

**ANCHOR TABLE**

OBTAIN UPLIFT REQUIREMENTS FROM TRUSS MANUFACTURER'S ENGINEERING

TRUSS CONNECTOR	UPLIFT SYP	UPLIFT SPF	F1 SYP	F2 SYP	F1 SPF	F2 SPF	TO RAFTER/TRUSS	TO PLATES
H5	455	265	115	200	100	170	4-8d x 1 1/2"	4-8d x 1 1/2"
H3	415	290	125	160	105	140	4-8d x 1 1/2"	4-8d x 1 1/2"
H2.5	415	365	150	130	130	130	5-8d x 1 1/2"	5-8d x 1 1/2"
H2.5A	480	480	110	110	110	110	5-8d x 1 1/2"	5-8d x 1 1/2"
H6	950	820					8-8d	8-8d
H8	745	565					5-10d x 1 1/2"	5-10d x 1 1/2"
H14-1	1465	1050	515	265	480	245	12-8d x 1 1/2"	13-8d
H14-2	1465	1050	515	265	480	245	12-8d x 1 1/2"	15-8d
H10	890	850	585	525	505	450	8-8d x 1 1/2"	8-8d x 1 1/2"
H10-2	760	655	455	395	390	340	8-10d	6-10d
H16	1470	1265					2-10d x 1 1/2"	10-10d x 1 1/2"
H16-2	1470	1265					2-10d x 1 1/2"	10-10d x 1 1/2"
LTS12 - LTS20	1000	620					6-10d x 1 1/2"	6-10d x 1 1/2"
MTS12 - MTS30	1000	860					7-10d x 1 1/2"	7-10d x 1 1/2"
HTS16 - HTS30	1450	1245					12-10d x 1 1/2"	12-10d x 1 1/2"

**HEAVY GIRDER TIEDOWNS**

	TO FOUNDATION
LGT2	2050
LGT3-SDS2.5	3685
LGT4-SDS3	4060
MGT	3965
HGT-2	10980
HGT-3	10530
HGT-4	9250

**STUD STRAP CONNECTOR**

	TO STUDS	TO FOUNDATION
SSP DOUBLE TOP PLATE	435	435
SSP SINGLE SILL PLATE	455	420
DSP DOUBLE TOP PLATE	825	825
DSP SINGLE SILL PLATE	825	600
SP1	585	535
SP2	1065	605
SP4	885	760
SP4H	1240	1065
SP6	885	760
SP6H	1240	1065
LSTA18	1235	1110
LSTA21	1235	1235
CS20	1030	1030
CS16	1765	1765

**STUD ANCHORS**

	TO STUDS	TO FOUNDATION
LTT19	1350	1305
LTT131	2310	2310
HD2A	2775	2570
HTT16	4175	3685
HTT22	5260	5250
ABU44	2200	2200
ABU66	2300	2300
ABU88	2320	2320

