



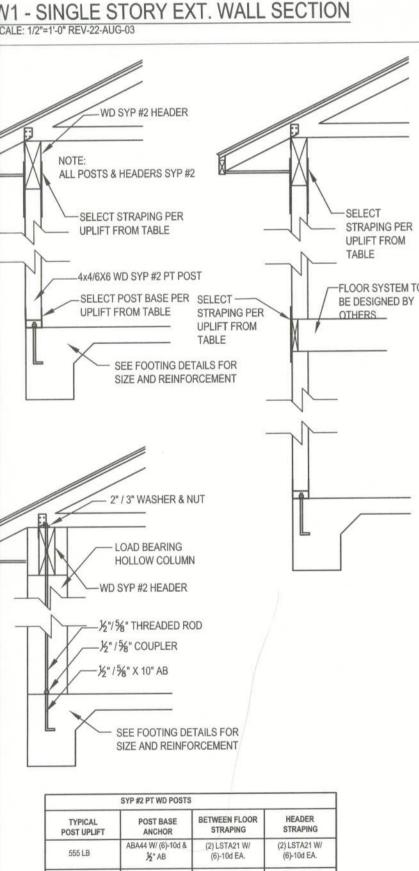
TTI31 W/ 5/8" X

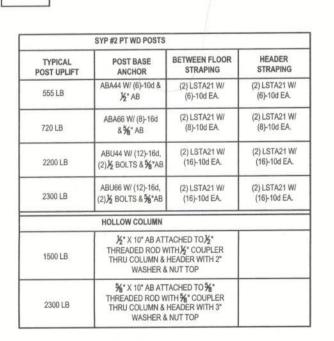
NOTE: SP2 TOP & SP1 BOTTOM ALTERNATE FOR SP4/6

MINIMUM ANCHOR BOLT SPACING FOR WALLS WITH A HEIGHT

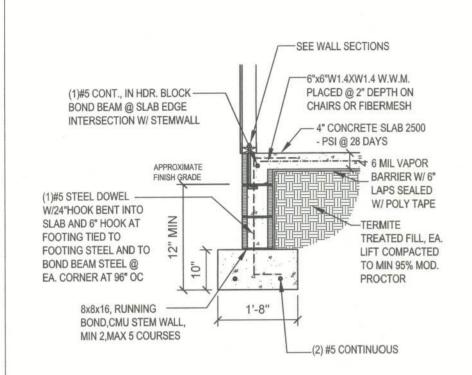
GREATER THAN 10'-0" AND LESS THAN 14'-0" SHALL BE 32" O.0

STUD PACK

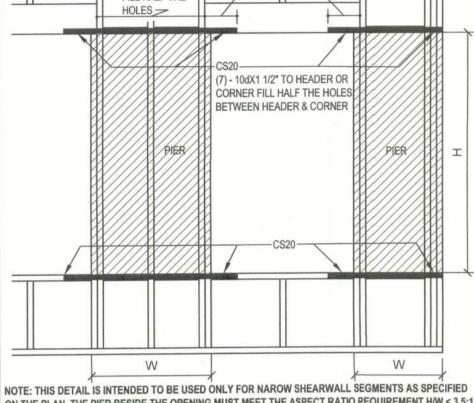




W12 - PORCH HEADER ANCHORS SCALE: N.T.S. REV-18-JUL-03



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



ON THE PLAN. THE PIER BESIDE THE OPENING MUST MEET THE ASPECT RATIO REQUIREMENT H/W < 3.5:1 WHERE H IS THE PIER HEIGHT. FOR WINDOWS NOT GREATER THAN 2' HIGHT OR 5' WIDE THE WIDTH OF THE OPENING MAY BE INCLUDED AS FULL HEIGHT SHEARWALL IN ADDITION TO THE PIER WIDTH WHEN STRAPPED ACCORDING TO THIS DETAIL.

W68 - SHEARWALL PIER STRAPPING

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

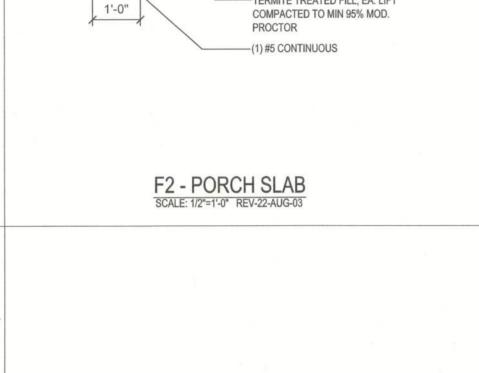
ABOVE, PROTECT GYPSUM FROM MOISTURE TO PRESERVE

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.



