

—POST BASE SEE W12

WD PT POST -

**APPROXIMATE** 

FINISH GRADE

1'-8"

BOTTOM CHORD OF-

GABLE END TRUSS

TOE NAIL TRUSS TO -

COM @8" OC.

DOUBLE PLATE w/ 16d

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

- PSI @ 28 DAYS

PLACED @ 2" DEPTH ON

CHAIRS OR FIBERMESH

- 4" CONCRETE SLAB 2500

HOUSE SLAB

POLY TAPE

PROCTOR

20"x10" POURED

\_\_CONCRETE STRIP

-2X6 SYP #2 STRONG

BACK (8) .131 X 3 1/4"

-H5A 6-8d TO EACH GABLE

TRUSS VERTICLE WEB

—(2) - 2X4 TOP PLATE

- SIMPSON LSTA

24 @ 48" OC.

SEE DETAIL W1

WITH TRAY CEILING

TO RAT RUN

**FOOTING** 

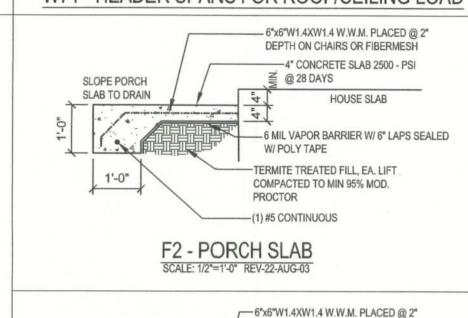
\_\_ (2) #5 CONTINUOUS

- 6 MIL VAPOR BARRIER

TERMITE TREATED FIL

EA. LIFT COMPACTED TO MIN 95% MOD.

W/6" LAPS SEALED W/



BASED ON FBC 2001 TABLES OR HAVE

SIZED BY SUPPLIER OR ENGINEER.

TYPICAL STRAPPING

(SEE TABLE FOR SPECIFIC

EXAMPLES BASED ON TRUSS UPLIFT)

- CONNECT HEADER SUD PACK TO -

HEADER CONNECTION TABLE)

FOUNDATION PER TRUSS UPLIFT (SEE

W13-TYPICAL HEADER SIZING & STRAPING DETAIL

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

110 MPH

N/A (Enclosed)

10-45 degrees

Zone Effective Wind Area (ft2)

**Total Shear Wall Segments** 

4 21.8 -23.6 18.5 -20.4 5 21.8 -29.1 18.5 -22.6

ACTUAL SHEAR WALL length is the total

heathing and width to height ratio greate

egments if noted.) REQUIRED SHEAR

f all wall segments with full height

than 1: 3.5 (plus special shear wall

VALL length is from WFCM-2001, tab 7A & 3.17B with table 3.17E

djustment for type II shear wall (or

quivalent calculation)

Transverse Longitudinal

< 30 ft

>10% slope.)

Basic Wind Speed

Wind Exposure

**Building Category** 

Mean Roof Height

Roof Angle

Wind Importance Factor

Internal pressure Coefficient

Building not in the high velocity hurricane zone

Components And Cladding Wind Pressures (FBC Table1609 B&C)

Building not in the wind-borne debris region

CONTINUE SPACING OF

SP4/6 STUD STRAPS OVER

CONNECT TOP OF

HEADER STUDS /

JACK STUDS TO

HEADER PER

TRUSS UPLIFT

NOTE:

