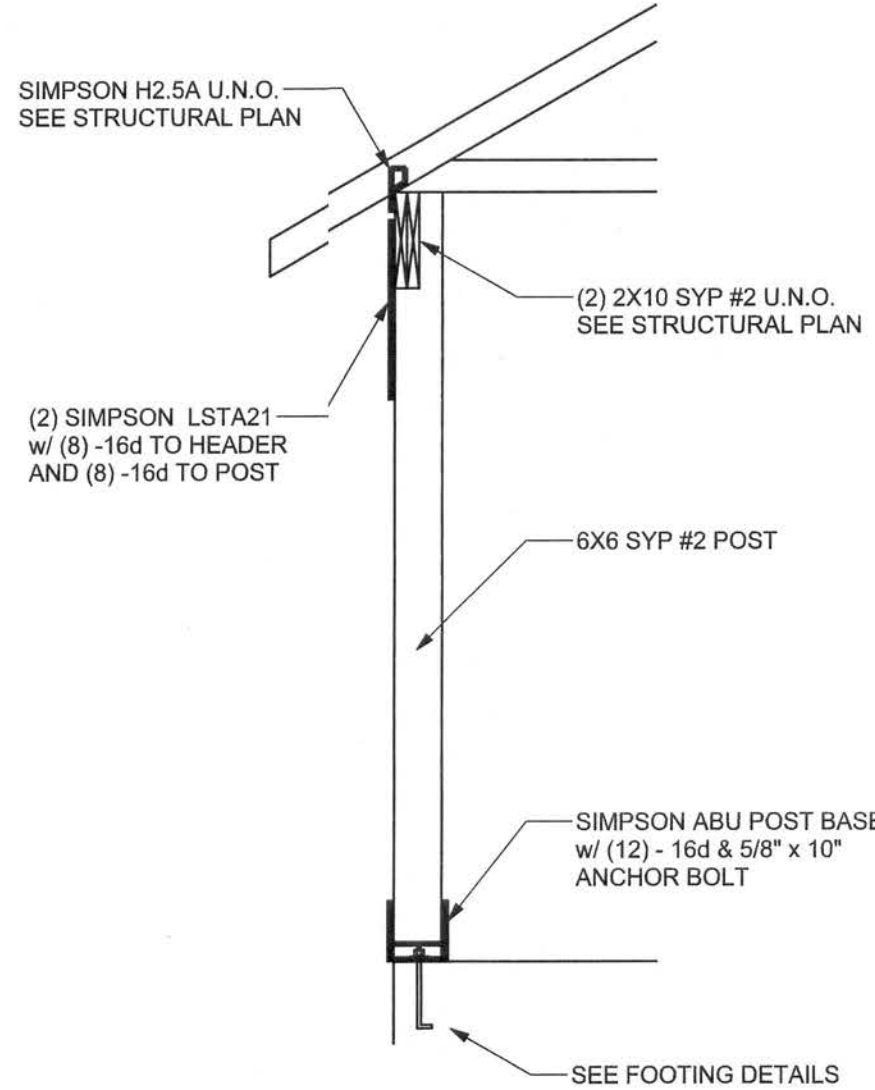


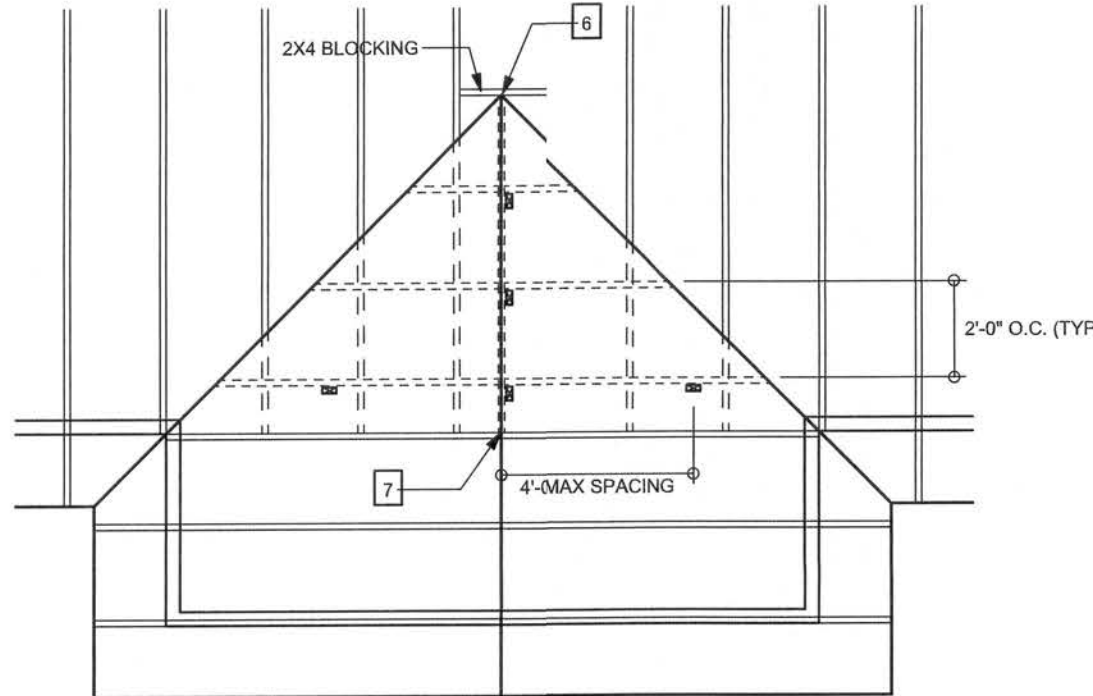
**ONE STORY WALL SECTION**  
