

24" O.C.

WEDGE ANCHOR

NOTE: SP2 TOP & SP1 BOTTOM ALTERNATE FOR SP4/6

MINIMUM ANCHOR BOLT SPACING FOR WALLS WITH A HEIGHT

GREATER THAN 10'-0" AND LESS THAN 14'-0" SHALL BE 32" O.C

16" O.C.

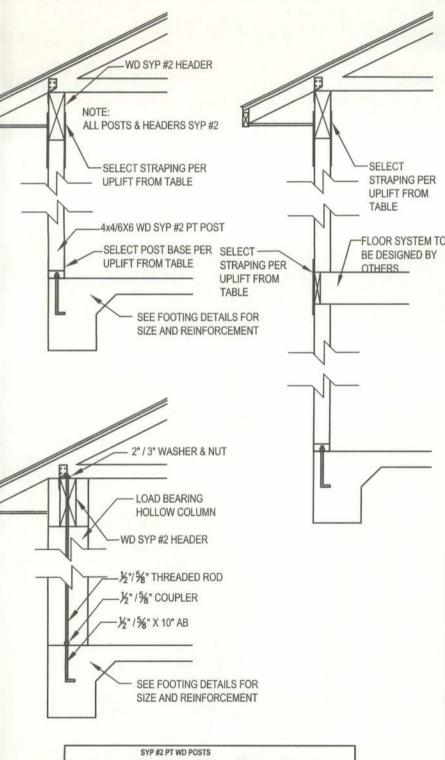
N/A

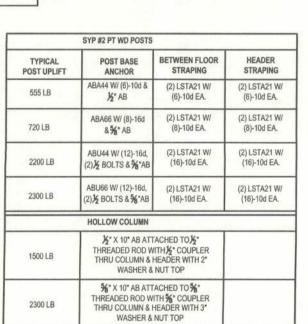
16" O.C.

STUD PACK

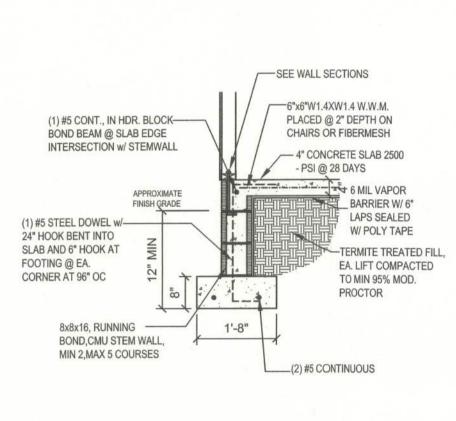
1500 LB

2200 LB

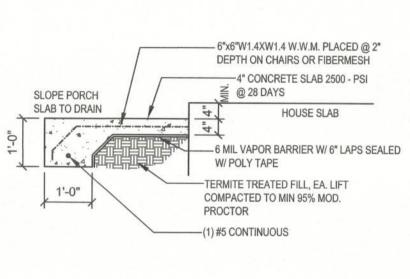




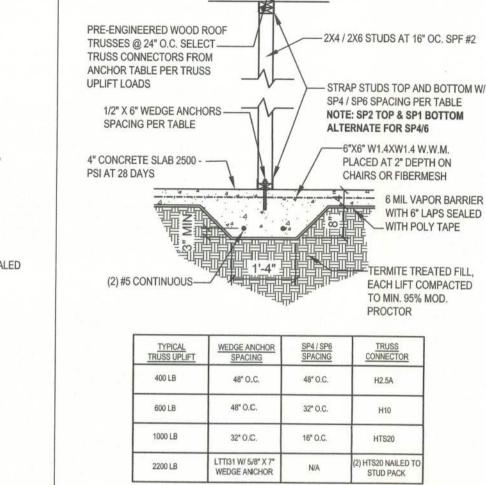
W12 - PORCH HEADER ANCHORS



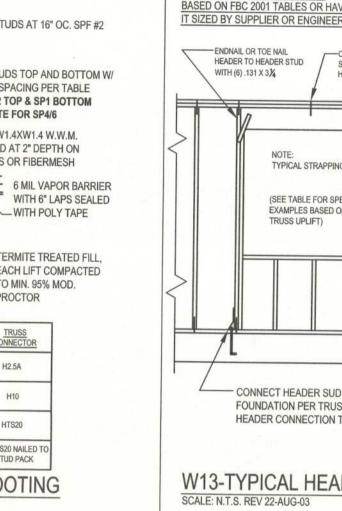
F39 - STEM WALL FOUNDATION SCALE: 1/2"=1'-0" REV-27-SEP-05



