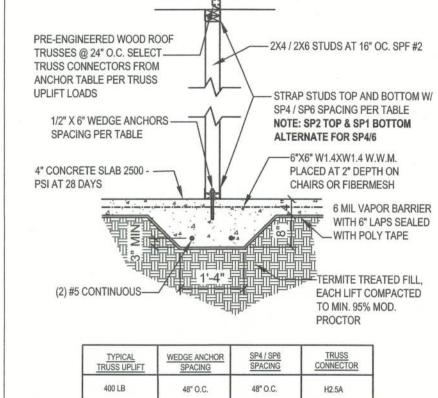


F1 - STEM WALL FOUNDATION

SCALE: 1/2"=1'-0" REV-27-MAY-03

## - 6"x6"W1.4XW1.4 W.W.M. PLACED @ 2" DEPTH ON CHAIRS OR FIBERMESH -4" CONCRETE SLAB 2500 - PSI SLAB TO DRAIN HOUSE SLAB -6 MIL VAPOR BARRIER W/ 6" LAPS SEALED W/ POLY TAPE TERMITE TREATED FILL, EA. LIFT 1'-0" COMPACTED TO MIN 95% MOD. PROCTOR -(1) #5 CONTINUOUS



WEDGE ANCHOR

F4 - INTERIOR BEARING FOOTING

\_\_\_2X4 / 2X6 STUDS AT 16" OC. SPF #2

2200 LB

PRE-ENGINEERED WOOD ROOF

TRUSSES @ 24" O.C. SELECT \_\_\_\_

TRUSS CONNECTORS FROM

900

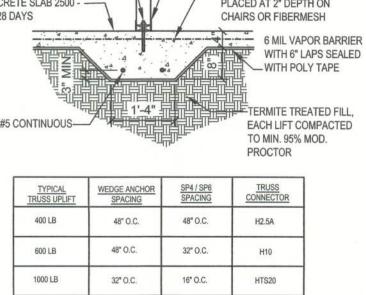
200 -

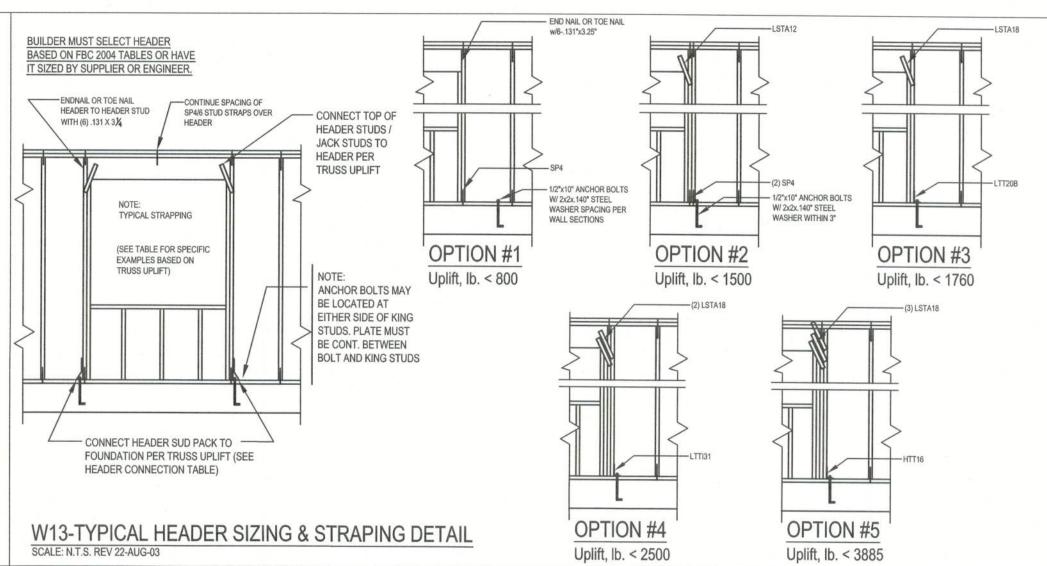
Main house width, 32

Main house width, 40

Bonus Room, above garage

100





Jack Studs and King Studs (BY BUILDER) Lookup jack studs from FBC 2004, Tables 2308.3 A, B, & C, or 2308.5. 5. Use one jack stud for every 3000 lb vertical load. Total king plus jack studs = studs needed to be there if no opening was there. Header Uplift Connections (BY BUILDER) Calculate the uplift at each end of the header by summing the moments of all truss uplifts and dividing by the length of the header. 8. Select header connections from table below or mfg. catalog to connect header to stud (top connection) and stud to foundation (bottom connection).