SCALE: 3/4" = 1'-0"



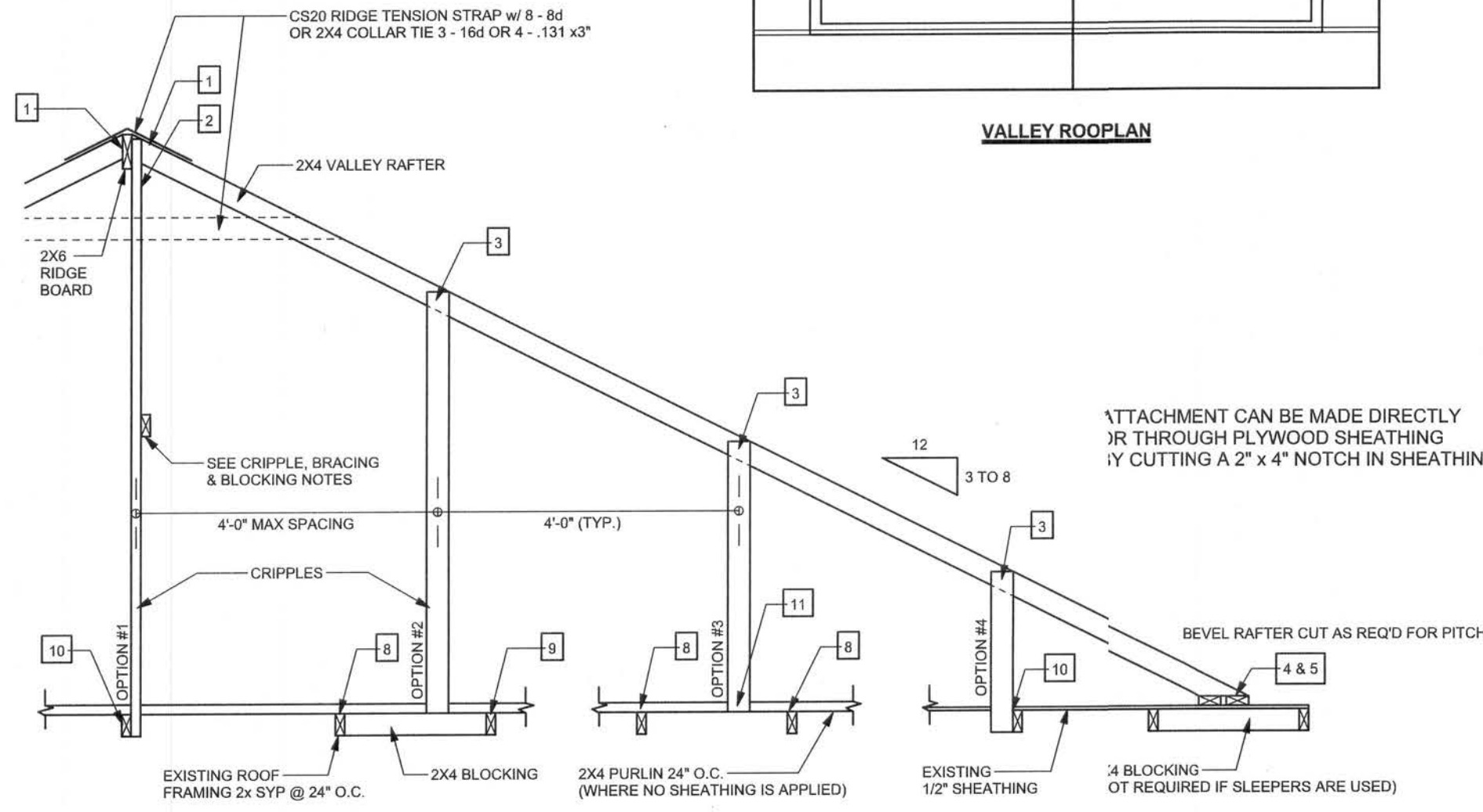
**TYPICAL PORCH POST DETAIL**  
SCALE: 2\"/>

