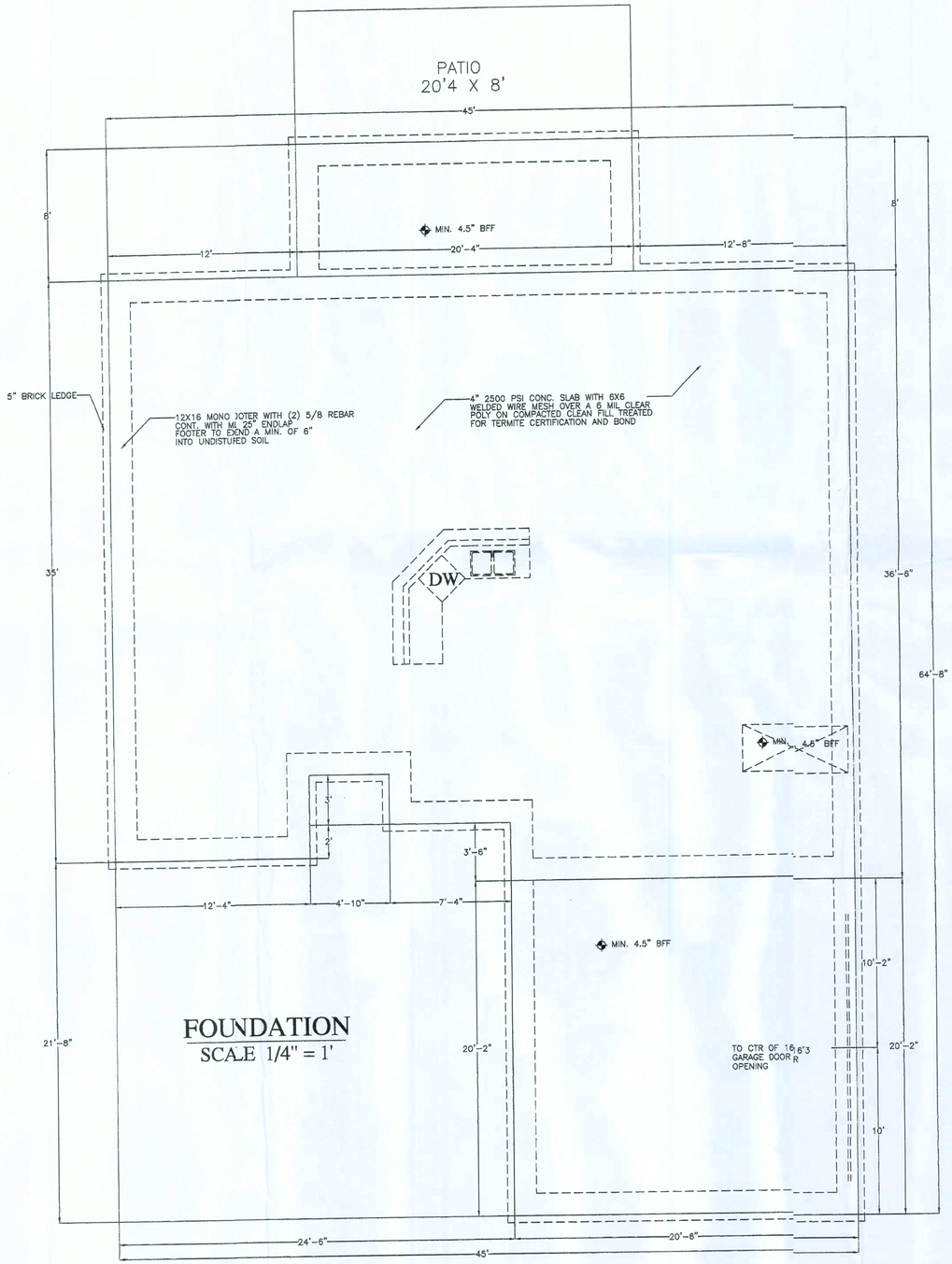
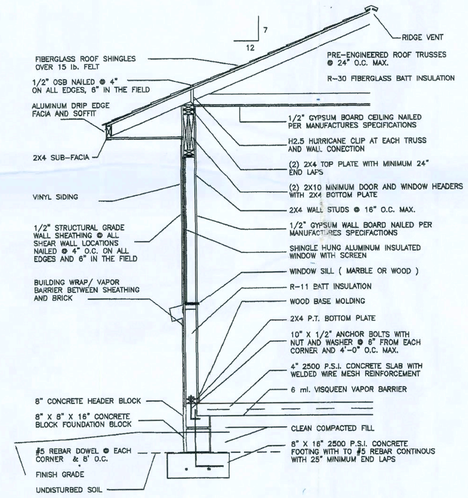


FOUNDATION
SCALE 1/4" = 1'



WALL SECTION
SCALE NTS

REVISIONS APPROVED BY:

OWNER:

CONTRACTOR:

DRAWN BY: T. LONGOBUCCO

FILE NO.: 07-065.R

DATE: 7/2/07

LONGOBUCCO DESIGNS INC.
RESIDENTIAL DESIGNERS
904-886-5888

GENERAL NOTES:

1. DESIGN FOR 110 MPH WINDZONE
2. TYPE VI FRAME CONSTRUCTION

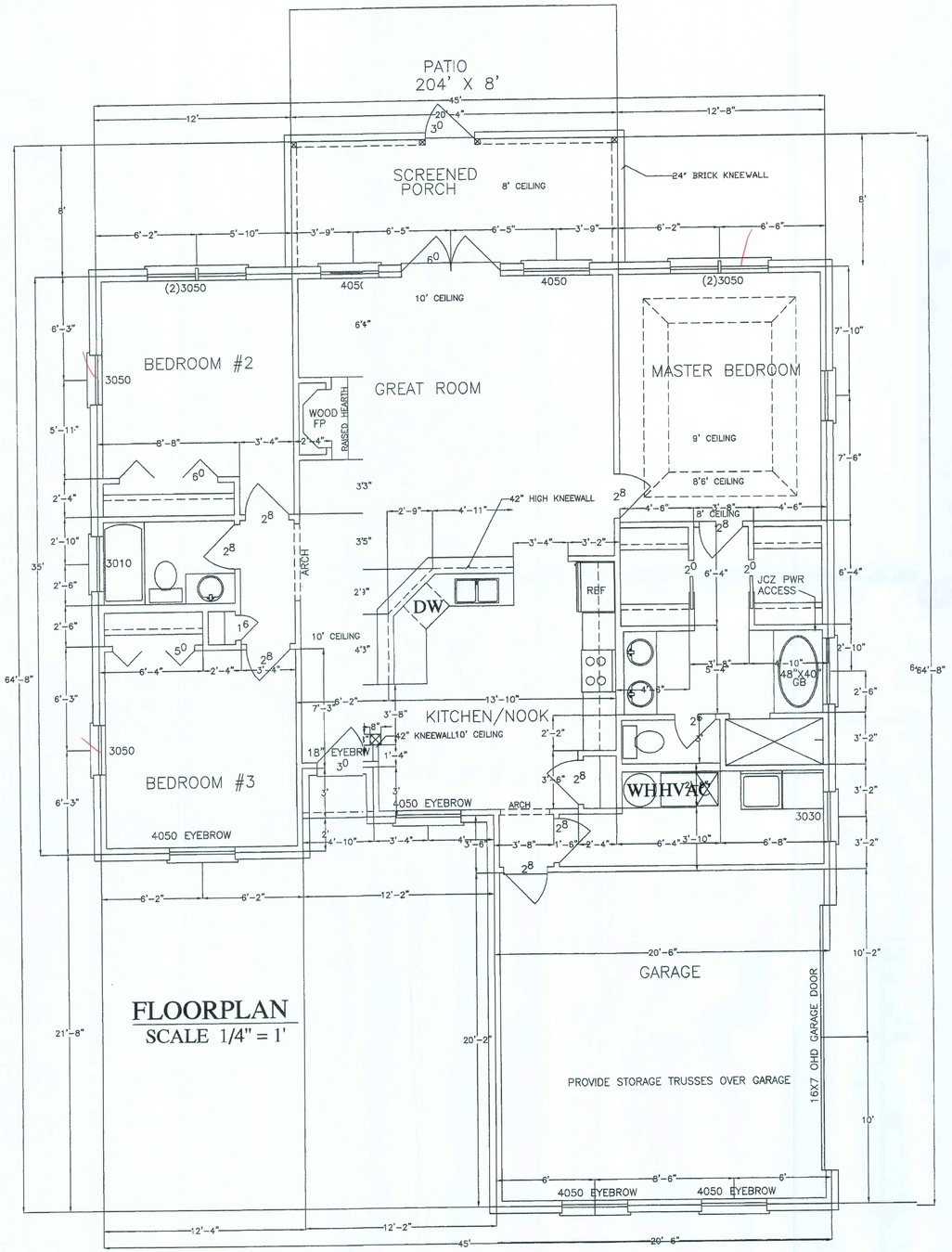
SQUARE FOOTAGE:

LIVING AREA:	1629 SQ FT
GARAGE AREA:	434 SQ FT
PORCH AREA:	170 SQ FT
TOTAL AREA:	2233 SQ FT

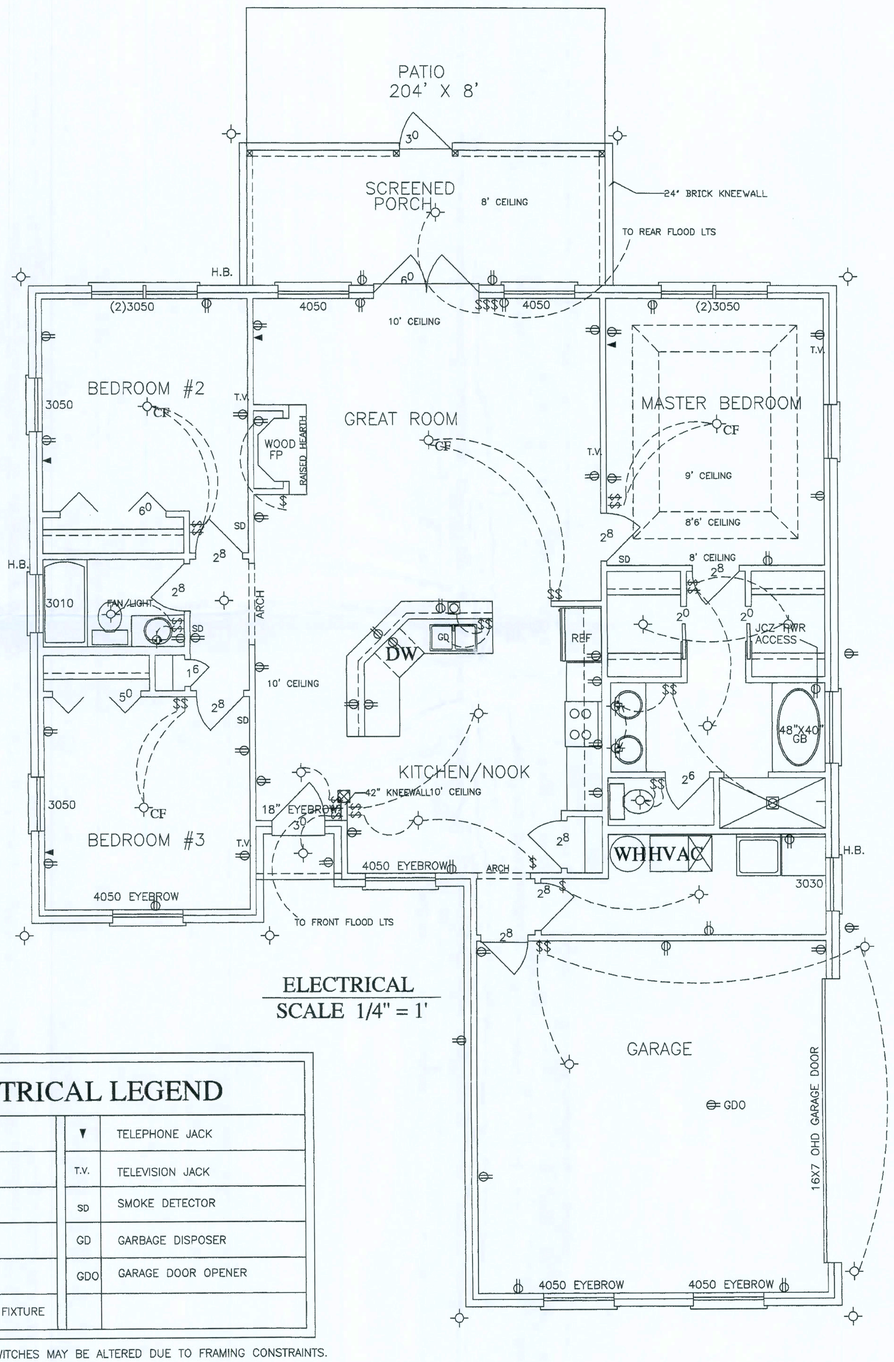
PROPOSED RESIDENCE FOR:

LAKE CITY SPEC

ROCK CONTRACTORS
CUSTOM BUILDERS
904-259-8989



FLOORPLAN
SCALE 1/4" = 1'



ELECTRICAL
SCALE 1/4" = 1'

ELECTRICAL LEGEND

	OUTLET		TELEPHONE JACK
$	SWITCH	T.V.	TELEVISION JACK
WS	WALL SCONCE	SD	SMOKE DETECTOR
	LIGHT FIXTURE	GD	GARBAGE DISPOSER
CF	CEILING FAN	GDO	GARAGE DOOR OPENER
	RECESSED LIGHT FIXTURE		

NOTE: EXACT LOCATION OF SWITCHES MAY BE ALTERED DUE TO FRAMING CONSTRAINTS.

