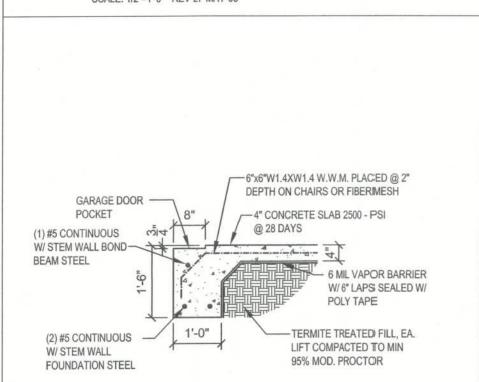


W12 - PORCH HEADER ANCHORS



F1 - STEM WALL FOUNDATION

1'-8"

-SEE WALL SECTIONS

(1)#5 CONT., IN HDR. BLOCK ---

BOND BEAM @ SLAB EDGE

(1)#5 STEEL DOWEL

FOOTING TIED TO

W/24"HOOK BENT INTO

SLAB AND 6" HOOK AT

BOND BEAM STEEL @

EA. CORNER AT 96" OC

FOOTING STEEL AND TO

8x8x16, RUNNING

BOND, CMU STEM WALL,

MIN 2,MAX 5 COURSES

INTERSECTION W/ STEMWALL

-6"x6"W1.4XW1.4 W.W.M.

PLACED @ 2" DEPTH ON

- 4" CONCRETE SLAB 2500

6 MIL VAPOR

BARRIER W/6"

LAPS SEALED

TREATED FILL FA

LIFT COMPACTED

TO MIN 95% MOD.

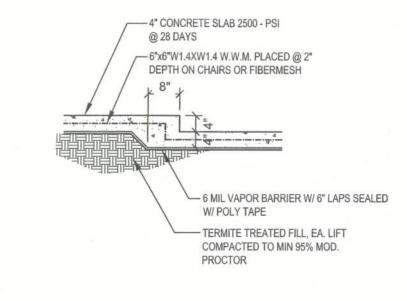
PROCTOR

W/ POLY TAPE

CHAIRS OR FIBERMESH

- PSI @ 28 DAYS

.(2) #5 CONTINUOUS



F12 - NON - BEARING STEP FOOTING

2X4 BARGE

RAFTER CONT.

-7/16" STRUCTURAL ROOF

HURRICANE

-CLIP H-2.5 OR

EQUAL 48" OC.

TOP CHORD

OF GABLE END

TRUSS DROP 3

TOE NAIL TRUSS TO

COM @8" OC.

DOUBLE PLATE w/ 16d

FBOTTOM CHORD OF GABLE END TRUSS

--(2) - 2X4 TOP PLATE

SIMPSON LSTA

24 @ 48" OC.

SEE DETAIL W1

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

3) .131 X 3 🗗 .

CONT 2X4 SCAB FROM TOP

TO BOTTOM CHORD @

VERTICAL IF HIGHER THAN

X-BRACING (PROVIDE

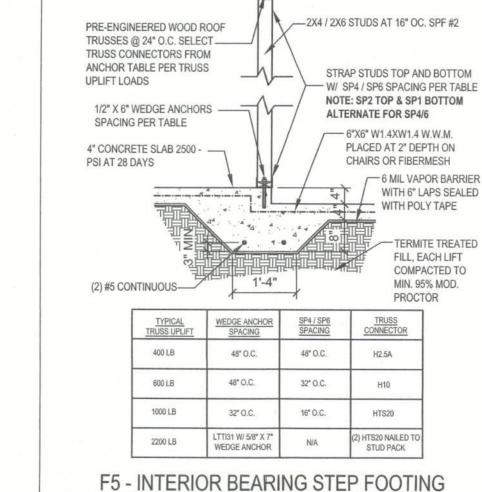
ADDITIONAL 2X4'5 @

48" TO FORM AN "I

GÚN NAILS

F2 - PORCH SLAB

SCALE: 1/2"=1'-0" REV-22-AUG-03



Header Span vs Load

3 4 5 6 7 8 9 10 11 12 13 14 15

Denection limits: IL=D280, LL=D180.

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

2x headers are SYP#2 with OSB flirch spacer and (2) 12dS 16°OC. (strength increased 5% for OSE 3.5° x 14° GLB is Anthony Power Header, 2600 Fb, 1.9 E, or GP (2)1.75x14LVL, 2850 Fb, 2.0 E 3.5° x 12° LVL is Blue Linx - GP Lam, (2) 1.75° x 11.78° LVL, 2900 Fb, 2.9 E, 285 Fv.

