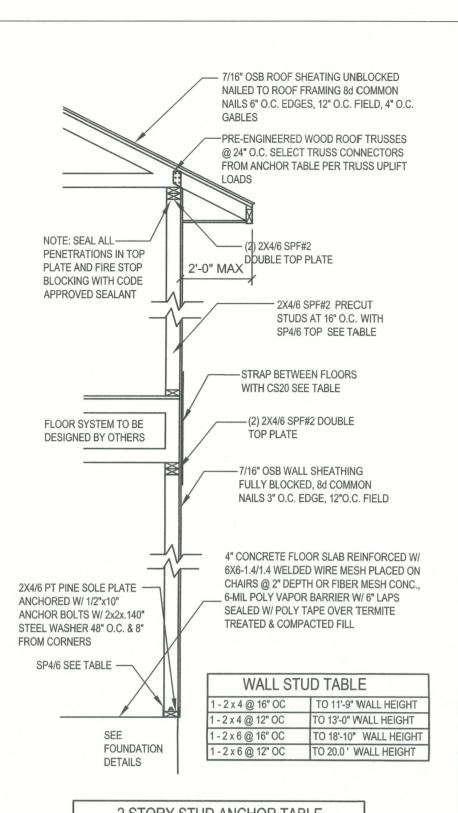


- SEE FOOTING DETAILS FOR

W12 - PORCH HEADER ANCHORS



TYPICAL TRUSS UPLIFT & MAX 10'-0" WALL HIGHT	ANCHOR BOLT SPACING	SP4 / SP6 / CS20 SPACING	ALTERNATE SPH4 / SPH6 / CS20 SPACING	
770 LB	LB 48" O.C. 48" O.C.		N/A	
950 LB	48" O.C.	32" O.C.	N/A	
1270 LB	1270 LB 32" O.C.		32" O.C.	
1500 LB	24" O.C.	16" O.C.	16" O.C.	
2200 LB	LTTI31 W/ 5/8" X 7" WEDGE ANCHOR	(2) CS16	(2) HTS20 NAILED TO STUD PACK	

W4-2 STORY EXT. WALL SECTION SCALE: 1/2"=1'-0" REV-22-AUG-03

CHAPTER 16 FOR DESIGN LOADS.

CROSS SECTION OF 1 1/4 TO 2 INCHES IN DIAMETER OR PRO-VIDE A NONCIRCULAR CROSS GRIPPING SURFACES SHALL

CONTINUOUS, WITHOUT INTERRUPTION BY NEWEL POSTS OR OTHE

BSTRUCTIONS: EXCEPT WITHIN DWELLINGS A NEWEL POST IS ALLOWED TA TURN AND A VOLUTE, TURNOUT, OR STARTING EASING IS ALLOWED

SHALL NOT BE CONSIDERED TO BE OBSTRUCTIONS TO

JECT HORIZONTALLY BEYOND THE SIDES OF THE HANDRAIL WITHIN 1 1/2 INCHES. HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1 1/2 INCHES BETWEEN

THE WALL AND THE HANDRAIL.

BEVELING OF NOSING SHALL NO EXCEED 1/2 INCH. RISERS SHALL BE VERTICAL OR SLOPED FROM THE UNDERSIDE OF THE LEADING EDGE OF THE TREAD ABOVE AT N ANGLE NOT MORE THAN 30

HE LEADING EDGE OF THE TREAD SHALL BE NO GREATER THAN 9/16 INCH. A NOSING NOT LESS THAN 3/4 INCH BUT NOT MORE THAN 1 1/4 INCHES SHALL BE PROVIDED

5) THE RADIUS OF CURVATURE AT

1) PORCHES, BALCONIES, OR RAISED FLOOR SUIR- FACES

3) STAIRWAYS SHALL BE EQUIPED WITH HANDRAILS

LOCATED MORE THAN 30 INCHES ABOVE FLOOR OR GRADE BELOW SHALL HAVE GUARDRAILS NOT LESS ITHAN 42 INCHES IN HEIGHT.