REVISIONS
APPROVED BY:
OWNER:
CONTRACTOR:

DATE: 7/23/07

LONGOBUCCO DESIGNS INC.
RESIDENTIAL DESIGNERS
904-886-9888
DRAWN BY: T. LONGOBUCCO
FILE NO.: 07-065-R

GENERAL NOTES:
1. DESIGN FOR 110 MPH WINDZONE
2. TYPE VI FRAME CONSTRUCTION

SQUARE FOOTAGE:

LIVING AREA:	1629 SQ FT
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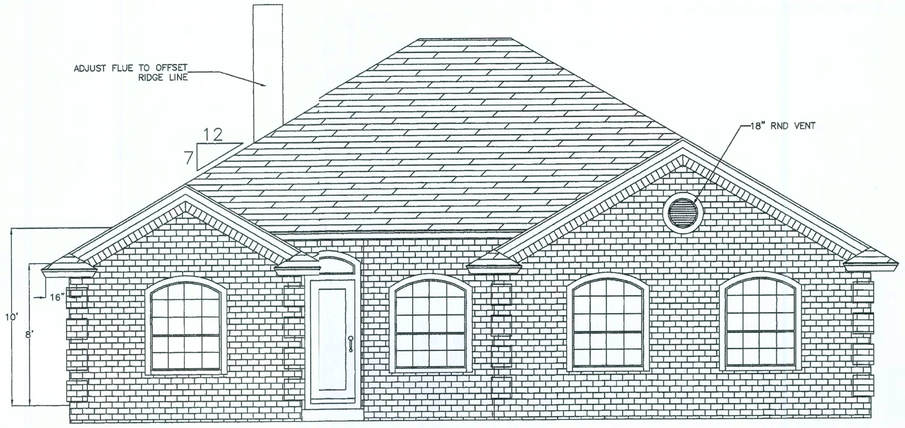
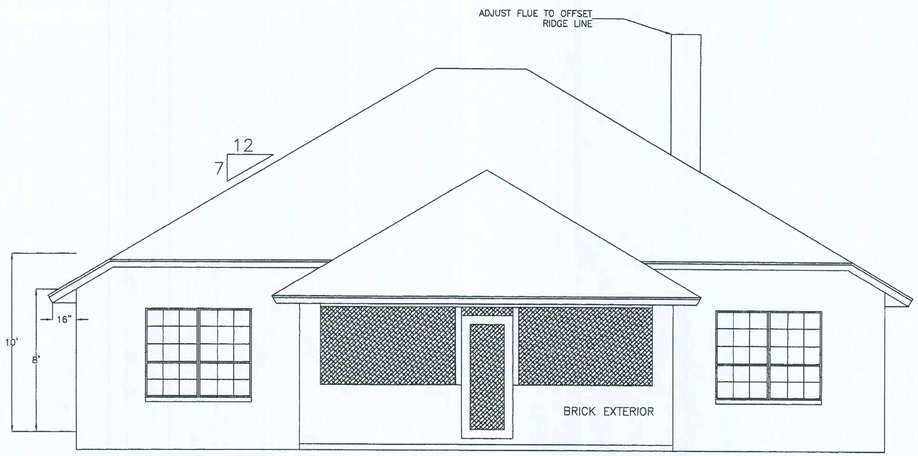
PROPOSED RESIDENCE FOR:
LAKE CITY SPEC

ROCK CONTRACTORS
CUSTOM BUILDERS
904-259-8989



FRONT ELEVATION

SCALE 1/4" = 1'

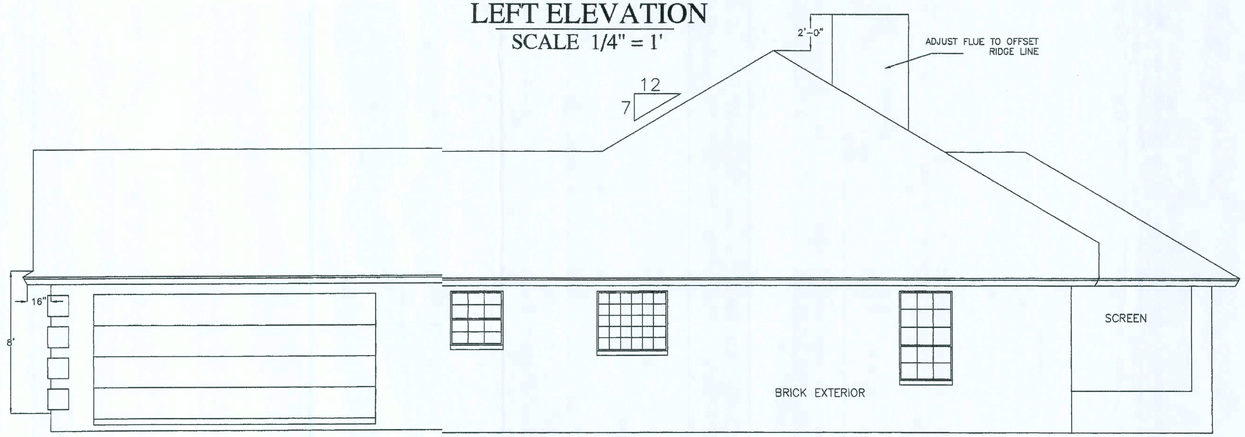


REAR ELEVATION

SCALE 1/4" = 1'

LEFT ELEVATION

SCALE 1/4" = 1'



RIGHT ELEVATION

SCALE 1/4" = 1'

REVISIONS
APPROVED BY:
OWNER:
CONTRACTOR:

DATE: 7/23/07

LONGOBUCCO DESIGNS INC.
RESIDENTIAL DESIGNERS
904-860-2888

DRAWN BY: T. LONGOBUCCO
FILE NO.: 07-065-R

GENERAL NOTES:

1. DESIGN FOR 110 MPH WINDZONE
2. TYPE VI FRAME CONSTRUCTION

SQUARE FOOTAGE:

LIVING AREA:	1629 SQ FT
GARAGE AREA:	434 SQ FT
PORCH AREA:	170 SQ FT
TOTAL AREA:	2233 SQ FT

PROPOSED RESIDENCE FOR:

LAKE CITY SPEC

ROCK CONTRACTORS
CUSTOM BUILDERS

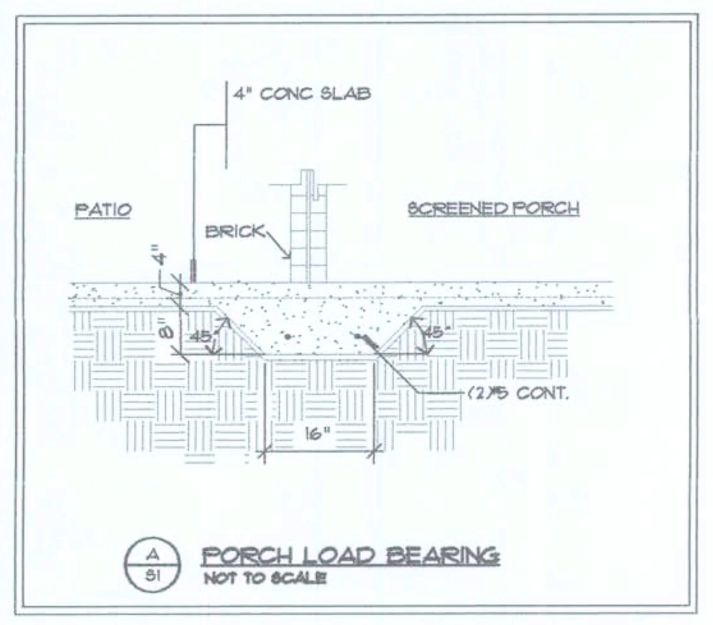
904-259-8989

Shoe plates should never overhang the foundation/slab edge at the building perimeter. However, many times when the foundation is not properly placed - i.e. incorrect dimension(s), out of square, etc. - the vertical construction is positioned in a manner that results in a shoe plate overhanging the slab edge in an effort to keep the framing square. This results in numerous structural inadequacies that must be addressed in order to maintain the structural integrity of the building.

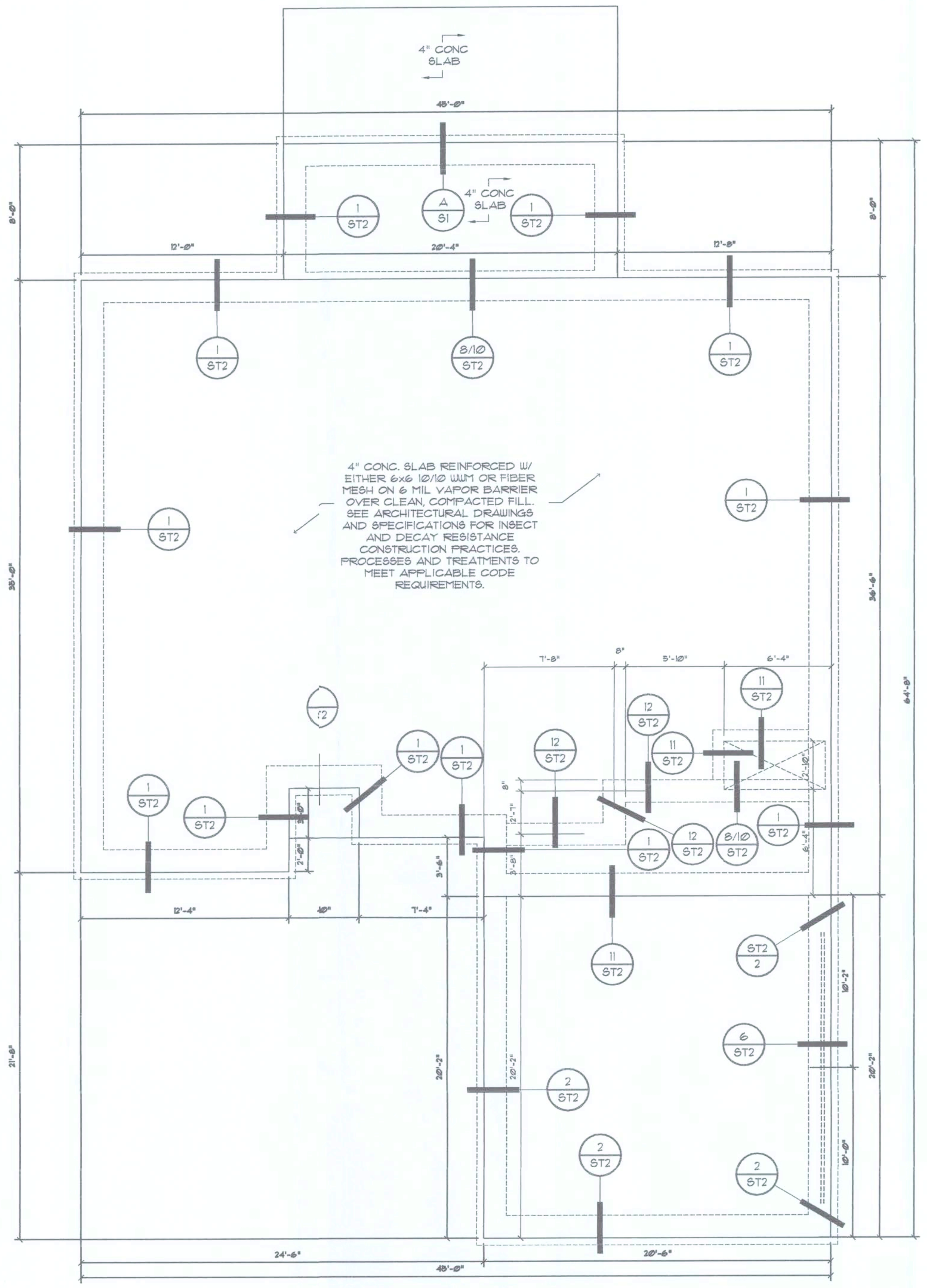
Since this condition should be easily recognizable at the time layout lines are popped on the slab, corrective action should be taken immediately rather than waiting until later when the repair is substantially more costly and time consuming. Corrective action at this stage is very simple: Increase the nominal size of the wall framing by two inches for walls overhanging the slab edge up to one-and-three-quarter (1¾) inches. Example: If a 2x4 wall is indicated, use 2x6 framing. The shoe plate material should either be treated for exposure or protected accordingly. Connectors - WOOD*Tie rods, sill plate anchors, etc. - should be sized and spaced according to the original design intent shown on the engineering and all minimum specified edge distances for the concrete shall be maintained. If conditions exist where the shoe plate will overhang the slab edge more than 1¾", contact the Engineer of Record before proceeding.

If corrective action is not taken at this time, it is likely the wall(s) will require re-framing or substantial enhancements (more extensive than simply increasing the framing size by two inches) at a later date. If corrective action is delayed until after rough trades have been completed, it is likely those elements - wiring, plumbing, mechanical and security - will have to be removed from the wall while the repairs are made and replaced later. Additionally, if corrective action is delayed further until insulation, drywall, trim, etc. are installed, these elements will have to be removed and later replaced to properly effect the repair.

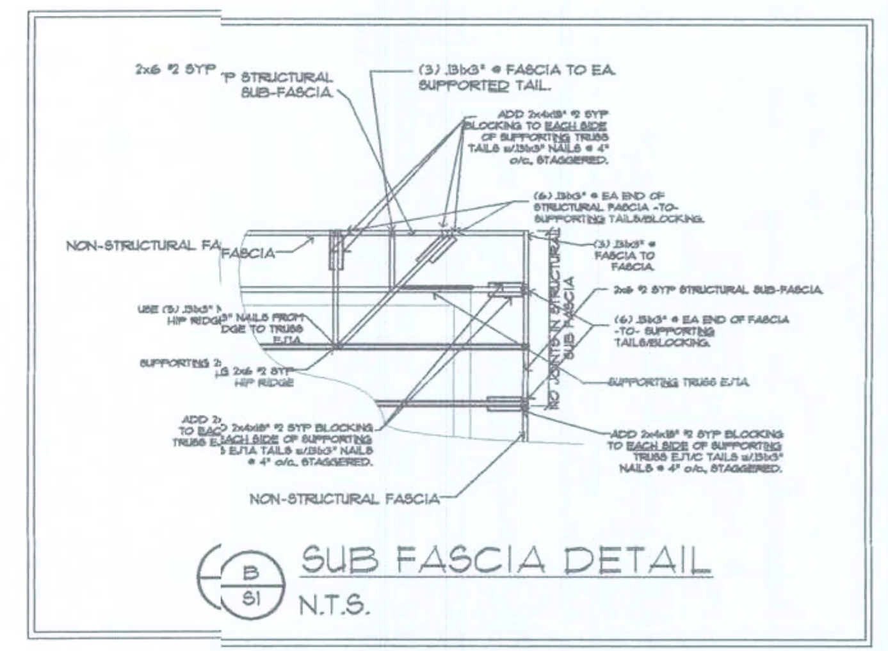
In conclusion, if a shoe plate is going to overhang a slab edge 1¾" or less, immediately increase the wall size accordingly so that no additional or substantial repairs are required later. If a shoe plate is going to overhang a slab edge more than 1¾", contact the Engineer of Record before proceeding.