Chart is for uniform loads only.

(For non-uniform loads sum the loads on the header, divide by header span, and multiply by 2.)

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

Minimum bearing for SYP header, Fc = 565psi, 2500 lb per jack stud. (För SYF plate, Fc = 425psi, 2200 lb pe Shear strength is increased 50% for minimal splits and checks headers but ib size on site.

Header Clear Span Between Supports (ft)

Half of 8' truss span + 24" overhang

Half of 20' truss ipan + 24" overhang Half of 24' truss ipan + 24" overhang

Half of 32' truss span + 24" overhand

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

025 Half of 24' truss span and 14' bonus roo

700

600

500

400

100

Main house width, 32

Bonus Room, above garage

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

48" O.C.

48" O.C.

32" O.C.

WEDGE ANCHOR

48" O.C.

32" O.C.

16" O.C.

F4 - INTERIOR BEARING FOOTING

PRE-ENGINEERED WOOD ROOF

TRUSSES @ 24" O.C. SELECT _

TRUSS CONNECTORS FROM

ANCHOR TABLE PER TRUSS

SPACING PER TABLE

4" CONCRETE SLAB 2500 - -

(2) #5 CONTINUOUS-

600 LB

1/2" X 6" WEDGE ANCHORS -

UPLIFT LOADS

PSI AT 28 DAYS

- 6"x6"W1.4XW1.4 W.W.M. PLACED @ 2"

-4" CONCRETE SLAB 2500 - PSI

HOUSE SLAB

-6 MIL VAPOR BARRIER W/6" LAPS SEALED

DEPTH ON CHAIRS OR FIBERMESH

€ @ 28 DAYS

W/ POLY TAPE

-(1) #5 CONTINUOUS

PROCTOR

TERMITE TREATED FILL, EA. LIFT

COMPACTED TO MIN 95% MOD.

SLOPE PORCH

SLAB TO DRAIN

1'-0"

-- 2X4 / 2X6 STUDS AT 16" OC. SPF #2

- STRAP STUDS TOP AND BOTTOM W/

SP4 / SP6 SPACING PER TABLE

NOTE: SP2 TOP & SP1 BOTTOM

-6"X6" W1.4XW1.4 W.W.M

PLACED AT 2" DEPTH ON

CHAIRS OR FIBERMESH

WITH 6" LAPS SEALED

6 MIL VAPOR BARRIER

-WITH POLY TAPE

EACH LIFT COMPACTED

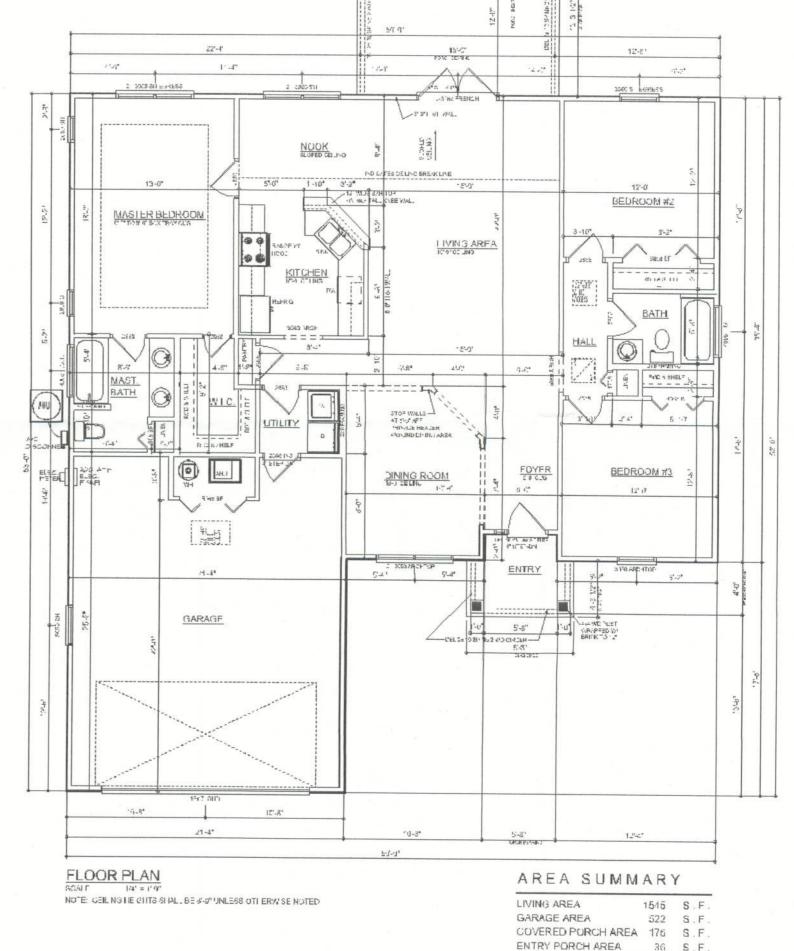
TO MIN. 95% MOD.