**LUMBER SIZE & GRADE MINIMUM REQUIREMENTS**

RIDGE BOARD	2X6 SYP #2
RAFTER SPANS 20'-0" OR LESS	2X4 SYP #2
PURLINS / LATERAL BRACING	2X4 SPF #2
SLEEPERS	2X (WIDTH OF RAFTER SEAT CUT) SPF #3 OR 2 PARALLEL 2X4 SPF #3
CRIPPLES & BLOCKING	2X4 SPF #2 OR BETTER
TRUSS BELOW	SEE TRUSS DESIGN - SOUTHERN PINE MATERIAL

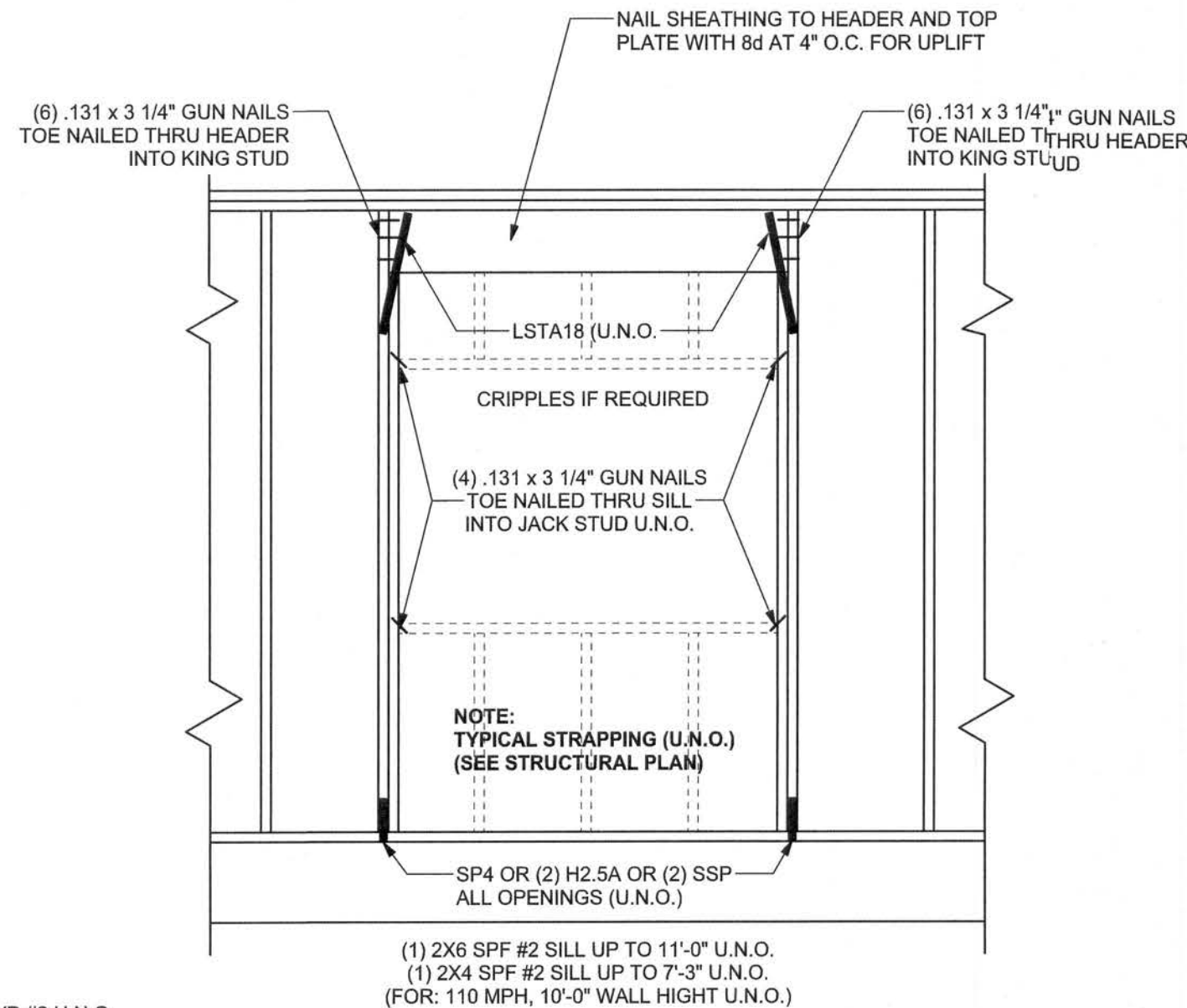


**VALLEY ROOF PLAN**



**SECTION CUT PARALLEL TO VALLEY RAFTER**

**RETROFIT ROOF OVER FRAMING & BRACING DETAIL**  
SCALE: N.T.S.