SLOPE PORCH

SLAB TO DRAIN

GARAGE DOOR -

POCKET

(2) #5 CONTINUOUS

FOUNDATION STEEL

W/ STEM WALL

W/ STEM WALL BOND

(1) #5 CONTINUOUS

- 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

TERMITE TREATED FILL, EA. LIFT

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

DEPTH ON CHAIRS OR FIBERMESH

6 MIL VAPOR BARRIER

W/6" LAPS SEALED W/

POLY TAPE

TERMITE TREATED FILL. EA.

LIFT COMPACTED TO MIN

95% MOD. PROCTOR

-4" CONCRETE SLAB 2500 - PSI

@ 28 DAYS

PRE-ENGINEERED WOOD ROOF

1/2" X 6" WEDGE ANCHORS -

TRUSSES @ 24" O.C. SELECT -

TRUSS CONNECTORS FROM

ANCHOR TABLE PER TRUSS

SPACING PER TABLE

4" CONCRETE SLAB 2500 - -

(2) #5 CONTINUOUS---/

400 LB

600 LB

1000 LB

PRE-ENGINEERED WOOD ROOF

TRUSSES @ 24" O.C. SELECT __

1/2" X 6" WEDGE ANCHORS

4" CONCRETE SLAB 2500 - -

SPACING PER TABLE

(2) #5 CONTINUOUS-

600 LB

1000 LB

2200 LB

900

800

600

500

400

Garage width, 24 Main house width, 32 Main house width, 40

fain house width, 60

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

TRUSS CONNECTORS FROM

ANCHOR TABLE PER TRUSS

UPLIFT LOADS

PSI AT 28 DAYS

48" O.C.

48" O.C.

32" O.C.

TI31 W/ 5/8" X

WEDGE ANCHOR

48" O.C.

48" O.C.

32" O.C.

WEDGE ANCHOIR

Header Span vs Load

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

Deflection limits: TL=I/240, LL=I/180.
 Duration factor, Cd = 1.25, applied to Fb and Fv. (No increase to E: or fc.1 for duration of load.)
 2x headers are SYP#2 with OSB flitch spacer and (2) 12dS 16°OC. (stength increased 5% for OSB)
 3.5° x 14° GLB is Anthony Power Header, 2600 Fb, 1.9 E, or GP (2)1.5x14 LVL, 2850 Fb, 2.0 E.
 3.5° x 12° LVL is Blue Linx - GP Lam, (2) 1.75° x 11.78° LVL, 2900 Fb, 2.0 E, 285 Fv.
 Minimum bearing for SYP header, Fc = 565psi, 2500 lb per jack situd. For SPF plate, Fc = 425psi, 2200 lb per 7. Shear strength is increased 50% for minimal splits and checks header cut to size on site.

Header Clear Span Between Supports (ft)

:Half of 8' trrussspan + 24" overhang Half of 20' trusi span + 24" overhang Half of 24' trusi span + 24" overhang

Half of 32' trusi span + 24" overhang Half of 40' trusi span + 24" overhang

Half of 60' trus span + 24" overhang

F5 - INTERIOR BEARING STEP FOOTING

48" O.C.

32" O.C.

16" O.C.

48" O.C.

32" O.C.

16" O.C.

F4 - INTERIOR BEARING FOOTING

UPLIFT LOADS

PSI AT 28 DAYS

--- 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

6 MIL VAPOR BARRIER

WITH 6" LAPS SEALED

TERMITE TREATED FIL

TO MIN. 95% MOD.

PROCTOR

H2.5A

H10

HTS20

2) HTS20 NAILED STUD PACK

___2X4 / 2X6 STUDS AT 16" OC. SPF #2

STRAP STUDS TOP AND BOTTOM

NOTE: SP2 TOP & SP1 BOTTOM

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

PLACED AT 2" DEPTH ON

CHAIRS OR FIBERMESH

- 6 MIL VAPOR BARRIER

WITH POLY TAPE

WITH 6" LAPS SEALED

TERMITE TREATED

FILL, EACH LIFT

COMPACTED TO

MIN. 95% MOD.