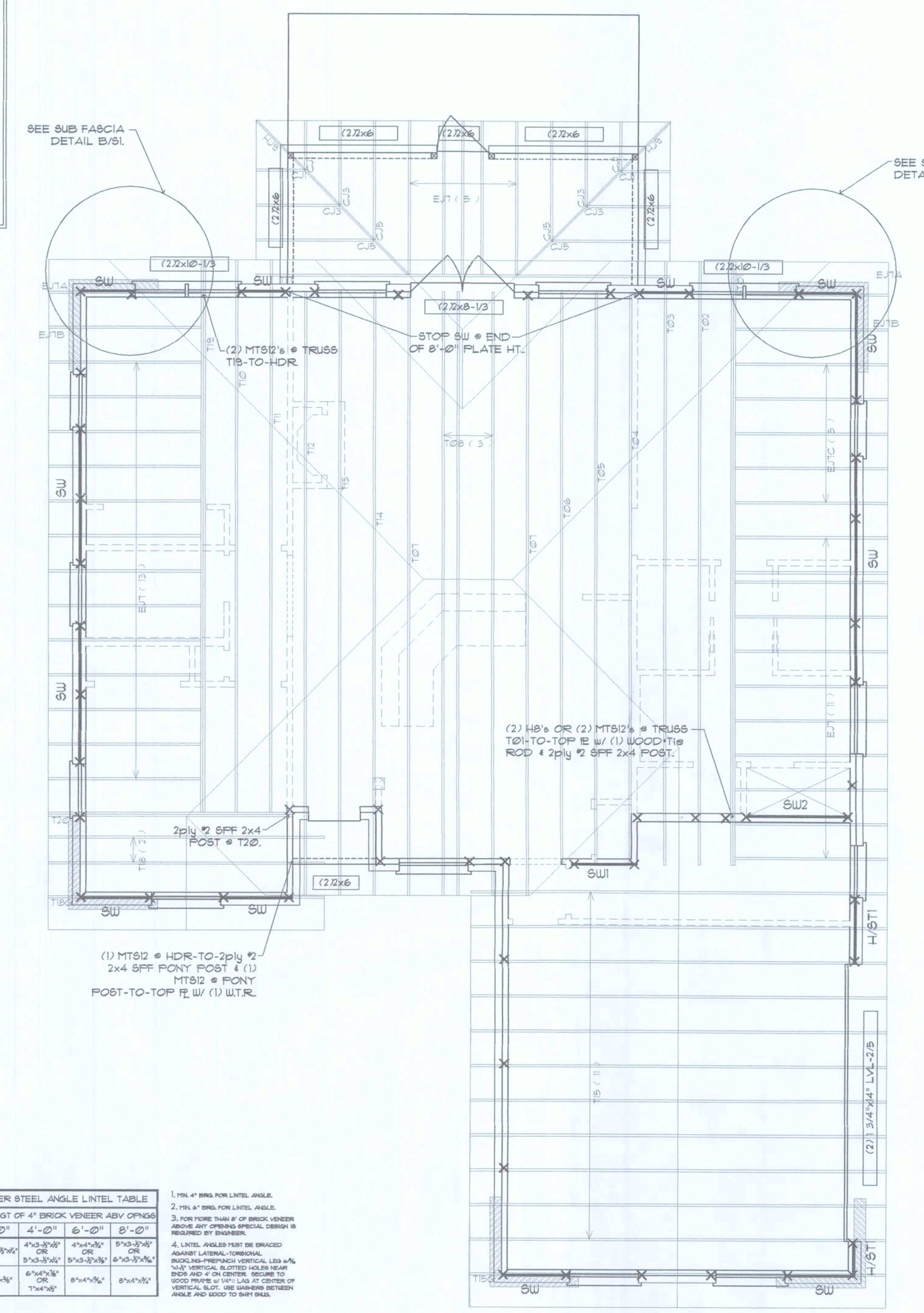
A/S1 PORCH LOAD BEARING
NOT TO SCALE



1/S1 FOUNDATION PLAN
3/16" = 1'-0"



B/S1 SUB FASCIA DETAIL
N.T.S.



2/S1 STRUCTURAL PLAN
3/16" = 1'-0"

NOTE: THE TOP PLATE MAY BE NOTCHED IF 2ply 14" LVL IS USED FOR GARAGE HDR AND A 8' HIGH CLEARANCE IS REQUIRED FOR THE GARAGE DOOR PROVIDED (2) MTSA24 HORZ. FLAT STRAPS ARE USED TO CONNECT THE TOP PLATES ON EACH END TO THE GARAGE HDR.

BRICK VENEER STEEL ANGLE LINTEL TABLE				
MAX. OPENING	MAX HGT OF 4" BRICK VENEER ABV OPNGS			
	2'-0"	4'-0"	6'-0"	8'-0"
9'-0" [1]	3-½"x3-½"x¼"	4"x3-½"x½" OR 5"x3-½"x¼"	4"x4"x¾" OR 5"x3-½"x⅜"	5"x3-½"x½" OR 6"x3-½"x5/16"
16'-0" [2]	6"x4"x⅜"	6"x4"x⅞" OR 7"x4"x½"	8"x4"x9/16"	8"x4"x¾"

1. MIN. 4" BRG. FOR LINTEL ANGLE.
2. MIN. 6" BRG. FOR LINTEL ANGLE.
3. FOR MORE THAN 8' OF BRICK VENEER ABOVE ANY OPENING SPECIAL DESIGN IS REQUIRED BY ENGINEER.
4. LINTEL ANGLES MUST BE BRACED AGAINST LATERAL-TORSIONAL BUCKLING-PREPUNCH VERTICAL LEG w/5/16"x1-½" VERTICAL SLOTTED HOLES NEAR ENDS AND 4' ON CENTER. SECURE TO WOOD FRAME w/ 1/4"ø LAG AT CENTER OF VERTICAL SLOT. USE WASHERS BETWEEN ANGLE AND WOOD TO SHIM SNUG.

EXTERIOR WALL STUD SCHEDULE

110mph, EXPOSURE B, FLEXIBLE FINISH, ENCLOSED

STUD SIZE, SPECIES & o/c SPACING. ALL GRADE #2 EXCEPT AS NOTED.	MAXIMUM PL HEIGHT END* ZONE	MAXIMUM PL HEIGHT INTERIOR ZONE
2x4 SPF 16"o/c	11'-1"	11'-10"
2x4 SPF 12"o/c	12'-2"	13'-0"
2x6 SPF 16"o/c	17'-2"	18'-5"
2x6 SPF 12"o/c	18'-10"	20'-2"
2x6 SYP 16"o/c	17'-11"	19'-3"
2x6 SYP 12"o/c	19'-8"	21'-1"
2x8 SYP 16"o/c	23'-7"	25'-3"
2x8 SYP 12"o/c	25'-10"	27'-9"
2x10 SYP 16"o/c	29'-11"	32'-1"
2x10 SYP 12"o/c	32'-11"	35'-3"

SPECIFIC STUD SIZE/GRADE/SPECIES/SPACING INDICATED ON STRUCTURAL PLAN(S) SUPERSEDE INFORMATION IN SCHEDULE

ALL STUDS SHALL SPAN CONTINUOUSLY FROM FLOOR TO FLOOR OR FLOOR TO ROOF/CLN'G ASSEMBLY WITHOUT BREAK OR INTERUPTION UNLESS SPECIFICALLY DETAILED ON STRUCTURAL PLAN.

*IT IS ALLOWABLE TO FOLLOW THE INTERIOR ZONE SCHEDULE FOR WALLS FALLING IN THE END ZONE REGION PROVIDED THAT DOUBLE STUDS @ THE SIZE/SPECIES/GRADE/SPACING ARE USED.

DUE TO MATERIAL UNAVAILABILITY, PL HEIGHTS > 24' MUST USE TIMBERSTRAND 1.7E LSL STUDS U.N.O. SYP. HEIGHTS < 24' MAY USE 1.7E LSL @ CONTRACTORS DISCRETION.

PLAN NOTES -

1) SEE SHEETS ST1 & ST2 FOR ADDITIONAL NOTES & DETAILS.
2) THESE DRAWINGS CONTAIN SPECIFIC INFORMATION INCLUDING, BUT NOT LIMITED TO, ARCHITECTURAL ELEMENTS, DIMENSIONS AND LOCATIONS PROVIDED BY OTHERS. BUILDERS FIRSTSOURCE IS NOT RESPONSIBLE FOR THE ACCURACY OF INFORMATION PROVIDED BY OR DERIVED FROM OTHER SOURCES.
3) ANY DISCREPANCY - DIMENSIONS, ORIENTATION, ETC. - BETWEEN THESE DRAWINGS AND THE ASSOCIATED ARCHITECTURAL and/or SITE DRAWINGS SHALL BE REPORTED TO BUILDERS FIRSTSOURCE AT ONCE AND NO CONSTRUCTION SHALL PROCEED UNTIL CORRECTED.
4) VERIFY BUILDING ORIENTATION WITH ARCHITECTURAL DRAWINGS AND SITE PLANS BEFORE COMMENCING CONSTRUCTION.
5) ALL INFORMATION OF A STRUCTURAL NATURE (i.e. BEAM/JOIST/COLUMN/HEADER/STUD/CONNECTOR/FOOTING/ETC. SIZE/GRADE/SPECIES/QUANTITY/STRENGTH/ETC.) SHOWN ON THESE SIGNED & SEALED ENGINEERING DOCUMENTS SHALL SUPERSEDE ALL INFORMATION OF A SIMILAR NATURE SHOWN ON THE ASSOCIATED ARCHITECTURAL DRAWINGS.
6) MINIMUM REQUIRED BEARING LENGTHS SHOWN ON TJ-BEAM OUTPUT HAVE BEEN ACCOUNTED FOR IN THE DESIGN AND, WHEN APPROPRIATE, BEARING-ENHANCERS ADDED SO AS NOT TO EXCEED THE MAXIMUM ALLOWABLE BEARING CAPACITY OF ANY STRUCTURAL ELEMENT.
7) ANY STRUCTURAL ELEMENT SPECIFIED WITHIN THESE DRAWINGS MAY BE REPLACED WITH A LARGER, STRONGER AND/OR HIGHER-QUALITY ELEMENT/PART/MATERIAL WITHOUT ADDITIONAL ANALYSIS REQUIRED.
8) DO NOT SCALE THESE DRAWINGS. DO NOT ASSUME WALLS ARE 2x4 BECAUSE THE ARCHITECTURAL DRAWINGS UPON WHICH THIS ENGINEERING IS BASED SCALES AS 2x4. REFER TO STUD SCHEDULE FOR MINIMUM STUD SIZE/SPECIES/SPACING FOR APPLICATION. STUD AND/OR COLUMN SIZES SHOWN ON STRUCTURAL PLAN SUPERSEDE THOSE SHOWN ON STUD SCHEDULE. WHEN A COLUMN IS SPECIFIED AS LARGER THAN ADJACENT WALL FRAMING (ex. 3ply 2x6 POST IN A 2x4 WALL), THE ADJACENT FRAMING MAY BE EITHER FURRED-OUT TO MATCH THE COLUMN OR THE ENTIRE WALL MAY BE FRAMED WITH THE LARGER MATERIAL, AT CONTRACTOR'S DISCRETION.

LEGEND -

(2) 2x10-2 / 3 ← HEADER/BEAM CALL-OUT
- NUMBER OF KING-STUDS EACH SIE OF OPENING
- NUMBER OF JACK-STUDS EACH SIE OF OPENING
- SIZE OF HEADER MATERIAL (#2 SY U.N.O.)
- NUMBER OF PLIES IN HEADER

ALL EXTERIOR HEADERS (2) 2x6-1/2 UNLESS NOTED OTHEWISE

ALL INTERIOR HEADERS (2) 2x6-1/1 UNLESS NOTED OTHERSE

SW_ - SHEAR-WALL SEGMENT - REFER TO SHEET ST1 FOR ADITIONAL INFORMATION

X APPROXIMATE WOOD•Tie ANCHORING ROD LOCATN. SEE "WOOD•Tie DETAILS & SPECIFICATIONS" ON PAGE ST1 FOR ADDITIONAL FORMATION ON THE LOCATION AND INSTALLATION OF WOOD•Tie ANCHORINGRODS

"RSD" IN PLACE OF A QUANTITY OF KING-STUDS IN A HEADE OR BEAM CALL-OUT INDICATES THE SPECIFIED HEADER OR BEAM IS RAISED AEVE THE PL LINE

←→ INDICATES DIRECTIONAL ORIENTATION OF SPECIFD FRAMING MEMBER

DESIGN LOADS -

USE (MIN.) 19/32" THICKSHTN'G w/ TILE ROOF

- ROOF LOADING (@1.25 LDF)
  - TOP CHORD or RAFTER
    - LL: 20psf DL: 7psf w/FG SHINGLES, 20psf* w/ TILE
  - BOT. CHORD or CLN'G JOIST
    - LL: 10psf** DL: 5/psf
- FLOOR LOADG (@1.00 LDF)
  - LL: 40/psfDL: 15/psf
- WIND LOADIN(@1.60 LDF)
  - 110 MPH WID SPEED
- SEISMIC DSG.ATEGORY (@1.60 LDF)
  - "A"

* 20 psf DL FOR TILES < 16psf, PER FBC "APPENDIX A." TILES > 16psf REQLE ADDITIONAL ANALYSIS
** 20 psf LL FOR CEILING JOIST WHEN USED FOR LIGHT ATTIC STORAGE

END-ZONE IDENTIFICATION -

CORNER OF HOUSE - TYP
4'-6"
4'-6"

SHADED/HATCHED CORNERS, AS IDENTIFIED AND DIMENSIONED ABOVE, INDICATE WALLS SEGMENTS WHERE END-ZONE PRESSURES SHALL APPLY TO COMPONENTS & CLADDING. WALLS NOT SHADED/HATCHED AS INDICATED ABOVE MAY USE INTERIOR-ZONE PRESSURES FOR COMPONENTS & CLADDING.

SILL PL-TO-FOUNDATION SHEAR CONNECTOR SCHEDULE FOR WOOD•Tie APPLICATIONS

EXTERIOR WALLS NOT DESIGNATED AS SHEAR-WALL

PL HEIGHT (NOMINAL)	MAXIMUM O/C SPACING OF ANCHORS - IN INCHES: ½"ø TITEN HD	MAXIMUM O/C SPACING OF ANCHORS - IN INCHES: ⅝"ø TITEN HD (MIN. 2x6 FRM'G)
8 ft	60"	72"
9 ft	60"	72"
10 ft	60"	72"
11 ft	48"	72"
12 ft	48"	72"
14 ft	36"	66"
16 ft	36"	58"
18 ft	34"	52"
20 ft	30"	46"
22 ft	27"	42"

DESIGNATED SHEAR-WALLS - INTERIOR & EXTERIOR

MAXIMUM O/C SPACING OF ANCHORS - IN INCHES

SHEAR-WALL DESIGNATION	EXTERIOR WALLS ½"ø TITEN HD	EXTERIOR WALLS ⅝"ø TITEN HD (MIN. 2x6 FRM'G)	INTERIOR WALLS ½"ø TITEN HD	INTERIOR WALLS ⅝"ø TITEN HD
SW	36"	48"	42"	60"
SW2	27"	38"	32"	45"
SW1	18"	27"	22"	32"

NOTES:
1) USE SIMPSON ½"ø OR ⅝"ø X 6" LONG TITEN HD SCREWS, U.N.O.
2) ½"ø TITEN HD's SHALL BE EMBEDDED MIN. 3-⅝" AND ⅝"ø TITEN HD'S SHALL BE EMBEDDED MIN. 4-½" INTO MIN. 2,500psi CONCRETE.
3) AT HIGH PL HEIGHT DESIGNATED SHEAR-WALLS (i.e. 14' & ABOVE) USE "NON-DESIGNATED" ANCHOR SPACING SCHEDULE IF INDICATED SPACING IS TIGHTER/CLOSER THAN IN "DESIGNATED SHEAR-WALL" SCHEDULE.
4) ⅝"ø TITEN HD's USED IN EXTERIOR WALL APPLICATIONS MAY ONLY BE USED IN WALLS CONSTRUCTED OF 2x6 OR LARGER FRAMING.
5) ALL TITEN HD's SHALL BE INSTALLED IN THE ¢ OF THE SHOE PL AND MAINTAIN MIN. CONCRETE EDGE DISTANCES OF 2" FOR ½"ø's AND 3-½" FOR ⅝"ø's.
6) TITEN HD's USED FOR EXTERIOR WALL APPLICATIONS MAY BE USED ONLY WITH MONOLITHIC FOUNDATIONS AND MAY NOT BE USED IN STEM-WALL APPLICATIONS.
7) AT EXTERIOR WALL APPLICATIONS WITH STEM-WALL FOUNDATIONS, USE EPOXIED ALL-THREAD ANCHORS AS FOLLOWS:
7a) IN LIEU OF ½"ø TITEN HD's, USE ½"ø X 4-½" EMBEDMENT ALL-THREAD RODS w/ MIN. 2" CONC. EDGE DISTANCE AND SPACE AT HALF THE INDICATED SPACING FOR ½"ø TITEN HD's.
7b) IN LIEU OF ⅝"ø TITEN HD's, USE ⅝"ø X 5" EMBEDMENT ALL-THREAD RODS w/ MIN. 3" CONC. EDGE DISTANCE AND MATCH SPACING INDICATED FOR ⅝"ø TITEN HD's.
7c) ADD NUT AND WASHER ATOP SHOE PL AT EACH ALL-THREAD.
7d) USE SIMPSON TWO-PART EPOXY PER MANUFACTURER'S INSTRUCTIONS.
8) SILL PLATES SHALL BE ANCHORED WITHIN 12" OF EACH END OF EACH SEGMENT OR PIECE AND ALL SEGMENTS OR PIECES SHALL HAVE NO FEWER THAN (2) ANCHORS.