(1) w/ INSTALLATION OF 4-16ds OPTIONAL NAIL HOLES  
(2) FOR SYP GIRDER & SPF STUDS

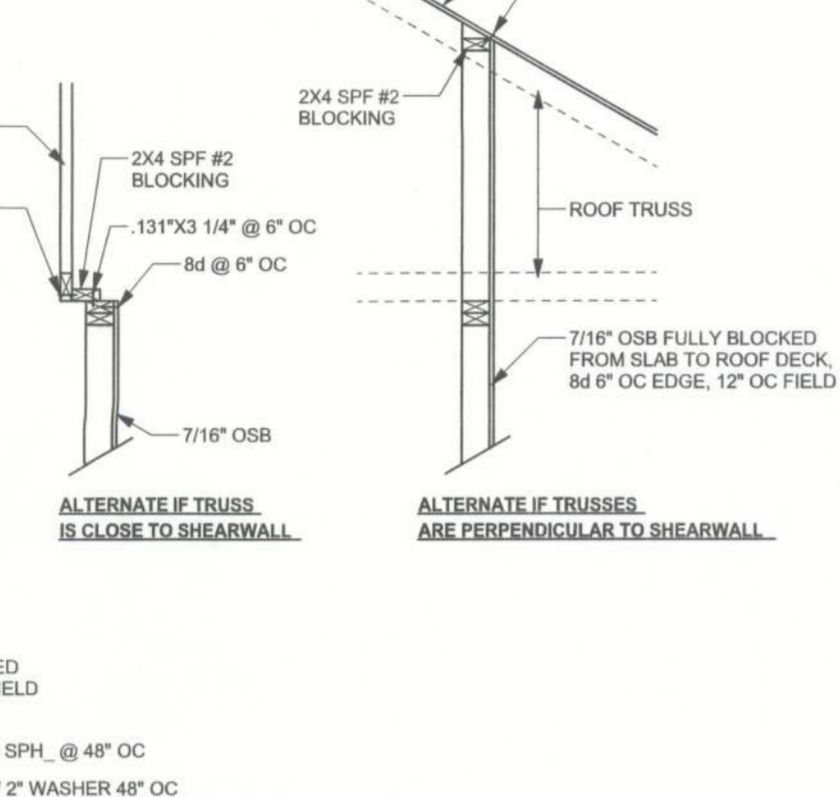
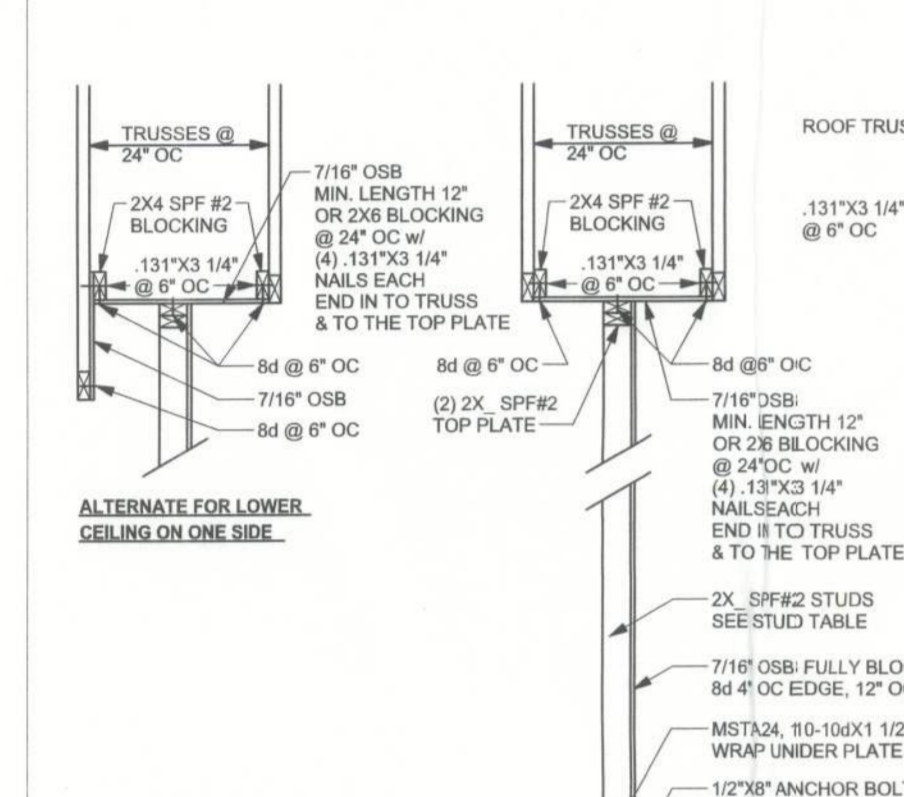
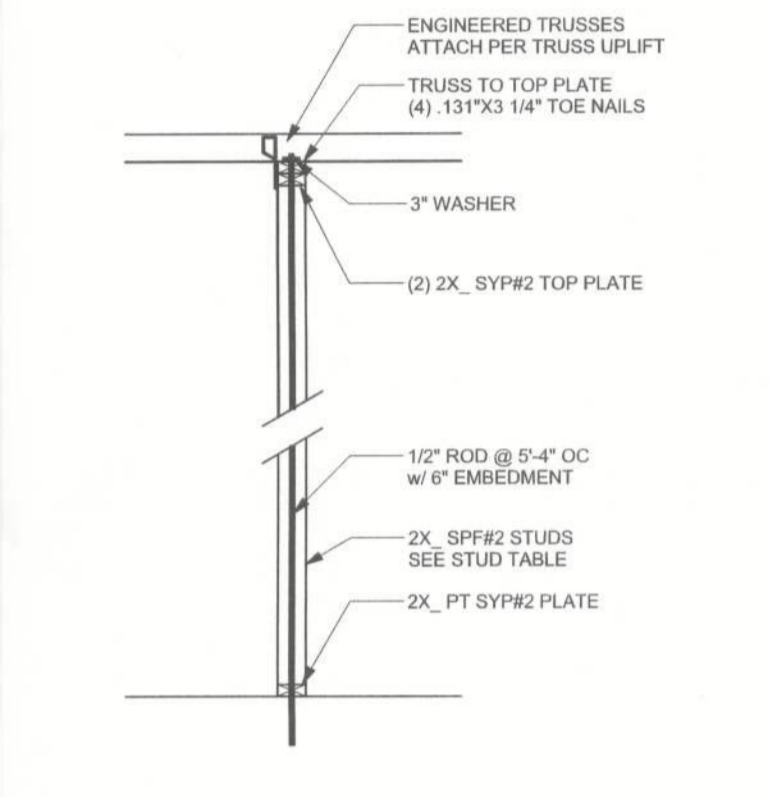
**EXTERIOR WALL STUD TABLE FOR SPF #2 STUDS**

(1) 2x4 @ 16" OC	TO 11'-8" STUD HEIGHT
(1) 2x4 @ 12" OC	TO 13'-0" STUD HEIGHT
(1) 2x6 @ 16" OC	TO 18'-0" STUD HEIGHT
(1) 2x6 @ 12" OC	TO 20'-0" STUD HEIGHT

THIS STUD HEIGHT TABLE IS PER WFCM 2001, TABLE 3.20B. EXTERIOR LOAD BEARING & NON LOAD BEARING STUD LENGTHS RESISTING INTERIOR ZONE WINDLOADS 110 MPH EXPOSURE B. STUD SPACINGS SHALL BE MULTIPLIED BY 0.85 FOR FRAMING LOCATED WITHIN 4 FEET OF CORNERS FOR END ZONE LOADING. EXAMPLE: 16" O.C. x 0.85 = 13.6" O.C.