**TYPICAL HEADER STRAPPING DETAIL**  
SCALE: 1/2\"/>

**VALLEY ROOF PLAN MEMBER LEGEND**

—	TRUSS
==	TRUSS UNDER VALLEY FRAMING
----	VALLEY RAFTER OR RIDGE
----	CRIPPLE

CRIPPLES 4'-0" O.C. FOR 20 psf (TL) AND 10 psf (TD) (TYP. SHINGLE ROOF) MAX

**CONNECTION REQUIREMENT NOTES**

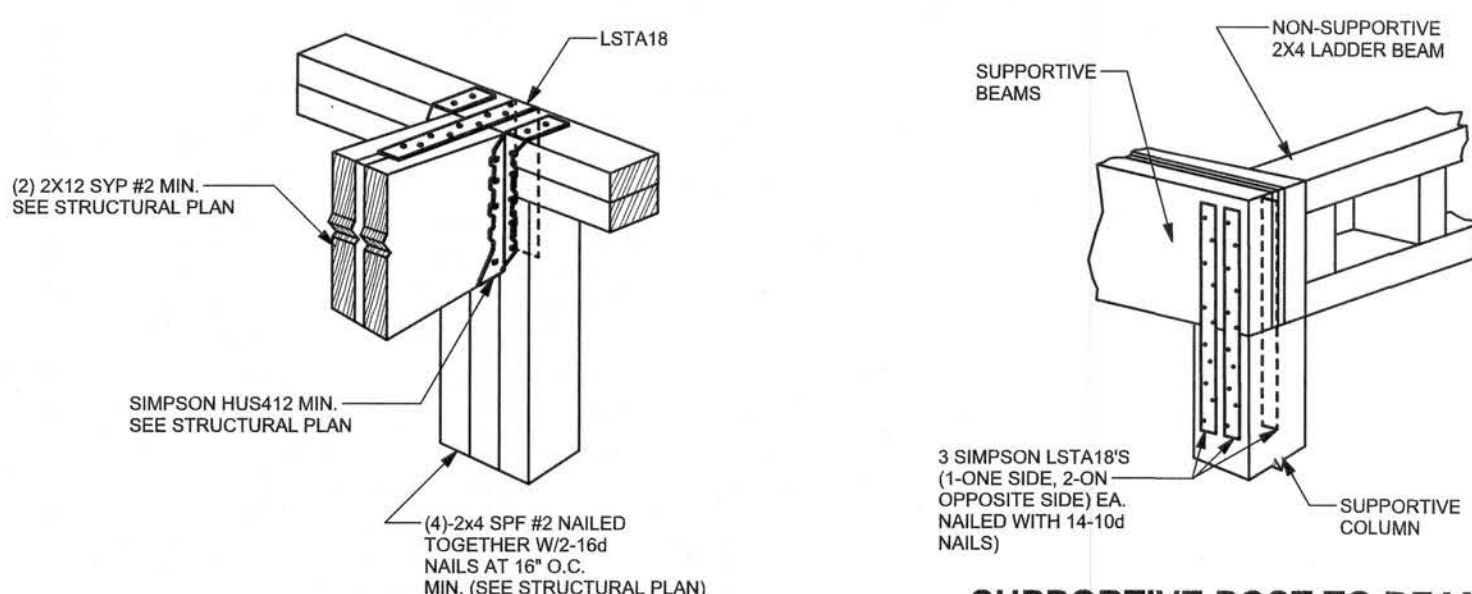
1	2X4 RAFTERS TO RIDGE	3 - 16d OR 6 - .131 x 3\"/>
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**GENERAL NOTES**

