12" OC	TO 11'-2" STUD HEIGHT
(1) 2x6 @ 16" OC	TO 15'-7" STUD HEIGHT
(1) 2x6 @ 12" OC	TO 17'-3" STUD HEIGHT

GRADE & SPECIES TABLE

	Fb	E
2x8	SP #2	925 1.4
2x10	SP #2	800 1.4
2x12	SP #2	750 1.4
GLB	24F-V3 SP	2600 1.9
LSL	TIMBERSTRAND	1700 1.7
LVL	MICROLAM	2950 2.0
PSL	PARALAM	2900 2.0

GENERAL NOTES:

TRUSSES: TRUSSES SHALL BE DESIGNED BY A FLORIDA LICENSED ENGINEER IN ACCORDANCE WITH THE FBCR. TRUSS ENGINEERING SHALL INCLUDE TRUSS DESIGN, PLACEMENT PLANS, TEMPORARY AND PERMANENT BRACING DETAILS, TRUSS-TO-TRUSS CONNECTIONS, AND UPLIFT AND REACTION LOADS FOR ALL BEARING LOCATIONS. TRUSS ENGINEERING IS THE RESPONSIBILITY OF THE TRUSS MANUFACTURER AND SHALL BE SIGNED & SEALED BY THE MANUFACTURER'S DESIGN ENGINEER. IT IS THE BUILDER'S RESPONSIBILITY TO VERIFY THE TRUSS DESIGNER FULLY SATISFIED ALL THE ABOVE REQUIREMENTS AND TO SELECT UPLIFT CONNECTIONS BASED ON TRUSS ENGINEERING UPLIFT AND PROVIDE FOOTINGS FOR INTERIOR BEARING WALLS. BUILDER IS TO TRUSS ENGINEERING TO WIND LOAD ENGINEER FOR REVIEW OF TRUSS REACTIONS ON THE BUILDING STRUCTURE. STRAP 2X6 RAFTERS WITH MIN. UPLIFT CONNECTION 45LB EACH END, 2X6 RAFTERS 70 LB EACH END.

SITE PREPARATION: SITE ANALYSIS AND PREPARATION IS NOT PART OF THIS PLAN FOUNDATION: CONFIRM THAT THE FOUNDATION DESIGN & SITE CONDITIONS MEET GRADING REQUIREMENTS ASSUME 1500 PSF BEARING CAPACITY UNLESS VISUAL OBSERVATION OR SOILS TEST PROVES OTHERWISE.

CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS, F_c = 2500 PSI.

WELDED WIRE REINFORCED SLAB: 6" x 11'4" x 11'4" F_y = 60KSI. WELDED WIRE REINFORCEMENT FABRIC (W.W.M.) CONFORMING TO ASTM A185. LOCATED IN MIDDLE OF THE SLAB, SUPPORTED WITH APPROVED MATERIALS OR SUPPORTS AT SPACINGS NOT TO EXCEED 7'.

FIBER CONCRETE SLAB: CONCRETE SLABS ON GROUND CONTAINING SYNTHETIC FIBER REINFORCEMENT FIBER LENGTH 1/2 INCH TO 2 INCHES. DOSAGE AMOUNTS FROM 0.75 TO 1.5 POUNDS PER CUBIC YARD PER THE MANUFACTURER'S RECOMMENDATIONS. FIBERS TO COMPLY WITH ASTM C 1119. SUPPLIER TO PROVIDE ASTM C 1119 CERTIFICATION OF COMPLIANCE WHEN REQUESTED BY BUILDING OFFICIAL.

CONTROL JOINTS: WHERE SPECIFIED, SAWN CONTROL JOINTS IN SLAB-ON-GRADE SHALL BE CUT IN ACCORDANCE WITH ACI 302. JOINTS SHALL BE CUT WITHIN 12 HOURS OF SLAB PLACEMENT. THE LENGTH / WIDTH RATIO OF SLAB REBAR SHALL NOT EXCEED 1.5 AND TYPICAL SPACING OF CUTS TO BE 12FT. DO NOT CUT W/WM OR REINFORCING STEEL. (RECOMMENDED LOCATION OF CONTROL JOINTS IS SUB-BEAM AND JOINER AND CONTRACTOR'S APPROVAL. THE CONTROL JOINTS ARE NOT INTENDED TO PREVENT CRACKS BUT RATHER TO ENCOURAGE THE SLAB TO CRACK ON A GIVEN LINE.)

REBAR: ASTM A615, GRADE 60, DEFORMED BARS, F_y = 60KSI. ALL LAP SPICES 4' x 0' DB (2' FOR BEARING UNO). ALL REINFORCEMENT SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI 315-96, U.N.O.