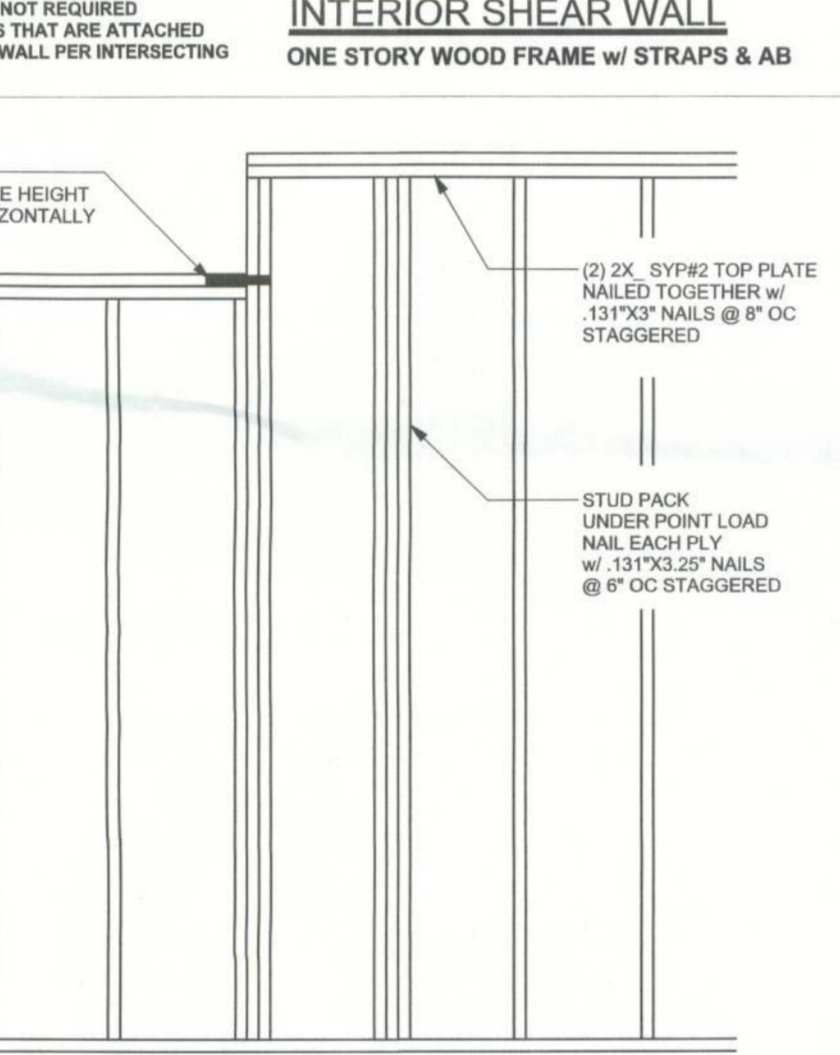
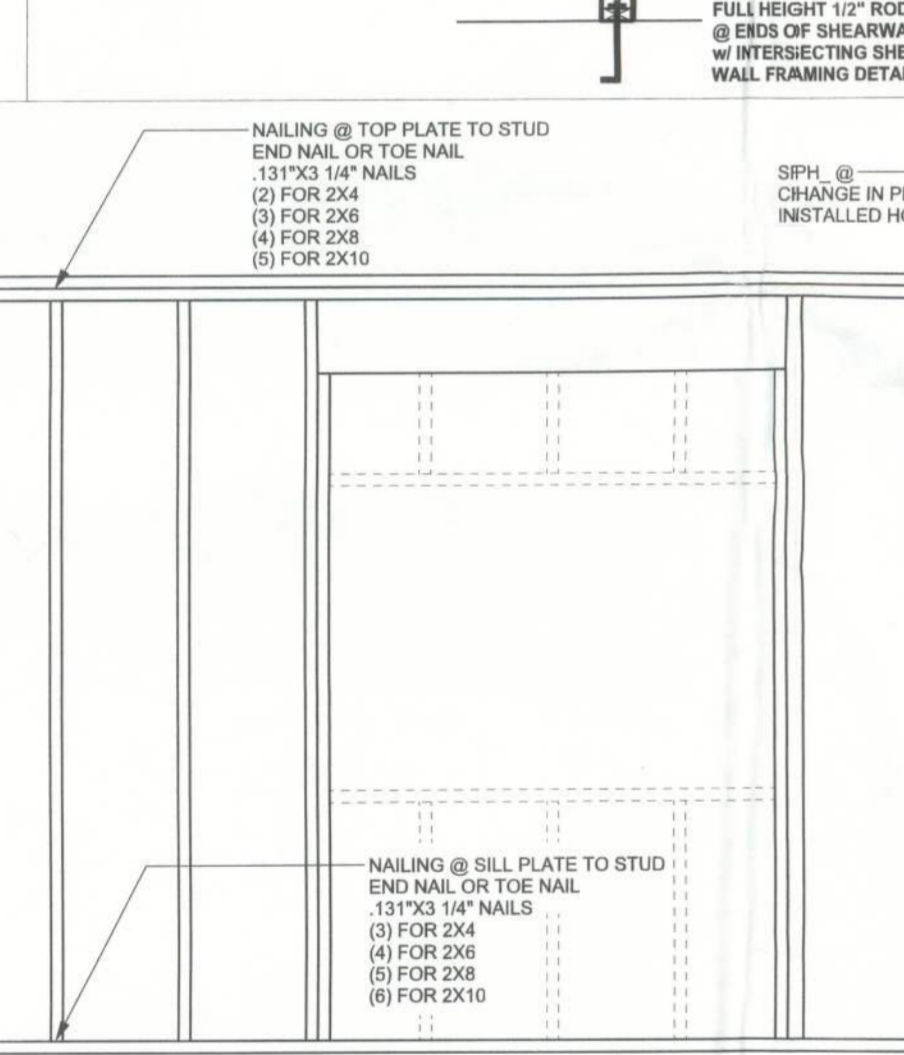
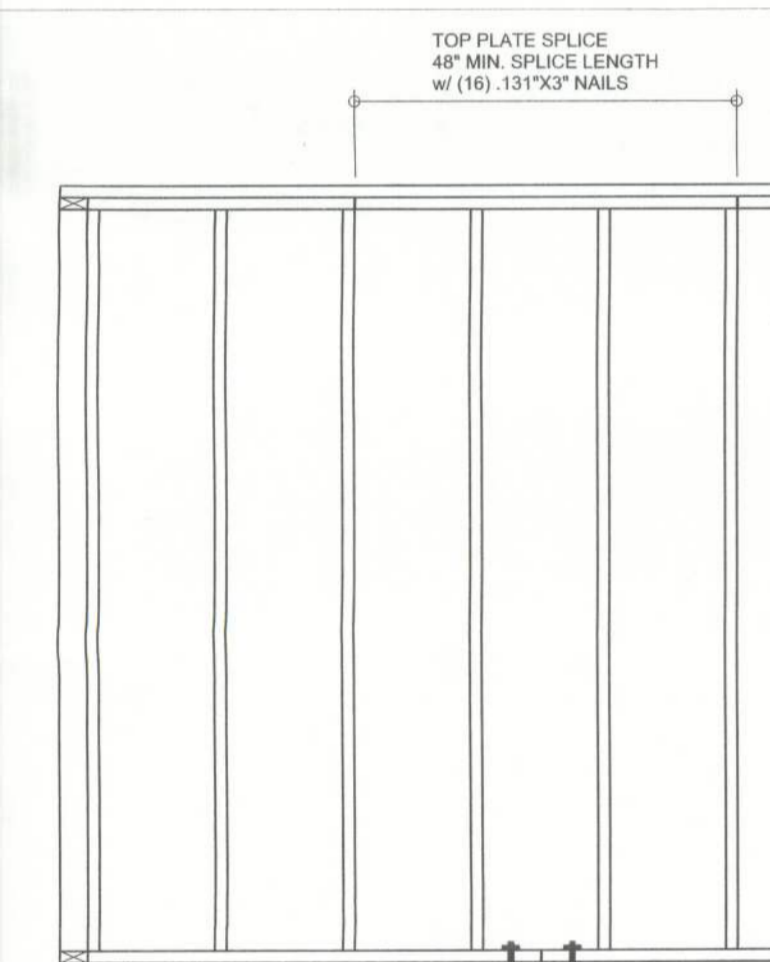
**GRADE & SPECIES TABLE**