COMPONENTS & CLADDING PRESSURES - IN "PSF"

NET OPN'G or TRIB. AREA IN Square Feet	WALLS END-ZONES POS. (+)	WALLS END-ZONES NEG. (-)	WALLS INT.-ZONES POS. (+)	WALLS INT.-ZONES NEG. (-)	ROOFS - PITCHES 3/12 ≤ 7/12 CRN'R & E-ZONES POS. (+)	CRN'R & E-ZONES NEG. (-)	INT.-ZONES POS. (+)	INT.-ZONES NEG. (-)	OH C-ZONES NEG. (-)	OH E-ZONES NEG. (-)	ROOFS - PITCHES 7/12 < 12/12 CRN'R & E-ZONES POS. (+)	CRN'R & E-ZONES NEG. (-)	INT.-ZONES POS. (+)	INT.-ZONES NEG. (-)	OH C-ZONES NEG. (-)	OH E-ZONES NEG. (-)
< 20 ft	+21.8	-29.1	+21.8	-23.6	+12.5	-42.1	+12.5	-19.9	-68.3	-40.6	+19.9	-25.5	+19.9	-21.8	-36.9	-36.9
20 < 50 ft	+20.8	-27.2	+20.8	-22.6	+11.4	-38.2	+11.4	-19.4			+19.4	-24.3	+19.4	-20.7		
50 < 100 ft	+19.5	-24.6	+19.5	-21.3	+10.0	-33.0	+10.0	-18.6	-50.2		+18.6	-22.9	+18.6	-19.2	-34.3	-34.3
> 100 ft	+18.5	-22.6	+18.5	-20.4	+10.0	-29.1	+10.0	-18.1	-42.4		+18.1	-21.8	+18.1	-18.1	-33.2	-33.2

GARAGE DOORS PARTIALLY IN END-ZONE

PRESSURES FOR GARAGE DOORS WITH ONE END (ONLY) EXTENDING MAX. 5'-0" INTO AN END-ZONE. ALL PRESSURES NEGATIVE (-), EXCEPT AS NOTED.

DOOR SIZE	LENGTH (IN FEET) OF DOOR INTO END-ZONE 1'	2'	3'	4'	5'	POS. (+) PSF
8' x 7' & LGR DOORS	-21.8	-22.2	-22.6	-23.0	-23.4	+19.5
16' x 7' & LGR DOORS	-20.5	-20.9	-20.7	-20.9	-21.0	+18.5

FRAMING CONNECTOR SCHEDULE

CLIP, TIE or STRAP	FASTENERS or NAILS
H2.5	(5) 8d PER END
H5	(4) 8d PER END
H8	(5) 10d x 1-1/2" PER END
MTS12	(14) 10d or 10d x 1-1/2" TOTAL
HTS20	(20) 10d or (24) 10d x 1-1/2" TOTAL
LGT2	(16) 16d SINKERS TO TRUSS, (14) 16d SINKERS TO PL & POST
H16, -16S, -16-2	(2) 10d x 1-1/2" TO TRUSS, (10) TO PL/POST
MSTA12	(10) 10d TOTAL
MSTA18	(14) 10d TOTAL
MSTA24	(18) 10d TOTAL
MST37	(42) 16d TOTAL
MST48	(46) 16d TOTAL
MST60	(56) 16d TOTAL
CS16	(30) 8d or (26) 10d TOTAL
SPH4, -6, -8	(12) 10d x 1-1/2"
HPAHD22	(23) 16d
LTP4	(12) 8d x 1-1/2" TOTAL
A35	(12) 8d x 1-1/2" TOTAL
META20	(12) 10d x 1-1/2"
HETA20	(12) 10d x 1-1/2"
LGT2-MASONRY	(16) 16d SINKERS TO TRUSS, (7) 1/4"ø x 2-1/4" TITEN SCREWS TO WALL
MTSM16	(7) 10d or 10d x 1-1/2" TO TRUSS, (4) 1/4"ø x 2-1/4" TITEN SCREWS TO WALL
HTSM16	(8) 10d or 10d x 1-1/2" TO TRUSS, (4) 1/4"ø x 2-1/4" TITEN SCREWS TO WALL
H16, -16S, -16-2	(2) 10d x 1-1/2" TO TRUSS, (6) 1/4"ø x 2-1/4" TITEN SCREWS TO WALL
FGTR	(18) 1/4"ø x 3" SDS TO TRUSS, (2) 1/2"ø x 5" TITEN HD's TO WALL
MSTAM36	(8) 10d TO FRAMING, (4) 1/4"ø x 2-1/4" TITEN TO MASONRY

FRAMING-TO-FOUNDATION / MASONRY CONNECTOR SCHEDULE

NAILS / SCREWS TO FRAMING MEMBERS	HARDWARE/ CONNECTOR	ASTM 307 (SAE 1018) ATR SIZE	INT LOCATIONS MIN EMBED	EXT/MONO FOUNDATIONS MIN EMBED	EXT/MONO FOUNDATIONS MIN EDGE DIST	EXT/STEM-WALL FOUNDATIONS MIN EMBED	EXT/STEM-WALL FOUNDATIONS MIN / MAX EDGE	CMU WALL TIE-BEAM / LINTEL MIN EMBED	CMU WALL TIE-BEAM / LINTEL EDGE DIST
(12) 16d	ABU-44, -66	5/8"ø	5-1/2"	5-1/2"	3"	12"	1-3/4" / 6"	N/A	
(10) 16d / EACH	LTT20B	1/2"ø (EA)	4-1/4" w/ MIN 2-1/2" SPC'G	5-1/2"	4" w/ 2-1/2" SPC'G 2" w/ 4" SPC'G	12"	1-3/4" / 6"	12"	¢ & MIN 3" SPC'G
(22) 10d	SINGLE MGT	5/8"ø	5-1/2"	5-1/2"	3"	12"	1-3/4" / 6"	12"	¢
2x (22) 10d	DOUBLE MGT	(2) 5/8"ø	5-1/2"	9-1/2"	3"	12"	3-1/2" / 4"	12"	¢
(18) 16d	SINGLE HTT16	5/8"ø	5-1/2"	7-1/2"	2"	12"	1-3/4" / 6"	12"	¢
2x (18) 16d	DOUBLE HTT16	(2) 5/8"ø	5-1/2"	7-1/2"	4"	12"	3-1/2" / 4"	12"	¢
2x (18) 16d	TANDEM HTT16	(1) 5/8"ø	5-1/2"	9-1/2"	5"	15"	1-3/4" / 6"	N/A	
(32) 16d Sinkers	SINGLE HTT22	5/8"ø	5-1/2"	9-1/2"	2"	15"	1-3/4" / 6"	N/A	
2x (32) 16d Sinkers	DOUBLE HTT22	(2) 5/8"ø	5-1/2"	9-1/2"	5"	SEE PLAN		N/A	
(18) ¼"ø x 3" SDS	SINGLE PHD6	7/8"ø	8"	8"	3"	13-1/2"	3-1/2" / 4"	13-1/2"	¢
2x (18) ¼"ø x 3" SDS	DOUBLE PHD6	(2) 7/8"ø	8"	13-1/2"	3"	13-1/2"	3-1/2" / 4"	13-1/2"	¢
(20) ¼"ø x 3" SDS	SINGLE HDQ8	7/8"ø	8"	13-1/2"	1-3/4"	SEE PLAN		N/A	
2x (20) ¼"ø x 3" SDS	DOUBLE HDQ8	(2) 7/8"ø	13-1/2"	13-1/2"	4"	SEE PLAN		N/A	
(24) ¼"ø x 2½" SDS	SINGLE HHDQ11	1"ø	9"	15"	3"	SEE PLAN		N/A	
2x (24) ¼"ø x 2½" SDS	DOUBLE HHDQ11	(2) 1"ø	15"	15"	4"	SEE PLAN		N/A	
(16) 10d	HGT2, HGT3	(2) 3/4"ø	7"	11-1/2"	3"	SEE PLAN		11-1/2"	¢
(16) 10d	HGT4	(2) 3/4"ø	7"	9"	3"	SEE PLAN		11-1/2"	¢

"FRAMING" and "FRAMING-TO-FOUNDATION" CONNECTOR SCHEDULE NOTES:

1) USE SIMPSON AT ACRYLIC TIE TWO-PART EPOXY FOR ATR-TO-FOUND. CONNECTIONS U.N.O.
2) ALL DIMENSIONS (ROD DIAMETER, EMBEDMENT, EDGE, ETC.) ARE MINIMUM DISTANCES U.N.O.
3) "DOUBLE" HOLD-DOWNS REQUIRE MINIMUM 8" SPACING BETWEEN ATR ANCHORS U.N.O.
4) EDGE DISTANCE DIMENSIONS TO BE MEASURED FROM THE EXTERIOR FACE OF THE FOUNDATION, CURB OR CMU WALL TO THE ¢ OF THE ATR ANCHOR
5) MIN. EDGE DISTANCE DOES NOT APPLY AT INTERIOR CURB LOCATIONS ONLY IF THE MIN. EMBEDMENT IS MEASURED FROM THE LOWER SLAB ELEVATION
6) ALL PARTS / MATERIALS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS & DIRECTIONS
7) ALL NAILS SPECIFIED ARE "COMMON" SIZES U.N.O.
8) MINIMUM ROD SIZE/GRADE, EMBEDMENT & EDGE DISTANCE SHOWN ON PLAN SUPERSEDES MINIMUMS SHOWN ON THIS CHART
9) MINIMUM EDGE DISTANCES OF 4" OR MORE REQUIRE MINIMUM 6" WALL FRAMING
10) MINIMUM 8" SPACING BETWEEN META- or HETA- ANCHORS U.N.O.
11) MINIMUM 1-1/2" EDGE DISTANCE FOR TITEN SCREWS
12) MINIMUM 4" EDGE DISTANCE FOR TITEN HD's

BUILDING DESIGN CRITERIA

CODE:	'04 FBC-R
BUILDING TYPE:	ENCLOSED
BASIC WIND SPEED:	110mph (3 sec. gust)
BUILDING CATEGORY:	II
WIND IMP. FACTOR:	1.00
WIND EXPOSURE:	B
INT. PRESSURE COEF.:	+0.18 / -0.18
EXTERIOR WALL FINISH:	FLEXIBLE

THIS BUILDING MAY BE USED IN A WIND-BORNE DEBRIS REGION ONLY IF GLAZED OPENINGS ARE PROTECTED or IMPACT-RESISTANT

Builders FirstSource of Jacksonville DESIGN CENTER Inc.
6550 Roosevelt Blvd.
Jacksonville, FL 32244
Tel 904.772-6100
Fax 904.317-2835

REV	DESCRIPTION
1	-
2	-
3	-
4	-

ROCK CONTRACTORS LOT 9 SUMMERSET MEADOWS CUSTOM STRUCTURAL PLAN

DESIGN	MEB
DRAFT	MEB
CHECKED	EAH
SCALE	3/16
DATE	1-7-2007
JOB NO.	L249154
SQ.FT.	2233

Project Engineer:
Charles M. Rhodebeck, PE
Professional Engineer
FL License No. 26497
This drawing not valid without raised seal AND signed in RED ink.
Builders FirstSource of Jacksonville
FL CoA Number 00008494
GA PEF Number 004586

SHEET
S1
of

SHEATHING THICKNESS & ATTACHMENT SCHEDULE

WIND SPEED & EXPOSURE	ROOF SHEATHING (supported @ 24" O/C MAX.) MIN. THICKNESS *** (SPAN INDEX)	8d RING SHANK NAILING INT ZONE	8d RING SHANK NAILING PERIMETER/ END ZONES	WALL SHEATHING* (supported @ 16" O/C MAX.) MIN. THICKNESS (SPAN INDEX) HORIZONTAL APPLICATION	VERT APP. W/ OUT STUCCO	VERT APP. W/ STUCCO	8d COMMON NAILING ** INT ZONE	8d COMMON NAILING ** END ZONE
120 D	19/32" (40/20)	6"/12"	4"/4"	7/16" (24/16)	15/32" (32/16)	15/32" (32/16)	6"/12"	6"/6"
120 C, 110 D	15/32" (32/16)	6"/12"	4"/4"	7/16" (24/16)	15/32" (32/16)	15/32" (32/16)	6"/12"	6"/6"
120 B, 110 C, B; 100 D, C, B	7/16" (24/16)	6"/12"	6"/6"	7/16" (24/16)	7/16" (24/16)	15/32" (32/16)	6"/12"	6"/12"

** 8d RING SHANK PER R803.2.3.1 OF '04 ('06) FBC-R; MIN. Ø.113" NOMINAL SHANK dia., RING dia. Ø.012" OVER SHANK dia., 16-20 RINGS PER INCH, Ø.280" dia. FULL ROUND HEAD, MIN. 2" LENGTH.

* BLOCK ALL PANEL EDGES OF WALL SHEATHING.

* MIN. WALL SHEATHING & NAILING MAY BE OVERRIDDEN BY REQUIRED SHEARWALL NAILING (SEE F/ST1).