F2 - PORCH SLAB



F4 - INTERIOR BEARING FOOTING



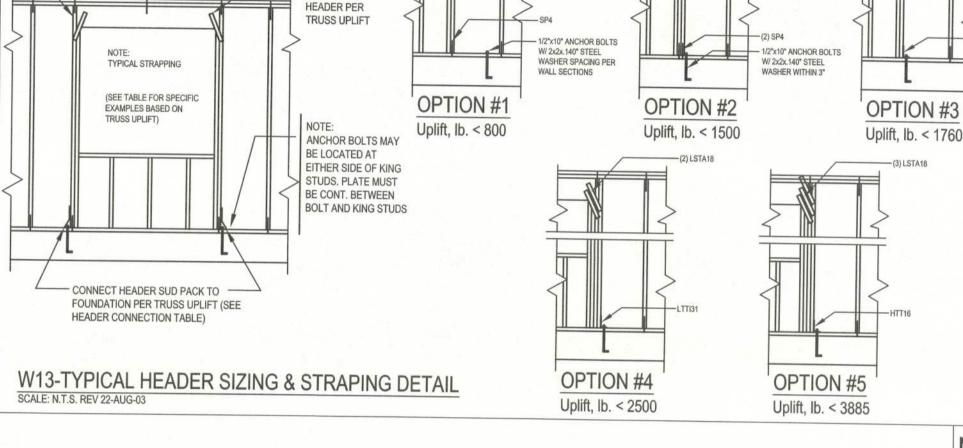
CONTINUE SPACING OF

SP4/6 STUD STRAPS OVER

CONNECT TOP OF

HEADER STUDS /

JACK STUDS TO



w/6-.131"x3.25"

Header Spans Building Width / Truss Span (ft) Supporting Roof+Ceiling (20psf+20psf) NOTES: NJ = Number of jack studs required to support each end. Building width is measured perpendicular to the ridge. For widths between those shown, spans may be interpolated. Spans are based on uniform loads on 4-2x12 14-1 1 12-2 2 10-11

Load Bearing Header Sizing Methods (BY BUILDER

5. Use one jack stud for every 3000 lb vertical load.

connection) and stud to foundation (bottom connection).

Option # Uplift, lb. | Top Connector

#3 < 1750 LSTA18, 14-10d

< 2500 (2) LSTA18, 14-10d

Jack Studs and King Studs (BY BUILDER)

Header Uplift Connections (BY BUILDER)

dividing by the length of the header.

Use supplier published data or Southern pine span tables.

For engineered lumber beams have suppliers engineer size beam.

Lookup jack studs from FBC 2001, Tables 2308.3 A, B, & C, or 2308.5.

End nail or toe nail

w/6-.131"x3.25"

Determine header size from FBC 2001, Tables 2308.3 A, B, & C, or 2308.5.

6. Total king plus jack studs = studs needed to be there if no opening was there.

Calculate the uplift at each end of the header by summing the moments of all truss uplifts and

Bottom Connector

(2) SP4, 6-10dx1½",½" AB 1380

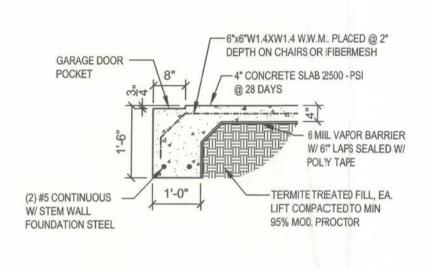
SP4, 6-10dx11/2"

1055 LTT20B, 10-16d ½" AB

8. Select header connections from table below or mfg. catalog to connect header to stud (top

A12, 10-10d 755

< 3885 (3) LSTA18, 14-10d 3480 HTT16, 18-16d, 18-16d,



F3 - GARAGE DOOR POCKET

2X4 SCAB CONT. TOP

CHORD@ 8' FROM

4 - 10d NAILS OR 4 -

ALL CONNECTIONS

2X4 SCAB IF VERT.