	Fb (psi)	E (10 <sup>3</sup> psi)
2x8 SYP #2	1200	1.6
2x10 SYP #2	1050	1.6
2x12 SYP #2	975	1.6
GLB 24F-V3 SP	2400	1.8
LSL TIMBERSTRAND	1700	1.7
LVL MICROLAM	2900	2.0
PSL PARALAM	2900	2.0

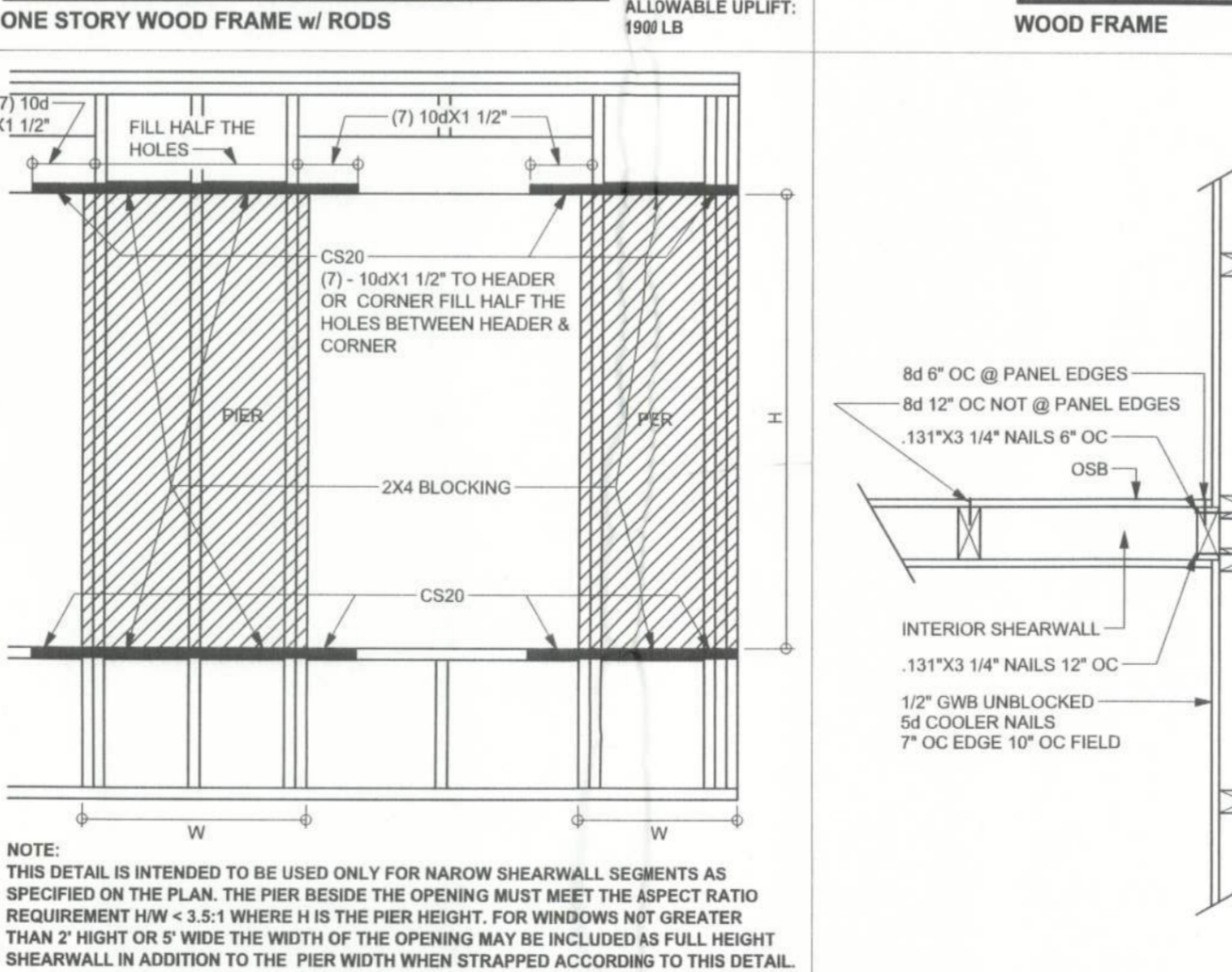


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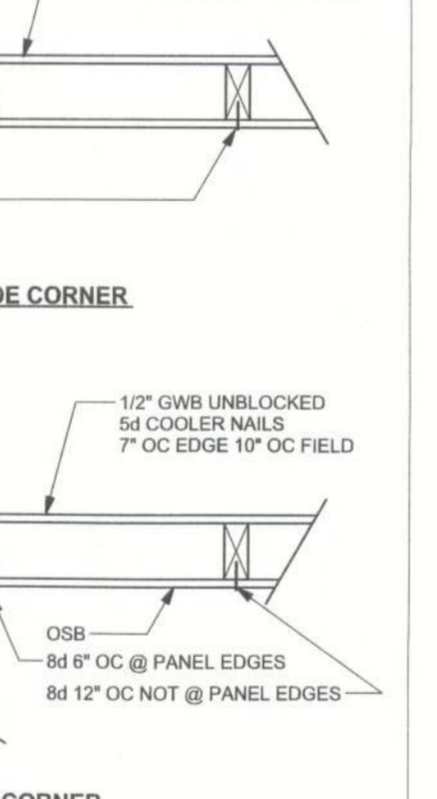
**(TYP.) WALL CONNECTIONS**