ROOF SHEATHING: ALL ROOFS ARE HORIZONTAL DIAPHRAGMS, MEANING, UNBLOCKED, APPLIED PERPENDICULAR TO FRAMING, OVER A MINIMUM OF 3 FRAMING MEMBERS, WITH PANELS STAGGERED.

STRUCTURAL CONNECTORS: MANUFACTURERS AND PRODUCT NUMBER FOR CONNECTORS, ANCHORS, AND REINFORCEMENT ARE LISTED FOR EXAMPLE NOT ENDORSEMENT. AN EQUIVALENT DEVICE OF THE SAME OR OTHER MANUFACTURER CAN BE SUBSTITUTED FOR ANY DEVICES LISTED IN THE EXAMINER'S AS LONG AS IT MEETS THE REQUIRED LOAD CAPACITIES. MANUFACTURER'S INSTALLATION INSTRUCTIONS MUST BE FOLLOWED TO ACHIEVE RATED LOADS.

ANCHOR BOLTS: A-307 ANCHOR BOLTS WITH MINIMUM EMBEDMENT AS SPECIFIED IN DRAWINGS BUT NOT LESS THAN 7" IN CONCRETE OR REINFORCED BOND BEAM OR 15" IN GROUTED CMU.

BUILDER'S RESPONSIBILITY:
THE BUILDER AND OWNER ARE RESPONSIBLE FOR THE FOLLOWING, WHICH ARE SPECIFICALLY NOT PART OF THE WIND LOAD ENGINEER'S SCOPE OF WORK.
CONFIRM SITE CONDITIONS, FOUNDATION BEARING CAPACITY, GRADE AND BACKFILL HEIGHT, WIND SPEED AND DERRIS ZONE, AND FLOOD ZONE.
PROVIDE MATERIALS AND CONSTRUCTION TECHNIQUES, WHICH COMPLY WITH FBCR REQUIREMENTS FOR THE STATED WIND VELOCITY AND DESIGN PRESSURES.
PROVIDE A CONTINUOUS LOAD PATH FROM TRUSSES TO FOUNDATION. IF YOU BELIEVE THE PLAN OMMITS A CONTINUOUS LOAD PATH CONNECTION, CALL THE WIND LOAD ENGINEER IMMEDIATELY.
VERIFY THE TRUSS MANUFACTURER'S SEAL DESIGN INCLUDES TRUSS DESIGN, PLACEMENT PLANS, TEMPORARY AND PERMANENT BRACING DETAILS, TRUSS-TO-TRUSS CONNECTIONS, AND UPLIFT AND REACTION LOADS FOR ALL BEARING LOCATIONS.

ROOF SYSTEM DESIGN:
THE SEAL ON THESE PLANS FOR COMPLIANCE WITH FBCR, IS BASED ON REACTIONS, UPLIFTS, AND BEARING LOCATIONS IN TRUSS ENGINEERING SUBMITTED TO THE WIND LOAD ENGINEER. IT IS THE RESPONSIBILITY OF THE BUILDER TO CHECK ALL DETAILS OF THE COMPLETE ROOF SYSTEM DESIGN SUBMITTED BY THE TRUSS MANUFACTURER AND HAVE IT SIGNED AND SEALED BY A DESIGN PROFESSIONAL FOR CORRECT APPLICATION OF FBCR REQUIRED LOADS AND ANY SPECIAL LOADS. THE BUILDER IS RESPONSIBLE TO REVIEW EACH INDIVIDUAL TRUSS MEMBER AND THE TRUSS ROOF SYSTEM AS A WHOLE AND TO PROVIDE RESTRAINT FOR ANY LATERAL BRACING. THE BUILDER SHOULD USE CARE AND ATTENTION TO DESIGN AND DESIGN BECAUSE THE WIND LOAD ENGINEER IS SPECIFICALLY NOT RESPONSIBLE FOR THE TRUSS LAYOUT WHICH WAS CREATED BY THE TRUSS MANUFACTURER AND THE TRUSS DESIGN AND THE SO DESIGN RESPONSIBILITY FOR THE LAYOUT PER NOTES ON THEIR SEALED TRUSS SHEETS.

MASONRY NOTE:
MASONRY CONSTRUCTION AND MATERIALS FOR THIS PROJECT SHALL CONFORM TO ALL REQUIREMENTS OF "SPECIFICATION FOR MASONRY STRUCTURES" (ACI 530.1/ASCE 6/TMS 602). THE CONTRACTOR AND MASON MUST IMMEDIATELY, BEFORE PROCEEDING, NOTIFY THE ENGINEER OF ANY CONFLICTS BETWEEN ACI 530.1-02 AND THE DESIGN DRAWINGS. ANY EXCEPTIONS TO ACI 530.1-02 MUST BE APPROVED BY THE ENGINEER IN WRITING.