CONT. 2X4X8' #2 SYP

LATERAL BRACE @ 48"

2X4 BLOCKING @ 48" OC. BETWEEN GABLE AND

FIRST TRUSS.

2 X 4 CONT. LATERAL BRACING

1/2 GYP, BOARD W/ 5d COOLER NAILS

STRENGTH OF DIAPHRAGM.

5d COOLER NAILS AT 7 IN. O.C.

ALTERNATIVE TO BALLOON FRAMING IS GYPSUM CEILING

ABOVE, PROTECT GYPSUM FROM MOISTUIRE TO PRESERVE

DIAPHRAGM AS SPECIFIED IN THE "WOOD IFRAME CONSTRUCTION

MANUAL" (WFCM). SEE WFCM TABLE 3.13 AND FIGURE 3.6a. SHONE

AT 6' O.C. W/ 2-10d NAILS EA.

AT 10 IN. O.C.

TRUSS

WEB IS NOT PRESENT

.131"x 3.25" TYPICAL AT\_\_\_

TO BOTTOM

GABLE

2X4 OUTRIGIGER @ 48" OC. -

GUN NAILS

CONT 2X4 SCAB FROM TOP

го воттом сного @

-BRACING (PROVIDE

VERTICAL IF HIGHER THAN

- 2 X 4 BLOCK NAILED TO EA. BRACE

NOTE: EXTEND RAT RUN BRACES GABLE TO GABLE

OR A LENGTH EQUAL TO 1/2 OF GABLE WIDTH FOR

ROOFS UP TO 7:12 AND 5/8 OF GABLE WIDTH OVER

W/4-10d NAILS

ADDITIONAL 2X4 6 @

48" TO FORM AN "L"

NOTE: ALL MEMBERS SHALL BES

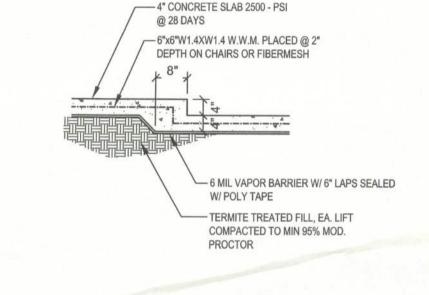
2X4 X-BRACE @ 6'-0" OC.

W10-TYPICAL GABLE END (X-BRACING)

W23 - GYPSUM CEILING DIAPHRAGM OPTION - GABLE END WALL

BLOCKING REQUIRED BETWEEN OUTRIGGERS

2X4 BLOCKING @ SHEATHING JOINT 4' FROM GABLE END -



F12 - NON - BEARING STEP FOOTING

-7/16" STRUCTURAL ROOF

HURRICANE

-TOP CHORD

OF GABLE END

TRUSS DROP 3

TOE NAIL TRUSS TO

-BOTTOM CHORD OF

GABLE END TRUSS

-(2) - 2X4 TOP PLATE

SIMPSON LSTA

24 @ 48" OC.

-SEE DETAIL W1

- SIMPSON LSTA30 STRAP W/

10-8d NAILS IN 2 X 4 BRACE &

10-8 d NAILS IN ENDWALL STUD

COM @8" OC.

DOUBLE PLATE w/ 16d

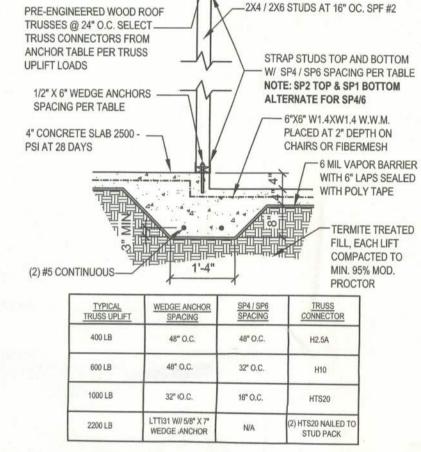
CLIP H-2.5 OR

EQUAL 48" OC.