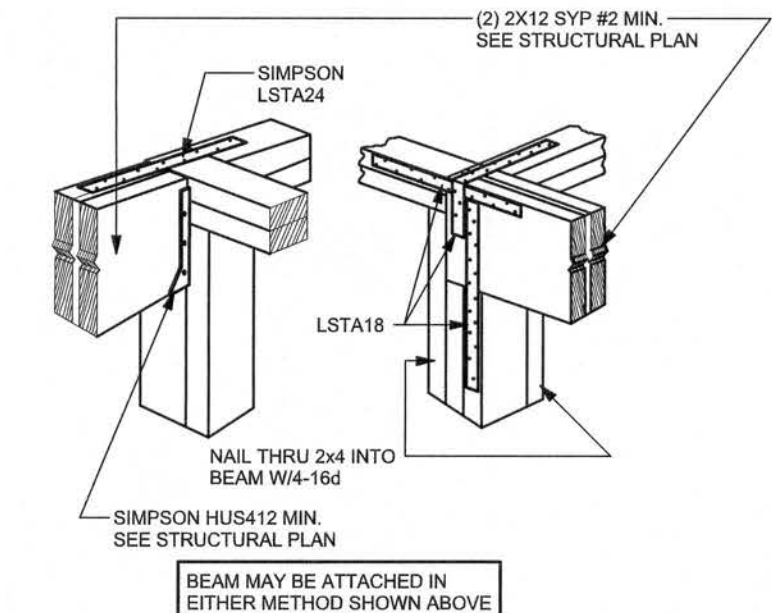
**MAXIMUM RAFTER SPANS:**  
6'-0" FOR 2X4, 9'-4" FOR 2X6 SYP #2 OR SYP #2.  
MAXIMUM ROOF AREA PER SUPPORT:  
1602 IN ZONES 2 & 3, 2402 IN ZONE 1 (EXAMPLE: 4'-0" O.C. X 4'-0" SPAN = 1602 OR 2'-0" X 8'-0" SPAN = 1602)  
PURLINS REQUIRED 2'-0" O.C. IF EXISTING SHEATHING IS REMOVED.  
PURLINS SHOULD OVERLAP SHEATHING ONE TRUSS SPACING MINIMUM.  
IN CASES THAT THIS IS IMPRACTICAL, OVERLAP SHEATHING A MINIMUM OF 6" AND NAIL UPWARDS THROUGH SHEATHING INTO PURLIN WITH A MINIMUM OF 8 - 8d COMMON WIRE NAILS.  
THIS DRAWING APPLIES TO VALLEYS WITH THE FOLLOWING CONDITIONS:  
- SPANS DISTANCES BETWEEN HEELS 46'-0" OR LESS  
- MAXIMUM WIND SPEED: 120 MPH  
- MAXIMUM MEAN ROOF HEIGHT: 30 FEET  
- MAXIMUM TOTAL LOADING: 40 psf  
- MEETS FBC 2001/ASCE 7-98 WIND REQUIREMENTS  
- EXPOSURE CATEGORY "B", I = 1.0, Kzt = 1.0  
- ENCLOSED BUILDING