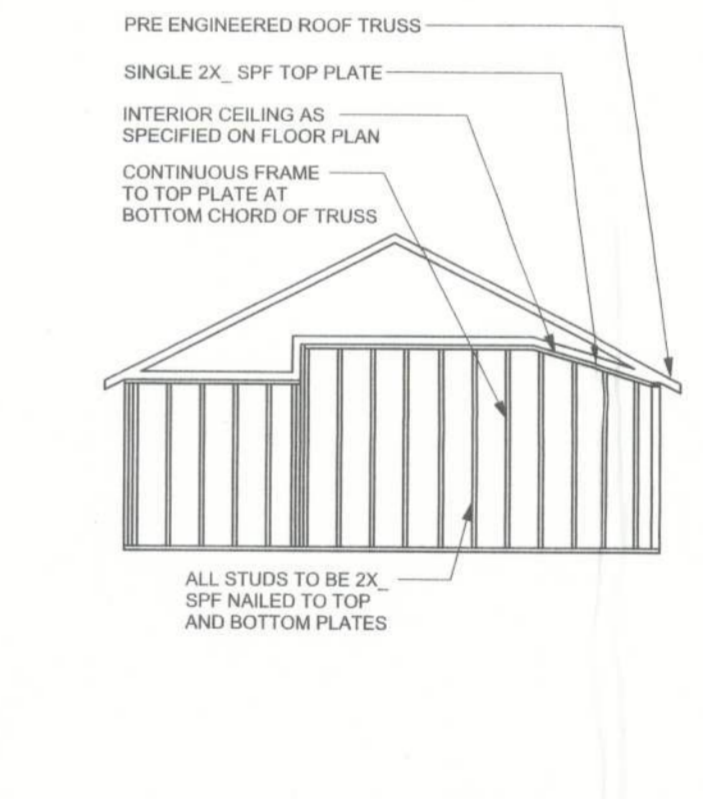
**ALTERNATE CONNECTION WHERE ROD CANNOT BE PLACED IN WALL**



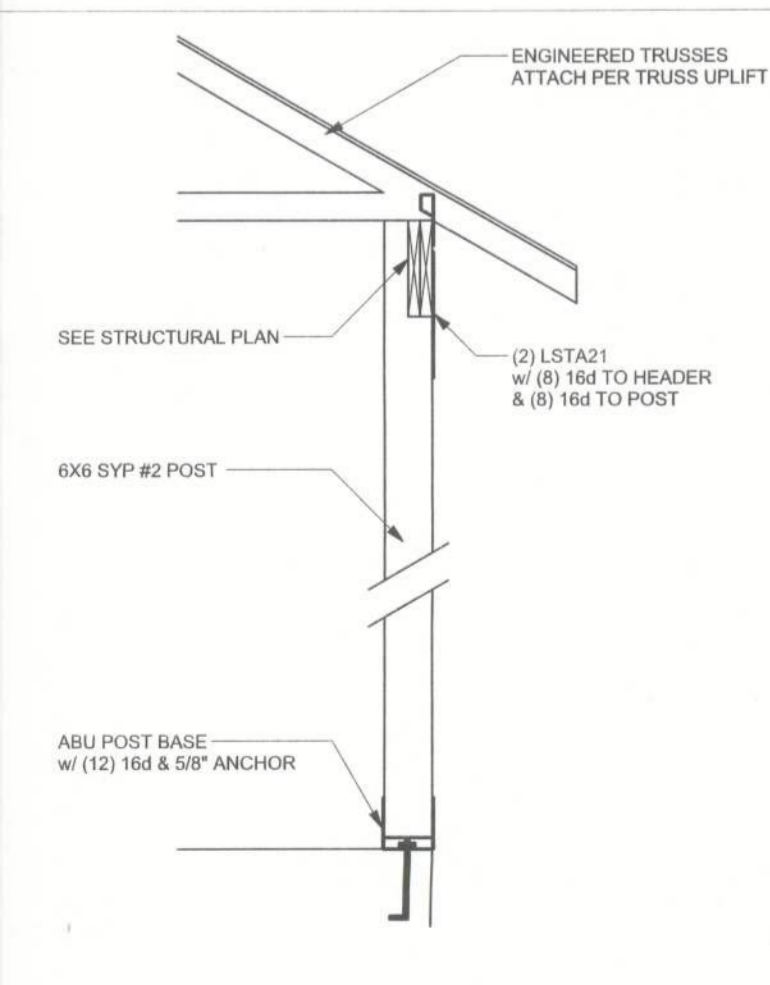
**(TYP.) CORNER FRAMING**



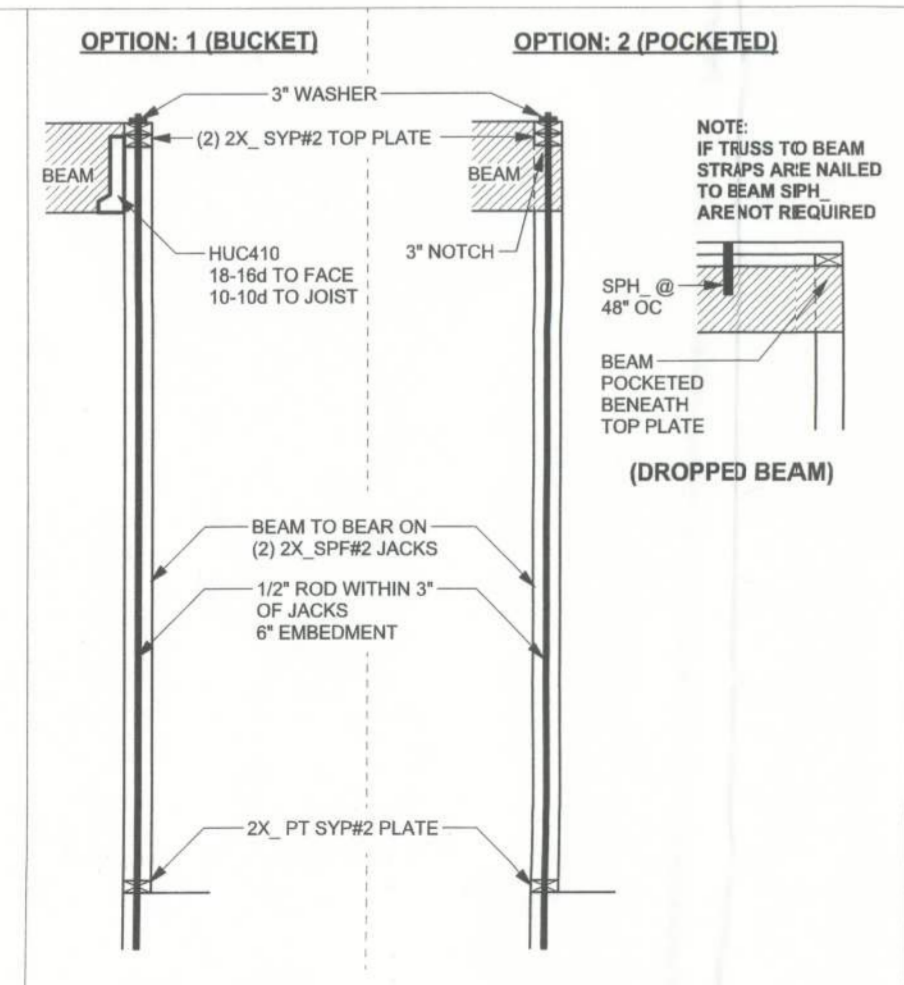
**CONTINUOUS FRAME TO CEILING DIAPHRAGM DETAIL**