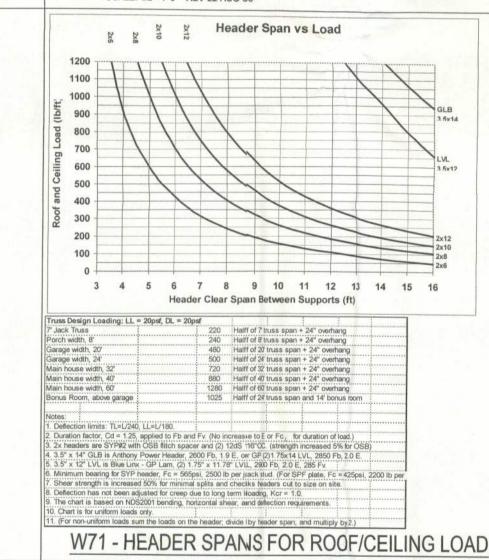
SHEATHING

2X4 BARGE -

RAFTER CONT.



## F5 - INTERIOR BEARING STEP FOOTING



N5 - TRUSS UPLIFT CONINECTOR TABLE

摇"x 16" AB

%"x 16" AB

Supporting Trusses: The builder is responsible for gravity loads, but you should but an extra 2x4 stop under truss bearing location for each

lanufacturer and product number are listed for example not endowsement. An equivalent device of the same or other manufacturer can be substituted.

chieve rated loads. All connections exposed directly to the weather shall be hot dipped galvanized after fabrication. Loads are increased for wind

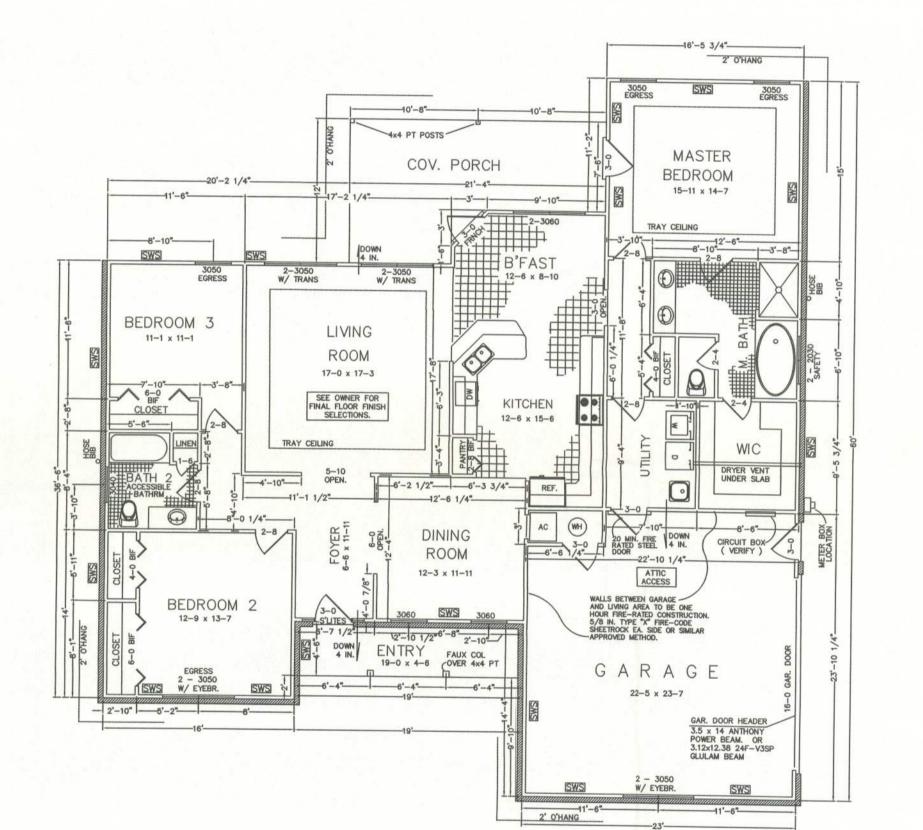
duration. Strap uplift may be reduced proportionally to number of mails. See spec sheet for alternate nail sizes (10d=.84\*16d, 10dx1½"=.80\*10d,

ne truss and top plate (SPF, Fc=425psi=2230lb/ply).