PROCTOR

H2.5A

HTS20

ALTERNATE FOR SP4/6

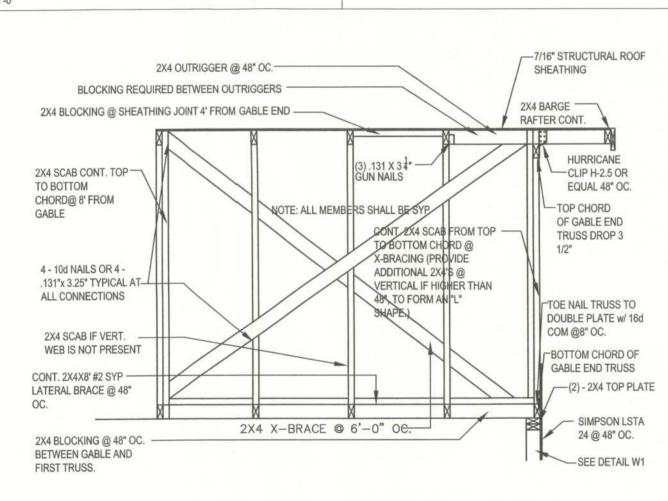
- W/ SP4 / SP6 SPACING PER TABLE

WITH POLY TAPE

EACH LIFT COMPACTED

ALTERNATE FOR SP4/6

F3 - GARAGE DOOR POCKET



W10 - TYPICAL GABLE END (X-BRACING)

W23 - GYPSUM CEILING DIAPHRAGM OPTION - GABLE END WALL

- 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

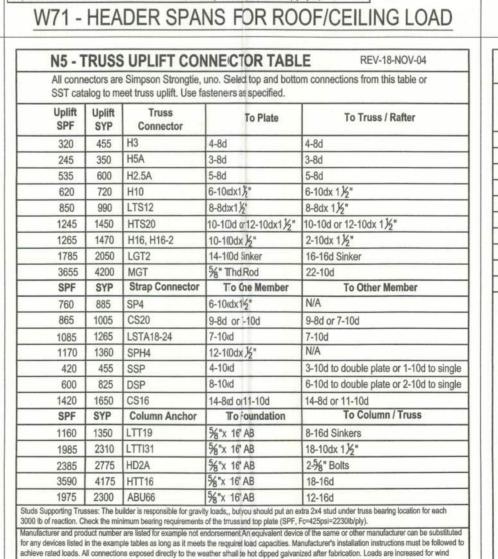
-GABLE END TRUSS

SIMPSON LSTA30 STRAP W/

10-8d NAILS IN 2 X 4 BRACE &

10-8 d NAILS IN ENDWALL STUD

W/4-10d NAILS



duration. Strap uplift may be reduced proportionally to number of nails.. Set 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** N/A (Enclosed) Internal pressure Coefficient Building not in the high velocity hurricane zone Building not in the wind-borne debris region Mean Roof Height Roof Angle 10-45 degrees Components And Cladding Wind Pressures (FBC Table 1606 2 B&) Zone Effective Wind Area (ft2) 5 21.8 -29.1 18.5 -22.6 **Total Shear Wall Segments** Transverse Longitudinal equired 48.5' Actual 159.3' 92.4'

w/6-.131"x3.25" BUILDER MUST SELECT HEADER ASED ON FBC 2001 TABLES OR HAVE SIZED BY SUPPLIER OR ENGINEER ENDNAIL OR TOE NAIL -CONTINUE SPACING OF HEADER TO HEADER STUD SP4/6 STUD STRAPS OVER CONNECT TOP OF WITH (6) .131 X 3 1/4 HEADER STUDS / 6. Total king plus jack studs = studs needed to be there if no opening was there. JACK STUDS TO HEADER PER TRUSS UPLIFT 1/2"x10" ANCHOR BOLTS W/ 2x2x.140" STEEL WASHER SPACING PER TYPICAL STRAPPING WASHER WITHIN 3" OPTION #2 OPTION #3 (SEE TABLE FOR SPECIFIC EXAMPLES BASED ON TRUSS UPLIFT) Uplift, lb. < 800 Uplift, lb. < 1500 Uplift, lb. < 1760 ANCHOR BOLTS MAY BE LOCATED AT EITHER SIDE OF KING STUDS. PLATE MUST BE CONT. BETWEEN **BOLT AND KING STUDS** - CONNECT HEADER SUD PACK TO FOUNDATION PER TRUSS UPLIFT (SEE HEADER CONNECTION TABLE) W13-TYPICAL HEADER SIZING & STRAPING DETAIL SCALE: N.T.S. REV 22-AUG-03 Uplift, lb. < 2500 Uplift, lb. < 3885