**CRIPPLE, BRACING, & BLOCKING NOTES**

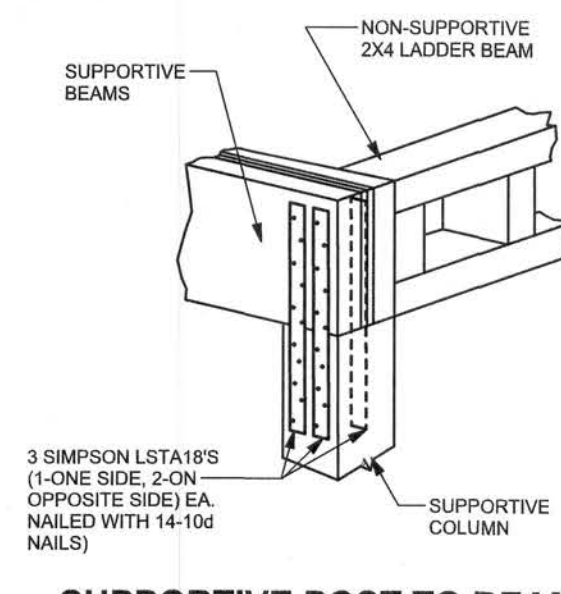
2X4 CONTINUOUS LATERAL BRACE (CLB) MIN. IS REQUIRED FOR CRIPPLES 6'-0" TO 10'-0" LONG NAILED W/ 8d NAILS OR 2X4 1" OR SCAB BRACE NAILED TO FLAT EDGE OF CRIPPLE WITH 8d NAILS @ 8" O.C. 1" OR SCAB MUST BE 90% OF CRIPPLE LENGTH. CRIPPLES OVER 10'-0" LONG REQUIRE TWO CLUBS OR BOTH FACES W/ 1" OR SCAB. USE STRESS GRADED LUMBER & BOX OR COMMON NAILS.  
- NARROW EDGE OF CRIPPLE CAN FACE RIDGE OR RAFTER, AS LONG AS THE PROPER NUMBER OF NAILS ARE INSTALLED INTO RIDGE BOARD  
- INSTALL BLOCKING UNDER RAFTER IF SLEEPERS ARE NOT USED.  
- INSTALL BLOCKING UNDER CRIPPLES IF CRIPPLES FALL BETWEEN LOWER TRUSS TOP CHORDS AND LATERAL BRACING IS NOT USED.  
- APPLY ALL NAILING IN ACCORDANCE TO NDS-1997 SECTION 12. NAILS ARE COMMON WIRE NAILS UNLESS NOTED OTHERWISE.



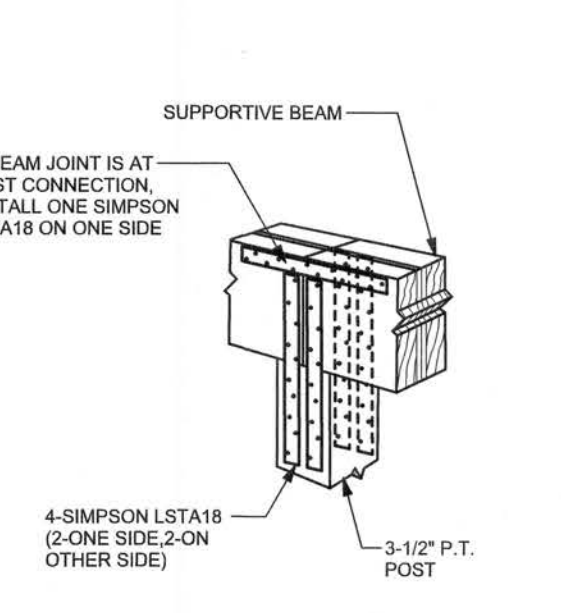
**BEAM MID-WALL CONNECTION DETAIL**  
SCALE: N.T.S.



**BEAM CORNER CONNECTION DETAIL**  
SCALE: N.T.S.



**SUPPORTIVE POST TO BEAM DETAIL FOR SINGLE BEAM**  
SCALE: N.T.S.



**SUPPORTIVE CENTER POST TO BEAM DETAIL**  
SCALE: N.T.S.

**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 FBCR 2004 REQUIREMENTS FOR THE STATED WIND VELOCITY AND DESIGN PRESSURES.  
PROVIDE A CONTINUOUS LOAD PATH FROM TRUSSES TO FOUNDATION. IF YOU BELIEVE THE PLAN OMITTS A CONTINUOUS LOAD PATH CONNECTION, CALL THE WIND LOAD ENGINEER IMMEDIATELY.  
VERIFY THE TRUSS MANUFACTURER'S SEALED ENGINEERING 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 2004, SECTION A3302.1.2 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 2004 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 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.