OPEN GUARDRAILS SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL CLOSURES WHICH DO NOT ALLOW PASSAGE OF A 4 INCH SPHERE UP TO A HEIGHT OF 34 INCHES

LOCATED NOT LESS THAN 34 INCHES NOR MORE THAN 38 INCHES ABOVE THE LEADING EDGE OF A TREAD; 36 INCH MINIMUM FOR HAND RAILS SERVING AS GUARDRAILS ON OPEN SIDE OF STARIWAYS.

HANDRAILS FOR DWELLINGS SHALL HAVE A CIRCULAR

2X4 OUTRIGGER @ 48" OC.—

BLOCKING REQUIRED BETWEEN OUTRIGGERS

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

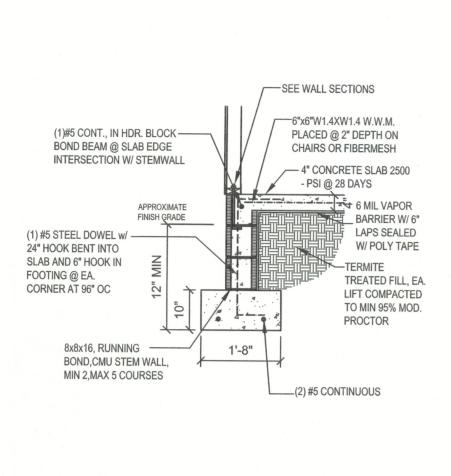
2X4 SCAB CONT. TOP

CHORD@ 8' FROM

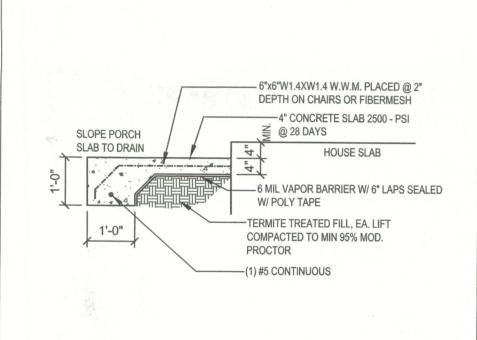
TO BOTTOM

FIRST TRUSS.

GABLE



F1 - STEM WALL FOUNDATION SCALE: 1/2"=1'-0" REV-27-MAY-03



F2 - PORCH SLAB

-7/16" STRUCTURAL ROOF

HURRICANE

-CLIP H-2.5 OR

EQUAL 48" OC.

TOP CHORD

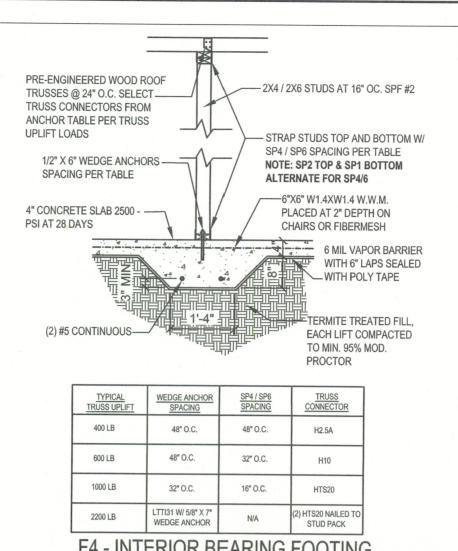
OF GABLE END

TRUSS DROP 3

SHEATHING

2X4 BARGE -

RAFTER CONT.



BASED ON FBC 2004 TABLES OR HAVE

SIZED BY SUPPLIER OR ENGINEER.