ANCHOR BOLTS MAY

STUDS. PLATE MUST

BE CONT. BETWEEN

EITHER SIDE OF KING

**BOLT AND KING STUDS** 

BE LOCATED AT

W/ 2x2x.140" STEEL

WALL SECTIONS

Uplift, lb. < 800

ASHER SPACING PER

OPTION #4

Uplift, lb. < 2500

2"x10" ANCHOR BOLTS

**OPTION #5** 

Uplift, lb. < 3885

OPTION #3

Uplift, lb. < 1760

W/ 2x2x.140\* STEEL

WASHER WITHIN 3

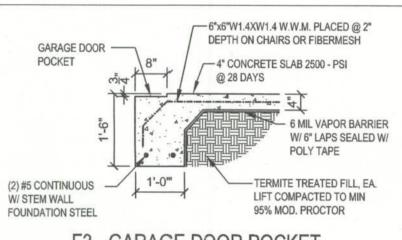
OPTION #2

Uplift, lb. < 1500

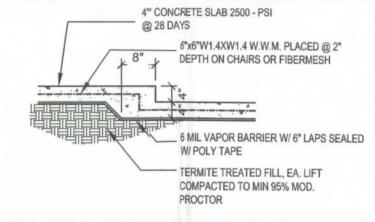
- ENDNAIL OR TOE NAIL

WITH (6) .131 X 3 1/4

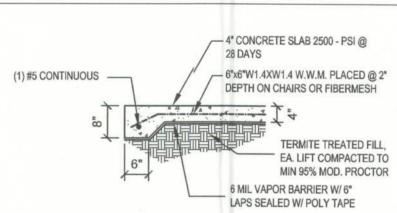
HEADER TO HEADER STUD



## F3 - GARAGE DOOR POCKET



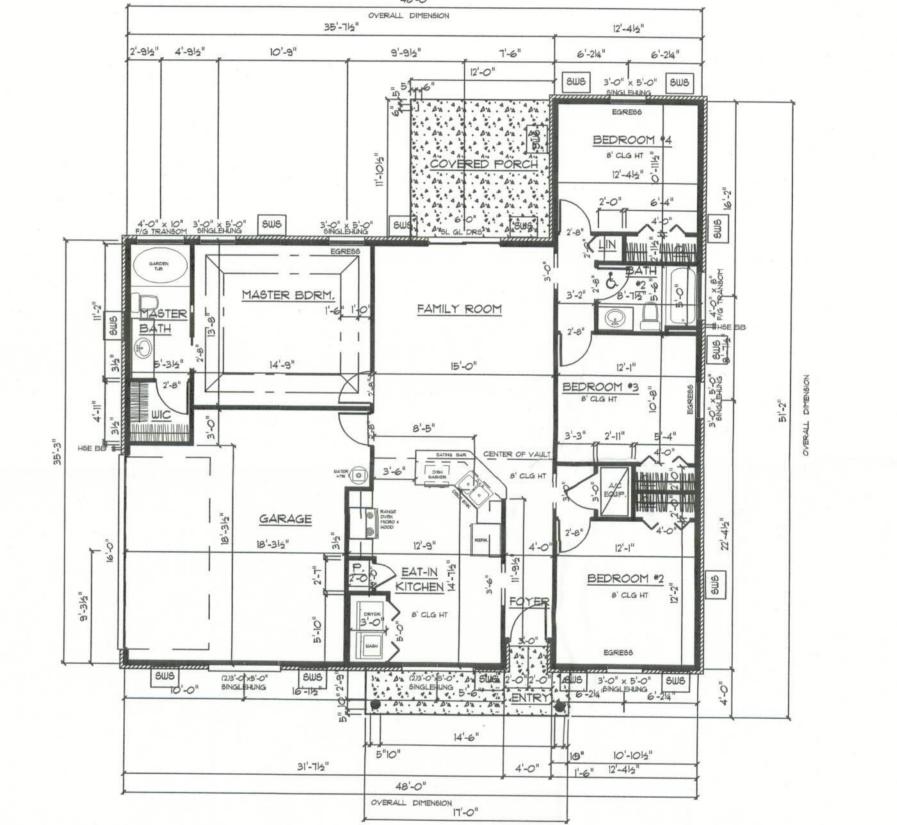
## F12 - NON - BEARING STEP FOOTING SCALE: 1/2"=1'-0" REV-08-JAN-055