**GENERAL NOTES:**

**TRUSSES:** TRUSSES SHALL BE DESIGNED BY A FLORIDA LICENSED ENGINEER IN ACCORDANCE WITH THE FBCR 2004. 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 FURNISH TRUSS ENGINEERING TO WIND LOAD 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 GRAVITY LOAD REQUIREMENTS (ASSUME 1000 PSF BEARING CAPACITY UNLESS VISUAL OBSERVATION OR SOILS TEST PROVES OTHERWISE)

**CONCRETE:** MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS,  $f'_c = 3000$  PSI

**WELDED WIRE REINFORCED SLAB:** 6" x 6" W14 x W14, F6 = 8KSL, WELDED WIRE REINFORCEMENT FABRIC (W.W.R.) CONFORMING TO ASTM A186, 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 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 C1116. SUPPLIER TO PROVIDE ASTM C1116 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 SHALL NOT EXCEED 1.5 AND TYPICAL SPACING OF CUTS TO BE 12FT. DO NOT CUT W/M OR REINFORCING STEEL. (RECOMMENDED LOCATION OF CONTROL JOINTS IS SUBJECT TO OWNER AND CONTRACTOR APPROVAL. THE CONTROL JOINTS ARE NOT INTENDED TO PREVENT CRACKS BUT RATHER TO ENCLOSE THE SLAB TO CRACK ON A GIVEN LINE.)

**REBAR:** ASTM A615, GRADE 60, DEFORMED BARS, Fy = 60 KSI. ALL LAP SPLICES 48" DB (30" FOR #5 BARS); UNO. ALL REINFORCEMENT SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI 315-96, U.N.O.

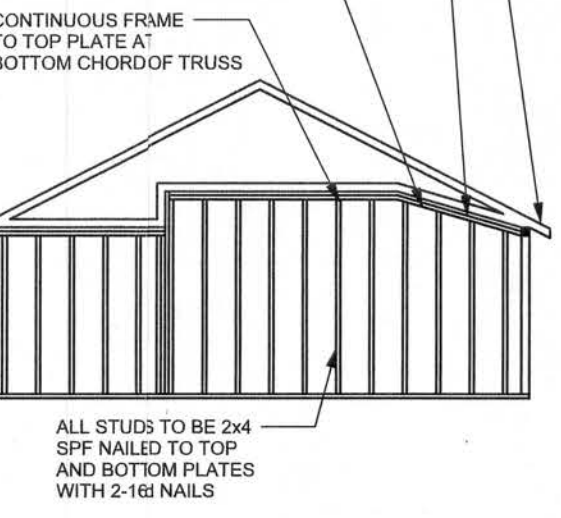
**ROOF SHEATHING:** ALL ROOFS ARE HORIZONTAL DIAPHRAGMS; 7/16" OSB SHEATHING, UNLOCKED, APPLIED PERPENDICULAR TO FRAMING, OVER A MINIMUM OF 3 FRAMING MEMBERS, WITH PANEL EDGES STAGGERED, FASTENED WITH 8d COMMON NAILS (131), 4" OC PANEL EDGES, 12" OC INTERMEDIATE MEMBERS, GABLE ENDS AND DIAPHRAGM BOUNDARY, 4" OC, UNO.

**STRUCTURAL CONNECTORS:** MANUFACTURERS AND PRODUCT NUMBER FOR CONNECTORS, ANCHORS, AND REINFORCEMENT ARE LISTED FOR EXAMPLES (NOT EXHAUSTIVE). 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 NO LESS THAN 7" IN CONCRETE OR REINFORCED BOND BEAM OR 15" IN GROUTED CMU.

**WASHERS:** WASHERS USED WITH 1/2" BOLTS 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 9/64"; WITH 7/8" 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.