CONTINUE SPACING OF

SP4/6 STUD STRAPS OVER

CONNECT TOP OF

HEADER STUDS /

JACK STUDS TO

HEADER PER

TRUSS UPLIFT

ANCHOR BOLTS MAY

EITHER SIDE OF KING

STUDS. PLATE MUST

BE CONT. BETWEEN

BOLT AND KING STUDS

BE LOCATED AT

-- ENDNAIL OR TOE NAIL

WITH (6) .131 X 31/4

HEADER TO HEADER STUD

TYPICAL STRAPPING

(SEE TABLE FOR SPECIFIC

EXAMPLES BASED ON

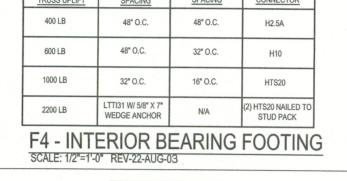
CONNECT HEADER SUD PACK TO

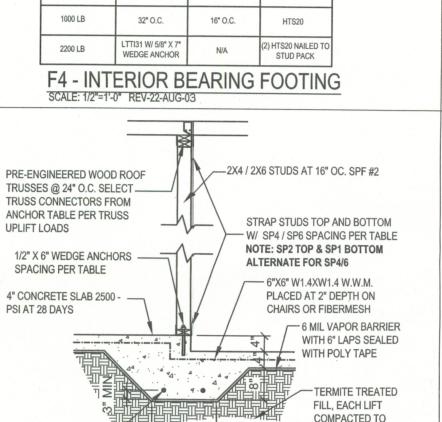
HEADER CONNECTION TABLE)

SCALE: N.T.S. REV 22-AUG-03

FOUNDATION PER TRUSS UPLIFT (SEE

W13-TYPICAL HEADER SIZING & STRAPING DETAIL



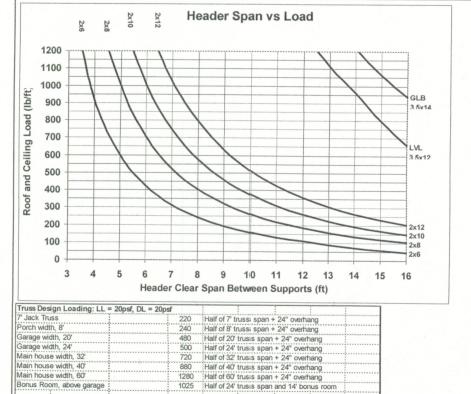


MIN. 95% MOD.

	1	1	PROC
TYPICAL TRUSS UPLIFT	WEDGE ANCHOR SPACING	SP4 / SP6 SPACING	TRUSS CONNECTOR
400 LB	48" O.C.	48" O.C.	H2.5A
600 LB	48" O.C.	32" O.C.	H10
1000 LB	32" O.C.	16" O.C.	HTS20
2200 LB	LTTI31 W/ 5/8" X 7" WEDGE ANCHOR	N/A	(2) HTS20 NAILED TO STUD PACK