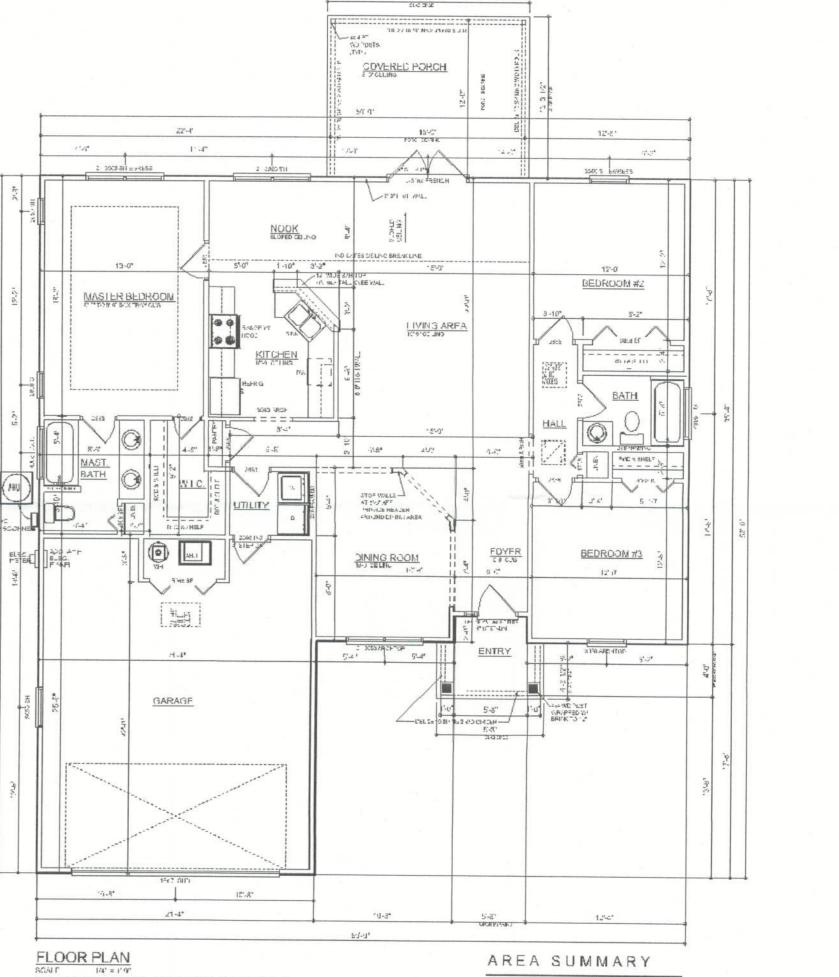
H2.5A

H10

HTS20

ALTERNATE FOR SP4/6





w/6-.131"x3.25"

- 1/2"x10" ANCHOR BOLTS

WASHER SPACING PER

OPTION #4

Uplift, lb. < 2500

W/ 2x2x.140" STEEL

OPTION #5

Uplift, lb. < 3885

OPTION #3

Uplift, lb. < 1760

OPTION #2

Uplift, lb. < 1500

W/ 2x2x.140" STEEL

Uplift, lb. < 800

ASED ON FBC 2001 TABLES OR HAVE

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

T SIZED BY SUPPLIER OR ENGINEER

- ENDNAIL OR TOE NAIL

WITH (6) .131 X 3 1/4

HEADER TO HEADER STUD

TYPICAL STRAPPING

(SEE TABLE FOR SPECIFIC

XAMPLES BASED ON

- CONNECT HEADER SUD PACK TO -

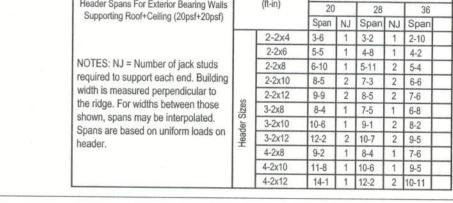
HEADER CONNECTION TABLE)

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

FOUNDATION PER TRUSS UPLIFT (SEE

W13-TYPICAL HEADER SIZING & STRAPING DETAIL

TRUSS UPLIFT)



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.