Determine header size from FBC 2004, Tables 2308.3 A, B, & C, or 2308.5.

Use supplier published data or Southern pine span tables.

For engineered lumber beams have suppliers engineer size beam.

Option #	Uplift, lb.	Top Connector		Bottom Connector			
#1	< 800	End nail or toe nail w/6131"x3.25"		SP4, 6-10dx11/2"	690		
#2	< 1500	LSTA12, 10-10d	755	(2) SP4, 6-10dx11/2", 1/2" AB	1380		
#3	< 1750	LSTA18, 14-10d	1055	LTT20B, 10-16d 1/2" AB	1750		
#4	< 2500	(2) LSTA18, 14-10d	2110	LTTI31, 18-10d 1/2 "x10" AB	2185		
#5	< 3885	(3) LSTA18, 14-10d	3480	HTT16, 18-16d, %"x10" AB	4175		

FBC2004, TABLE 2308.3A	Header Spans (ft-in)		Building Width / Truss Span (ft)						
Header Spans For Exterior Bearing Walls			20		28		36		
Supporting Roof+Ceiling (20psf+20psf)			Span	NJ	Span	NJ	Span		
		2-2x4	3-6	1	3-2	1	2-10		
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 leader.	Header Sizes	2-2x6	5-5	1	4-8	1	4-2		
		2-2x8	6-10	1	5-11	2	5-4		
		2-2x10	8-5	2	7-3	2	6-6		
		2-2x12	9-9	2	8-5	2	7-6		
		3-2x8	8-4	1	7-5	1	6-8		
		3-2x10	10-6	1	9-1	2	8-2		
		3-2x12	12-2	2	10-7	2	9-5		
		4-2x8	9-2	1	8-4	1	7-6		
		4-2x10	11-8	1	10-6	1	9-5		
		4-2x12	14-1	1	12-2	2	10-11		

-6"x6"W1.4XW1.4 W.W.M. PLACED @ 2" DEPTH ON CHAIRS OR FIBERMESH GARAGE DOOR --4" CONCRETE SLAB 2500 - PSI 6 MIL VAPOR BARRIER W/ 6" LAPS SEALED W/ TERMITE TREATED FILL, EA. (2) #5 CONTINUOUS LIFT COMPACTED TO MIN W/ STEM WALL 95% MOD. PROCTOR **FOUNDATION STEEL** 

F3 - GARAGE DOOR POCKET

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 MOISTURE TO PRESERVE

DIAPHRAGM AS SPECIFIED IN THE "WOOD FRAME 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

- 4" CONCRETE SLAB 2500 - PSI @ 28 DAYS -6"x6"W1.4XW1.4 W.W.M. PLACED @ 2" DEPTH ON CHAIRS OR FIBERMESH — 6 MIL VAPOR BARRIER W/ 6" LAPS SEALED TERMITE TREATED FILL, EA. LIFT COMPACTED TO MIN 95% MOD. PROCTOR

F2 - PORCH SLAB

F12 - NON - BEARING STEP FOOTING

-7/16" STRUCTURAL ROOF

SCALE: 1/2"=1'-0" REV-08-JAN-05

- 2 X 4 BLOCK NAILED TO EA. BRACE

-ENDWALL STUDS

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

-GABLE END TRUSS

SIMPSON LSTA30 STRAP W/

10-8d NAILS IN 2 X 4 BRACE &

10-8 d NAILS IN ENDWALL STUD

W/4-10d NAILS

ANCHOR TABLE PER TRUSS STRAP STUDS TOP AND BOTTOM UPLIFT LOADS - W/ SP4 / SP6 SPACING PER TABLE 1/2" X 6" WEDGE ANCHORS -ALTERNATE FOR SP4/6 SPACING PER TABLE - 6"X6" W1.4XW1.4 W.W.M. 4" CONCRETE SLAB 2500 -CHAIRS OR FIBERMESH PSI AT 28 DAYS (2) #5 CONTINUOUS-PROCTOR 400 LB 48" O.C. H2.5A 48" O.C. 48" O.C. 600 LB 32" O.C. H10 1000 LB 16" O.C. HTS20 32" O.C. LTTI31 W/ 5/8" X 7