(2) #5 CONTINUOUS-

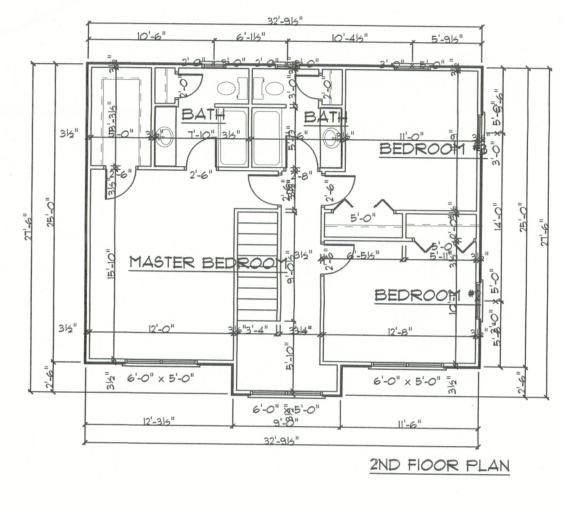
F5 - INTERIOR BEARING STEP FOOTING



Truss Design Loading: LL = 20psf, [)L = 20psf		
7' Jack Truss	220	Half of 7' truss; span + 24" overh	ang :
Porch width, 8'	240	Half of 8' truss; span + 24" overh	ang
Garage width, 20'	: 480	Half of 20' trusis span + 24" over	hang
Garage width, 24'	500	Half of 24' trusis span + 24" over	hang
Main house width, 32'	720	Half of 32' trusis span + 24" over	hang
Main house width, 40'	: 880	Half of 40' trusis span + 24" over	hang
Main house width, 60'	1280	Half of 60' trusis span + 24" over	hang
Bonus Room, above garage	1025	Half of 24' trusis span and 14' bo	nus room
Notes:		·	
1. Deflection limits: TL=L/240, LL=L/18	30.	·	·†·····
2. Duration factor, Cd = 1.25, applied to	o Fb and Fv. (No inc	crease to E or Fc for duration of	f load.)
2x headers are SYP#2 with OSB flit	ch spacer and (2) 1	12dS 16"OC. (stirength increased	5% for OSB)
4. 3.5" x 14" GLB is Anthony Power He	eader, 2600 Fb, 1.9	E, or GP (2)1.775x14 LVL, 2850	Fb, 2.0 E.
 3.5" x 12" LVL is Blue Linx - GP Lar 			1
Minimum bearing for SYP header, For	c = 565psi, 2500 lb	per jack stud. ((For SPF plate, Fo	c = 425psi, 2200 lb pe
Shear strength is increased 50% for	minimal splits and	checks headers cut to size on si	te.
Deflection has not been adjusted for	creep due to long to	term loading, Kcr = 1.0.	7
The chart is based on NDS2001 ben	ding, horizontal she	ear, and deflection requirements.	1
Chart is for uniform loads only.		``````````````````````````````````````	
11. (For non-uniform loads sum the load	ds on the header, d	divide by header span; and multiple	y by 2.)
W71 - HFAD	IFR SP	ANS FOR RO	OE/CEII
V V /			OI /OLIL

			oads sum		n the header	, divide by he	eader span; an	id multiply by	2.)		
	W	71	- HE	ADE	R SF	PANS	FOR	ROO	F/CEI	LING	LOAD

SST car	talog to m	eet truss uplift. Use f	asteners as specified.	om connections from this table or
Uplift SPF	Uplift SYP	Truss Connector	To Plate	To Truss / Rafter
320	455	H3	4-8d	4-8d
245	350	H5A	3-8d	3-8d
535	600	H2.5A	5-8d	5-8d
620	720	H10	6-10dx11/2"	6-10dx 11/5"
850	990	LTS12	8-8dx1½"	8-8dx 1½"
1245	1450	HTS20	10-10d or 12-10dx11/2"	10-10d or 12-10dx 1½"
1265	1470	H16, H16-2	10-10dx111/2"	2-10dx 1½"
1785	2050	LGT2	14-10d Siinker	16-16d Sinker
3655	4200	MGT	%" Thd. Rod	22-10d
SPF	SYP	Strap Connector	To One Member	To Other Member
760	885	SP4	6-10dx1½"	N/A
865	1005	CS20	9-8d or 7-10d	9-8d or 7-10d
1085	1265	LSTA18-24	7-10d	7-10d
1170	1360	SPH4	12-10dx1 ½"	N/A
420	455	SSP	4-10d	3-10d to double plate or 1-10d to sing
600	825	DSP	8-10d	6-10d to double plate or 2-10d to sing
1420	1650	CS16	14-8d or 11-10d	14-8d or 11-10d
SPF	SYP	Column Anchor	To Foundation	To Column / Truss
1160	1350	LTT19	%"x 16" AB	8-16d Sinkers
1985	2310	LTTI31	%"x 1,6" AB	18-10dx 1½"
2385	2775	HD2A	%"x 16" AB	2-%" Bolts
3590	4175	HTT16	%"x 16" AB	18-16d
1975	2300	ABU66	%"x 16" AB	12-16d tra 2x4 stud under truss bearing location for each



w/6-.131"x3.25"