**CONTINUOUS FRAME TO CEILING DIAPHRAGM DETAIL**  
SCALE: N.T.S.

**ANCHOR TABLE**

OBTAIN UPLIFT REQUIREMENTS FROM TRUSS MANUFACTURER'S ENGINEERING

UPLIFT LBS. SYP	UPLIFT LBS. SPF	TRUSS CONNECTOR*	TO PLATES	TO RAFTER/TRUSS	TO STUDS
< 420	< 245	HSA	3-8d	3-8d	
< 455	< 265	H5	4-8d	4-8d	
< 360	< 235	H4	4-8d	4-8d	
< 455	< 320	H3	4-8d	4-8d	
< 415	< 365	H2.5	5-8d	5-8d	
< 600	< 535	H2.5A	5-8d	5-8d	
< 850	< 820	H8	8-8d	8-8d	
< 745	< 565	H8	5-10d, 1 1/2"	5-10d, 1 1/2"	
< 1465	< 1050	H14-1	13-8d	12-8d, 1 1/2"	
< 1465	< 1050	H14-2	15-8d	12-8d, 1 1/2"	
< 990	< 850	H10-1	8-8d, 1 1/2"	8-8d, 1 1/2"	
< 760	< 655	H10-2	6-10d	6-10d	
< 1470	< 1265	H16-1	10-10d, 1 1/2"	2-10d, 1 1/2"	
< 1470	< 1265	H16-2	10-10d, 1 1/2"	2-10d, 1 1/2"	
< 1000	< 860	MTS24C	7-10d 1 1/2"	7-10d 1 1/2"	
< 1450	< 1245	HTS24	12-10d 1 1/2"	12-10d 1 1/2"	
< 2900	< 2490	2 - HTS24			
< 2050	< 1785	LG12	14 - 16d	14 - 16d	
<b>HEAVY GIRDER TIEDOWNS*</b>					<b>TO FOUNDATION</b>
< 3965	< 3330	MGT		22 - 10d	1-5/8" THREADED ROD 12" EMBEDMENT
< 10980	< 6485	HGT-2		16 - 10d	2-5/8" THREADED ROD 12" EMBEDMENT
< 10530	< 8035	HGT-3		16 - 10d	2-5/8" THREADED ROD 12" EMBEDMENT
< 9250	< 9250	HGT-4		16 - 10d	2-5/8" THREADED ROD 12" EMBEDMENT
<b>STUD STRAP CONNECTOR*</b>					<b>TO STUDS</b>
< 435	< 435	SSP DOUBLE TOP PLATE	3 - 10d		4 - 10d
< 455	< 420	SSP SINGLE SILL PLATE	1 - 10d		4 - 10d
< 825	< 825	DSP DOUBLE TOP PLATE	6 - 10d		8 - 10d
< 825	< 600	DSP SINGLE SILL PLATE	2 - 10d		8 - 10d
< 885	< 760	SP4			6-10d, 1 1/2"
< 1240	< 1065	SP4			10-10d, 1 1/2"
< 885	< 760	SP6			6-10d, 1 1/2"
< 1240	< 1065	SP6			10-10d, 1 1/2"
< 1235	< 1165	LSTA18	14-10d		
< 1235	< 1235	LSTA21	16-10d		
< 1030	< 1030	CS20	18-8d		
< 1705	< 1705	CS16	28-8d		
<b>STUD ANCHORS*</b>					<b>TO FOUNDATION</b>
< 1350	< 1305	LTT19		8-16d	1/2" AB
< 2310	< 2310	LTT31	18-10d, 1 1/2"		1/2" AB
< 2775	< 2570	H02A	2-5/8" BOLTS		5/8" AB
< 4175	< 3655	HTT16	18 - 16d		5/8" AB
< 1400	< 1400	PAHD42	16-16d		
< 3335	< 3335	HPAHD22	16-16d		
< 2200	< 2200	ABU44	12-16d		1/2" AB
< 2300	< 2300	ABU86	12-16d		1/2" AB
< 2320	< 2320	ABU88	18 - 16d		2-5/8" AB

**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 60FT IN EXP. B, 30FT IN EXP. C AND >10% SLOPE AND UNOBSTRUCTED UPWIND FOR 50x 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	100
1	19.9 - 21.8	18.1	-18.1
2	19.9 - 25.5	18.1	-21.8
2 0thg		-40.6	-40.6
3	19.9 - 25.5	18.1	-21.8
3 0thg		-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 R2)		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 DWELLING ROOMS)

30 PSF (SLEEPING ROOMS)

30 PSF (ATTICS WITH STORAGE)

10 PSF (ATTICS WITHOUT STORAGE, <3:12)

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**


**SOFTPLAN**  
ARCHITECTURAL DESIGN SOFTWARE

WINDLOAD ENGINEER: Mark Disoway,  
PE No.5915, POB 866, Lake City, FL  
32056, 36-754-5419

**DIMENSIONS:**  
States dimensions supersede scaled dimensions. Refer all questions to Mark Disoway, 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 DISOWAY  
P.E. 53915  
*Mark Disoway*  
SEAL

**CHINELL ADDITION**

ADDRESS:  
359 SW Pinewood Rd.  
Lake City FL 32024

Mark Disoway P.E.  
P.O. Box 868  
Lake City, Florida 32056  
Phone: (386) 754 - 5419  
Fax: (386) 269 - 4871

PRINTED DATE:  
June 14, 2007

DRAWN BY: STRUCTURAL BY:  
Ben Sparks Ben Sparks

FINALS DATE:  
14 / Jun / 07

JOB NUMBER:  
706011

DRAWING NUMBER

**S-1**

OF 2 SHEETS