NOTE: SP2 TOP & SP1 BOTTOM PLACED AT 2" DEPTH ON 6 MIL VAPOR BARRIER WITH 6" LAPS SEALED WITH POLY TAPE FILL, EACH LIFT COMPACTED TO MIN. 95% MOD. WEDGE ANCHOR

F5 - INTERIOR BEARING STEP FOOTING

Header Span vs Load

3 4 5 6 7 8 9 10 11 12 13 14

Notes:

1. Deflection limits: TL=L/240, LL=L/180.

2. Duration factor, Cd = 1.25, applied to Fb and Fv. (No increase to E or Fc, for duration of load.)

3. 2x headers are SYP#2 with OSB flitch spacer and (2) 12dS 16"OC. (strength increased 5% for OSB)

4. 3.5" x 14" GLB is Anthony Power Header, 2600 Fb, 1.9 E, or GP (2)1.75x14 LVL, 2850 Fb, 2.0 E.

5. 3.5" x 12" LVL is Blue Linx - GP Lam, (2) 1.75" x 11.78" LVL, 2900 Fb, 2.0 E, 285 Fv.

Header Clear Span Between Supports (ft)

Half of 7' truss span + 24" overhang

Half of 8' truss span + 24" overhang

Half of 20' truss span + 24" overhan

Half of 24" truss span + 24" overhang Half of 32" truss span + 24" overhang

Half of 40' truss span + 24" overhang Half of 60' truss span + 24" overhang

1025 Half of 24' truss span and 14' bonus room

RIGELING BREACTIVE BEDROOM #2 MASTER BEDROOM LIVING AREA 41-17 STOP WALLS PROMITE TEACHR BEDROOM #3 DINING ROOM 10 0 DELING THE ENTRY GARAGE 1 452 (DickEP) 100 NACHORE TO CONG. (MILACH POST INS. (MASPER) W. AREA SUMMARY LIVING AREA 1545 S.F. GARAGE AREA 522 S.F. ENTRY PORCH AREA 36 S.F TOTAL AREA 2103 S.F

## **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

ONCRETE: MINIMUM COMPRESSIVE STRENGTH OF CONCRETE AT 28 DAYS SHALL BE F'c = 3000 PSI. 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

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 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 WITH ACI 315-96 UNLESS NOTED OTHERWISE. ALL TENSION DEVELOPMENT LENGTHS SHALL BE 30 INCHES.

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: 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.

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

2X4 OUTRIGGIER @ 48" OC. -SHEATHING **BLOCKING REQUIRED BETWEEN OUTRIGGERS** 2X4 BARGE -2X4 BLOCKING @ SHEATHING JOINT 4' FROM GABLE END -RAFTER CONT. HURRICANE 2X4 SCAB CONT. TOP -CLIP H-2.5 OR то воттом EQUAL 48" OC. CHORD@ 8' FROM TOP CHORD NOTE: ALL MEMBERS SHALL BE-S OF GABLE END CONT 2X4 SCAB FROM TOP TRUSS DROP 3 TO BOTTOM CHORD @ -BRACING (PROVIDE 4 - 10d NAILS OR 4 -ADDITIONAL 2X 6 @ .131"x 3.25" TYPICAL AT-VERTICAL IF HIGHER THAN ALL CONNECTIONS 48" TO FORM AN "L" TOE NAIL TRUSS TO DOUBLE PLATE w/ 16d COM @8" OC. 2X4 SCAB IF VERT. WEB IS NOT PRESENT FBOTTOM CHORD OF GABLE END TRUSS CONT. 2X4X8' #2 SYP (2) - 2X4 TOP PLATE LATERAL BRACE @ 48" — SIMPSON LSTA 2X4 X-BRACE @ 6'-0" OC. 24 @ 48" OC. 2X4 BLOCKING @ 48" OC. BETWEEN GABLE AND -SEE DETAIL W1 FIRST TRUSS. W10 - TYPICAL GABLE END (X-BRACING)

W23 - GYPSUM CEILING DIAPHRAGM OPTION - GABLE END WALL

 Minimum bearing for SYP header, Fc = 565psi, 2500 lb per jack stud. (For SPF plate, Fc = 425psi, 2200 lb per.
 Shear strength is increased 50% for minimal splits and checks headers cut to size on site. Deflection has not been adjusted for creep due to long term loading, Kcr = 1.0 The chart is based on NDS2001 bending, horizontal shear, and deflection requirements. or non-uniform loads sum the loads on the header; divide by header span, and multiply by 2. W71 - HEADER SPANS FOR ROOF/CEILING LOAD N5 - TRUSS UPLIFT CONNECTOR TABLE