1/2"x10" ANCHOR BOLTS

- 1/2"x10" ANCHOR BOLTS

OPTION #5

Uplift, lb. < 3885

Uplift, lb. < 1760

W/ 2x2x.140" STEEL

OPTION #2

Uplift, lb. < 1500

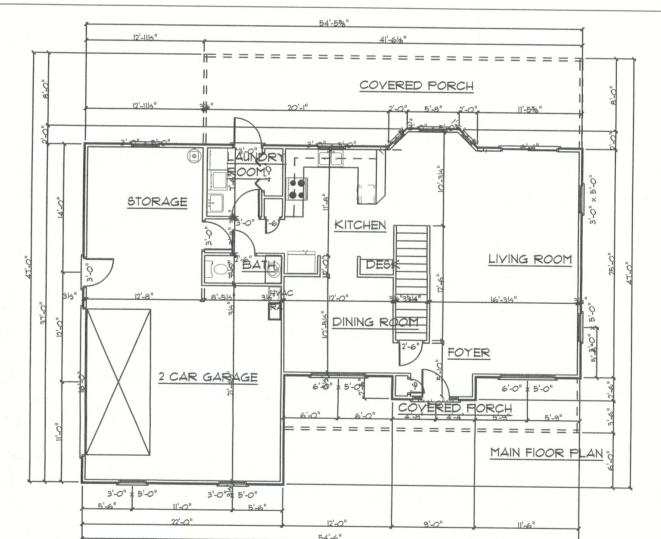
W/ 2x2x.140" STEEL
WASHER SPACING PER

OPTION #4

Uplift, lb. < 2500

OPTION #1

Uplift, lb. < 800



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

oad Bearing Header Sizing Methods (BY BUILDER)

Jack Studs and King Studs (BY BUILDER)

Header Uplift Connections (BY BUILDER)

dividing by the length of the header.

Use one jack stud for every 3000 lb vertical load.

connection) and stud to foundation (bottom connection)

Option # Uplift, lb. Top Connector

plift greater than 3885 lb requires engineering design

2. Use supplier pubished data or Southern pine span tables.

3. For engineered lumber beams have suppliers engineer size beam.

< 800 End nail or toe nail

w/6-.131"x3.25"

4. Lookup jack studs 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

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

#2 < 1500 LSTA12, 10-10d 755 (2) SP4, 6-10dx1½",½" AB 1380

< 1750 LSTA18, 14-10d 1055 LTT20B, 10-16d ½" AB</p>
< 2500 (2) LSTA18, 14-10d 2110 LTT131, 18-10d ½"x10" AB</p>

< 2500 (2) LSTA18, 14-10d 2110 LTTI31, 18-10d½"x10" AB 2188
 < 3885 (3) LSTA18, 14-10d 3480 HTT16, 18-16d, %"x10" AB 4178

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

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 BARS): UNO, ALL REINFORCEMENT SHALL BE DETAILED AND PLACED IN 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: 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.

N3-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 WINDLOAD ENGINEERING engineer of record for the trusses and did not design the trusses or delegate to the truss designer.

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

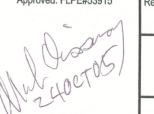
POB 868, Lake City, FL 32056 Phone: (386) 754-5419 Fax: (386) 269-4871 Email: windloadengineer@bellsouth.net

Location: 275 SW Scenic Court. Ft. White. Florida 32038

Adam & Kim Service Residence

Builder: Stephen Crawford Construction

Designer: Stephen Crawford Construction Approved: FLPE#53915



REV-06-OCT-03

Sheet S-1 of 1 Sheet Windload Engineering Job # 510121

Uplift SPF	Uplift SYP	Truss Connector	To Plate	To Truss / Rafter
320	455	H3	4-8d	4-8d
245	350	H5A	3-8d	3-8d
535	600	H2.5A	5-8d	5-8d
620	720	H10	6-10dx11/2"	6-10dx 1½"
850	990	LTS12	8-8dx1½"	8-8dx 1½"
1245	1450	HTS20	10-10d or 12-10dx11/2"	10-10d or 12-10dx 1½"
1265	1470	H16, H16-2	10-10dx11 1/2"	2-10dx 1½"
1785	2050	LGT2	14-10d Siinker	16-16d Sinker
3655	4200	MGT	%" Thd. Rod	22-10d
SPF	SYP	Strap Connector	To One Member	To Other Member
760	885	SP4	6-10dx1½"	N/A
865	1005	CS20	9-8d or 7-10d	9-8d or 7-10d
1085	1265	LSTA18-24	7-10d	7-10d
1170	1360	SPH4	12-10dx1 ½"	N/A
420	455	SSP	4-10d	3-10d to double plate or 1-10d to single
600	825	DSP	8-10d	6-10d to double plate or 2-10d to single
1420	1650	CS16	14-8d or 11-10d	14-8d or 11-10d
SPF	SYP	Column Anchor	To Foundation	To Column / Truss
1160	1350	LTT19	%"x 16" AB	8-16d Sinkers
1985	2310	LTTI31	%"x 1,6" AB	18-10dx 1½"
2385	2775	HD2A	%"x 16" AB	2-%" Bolts
2500	4475	LITTAO	5/H 40H 4D	