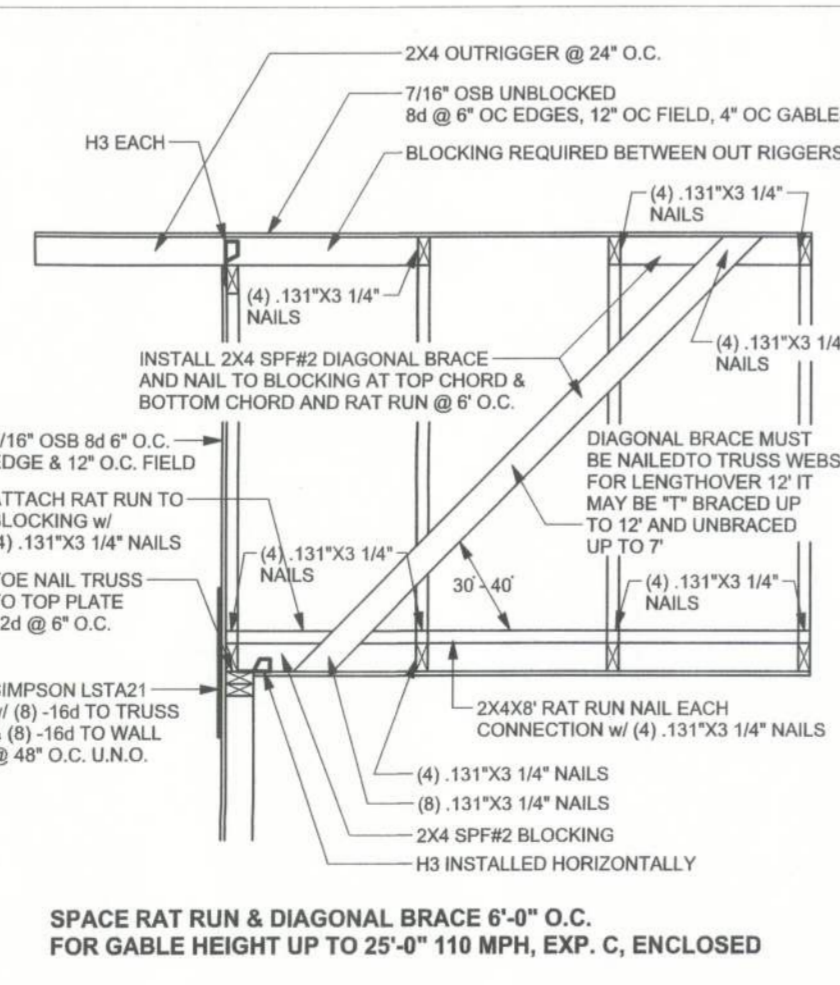
**(TYP.) PORCH POST**



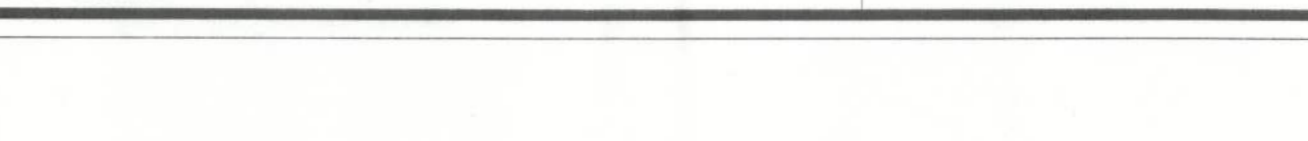
**(TYP.) BEAM TO WALL**



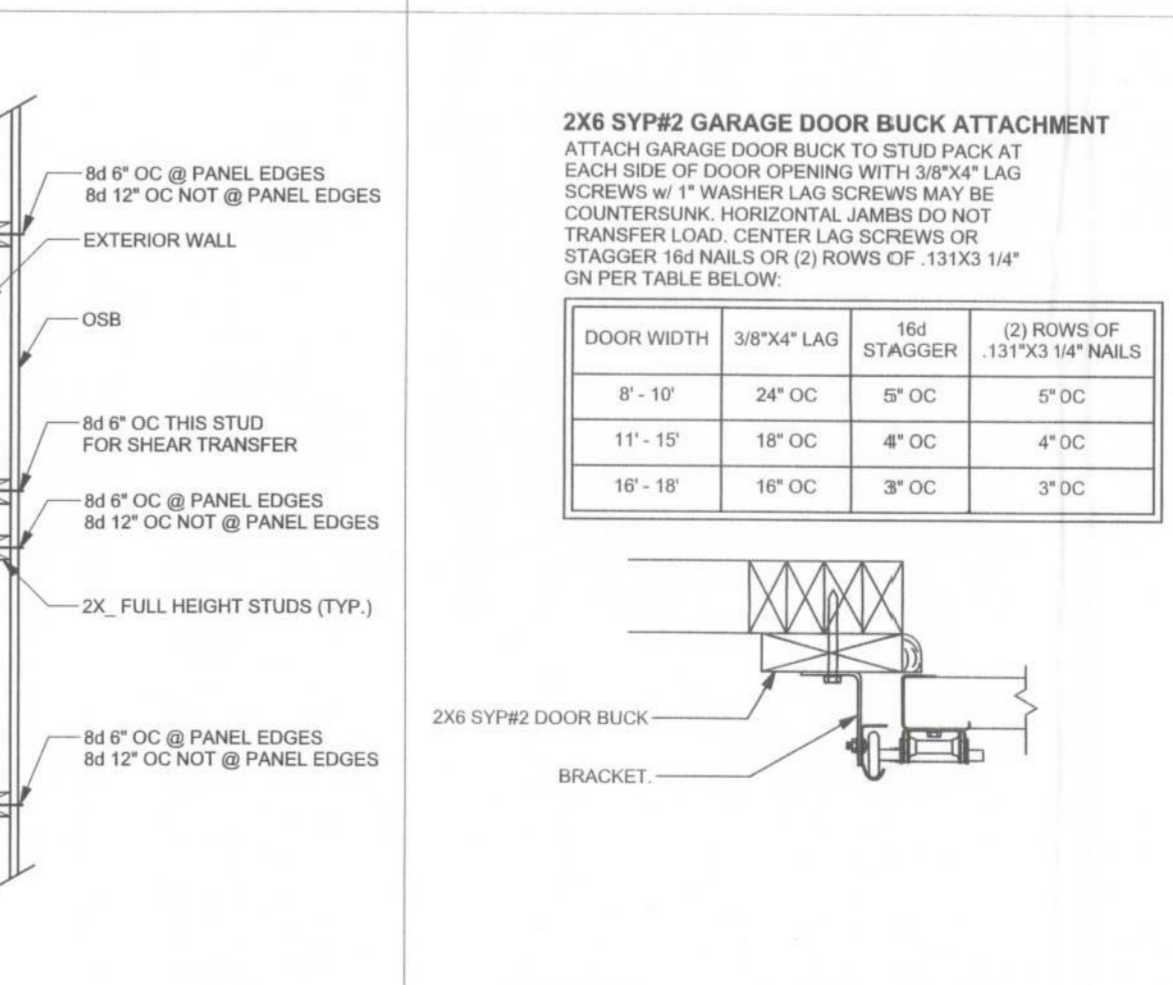
**(TYP.) GABLE BRACING DETAIL**



**W68 OPENING FORCE TRANSFER**

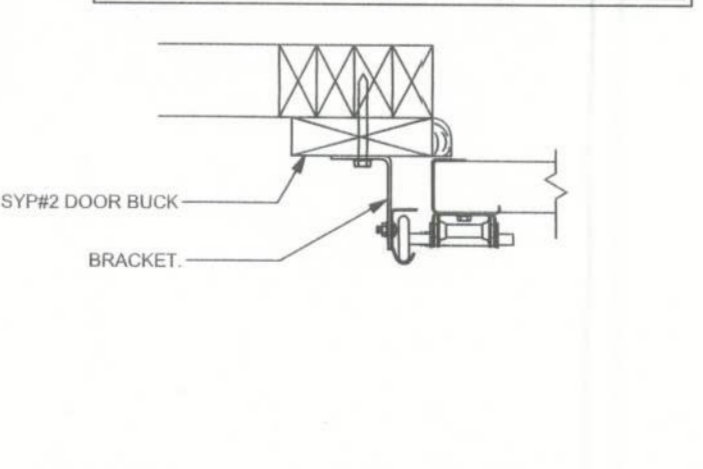


**(TYP.) INTERSECTING WALL FRAMING**



**2X6 SYP#2 GARAGE DOOR BUCK ATTACHMENT**

DOOR WIDTH	3/8" X 4" LAG	16d STAGGER	(2) ROWS OF 131X3 1/4" NAILS
8'-10"	24" OC	5" OC	6" OC
11'-15"	18" OC	4" OC	4" OC
16'-18"	16" OC	3" OC	3" OC



**GENERAL NOTES:**

TRUSSES: TRUSSES SHALL BE DESIGNED BY A FLORIDA LICENSED ENGINEER IN ACCORDANCE WITH THE FIBER CONCRETE TRUSS ENGINEERING DESIGN, DESIGN, TRUSS ENGINEERING SHALL INCLUDE TRUSS DESIGN, TRUSS CONNECTIONS, TEMPORARY AND PERMANENT BRACING DETAILS, TRUSS-TO-STUD 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'S 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 FURNISH TRUSS ENGINEERING TO WIND ENGINEER FOR REVIEW OF TRUSS REACTIONS ON THE BUILDING STRUCTURE. STRAP-2X6 RAFTERS WITH MIN UPLIFT CONNECTION 415LB EACH END; 2X8 RAFTERS 700 LB EACH END.

SITE PREPARATION: SITE ANALYSIS AND PREPARATION IS NOT PART OF THIS PLAN.