DESIGN CRITERIA & LOADS:

BUILDING CODE	8TH EDITION FLORIDA BUILDING CODE RESIDENTIAL (2023)
CODE FOR DESIGN LOADS	ASCE 7-22
BASIC WIND SPEED (ASCE 7-22, 3S GUST)	130 MPH
WIND EXPOSURE (BUILDER MUST FIELD VERIFY)	C
TOPOGRAPHIC FACTOR (BUILDER MUST FIELD VERIFY)	1
RISK CATEGORY	ENCLOSED
INTERNAL PRESSURE COEFFICIENT	0.18
ROOF ANGLE	7-45 DEGREES
MEAN ROOF HEIGHT	35 FT
C&D DESIGN PRESSURES	SEE TABLE
FLOOR LOADING	
ROOMS OTHER THAN SLEEPING ROOM	40 PSF LIVE LOAD
SLEEPING ROOMS	30 PSF LIVE LOAD
ROOF LOADING	
FLAT OR < 2	20 PSF LIVE LOAD
4:12 TO < 12:12	16 PSF LIVE LOAD
12:12 & GREATER	12 PSF LIVE LOAD
SOIL BEARING CAPACITY	1500 PSF
FLOOD ZONE	THIS BUILDING IS NOT IN THE FLOOD ZONE

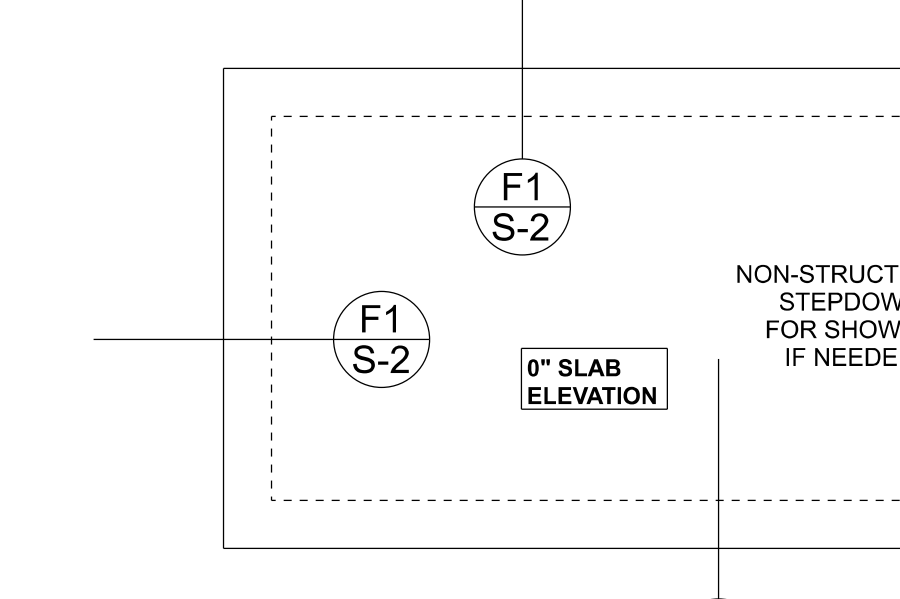
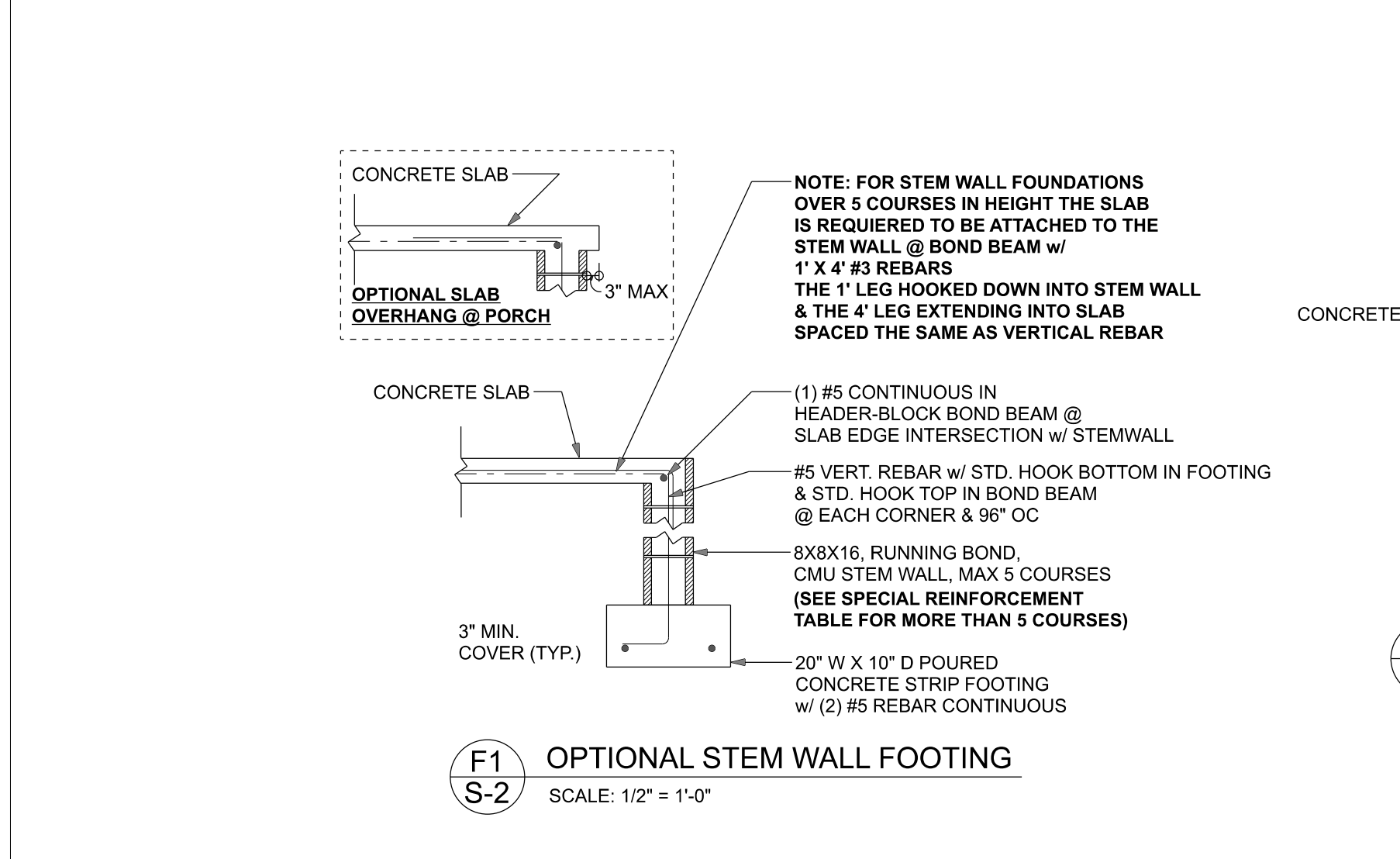
COMPONENT & CLADDING DESIGN PRESSURES 130 MPH (EXP C)