less than 60' or the least horizontal dimension; not sited on the upper half of an unobstructed 60' high hill with BUILDER'S RESPONSIBILITY: The builder and owner are responsible for the following, which are specifically not part >10% slope. of the wind load engineer's scope of work. * Confirm that the foundation design & site conditions meet gravity load requirements (assume 1000 PSF bearing Basic Wind Speed capacity unless visual observation or soils test proves otherwise Wind Exposure * Provide materials and construction techniques, which comply with FBC 2004 requirements for the stated wind Wind Importance Factor velocity and design pressures. Building Category Provide a continuous load path from roof to foundation. If you believe the plan omits a continuous load path N/A (Enclosed Internal pressure Coefficien connection, call the wind load engineer immediately. Verify the truss engineering includes truss design, placement plans, temporary and permanent bracing details, Building not in the high velocity hurricane zone truss-to-truss connections, and load reactions for all bearing locations. Building not in the wind-borne debris region * Select uplift connections, walls, columns, and footings based on truss engineering bearing locations and reactions; Mean Roof Height including interior bearing walls. Roof Angle 10-45 degrees * Size headers for gravity loads; headers sized by the builder for gravity loads will also satisfy wind loads. Components And Cladding Wind Pressures (FBC Table 1609 B& DOCUMENT CONTROL and PRIORITY: Structural requirements on S-1 control unless the building code or Zone Effective Wind Area (ft2) architectural 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 is the responsibility of the builder. 5 21.8 -29.1 18.5 -22.6 COPYRIGHTS AND PROPERTY RIGHTS: Mark Disosway, P.E. hereby expressly reserves 1st Floor Total Shear Wall Segments is common law copyrights and property right in these instruments of service. This document is -4"min for 8'-0"H wall 2'-10"min for 10'-0"H wall not to be reproduced, altered or copied in any form or manner without first the express written permission and conse
 Transverse
 Longitudinal

 Required
 45.8'
 39.8'

 Actual
 46.5'
 55.6'
 itated dimensions supercede scaled dimensions. Refer all questions to Mark Disosway, P.E. for resolution. Do not 2nd Floor Total Shear Wall Segments proceed without clarification -4"min for 8'-0"H wall 2'-10"min for 10'-0"H wall WINDLOAD ENGINEER: Mark Disosway, PE No.53915 Transverse Longitudinal Required 29.8' 26.8' ERTIFICATION: The attached plans and "Windload Engineering", sheet S-1, comply with FBC 2004, Section 1609 vind loads, to the best of my knowledge. erior walls are type II shear walls ACTUAL SHEAR WALL length is the total Il wall segments with full height sheatning and width to height rade greater with a 3.5 (plus special shear wall segments if noted.) REQUIRED SHEAR WALL length is from WFCM-2001, table 3.17A & 3.17B with table 3.17E adjustment for type II shear wall for equivalent calculation)

REV-27-Jun-0' all wall segments with full height sheathing and width to height ratio greater than IMITATION: This design is valid for one building, at specified location. s drawing is not valid for construction unless raised seal is affixed.

N4-WIND LOAD DESIGN DATA

(Wind loads are per FBC 2004, Section 1609 for enclosed simple diaphragm buildings with mean roof height

ads. 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 nails. See spec sheet for alternate nail sizes (10d=.84*16d, 10dx1½*=.80*10d,

TO BOTTOM CHORD @ X-BRACING (PROVIDE 4 - 10d NAILS OR 4 -ADDITIONAL 2X4'S @ .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 2X4 SCAB IF VERT. COM @8" OC. WEB IS NOT PRESENT BOTTOM CHORD OF **GABLE END TRUSS** CONT. 2X4X8' #2 SYP LATERAL BRACE @ 48" (2) - 2X4 TOP PLATE - SIMPSON LSTA 2X4 X-BRACE @ 6'-0" OC. 24 @ 48" OC. 2X4 BLOCKING @ 48" OC. BETWEEN GABLE AND SEE DETAIL W1

CONT 2X4 SCAB FROM TOP

NOTE: ALL MEMBERS SHALL BE SY

W10 - TYPICAL GABLE END (X-BRACING