FOUNDATION: CONFIRM THAT THE FOUNDATION DESIGN & SITE CONDITIONS MEET ALL LEAD REQUIREMENTS (ASSUME 1000 PSF BEARING CAPACITY UNLESS VISUAL OBSERVATION OR SOILS TEST PROVES OTHERWISE).

CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS, FC = 3000 PSI.

WELDED WIRE REINFORCED SLAB: 8" @ 16" W1 & W1.4; FB = 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 3'.

FIBER CONCRETE SLAB: CONCRETE SLABS ON GROUND CONTAINING SYNTHETIC FIBER REINFORCEMENT. FIBER LENGTH 12 INCH TO 2 INCHES. DOSAGE AMOUNTS FROM 0.75 TO 1.5 POUNDS PER CUBIC YARD PER THE MANUFACTURER'S RECOMMENDATIONS. REFER TO CONCRETE WITH ASTM C 1116. SUPPLIER TO PROVIDE ASTM C 1116 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 RATIOS OF SLAB AREAS NOT EXCEED 1.5 AND TYPICAL SPACING OF CUTS TO BE 12FT. DO NOT CUT WALL OR REINFORCING STEEL. RECOMMENDED LOCATION OF CONTROL JOINTS IS SUBJECT TO OWNER 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 A 615, GRADE 60, DEFORMED BARS; FY = 60 KSI, ALL LAP SPICES @ 48" DB (2' FOR BAR BARS); UNO ALL REINFORCEMENT SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI 315-96, U.N.O.

GLULAM BEAMS: GLB, 24F-V3SP, Fb = 2.4ksi, E = 1800ksi; UNO. SUPPLIER MAY SUPPLY AN ALTERNATE BEAM WITH EQUAL PROPERTIES OR MAY SUBMIT THEIR OWN SIZING CALCULATIONS.