## F13 - NON - BEARING THICKENED SLAB EDGE

SCALE: 1/2"=1'-0" REV-10-FEB-03

| Uplift<br>SPF        | Uplift<br>SYP | Truss<br>Connector        | To Plate   | To Truss / Rafter                                    |
|----------------------|---------------|---------------------------|--|--|
| 320                  | 455           | H3                        | 44-8d  | 4-8d   |
| 245                  | 350           | H5A                       | :3-8d  | 3-8d   |
| 535                  | 600           | H2.5A                     | !5-8d  | 5-8d   |
| 620                  | 720           | H10                       | 66-10dr1 1/2"  | 6-10dx 1½"   |
| 850                  | 990           | LTS12                     | 18-8dx1 1/2"   | 8-8dx 1½"  |
| 1245                 | 1450          | HTS20                     | 110-10d or 12-10dx1 1/2"   | 10-10d or 12-10dx 1½"                                |
| 1265                 | 1470          | H16, H16-2                | 110-10tx1½"  | 2-10dx 1½"   |
| 1785                 | 2050          | LGT2                      | 114-10t Sinker   | 16-16d Sinker  |
| 3655                 | 4200          | MGT                       | 55%" Tid. Rod  | 22-10d   |
| SPF                  | SYP           | Strap Connector           | To One Member  | To Other Member                                      |
| 760                  | 885           | SP4                       | 66-10dr11/2"   | N/A  |
| 865                  | 1005          | CS20                      | 9-8d o 7-10d   | 9-8d or 7-10d  |
| 1085                 | 1265          | LSTA18-24                 | 77-10d   | 7-10d  |
| 1170                 | 1360          | SPH4                      | 112-10tx1½"  | N/A  |
| 420                  | 455           | SSP                       | 44-10d   | 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                      | 114-8dor 11-10d  | 14-8d or 11-10d                                      |
| SPF                  | SYP           | Column Anchor             | To Foundation  | To Column / Truss                                    |
| 1160                 | 1350          | LTT19                     | 55/8"x 16" AB  | 8-16d Sinkers  |
| 1985                 | 2310          | LTTI31                    | 5%"x 16" AB  | 18-10dx 1½"  |
| 2385                 | 2775          | HD2A                      | 5% "x 16" AB   | 2-5/8" Bolts   |
| 3590                 | 4175          | HTT16                     | 5% "x16" AB  | 18-16d   |
| 1975                 | 2300          | ABU66                     | 5%"x16" AB   | 12-16d   |
| 00 lb of reaction. C | heck the min  | imum bearing requirements | y Moads, but you should put an e<br>of f the truss and top plate (SPF, | extra 2x4 stud under truss bearing location for each |



\* FLOOR

A/C LIVING AREA

OPT.COVERED PORCH

OTAL AREA UNDER ROLOF

FRONT ENTRY

SCALE : 1/:4" = 1'-0"

2-CAR GARAGE & MECH, AREA . 400 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

Load 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).

Option # Uplift, lb. Top Connector

#3 < 1750 LSTA18, 14-10d

#4 < 2500 (2) LSTA18, 14-10d

eader Spans For Exterior Bearing Walls Supporting Roof+Ceiling (20psf+20psf)

NOTES: NJ = Number of jack studs

width is measured perpendicular to

the ridge. For widths between those

shown, spans may be interpolated.

Spans are based on uniform loads on

required to support each end. Building

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

< 1500 LSTA12, 10-10d

w/6-.131"x3.25"

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** 

SP4, 6-10dx1½",½" AB 1380

TT20B, 10-16d 1/2" AB 1750

SP4, 6-10dx1 1/2"

Header Spans Building Width / Truss Span (ft)

4-2x10 11-8 1 10-6 1 9-5

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

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

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 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.

WINDLOAD ENGINEERING

REV-27-Jul-04

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

POB 868, Lake City, FL 32056 Phone: (386) 754-5419 Fax: (386) 754-6749 Email: windloadengineer@bellsouth.net

truss-to-truss connections, and load reactions for all bearing locations. Location: Lot #73 Emerald Cove S/D, Lake City, Florida \* Select uplift connections, walls, columns, and footings based on truss engineering bearing locations and reactions;

DOCUMENT 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

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N3-WINDLOAD ENGINEER'S SCOPE OF WORK: The wind load engineer is engineer of record for compliance of the

BUILDER'S RESPONSIBILITY: The builder and owner are responsible for the following, which are specifically not part

\* Confirm that the foundation design & site conditions meet gravity load requirements (assume 1000 PSF bearing

\* Provide materials and construction techniques, which comply with FBC 2004 requirements for the stated wind

\* Provide a cointinuous load path from roof to foundation. If you believe the plan omits a continuous load path

\* Verify the truiss engineering includes truss design, placement plans, temporary and permanent bracing details,

\* Size headers; for gravity loads; headers sized by the builder for gravity loads will also satisfy wind loads.

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.

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

WINDLOAD EINGINEER: Mark Disosway, PE No.53915

PLAN \*

= 1430 S.F.

= 74 S.F.

= 2049 S.F

capacity unless visual observation or soils test proves otherwise

connection, call the wind load engineer immediately.

of the wind load engineer's scope of work.

velocity and design pressures.

including interior bearing walls.

is the responsibility of the builder.

CERTIFICATION: The attached plans and "Windload Engineering", sheet S-1, comply with FBC 2004, Section 1609 wind loads, to the best of my knowledge.

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

The Victria Model

Builder: Cornerstone Development

Approved: FLPE#53915

Designer: Teena Ruffo



Sheet S-1 of 2 Sheet Windload Engineering

Job # 511011