for any devices listed in the example tables as long as it meets the required load capacities. Manu

3590 4175 HTT16

1975 2300 ABU66



FLOOR PLAN

## **N2-GENERAL NOTES:**

FOUNDATION: FOR POINT LOADS GRATER THAN 5000 Ib OR REPETITIVE TRUSS LOADS GRATER THAN 2000 Ib PER TRUSS PROVIDE A THICKENED SLAB OR PAD FOOTING 1'-0"D X 1 sq ft. FOR EVERY 1000 Ib OF BEARING REINFORCE WITH #5 @ 8" O.C. EACH WAY

CONCRETE: MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS SHALL BE F'C = 3000 PSI. WHERE EXCESS WATER IS ADDED TO THE CONCRETE SO THAT ITS SERVICABILITY IS DEGRADED, THE ATTAINMENT OF REQUIRED STRENGTH SHALL NOT RELEASE THE CONTRACTOR FROM PROVIDING SUCH MODIFICATIONS AS MAY BE REQUIRED BY THE ENGINEER TO PROVIDE A SERVICEABLE MEMBER OR SURFACE. ALL CONCRETE SHALL BE VIBRATED. NO REPAIR OR RUBBING OF CONCRETE SURFACES SHALL BE MADE PRIOR TO INSPECTION BY AND APPROVAL OF THE ENGINEER, OWNER OR HIS REPRESENTATIVE.

WELDED WIRE REINFORCED SLAB: 6" x 6" W1.4 x W1.4, FB = 85KSI, 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 LENGTHS SHALL BE 1/2 INCH TO 2 INCHES IN LENGTH. DOSAGE AMOUNTS SHALL BE FROM 0.75 TO 1.5 POUNDS PER CUBIC YARD IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. SYNTHETIC FIBERS SHALL COMPLY WITH ASTM C 1116. THE MANUFACTURER OR SUPPLIER SHALL PROVIDE CERTIFICATION OF COMPLIANCE WITH ASTM C 1116 WHEN REQUESTED BY THE 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 WWM 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 LAPS SPLICES 48 \* db (30" FOR #5 ARS); UNO. ALL REINFORCEMENT SHALL BE DETAILED AND PLACED IN ACCORDANCE WITH ACI 315-95 WITH ACI 315-96 UNLESS NOTED OTHERWISE. ALL TENSION DEVELOPMENT LENGTHS SHALL BE 30

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 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 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"; NO.

WINDLOAD ENGINEERING

"EVERYTHING YOU NEED FOR YOUR BUILDING PERMIT"

Mark Disosway P.E.

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Fax: (386) 269-4871 Email: windloadengineer@bellsouth.net

Spec House

Lot 15 Stonehenge S/D Phase II

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

All connectors are Simpson Strongtie, umo. Select top and bottom connectors					om connections from this table or	N4
	Uplift SPF	Uplift SYP	Truss Connector	To Plate	To Truss / Rafter	(Wind loads are per FBC 2001, See less than 60' or the least horizontal >10% slope.)
Ī	320	455	H3	44-8d	4-8d	Basic Wind Speed
	245	350	H5A	33-8d	3-8d	Wind Exposure
	535	600	H2.5A	55-8d	5-8d	Wind Importance Factor
Ī	620	720	H10	66-10dx11/5"	6-10dx 11/5"	Building Category
	850	990	LTS12	88-8dx11/3"	8-8dx 11/5"	Internal pressure Coefficie
	1245	1450	HTS20	1(0-10d or 12-10dx1 1/2"	10-10d or 12-10dx 1½"	Building not in the high vel
Ī	1265	1470	H16, H16-2	110-10dx11/5"	2-10dx 11/5"	Building not in the wind-bo
	1785	2050	LGT2	114-10d Sinker	16-16d Sinker	Mean Roof Height
Ī	3655	4200	MGT	5%° Thd. Rod	22-10d	Roof Angle
	SPF	SYP	Strap Connector	To One Member	To Other Member	Components And Cladding
	760	885	SP4	63-10dx11/5"	N/A	- It
	865	1005	CS20	9)-8d or 7-10d	9-8d or 7-10d	
	1085	1265	LSTA18-24	77-10d	7-10d	
	1170	1360	SPH4	1:2-10dx11/2"	N/A	
	420	455	SSP	4I-10d	3-10d to double plate or 1-10d to single	5
	600	825	DSP	84-10d	6-10d to double plate or 2-10d to single	1
	1420	1650	CS16	1-4-8d or 11-10d	14-8d or 11-10d	1
	SPF	SYP	Column Anchor	To Foundation	To Column / Truss	
	1160	1350	LTT19	5%"x 16" AB	8-16d Sinkers	1
	1985	2310	LTTI31	5%"x 16" AB	18-10dx 1½"	The state of the s
Ī	2385	2775	HD2A	5%"x 16" AB	2-%" Bolts	/2/
-	0500		With the same of t	E u		AX V