ROOF SHEATHING: ALL ROOFS ARE HORIZONTAL DIAPHRAGMS; 7/16" OSB SHEATHING, UNBLOCKED, APPLIED PERPENDICULAR TO FRAMING, OVER A MINIMUM OF 3 FRAMING MEMBERS, WITH PANEL EDGES STAGGERED, FASTENED WITH 8d COMMON NAILS (L31), 8" OC PANEL EDGES, 12" OC INTERMEDIATE MEMBERS, GABLE ENDS AND DIAPHRAGM BOUNDARY 4" OC, UNO.

STRUCTURAL CONNECTORS: MANUFACTURER 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 EXAMPLE TABLES 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.

WASHERS: WASHERS USED WITH 1/2" ROD TO BE 2" x 2" x 9/64"; WITH 5/8" BOLTS TO BE 3" x 3" x 9/64"; WITH 3/4" BOLTS TO BE 3" x 3" x 5/16"; UNO.

NAILS: ALL NAILS ARE COMMON NAILS UNLESS OTHERWISE SPECIFIED OR ACCEPTED BY FBC TEST REPORTS AS HAVING EQUAL STRUCTURAL VALUES.

**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 DEBRIS ZONE, AND FLOOD ZONE.

PROVIDE MATERIALS AND CONSTRUCTION TECHNIQUES, WHICH COMPLY WITH FIBER CONCRETE TRUSS ENGINEERING 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 SEALED ENGINEERING INCLUDES TRUSS DESIGN, TRUSS CONNECTIONS, TEMPORARY AND PERMANENT BRACING DETAILS, TRUSS-TO-STUD CONNECTIONS, AND UPLIFT AND REACTION LOADS FOR ALL BEARING LOCATIONS.

**ROOF SYSTEM DESIGN**

THE SEAL ON THESE PLANS FOR COMPLIANCE WITH FIBER CONCRETE TRUSS ENGINEERING 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 SUBMITTED BY THE TRUSS MANUFACTURER AND HAVE IT SIGNED, AND SEALED BY A DESIGN PROFESSIONAL FOR CORRECT APPLICATION OF FIBER CONCRETE TRUSS ENGINEERING 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 BRACINGS. THE BUILDER SHOULD USE CARE CHECKING THE ROOF DESIGN BECAUSE THE WIND LOAD ENGINEER IS SPECIFICALLY NOT RESPONSIBLE FOR THE TRUSS LAYOUT WHICH WAS CREATED BY THE TRUSS MANUFACTURER AND THE TRUSS DESIGNER. ALSO DENIES RESPONSIBILITY FOR THE LAYOUT PER NOTES ON THEIR SEALED TRUSS SHEETS.

**DESIGN DATA**

WIND LOADS PER FLORIDA BUILDING CODE 2004 RESIDENTIAL, SECTION R301.2.1 (ENCLOSED SIMPLE DIAPHRAGM BUILDINGS WITH FLAT, HIPPED, OR GABLE ROOFS; MEAN ROOF HEIGHT NOT EXCEEDING LEAST HORIZONTAL DIMENSION OR 60 FT; NOT ON UPPER HALF OF HILL OR ESCARPMENT 60 FT EXP. B; 30 FT IN EXP. C AND -10% SLOPE AND UNOBSTRUCTED UPWIND FOR 500' HEIGHT OR 1 MILE WHICHEVER IS LESS.)

BUILDING IS NOT IN THE HIGH VELOCITY HURRICANE ZONE

BUILDING IS NOT IN THE WIND-BORNE DEBRIS REGION

1) BASIC WIND SPEED = 110 MPH  
2) WIND EXPOSURE = B  
3) WIND IMPORTANCE FACTOR = 1.0  
4) BUILDING CATEGORY = II  
5) ROOF ANGLE = 10-45 DEGREES  
6) MEAN ROOF HEIGHT = -30 FT  
7) INTERNAL PRESSURE COEFFICIENT = N/A (ENCLOSED BUILDING)  
8) COMPONENTS AND CLADDING DESIGN WIND PRESSURES (TABLE R301.2(2))

Zone	Effective Wind Area (ft <sup>2</sup> )	10	15	20
1	19.9	21.8	18.1	-21.8
2	19.9	25.5	18.1	-21.8
2.0tg		40.6		-40.6
3	19.9	25.5	18.1	-21.8
3.0tg		68.3		-42.4
4	21.8	23.6	18.5	-20.4
5	21.8	29.1	18.5	-22.6

Doors & Windows Worst Case (Zone 5, 10 ft)  
21.8 -29.1

8x7 Garage Door  
19.5 -22.9

16x7 Garage Door  
18.5 -21.0

DESIGN LOADS

FLOOR	40 PSF (ALL OTHER DWELLINGS ROOMS)
	30 PSF (SLEEPING ROOMS)
	30 PSF (ATTICS WITH STORAGE)
	10 PSF (ATTICS WITHOUT STORAGE, <312")
ROOF	20 PSF (FLAT OR <4:12)
	16 PSF (4:12 TO <12:12)
	12 PSF (12:12 AND GREATER)
STAIRS	40 PSF (ONE & TWO FAMILY DWELLINGS)
SOIL BEARING CAPACITY	1000PSF
NOT IN FLOOD ZONE (BUILDER TO VERIFY)	

**REVISIONS**

NO.	DESCRIPTION



WINDLOAD ENGINEER:  
Mark Discoway, P.E.  
No. 53915, P.O. Box 868, Lake City, FL 32066,  
385-754-5419

DIMENSIONS: Stalled dimensions supersede scaled dimensions. Refer all questions to Mark Discoway, P.E. for resolution. Do not proceed without clarification.

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CERTIFICATION: I hereby certify that I have examined this plan, and that the applicable portions of the plan, relating to wind engineering comply with section R301.2.1, Florida building code residential 2004, to the best of my knowledge.

LIMITATION: This design is valid for one building, at specified location.

MARK DISCOWAY  
P.E. 53915

Handwritten signature: Mark Discoway  
05 SEP 08  
SEAL

**Burbach Construction Services, Inc.**

**Charles & Marlene Meade**

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PRINTED DATE:  
September 05, 2008

DRAWN BY: STRUCTURAL BY:  
David Discoway

FINALS DATE:  
05Sep08

JOB NUMBER:  
808285

DRAWING NUMBER  
S-1

OF 3 SHEETS