*** MIN. 19/32" (40/20) WITH TILE ROOFING, UNLESS NOTED OTHERWISE.

TRUSS-TO-PL CONNECTORS

EXCEPT AS NOTED ON STRUCTURAL PLAN(S)	
UPLIFT (LBS)	CONNECTION
0-415	(1) H2.5
0-465	(1) H5
0-745	(1) H8
0-990	(1) H10*
465-930	(2) H5's
745-1000	(2) H8's
0-1000	(1) H16/H16S TO TOP PL
0-1000	(1) MTS12 TO TOP PL
1001 & ABV.	SEE STRUCTURAL PLAN

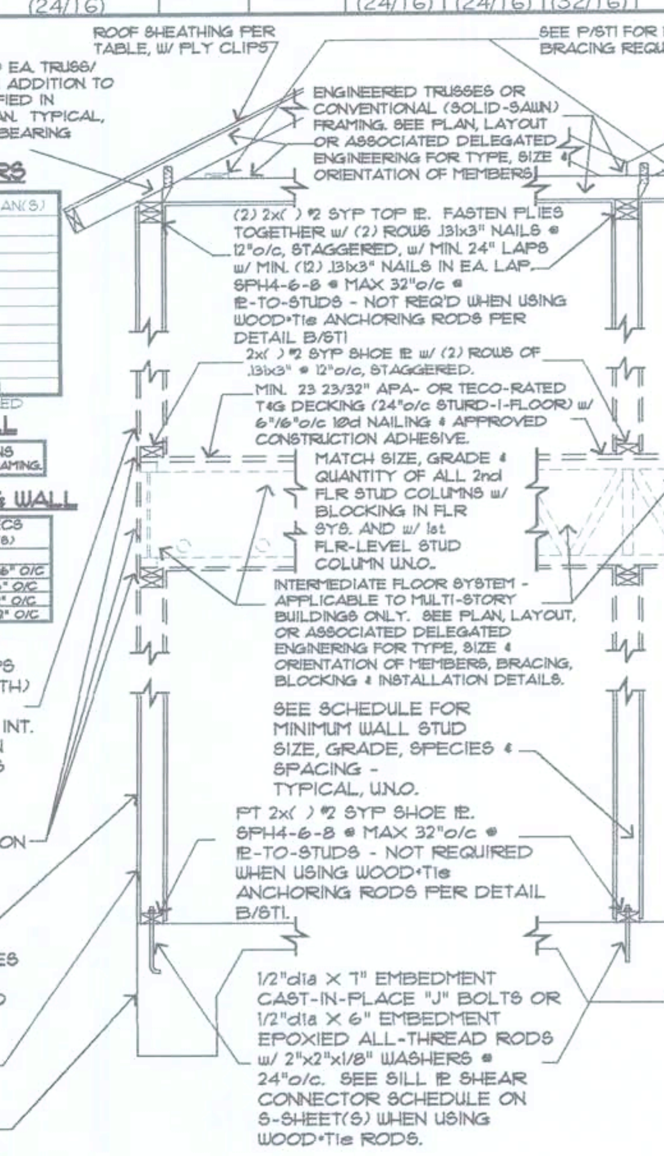
*TOENAILS TO TOP PLATE NOT REQUIRED

TYPICAL EXTERIOR WALL

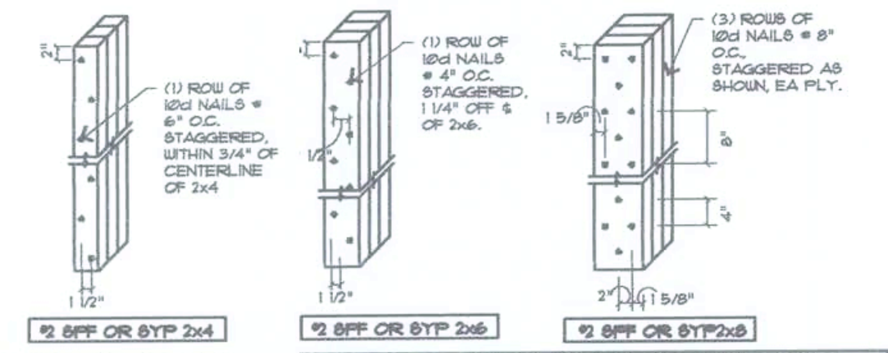
EXTERIOR STUD WALL SPECIFICATIONS — SEE STRUCTURAL SHEET FOR EXTERIOR WALL FRAMING.

TYPICAL INTERIOR BEARING WALL

INT. LOAD-BEARING STUD WALL SPECS EXCEPT AS NOTED ON STRUCTURAL PLAN(S)	
EFFECTIVE PL HT. (FT.)	ALLOWABLE STUD
TO 8'-1 1/8"	2x4 SS SPF STUDS @ 16" O/C
TO 12'-1 1/8"	2x4 #2 SPF STUDS @ 16" O/C
TO 18'-1"	2x6 #2 SPF STUDS @ 12" O/C
TO 21'-1"	2x6 #2 SYP STUDS @ 12" O/C



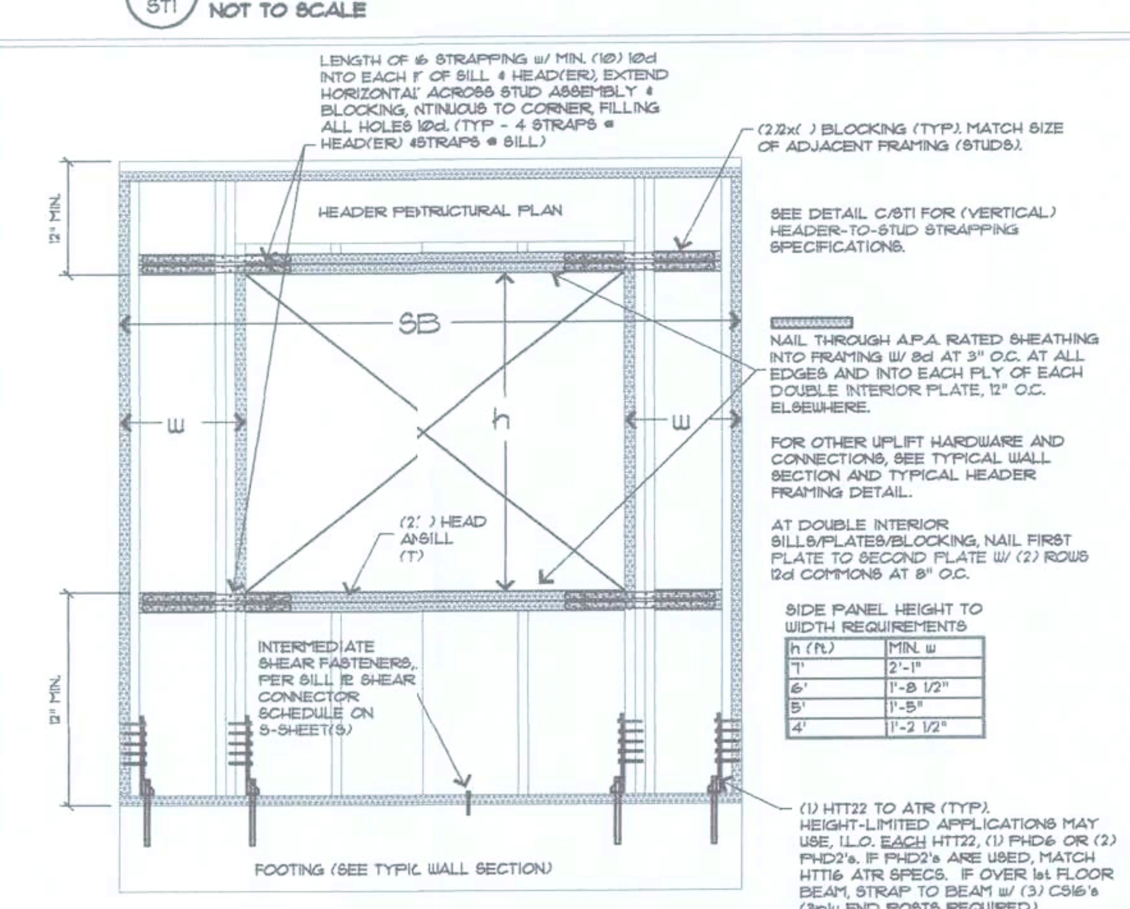
A/ST1 TYPICAL ONE- & TWO-STORY WALL DETAIL — NOT TO SCALE



•TYPICAL CONNECTIONS @ STUD COLUMNS, JACK-TO-KING STUD ASSEMBLIES, CORNER POST, ETC. •SPECIFIED NAILING REQUIRED FOR EVERY PLY IN ADDITION TO 2 PLY'S.

SEE STRUCTURAL FRAMING PLAN FOR NUMBER OF PLIES. FASTEN WALL SHEATHING-TO-POST W/ MIN 8d's @ 12" O/C OR GYPSUM-TO-POST W/ MIN 5d's @ 4" O/C. IF MORE THAN 3 PLY'S ARE USED, CONNECT EACH OUTER PLY TO SHEATHING AS SPECIFIED.

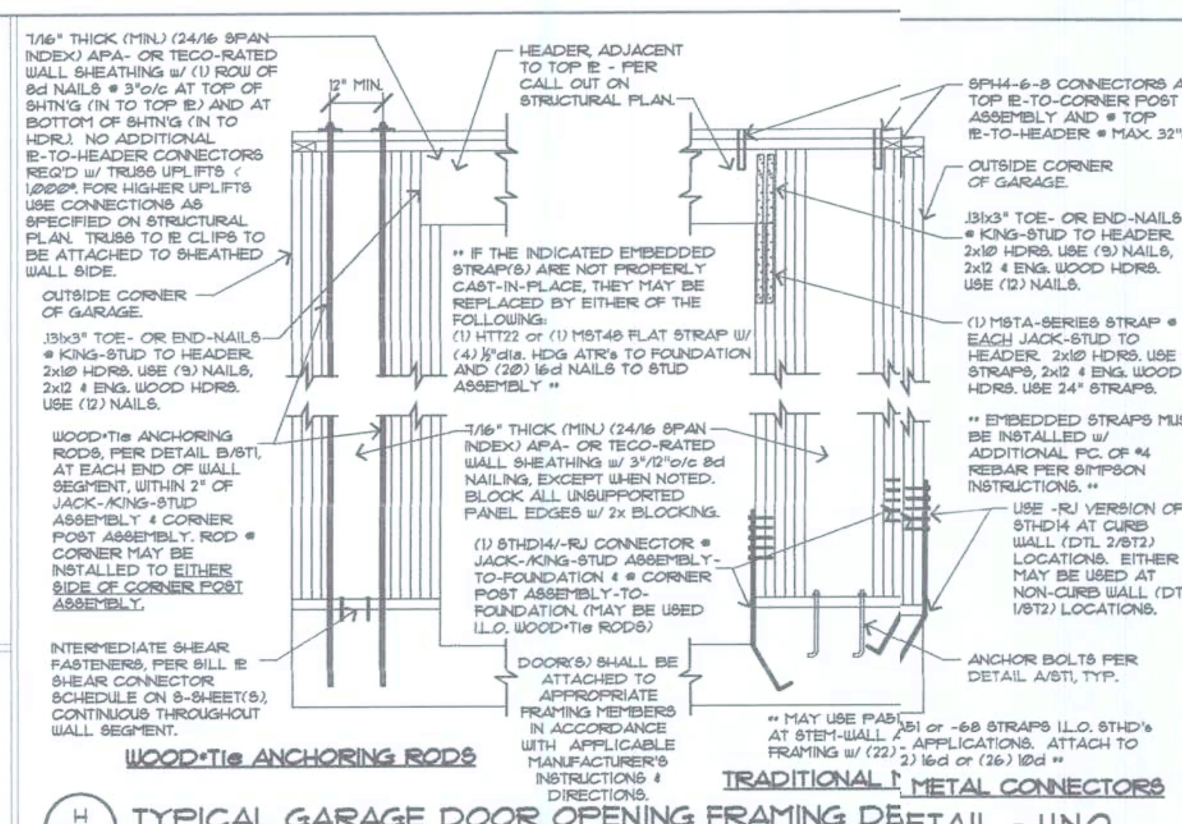
D/ST1 MULTIPLE F.Y POST CONNECTIONS — NOT TO SCALE



SIDE PANEL HEIGHT TO WIDTH REQUIREMENTS

h (ft)	MIN. w
7'	2'-1"
6'	1'-8 1/2"
5'	1'-5"
4'	1'-2 1/2"

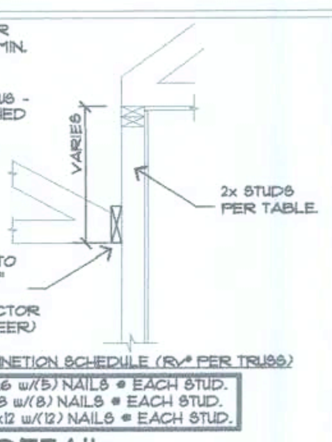
E/ST1 SWB - SPEIAL SHEARWALL DETAIL — NOT TO SCALE



H/ST1 TYPICAL GARAGE DOOR OPENING FRAMING DETAIL - U.N.O. — NOT TO SCALE

AT EXTERIOR DECKS, LEDGER SHALL MATCH JOIST DEPTH (MIN. 2x8) AND BE ATTACHED TO EACH 16"o/c (MAX) VERT. FRAMING w/ 1/4"dia. SDS-SCREWS - 3" LONG IF DIRECTLY ATTACHED TO FRAMING, 3-1/2" LONG IF ATTACHED THROUGH SHTN'G.

QUANTITY OF SCREWS:
- 2x8 LDGR. (6) SCREWS
- 2x10 LDGR. (7) SCREWS
- 2x12 LDGR. (8) SCREWS

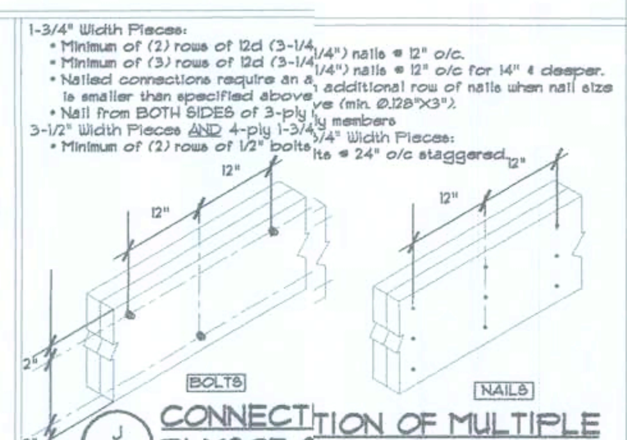


TRUSS LEDGER & CONNETION SCHEDULE (RV# PER TRUSS)
- RV# 0-716___2x6 w/(5) NAILS @ EACH STUD.
- RV# 717-1241__2x8 w/(8) NAILS @ EACH STUD.
- RV# 1242-1862_2x12 w/(12) NAILS @ EACH STUD.