EFFECTIVE WIND AREA (FT ²)	ZONE 4 INTERIOR	ZONE 4 END 4 FROM ALL OUTSIDE CORNER
0-20	+25.6(Vasd)	-27.8(Vasd)
0-20	+42.8(Vu1)	-46.2(Vu1)
20-7	+22.6(Vasd)	-25.5(Vasd)
16.7 GARAGE DOOR	+21.7(Vasd)	-24.1(Vasd)

TALL STEM WALL TABLE:
The table assumes 40 ksi for #5 rebar and 60 ksi for #7 & #8 rebar with 6" hook in the footing and bent 24" into the reinforced slab at the top. The vertical steel is to be placed toward the tension side of the CMU wall (away from the soil pressure, within 2" of the exterior side of the wall).

STEM WALL HEIGHT (FEET)	UNBALANCED BACKFILL HEIGHT	VERTICAL REINFORCEMENT FOR 8" CMU STEM WALL (INCHES O.C.)			VERTICAL REINFORCEMENT FOR 12" CMU STEM WALL (INCHES O.C.)		
		#5	#7	#8	#5	#7	#8
3.3	3.0	96	96	96	96	96	96
4.0	3.7	96	96	96	96	96	96
4.7	4.3	88	96	96	96	96	96
5.3	5.0	56	96	96	96	96	96
6.0	5.7	40	80	96	80	96	96
6.7	6.3	32	56	80	56	96	96

THIS FOUNDATION DESIGN IS FOR RELATIVELY FLAT GRADE ONLY. IF FOUNDATION IS ON A STEEP SLOPE THAT EXCEEDS 1' IN 12', CONTACT ENGINEER BEFORE CONSTRUCTION FOR ADDITIONAL ENGINEERING



ACTUAL vs REQUIRED SHEARWALL

	TRANSVERSE	LONGITUDINAL
ACTUAL	6732 LBF	12474 LBF
REQUIRED	2695 LBF	1364 LBF