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

connection) and stud to foundation (bottom connection).

Uplift, lb. Top Connector

< 800 End nail or toe nail

w/6-.131"x3.25"

A12, 10-10d

Use supplier pubished data or Southern pine span tables.

For engineered lumber beams have suppliers engineer size beam.

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

< 1750 LSTA18, 14-10d 1055 LTT20B, 10-16d ½" AB

#5 < 3885 (3) LSTA18, 14-10d 3480 HTT16, 18-16d, %"x10" AB 4175

Bottom Connector

) SP4, 6-10dx11/2", 1/2" AB 13

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

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

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. 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 ACCORDANCE WITH ACI 315-95 WITH ACI 315-96 UNLESS NOTED OTHERWISE. ALL TENSION DEVELOPMENT LENGTHS SHALL BE 30

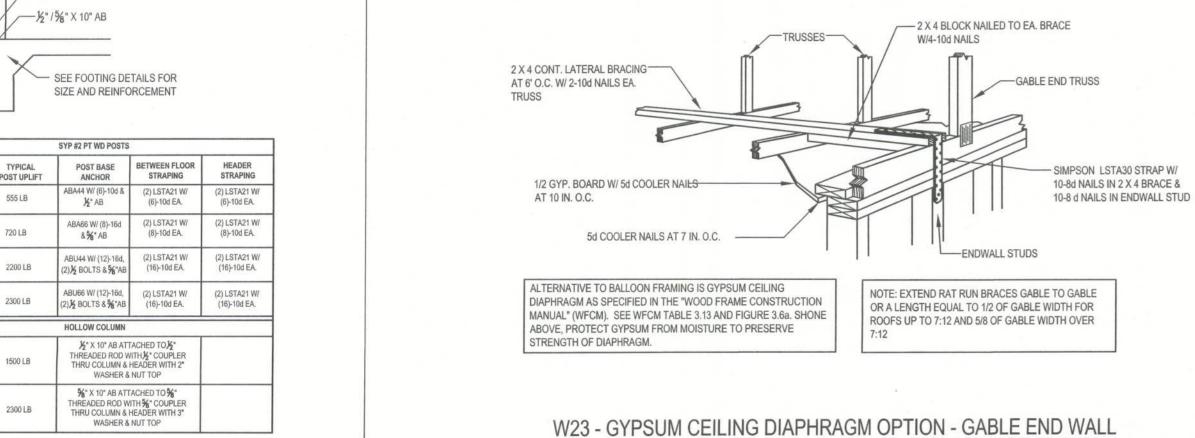
STRUCTURAL CONNECTORS: MANUFACTURERS AND PRODUCT NUMBER FOR CONNECTORS, ANCHORS, AND REINFORCEMENT ARE LISTED FOR EXAMPLE NOT ENDORSEMENT. AN EQUIVALENT DEVICE OF THE SAME OR OTHER MANUFACTURER CAN BE SUBSTITUTED FOR ANY DEVICES LISTED IN THE EXAMPLE TABLES AS LONG AS IT MEETS THE REQUIRED LOAD CAPACITIES. 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: 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.

F3 - GARAGE DOOR POCKET W1 - SINGLE STORY EXT. WALL SECTION 2X4 OUTRIGGER @ 48" OC. WD SYP #2 HEADER BLOCKING REQUIRED BETWEEN OUTRIGGERS -2X4 BLOCKING @ SHEATHING JOINT 4' FROM GABLE END -ALL POSTS & HEADERS SYP #2 2X4 SCAB CONT. TOP -SELECT -SELECT STRAPING PER TO BOTTOM STRAPING PER UPLIFT FROM TABLE CHORD@ 8' FROM UPLIFT FROM NOTE: ALL MEMBERS SHALL BE SYP 4x4/6X6 WD SYP #2 PT POST FLOOR SYSTEM TO -SELECT POST BASE PER SELECT ----4 - 10d NAILS OR 4 -BE DESIGNED BY UPLIFT FROM TABLE STRAPING PER .131"x 3.25" TYPICAL AT-**UPLIFT FROM** ALL CONNECTIONS - SEE FOOTING DETAILS FOR 2X4 SCAB IF VERT. SIZE AND REINFORCEMENT WEB IS NOT PRESENT CONT. 2X4X8' #2 SYP -LATERAL BRACE @ 48" 2X4 X-BRACE @ 6'-0" OC. 2X4 BLOCKING @ 48" OC. BETWEEN GABLE AND ___ 2" / 3" WASHER & NUT FIRST TRUSS. W10 - TYPICAL GABLE END (X-BRACING - LOAD BEARING **HOLLOW COLUMN** -WD SYP #2 HEADER //%" THREADED ROD /—½"/%" COUPLER