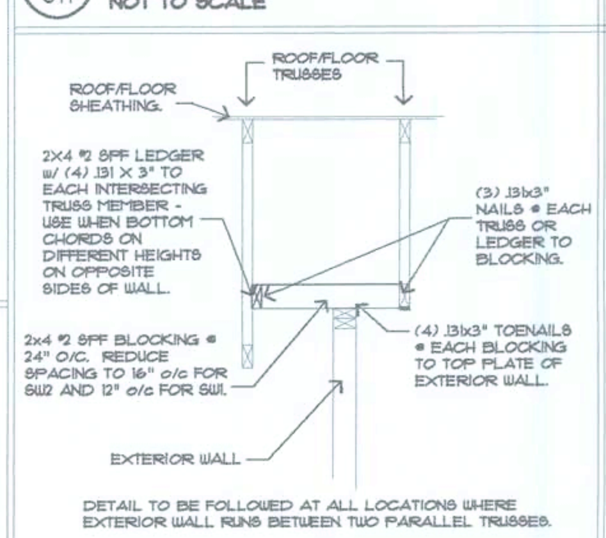
I/ST1 LEDGER DETAIL — NOT TO SCALE

1-3/4" Width Pieces:
- Minimum of (2) rows of 12d (3-1/4") nails @ 12" o/c.
- Minimum of (3) rows of 12d (3-1/4") nails @ 12" o/c for 14" & deeper.
- Nailed connections require an additional row of nails when nail size is smaller than specified above (min. 0.128"x3").
- Nail from BOTH SIDES of 3-ply members

3-1/2" Width Pieces AND 4-ply 1-3/4" Width Pieces:
- Minimum of (2) rows of 1/2" bolts @ 24" o/c staggered.

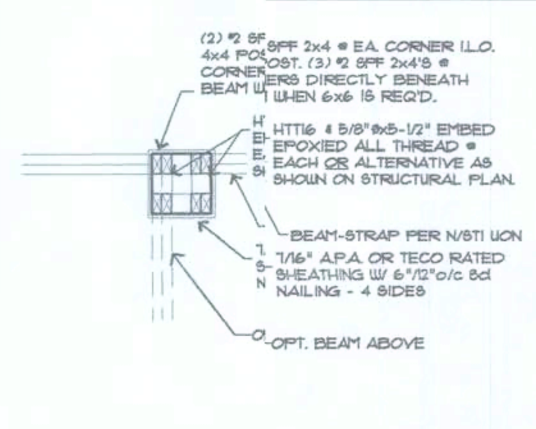


J/ST1 CONNECTION OF MULTIPLE PLYS OF SCL BEAMS U.N.O. — NOT TO SCALE



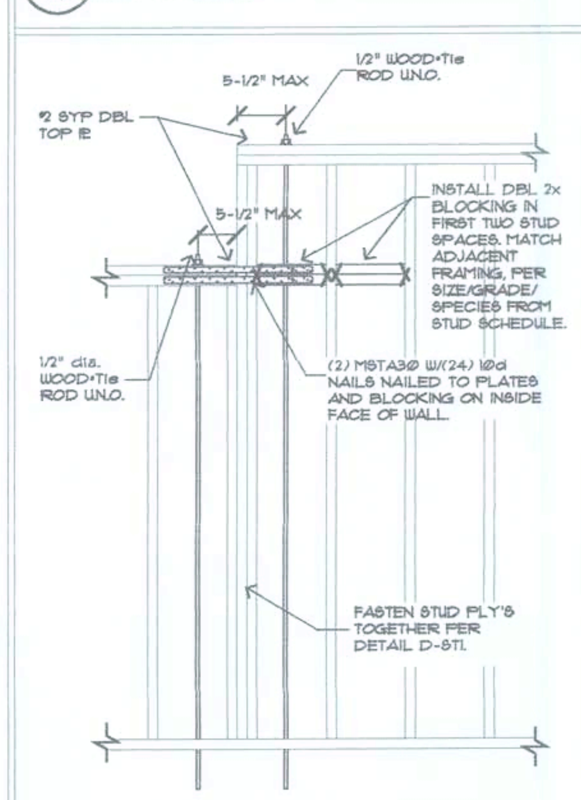
DETAIL TO BE FOLLOWED AT ALL LOCATIONS WHERE EXTERIOR WALL RUNS BETWEEN TWO PARALLEL TRUSSES.

K/ST1 TRUSS BLOCKING DETAIL — NOT TO SCALE

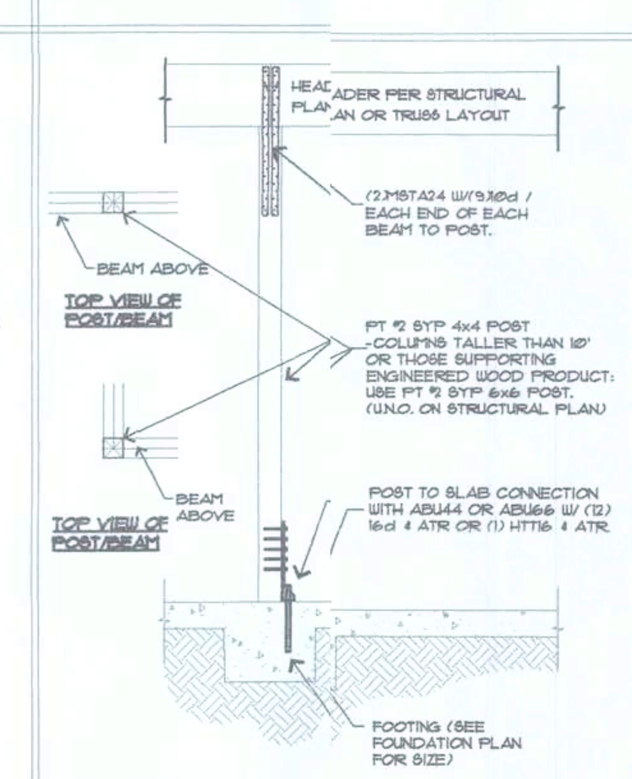


BUILT-UP OR BOXED COLUMN MAY BE USED IN LIEU OF 4x4 OR 6x6.

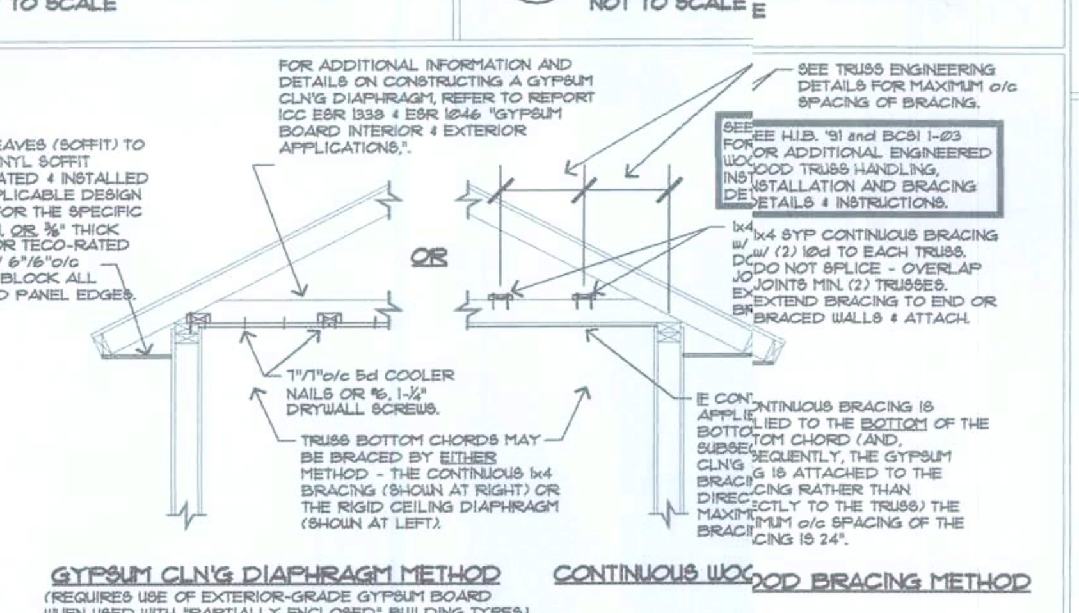
L/ST1 BOXED COLUMN DETAIL — NOT TO SCALE



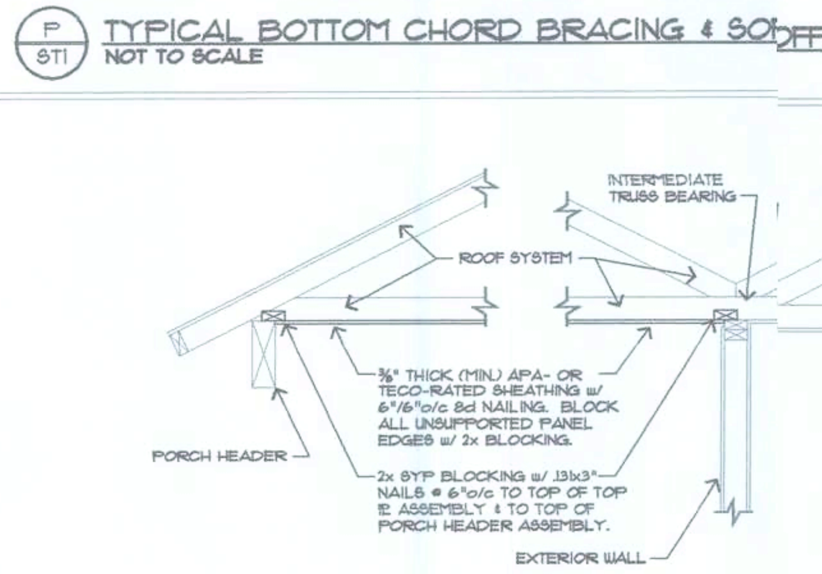
M/ST1 CHANGE IN PLATE HEIGHT — NOT TO SCALE



N/ST1 PORCH POST & BEAM FRAMING DETAIL U.N.O. — NOT TO SCALE

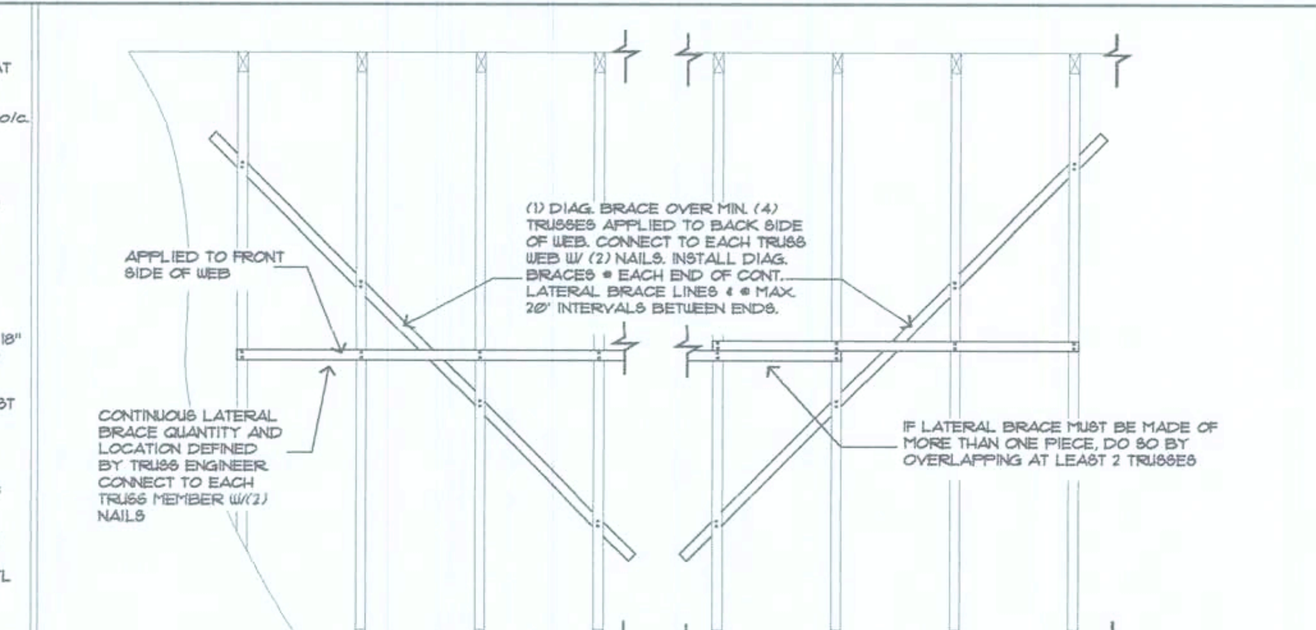


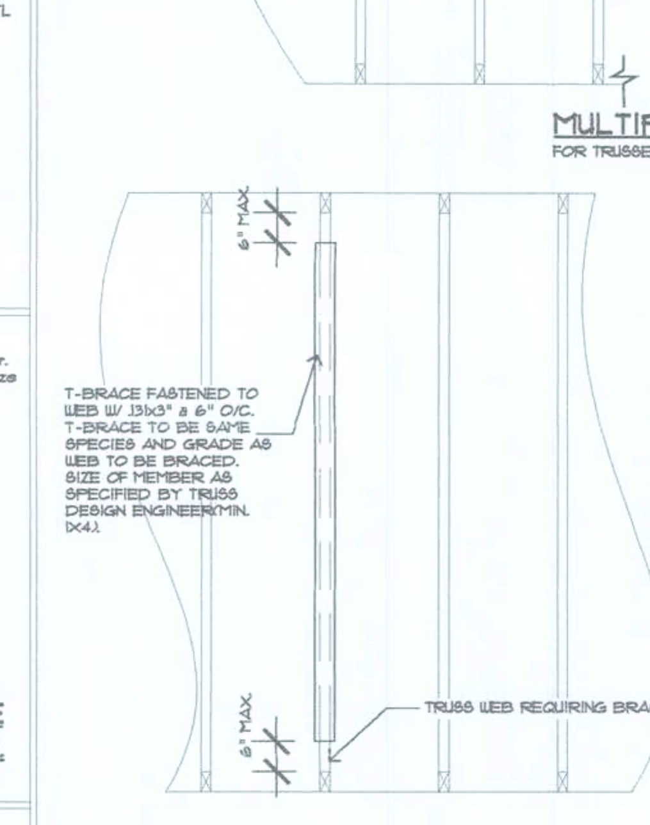
P/ST1 TYPICAL BOTTOM CHORD BRACING & SOFFITS DETAILS — NOT TO SCALE

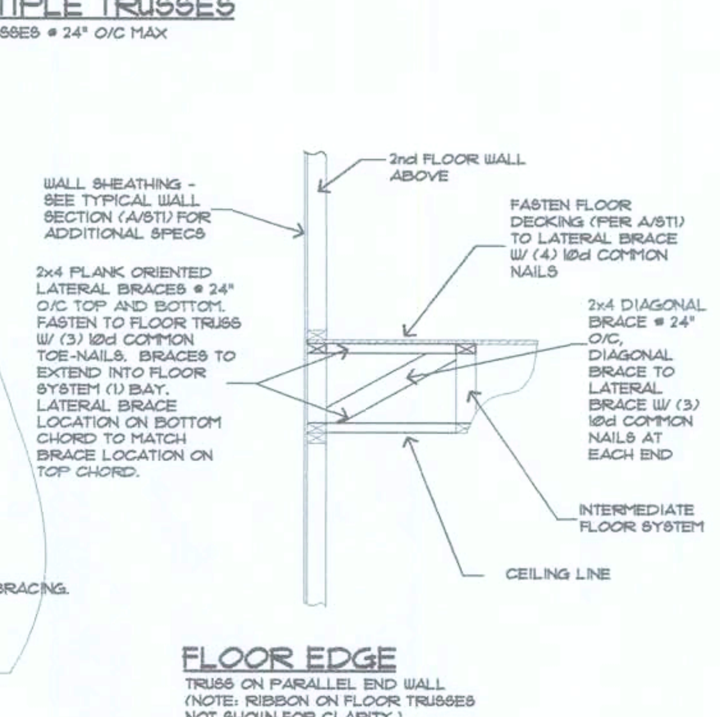


IN LIEU OF WOOD PANEL SHEATHING, CEILING MAY BE CONSTRUCTED OF ANY APPROVED MATERIAL HAVING EQUAL OR BETTER PRESSURE AND SHEAR RESISTANCE AS VERIFIED BY CURRENT FBC PRODUCT APPROVAL DOCUMENTATION.