N4-WIND LOAD DESIGN DATA Section 1606.2 for enclosed simple diaphragm buildings with mean roof height tal dimension; not sited on the upper half of an unobstructed 60' high hill with 110 MPH 1.0 N/A (Enclosed) locity hurricane zone borne debris region Select uplift connections, walls, columns, and footings based on truss engineering bearing locations and reactions; < 30 ft including interior bearing walls. 10-45 degrees ng Wind Pressures (FBC Table1606.2 B&C) Zone Effective Wind Area (ft2)

is the responsibility of the builder. 5 21.8 -29.1 18.5 -22.6 **Total Shear Wall Segments** Transverse Longitudinal All exterior walls are type II shear walls CTUAL SHEAR WALL length is the total f all wall segments with full height eathing and width to height ratio great nan 1: 3.5 (plus special shear wall eaments if noted.) REQUIRED SHEAR ALL length is from WFCM-2001, table 7A & 3.17B with table 3.17E justment for type II shear wall (or equivalent calculation) REV-27-Jun-07

N3-WINDLOAID ENGINEER'S SCOPE OF WORK: The wind load engineer is engineer of record for compliance of the structure to wind load requirements of FBC 2001, Section 1606. If trusses are used, the wind load engineer is not engineer of record for the trusses and did not design the trusses or delegate to the truss designer.

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 that the foundation design & site conditions meet gravity load requirements (assume 1000 PSF bearing capacity unless visual observation or soils test proves otherwise \* Provide materials and construction techniques, which comply with FBC 2001 requirements for the stated wind

velocity and design pressures. Provide a continuous load path from roof to foundation. If you believe the plan omits a continuous load path connection, call the wind load engineer immediately. Verify the truss engineering includes truss design, placement plans, temporary and permanent bracing details, truss-to-truss connections, and load reactions for all bearing locations.

\* Size headers for gravity loads; headers sized by the builder for gravity loads will also satisfy wind loads. DOCUMENT CONTROL and PRIORITY: Structural requirements on S-1 control unless the building code or chitectural sheets have more stringent requirements. Non-structural requirements on architectural sheets control. Specific requirements take precedence over general requirements. Revision control is by the latest signature date and

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Stated dimensions supercede scaled dimensions. Refer all questions to Mark Disosway, P.E. for resolution. Do not proceed without clarification.

WINDLOAD ENGINEER: Mark Disosway, PE No.53915 CERTIFICATION: The attached plans and "Windload Engineering", sheet S-1, comply with FBC 2001, Section 1606

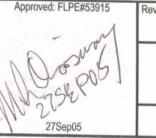
wind loads, to the best of my knowledge. LIMITATION: This design is valid for one building, at specified location.

his drawing is not valid for construction unless raised seal is affixed.

Builder: Jonathan Perry

Designer: Tim Delbene Job #05043-15

ocation: Lot 15 Stonehenge S/D Phase II Columbia County, Florida



REV-06-OCT-03

Sheet S-1 of 1 Sheet Windload Engineering Job # 509156

REV-27-Jul-04