All connectors are Simpson Strongtie, uno. Select top and bottom connections from this table or SST catalog to meet truss uplift. Use fasteners as specified. To Truss / Rafter Connector 535 600 H2.5A 620 720 H10 8-8dx 1 1 10-10d or 12-10dx1 1/2 10-10d or 12-10dx 1 1265 1470 H16, H16-2 2-10dx 1 1/3 16-16d Sinker 56" Thd. Rod SPF SYP Strap Connector To One Member To Other Member 1085 1265 LSTA18-24 1170 | 1360 | SPH4 3-10d to double plate or 1-10d to single 6-10d to double plate or 2-10d to sing 14-8d or11-10d 14-8d or 11-10d To Column / Truss SPF SYP Column Anchor To Foundation 8-16d Sinkers 18-10dx 11/2 %"x 16" AB %"x 16" AB 2-5/8" Bolts %"x 16" AB 18-16d

ds Supporting Trusses: The builder is responsible for gravity loads, but you should put an extra 2x4 stud under truss bearing location for eac

Manufacturer and product number are listed for example not endorsement. An equivalent device of the same or other manufacturer can be substitu-

for any devices listed in the example tables as long as it meets the required load capacities. Manufacturer's installation instructions must be follow

duration. Strap uplift may be reduced proportionally to number of nails. See spec sheet for alternate nail sizes (10d=.84\*16d, 10dx11/2\*=.80\*10d,

everaled loads. All connections exposed directly to the weather shall be not dipped galvanized after fabrication. Loads are increased for wind

of the truss and top plate (SPF, Fc=425psi=2230lb/p

N4-WIND LOAD DESIGN DATA (Wind loads are per FBC 2004, Section 1609 for enclosed simple diaphragm buildings with mean roof height less than 60' or the least horizontal dimension; not sited on the upper half of an unobstructed 60' high hill with >10% slope.) Basic Wind Speed 110 MPH Wind Exposure Wind Importance Facto **Building Category** Internal pressure Coefficien N/A (Enclosed) Building not in the high velocity hurricane zone Building not in the wind-borne debris region Mean Roof Height < 30 ft Roof Angle 10-45 degrees Components And Cladding Wind Pressures (FBC Table1609 B&C) Zone Effective Wind Area (ft2) 4 21.8 -23.6 18.5 -20.4 5 21.8 -29.1 18.5 -22.6 Total Shear Wall Segments 4"min for 8'-0"H wall 2'-10"min for 10'-0"H wall Transverse Longitudinal
Required 32.5' 28.5' Actual 103.8' 44.0'
All exterior walls are type II shear walls ACTUAL SHEAR WALL length is the total f all wall segments with full height sheathing and width to height ratio great

than 1: 3.5 (plus special shear wall

17A & 3.17B with table 3.17E

diustment for type II shear wall (or

segments if noted.) REQUIRED SHEAR

VALL length is from WFCM-2001, table

equivalent calculation) REV-27-Jun-03

FLOOR PLAN

3-WINDLOAD ENGINEER'S SCOPE OF WORK: The wind load engineer is engineer of record for compliance of the structure to wind load requirements of FBC 2004, Section 1609. 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.

3500 S EGREES

≏u⊃≼i-ELF

ROD & SHELT

5'-2"

BUILDER'S RIESPONSIBILITY: 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

4' 3"

Provide materials and construction techniques, which comply with FBC 2004 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

onnection, call the wind load engineer immediately. Verify the truss engineering includes truss design, placement plans, temporary and permanent bracing details, russ-to-truss connections, and load reactions for all bearing locations.

Select uplift connections, walls, columns, and footings based on truss engineering bearing locations and reactions; ncluding interior bearing walls. Size headers for gravity loads; headers sized by the builder for gravity loads will also satisfy wind loads.

OCUMENT CONTROL and PRIORITY: Structural requirements on S-1 control unless the building code or chitectural siheets 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 s the responsibility of the builder.

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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 2004, Section 1609 vind 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. Approved: FLPE#53915

"EVERYTHING YOU NEED FOR YOUR BUILDING PERMIT" Mark Disosway P.E.

WINDLOAD ENGINEERING

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ocation: Lot 37 Cannon Creek Place S/D Lake City, Florida

1545 Model Lot 37 Cannon Creek Place S/D

Builder: Rob Stewart

Designer:

REV-06-OCT-03

Sheet S-1 of 2 Sheets Windload Engineering Job # 509083