N2-GENERAL NOTES: OUNDATION: 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 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'. AREA SUMMARY CONDITIONED - - - - - - 2299 SF GARAGE - - - - - - - 583 S FIBER CONCRETE SLAB: CONCRETE SLABS ON GROUND CONTAINING SYNTHETIC FIBER STORAGE SHALL BE FROM 0.75 TO 1.5 POUNDS PER CUBIC YARD IN ACCORDANCE WITH THE MANUFACTURER'S TOTAL ROOF - - - - - - - 4664 SI (LOFT ABOVE - FUT.) 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 BEAM PER ENGINEER THE BUILDING OFFICIAL. MA T LINEN MASTER BEDROOM

0

CONTROL JOINTS: WHERE SPECIFIED, SAWN CONTROL JOINTS IN SLAB-ON-GRADE SHALL BE CUT IN 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.)

oad 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

plift greater than 3885 lb requires engineering design

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

equired to support each end. Building

< 800 End nail or toe nail

w/6-.131"x3.25"

STA12, 10-10d

LSTA18, 14-10d

Jack Studs and King Studs (BY BUILDER)

Header Uplift Connections (BY BUILDER)

dividing by the length of the header

Use supplier pubished 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.

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

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

Bottom Connector

(2) SP4, 6-10dx1火",火" AB 138

055 LTT20B, 10-16d ½" AB 1750 110 LTT131, 18-10d½"x10" AB 2185

3-2x8 8-4 1 7-5 1 6-8

Header Spans Building Width / Truss Span (ft)

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

#4 < 2500 (2) LSTA18, 14-10d | 2110 | L11131, 10-10072 | 3185 (3) LSTA18, 14-10d | 3480 | HTT16, 18-16d, %"x10" AB | 4175

(ft-in)

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.

N3-WINDLOAD EINGINEER'S SCOPE OF WORK: The wind load engineer is engineer of record for compliance of the WINDLOAD ENGINEERING 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 RESP'ONSIBILITY: The builder and owner are responsible for the following, which are specifically not part of the wind load engineer's scope of work.

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.

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

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

OCCUMENT CONITROL 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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its common law corpyrights and property right in these instruments of service. This document is not to be reproducied, altered or copied in any form or manner without first the express written permission and consent of Mark Disosway...

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 lbest of my knowledge.

LIMITATION: This design is valid for one building, at specified location.

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

REV-27-Jul-04

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

ocation: Lot 6 Russwood S/D Unit I Columbia County, Florida

Ted & Catherine Bryan Residence

Builder:

Designer: Tim Delbene Job #05038



Sheet S-1 of 1 Sheet Windload Engineering

-W68-FLOOR PLAN

SEE ELEVATIONS
FOR LOCATION
OF EXTERIOR
BRICK WAINSCOT GARAGE ENTRY 9' CEILING 17-11 x 5-0 DOWN / 11-5 x 13-3 DYERR ARCH LIBRARY STEP TRAY SWS W/ EYEBR SWS 2' O'HANG 14'

UTILITY

10-3 x 9-0

15 IN. BAR SINK

BREAKFAST

7-4 3050 III

-5'-8 1/16"-4'-8 3/8"-1

SCREEN PORCH

7-2" 1 12-4" 4'-8" 14'-8" 1 8'-7" 1 8'-7"

17-11 x 20-2

BEDROOM 2

9'-6"

BEDROOM 3

13-5 x 11-7

Deflection has not been adjusted for creep due to long term loading, Kr = 1.0.

The chart is based on NDS2001 bending, horizontal shear, and deffectin requirements. Chart is for uniform loads only.

(For non-uniform loads sum the loads on the header, divide by headerspan, and multiply by 2. N4-WIND LOAD DESIGN DATA

All exterior walls are type II shear walls ACTUAL 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 /ALL length is from WFCM-2001, table

egments if noted.) REQUIRED SHEAR 7A & 3.17B with table 3.17E justment for type II shear wall (or equivalent calculation) REV-27-Jun-03

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

REV-06-OCT-03

Job # 506282