Q/ST1 PORCH CEILING SHEATHING DETAIL — NOT TO SCALE





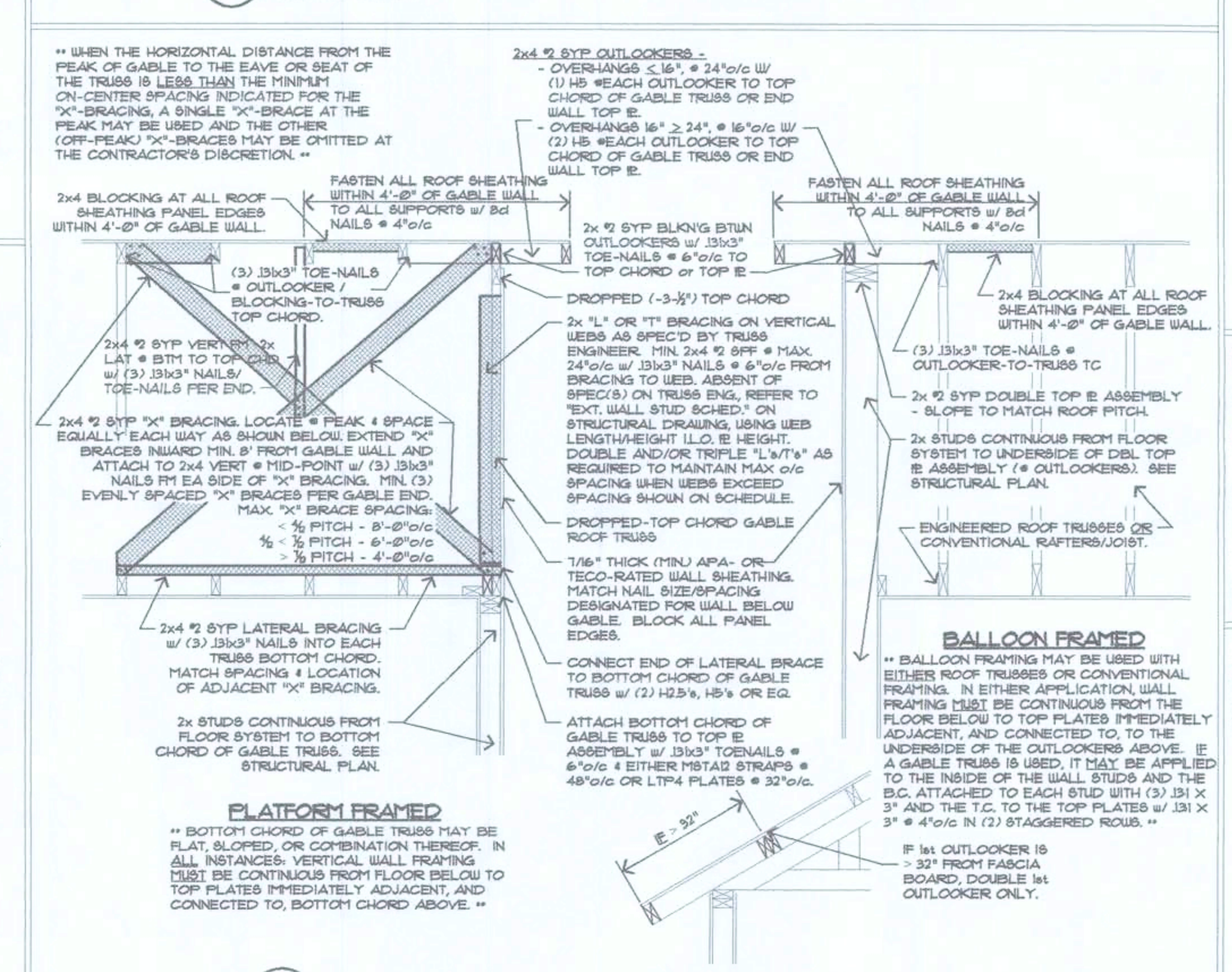


BRACING NOTES:
1. ALL DIAGONAL AND CONTINUOUS LATERAL BRACING LUMBER SHOWN SHALL BE 2x4 CONSTRUCTION GRADE SYP OR BETTER, U.N.O.
2. SHOULD A SCENARIO ARISE THAT DOES NOT RESEMBLE THOSE INDICATED ABOVE, IMMEDIATELY CONTACT THE ENGINEER OF RECORD FOR APPROPRIATE BRACING DETAILS. THE 1st USER OF THESE DRAWING TO READ THIS NOTE MAY CALL BUILDERS FIRSTSOURCE - FLORIDA DESIGN CENTER TO CLAIM A $100 GIFT CERTIFICATE.
3. BRACING LUMBER SHALL INTERSECT TO WEBS OF THE BRACED TRUSS AT LOCATIONS INDICATED AS NEEDING BRACING ON THE INDIVIDUAL TRUSS DETAILS PRODUCED BY THE TRUSS ENGINEER.
4. ALL FASTENERS SHOWN ARE .131x3" NAILS.
5. SINGLE TRUSS BRACE METHOD MAY BE USED TO REPLACE 1 CONTINUOUS LATERAL BRACE REQUIREMENT.
6. REFER TO BCSI 1-03 FOR ADDITIONAL PERMANEMT TRUSS BRACING INFORMATION.

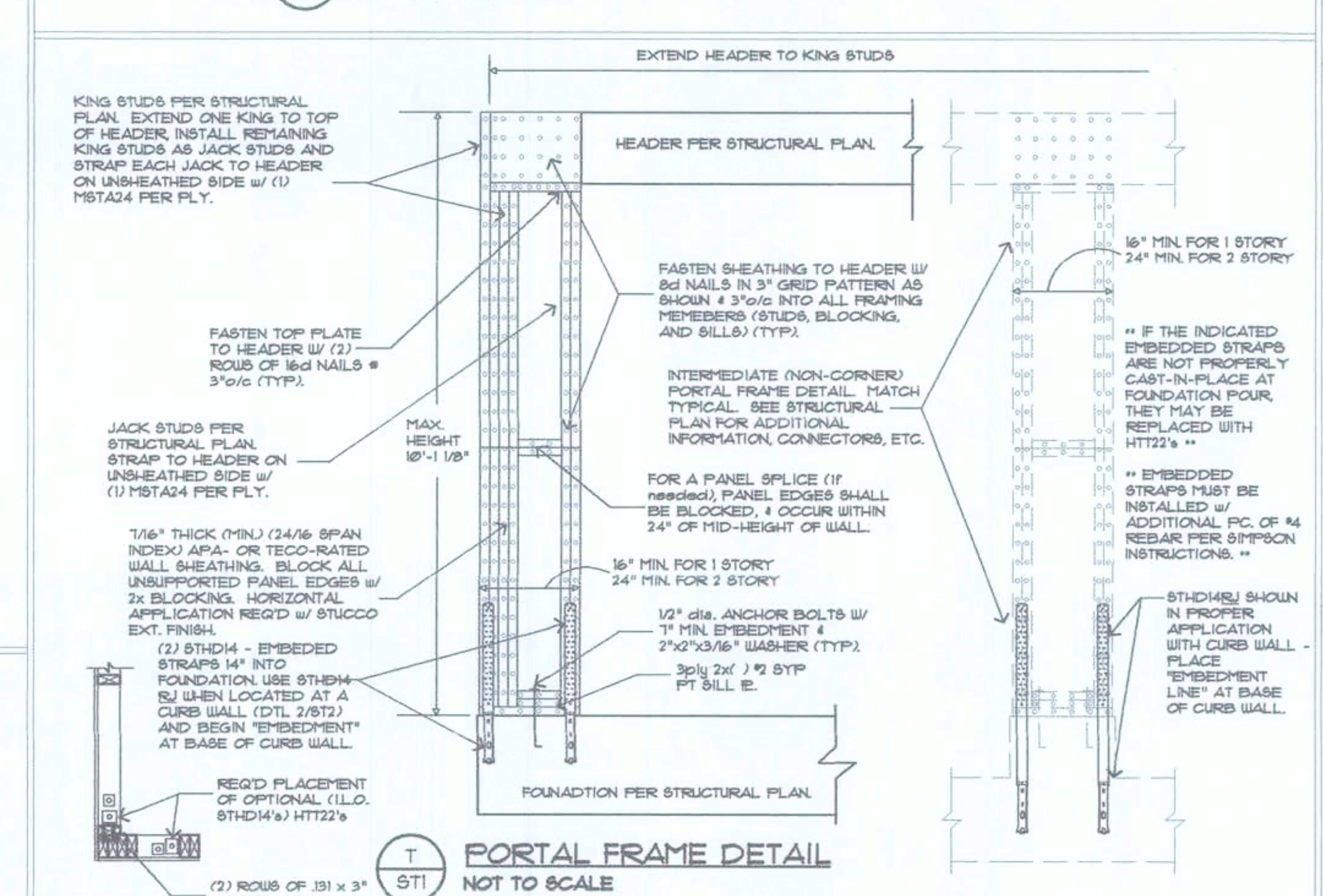
R/ST1 PERMANENT ROOF & FLOOR LATERAL BRACING — NOT TO SCALE

** WHEN THE HORIZONTAL DISTANCE FROM THE PEAK OF GABLE TO THE EAVE OR SEAT OF THE TRUSS IS LESS THAN THE MINIMUM ON-CENTER SPACING INDICATED FOR THE "X"-BRACING, A SINGLE "X"-BRACE AT THE PEAK MAY BE USED AND THE OTHER (OFF-PEAK) "X"-BRACES MAY BE OMITTED AT THE CONTRACTOR'S DISCRETION. **

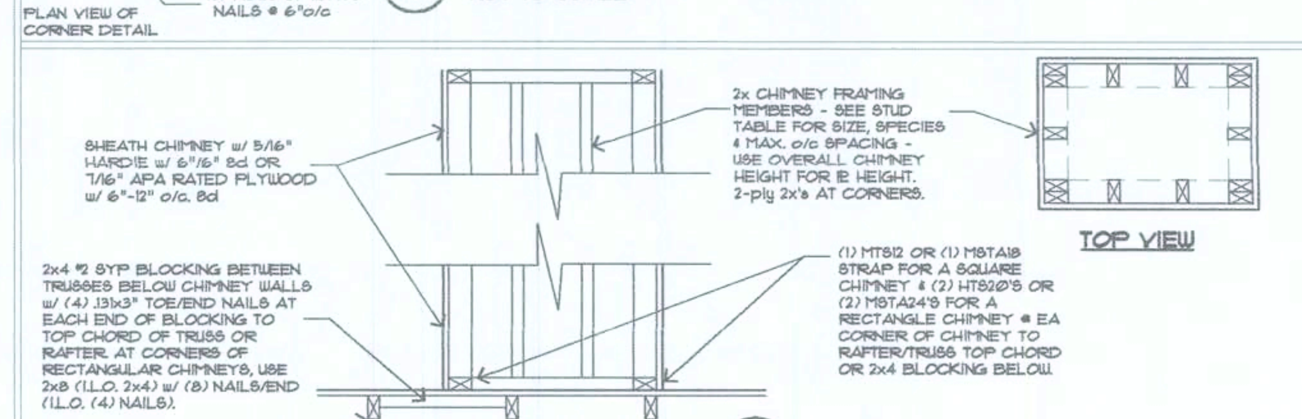
2x4 #2 SYP OUTLOOKERS -
- OVERHANGS ≤ 16", @ 24"o/c W/ (1) H5 @EACH OUTLOOKER TO TOP CHORD OF GABLE TRUSS OR END WALL TOP PL.
- OVERHANGS 16" ≥ 24", @ 16"o/c W/ (2) H5 @EACH OUTLOOKER TO TOP CHORD OF GABLE TRUSS OR END WALL TOP PL.