W71 - HEADER SPANS FOR ROOF/CEILING LOAD N5 - TRUSS UPLIFT CONNECTOR TABLE All connectors are Simpson Strongtie, uno. Select op and bottom connections from this table or SST catalog to meet truss uplift. Use fasteners as specified. Uplift Uplift Truss
SPF SYP Connector To Truss / Rafter ToPlate 245 350 H5A 850 990 LTS12 8-8dx11/2" 8-8dx 13/5 1245 1450 HTS20 10-10d or 1210dx1 1/2" 10-10d or 12-10dx 1) 1265 1470 H16, H16-2 10-10dx11/2 2-10dx 11/2" 14-10d Sinkr 16-16d Sinker %" Thd. Rd SPF SYP Strap Connector To One Member To Other Member 9-8d or 7-10 9-8d or 7-10d 1085 | 1265 | LSTA18-24 7-10d 1170 | 1360 | SPH4 12-10ldx11/2 3-10d to double plate or 1-10d to single 8-10d 6-10d to double plate or 2-10d to single 14-8dl or 1110d 1420 | 1650 | CS16 14-8d or 11-10d To Foundation To Column / Truss %"x 16" AB 8-16d Sinkers 1160 | 1350 | LTT19 %"x 16" AB 1985 | 2310 | LTTI3 18-10dx 11/2" 2385 2775 HD2A "x 16" AB 2-%" Bolts "x 16" AB 1975 | 2300 | ABU66 %"x 16" AB upporting Trusses: The builder is responsible for gravity loads, but you should put an extra 2x4 stud under truss bearing location for each 3000 lb of reaction. Check the minimum bearing requirements of the truss and too plate (SPF, Fc=425psi=2230lb/ply anufacturer and product number 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 achieve rated loads. All connections exposed directly to the weather shall be not 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,

(Wind loads are per FBC 2001, Section 1606.2 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 Wind Exposure Wind Importance Factor **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 Size headers for gravity loads; headers sized by the builder for gravity loads will also satisfy wind loads. 10-45 degrees Components And Cladding Wind Pressures (FBC Table1606.2 B8 Zone Effective Wind Area (ft2) **Total Shear Wall Segments** 4"min for 8'-0"H wall 2'-10"min for 10'-0"H wall Transverse Longitudinal Il exterior walls are type II shear walls proceed without clarification. CTUAL SHEAR WALL length is the total of all wall segments with full height sheathing and width to height ratio greater than 1: 3.5 (plus special shear wall agments if noted.) REQUIRED SHEAF ALL length is from WFCM-2001, table 7A & 3.17B with table 3.17E djustment for type II shear wall (or equivalent calculation) REV-27-Jun-03

N4-WIND LOAD DESIGN DATA

TOTAL AREA 2279 S.F. 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 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 apacity 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, 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 including interior bearing walls.

OCUMENT CONTROL and PRIORITY: Structural requirements on S-1 control unless the building code or 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.

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Stated dimensions supercede scaled dimensions. Refer all questions to Mark Disosway, P.E. for resolution, Do not

WINDLOAD ENGINEER: Mark Disosway, PE No.53915

CERTIFICATION: The attached plans and "Windload Engineering", sheet S-1, comply with FBC 2001, Section 1606 vind loads, to the best of my knowledge.

IMITATION: This design is valid for one building, at specified location. This drawing is not walld for construction unless raised seal is affixed.

WINDLOAD ENGINEERING "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: Lot 24, SE Carob Gln. Suzanne S/D Lake City, Florida 32025

Spec House Lot 24, SE Carob Gln. Suzanne S/D

Designer

Approved: FLPE#53915

Sheet S-1 of 1 Sheet Windload Engineering

Job # 508182

REV-27-Jul-04

REV-06-OCT-03