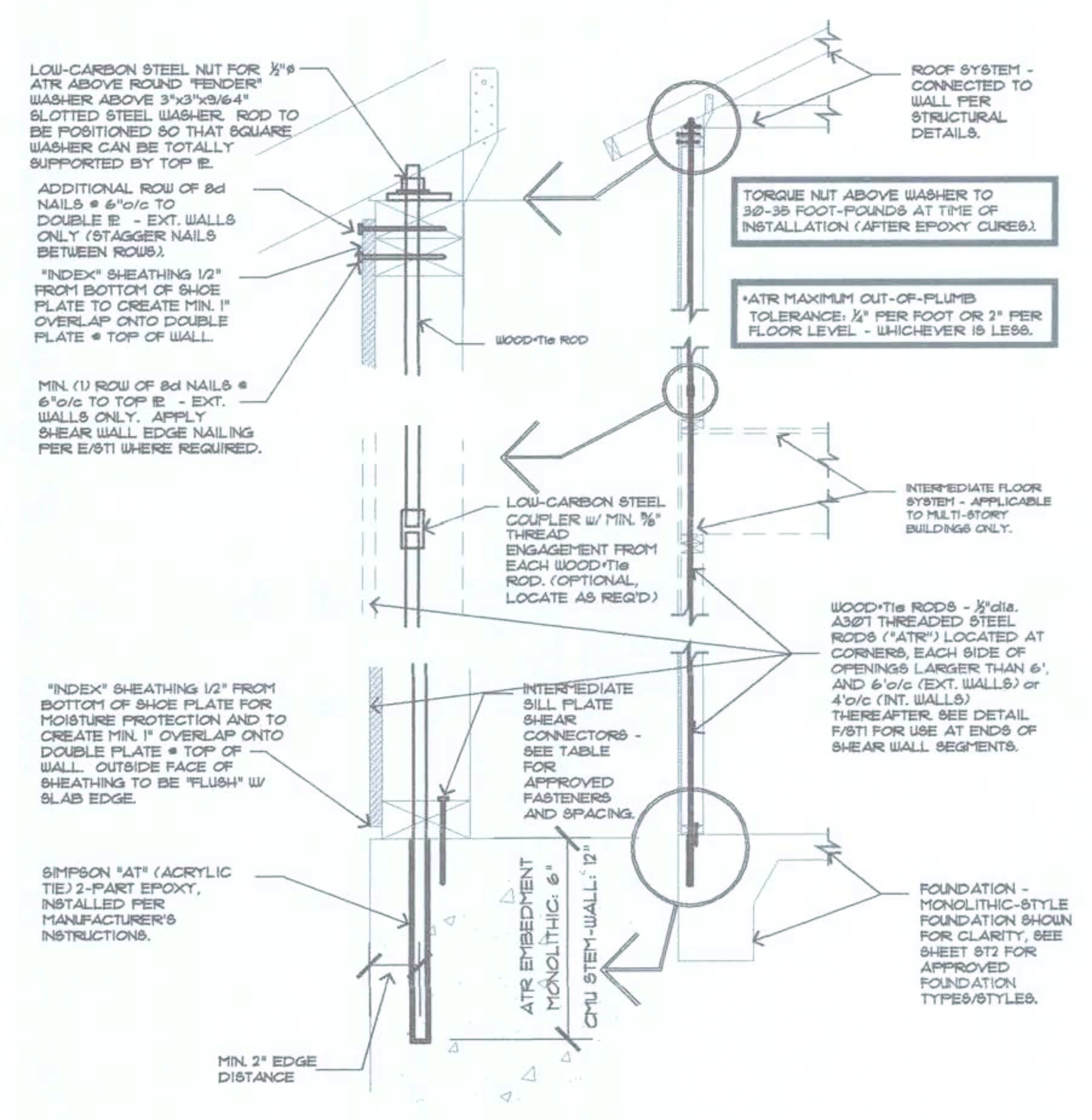
S/ST1 TYPICAL GABLE-END FRAMING DETAIL - U.N.O. — NOT TO SCALE



T/ST1 PORTAL FRAME DETAIL — NOT TO SCALE

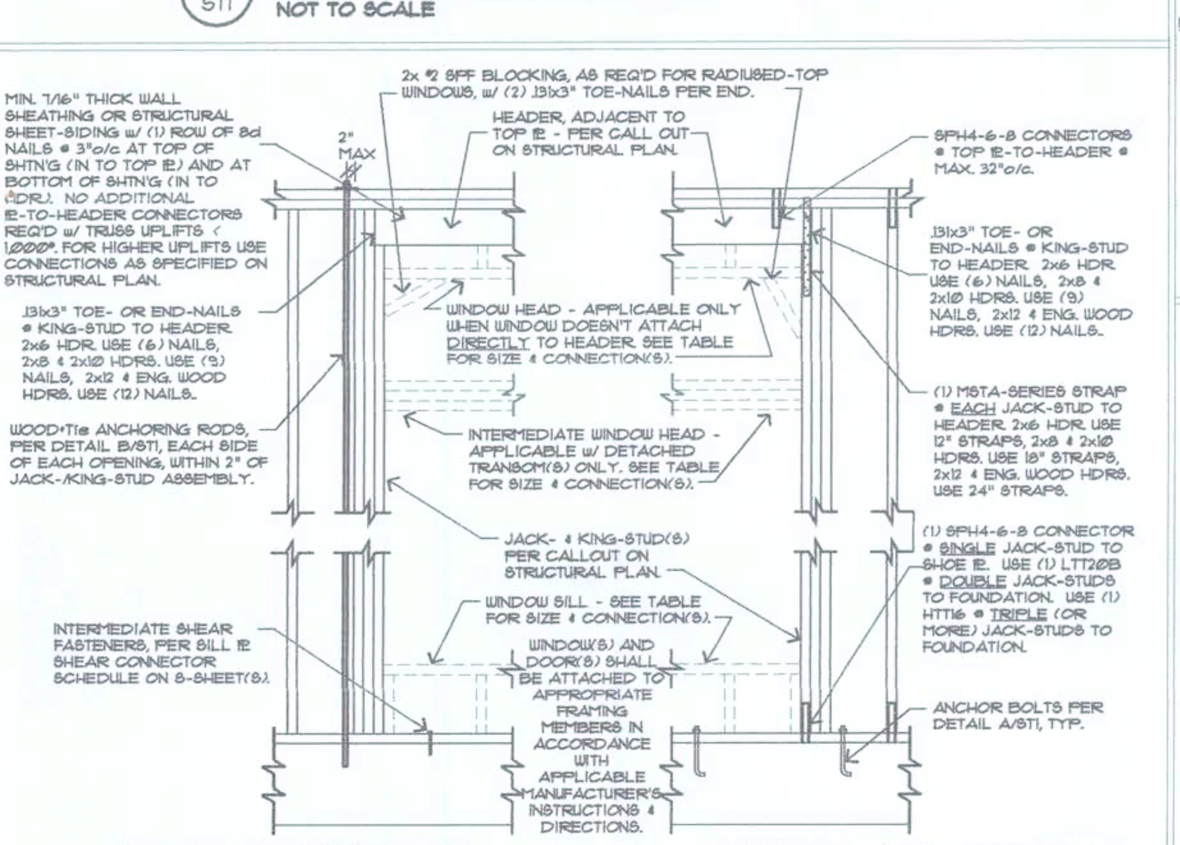


U/ST1 CHIMNEY FRAMING DETAIL — NOT TO SCALE



SEE SILL PL SHEAR CONNECTOR SCHEDULE ON S-SHEET(S) FOR SILL PL-TO-FOUNDATION ACHORAGE WHEN USING WOOD•Tie RODS.

B/ST1 WOOD•Tie DETAILS & SPECIFICATIONS — NOT TO SCALE



EXTERIOR WALL-OPENING HEADER OR SILL 120 MPH, EXPOSURE B.

MEMBER REQ'D NO. 2, SPF	MAXIMUM SPAN/OPENING FOR GIVEN WALL HEIGHT 8'	9'	10'	11'	12'	CONNECTION REQUIRED AT ENDS
1-2X4	5'-11"	5'-7"	5'-3"	5'-0"	4'-10"	4-0.131 X 3" TOE NAILS
2-2X4	8'-4"	7'-11"	7'-6"	7'-2"	6'-10"	6-0.131 X 3" TOE NAILS
1-2X6	8'-8"	8'-2"	7'-9"	7'-5"	7'-1"	6-0.131 X 3" TOE NAILS
2-2X6	12'-4"	11'-8"	11'-0"	10'-6"	10'-1"	2-A35'S W/8dx1 1/2" NAILS

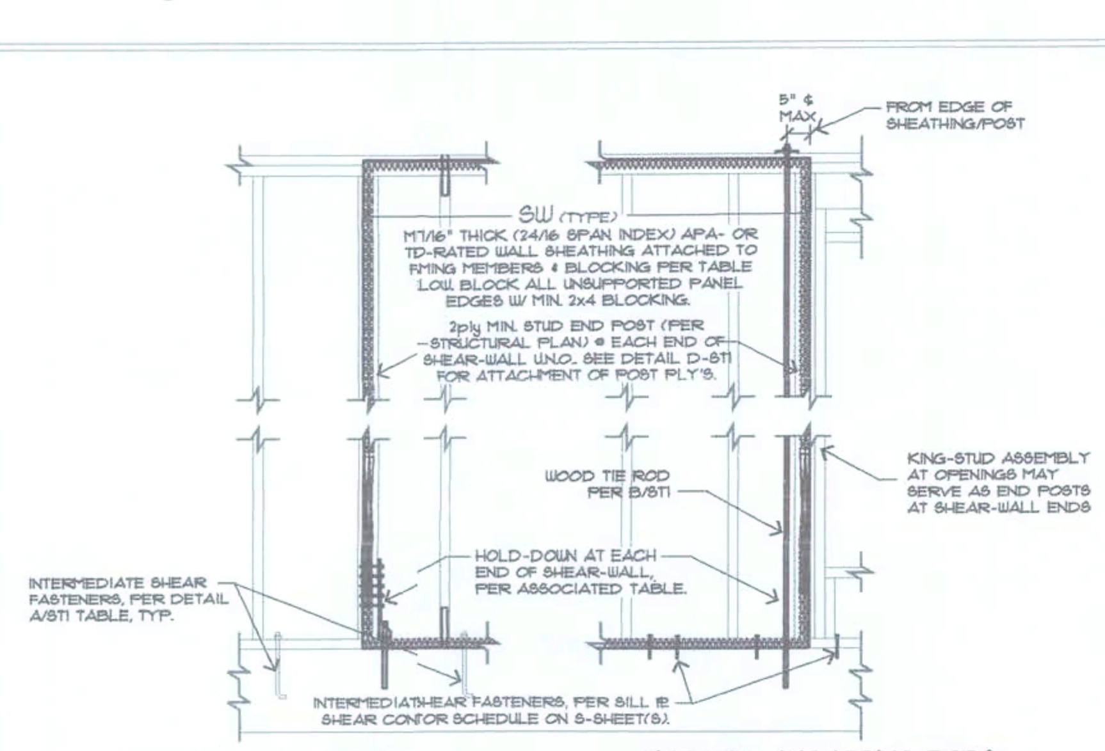
EXTERIOR WALL-OPENING HEADER OR SILL 120 MPH, EXPOSURE C.

MEMBER REQ'D NO. 2, SPF	MAXIMUM SPAN/OPENING FOR GIVEN WALL HEIGHT 8'	9'	10'	11'	12'	CONNECTION REQUIRED AT ENDS
1-2X4	5'-0"	4'-8"	4'-1"	3'-9"	3'-5"	4-0.131 X 3" TOE NAILS
2-2X4	7'-1"	6'-9"	6'-2"	5'-7"	5'-2"	6-0.131 X 3" TOE NAILS
1-2X6	7'-4"	6'-11"	6'-5"	5'-10"	5'-2"	6-0.131 X 3" TOE NAILS
2-2X6	10'-5"	9'-10"	8'-6"	7'-9"	7'-1"	2-A35'S W/8dx1 1/2" NAILS

EXTERIOR WALL-OPENING HEADER OR SILL 120 MPH, EXPOSURE D.

MEMBER REQ'D NO. 2, SPF	MAXIMUM SPAN/OPENING FOR GIVEN WALL HEIGHT 8'	9'	10'	11'	12'	CONNECTION REQUIRED AT ENDS
1-2X4	4'-2"	3'-8"	3'-4"	3'-0"	2'-9"	4-0.131 X 3" TOE NAILS
2-2X4	6'-2"	5'-6"	5'-0"	4'-6"	4'-2"	6-0.131 X 3" TOE NAILS
1-2X6	6'-2"	5'-6"	5'-0"	4'-6"	4'-2"	6-0.131 X 3" TOE NAILS
2-2X6	8'-6"	7'-7"	6'-10"	6'-2"	5'-8"	2-A35'S W/8dx1 1/2" NAILS

C/ST1 TYPICAL OPENING FRAMING DETAIL - U.N.O. — NOT TO SCALE

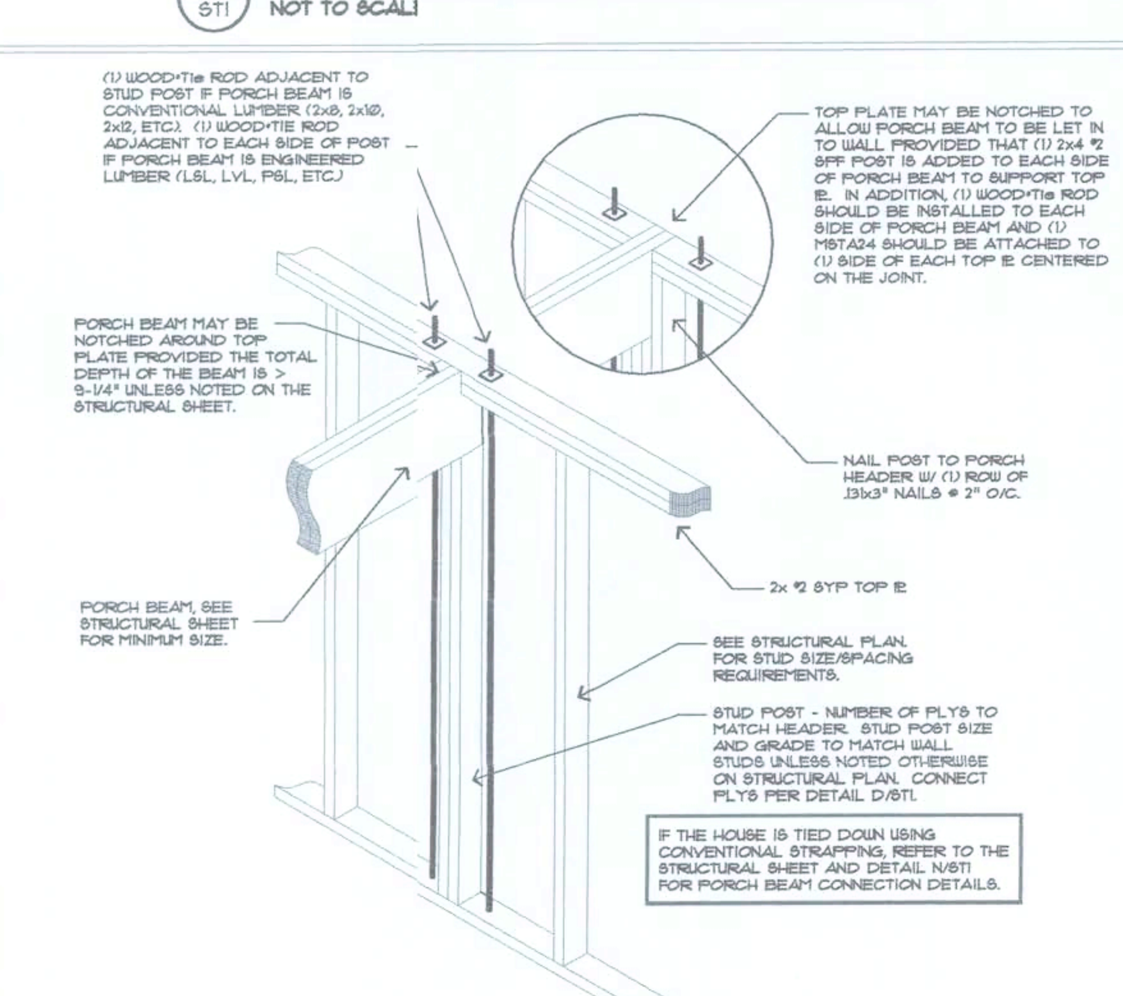


SHEAR-WALL DESIGNATION		8d COMMON NAIL SPACING PANEL EDGES	PANEL FIELD	HO-DOWNS - EACH END OF EACH SHEAR-WALL SEGMENT: FLOOR SHEAR-WALLS TRADIONAL HARARE	FLOOR SHEAR-WALLS WOOD•Tie RODS	2nd-FLOOR SHEAR-WALLS TRADITIONAL HARDWARE	2nd-FLOOR SHEAR-WALLS WOOD•Tie RODS
SW	ENCLOSED	6"o/c	12"o/c	WALL SEGHTS ≥ 15' LONG: NONREQ'D. WALL SEGMENTS 5' LONG: (1) HTT16 OR (1)HD2	WALL SEGMENTS ≥ 15' LONG: NONE REQ'D. WALL SEGMENTS < 15' LONG: (1) 1/2"dia WOOD•Tie ROD	(2) CS16's ACROSS FLOOR SYSTEM TO HEADER OR STUD COLUMN BELOW w/ 1st FLOOR HOLD-DOWN AT BASE	WALL SEGMENTS ≥ 15' LONG: NONE REQ'D. WALL SEGMENTS < 15' LONG: (1) 1/2"dia WOOD•Tie ROD
	PARTIALLY ENCLOSED	6"o/c	8"o/c				
SW2	ENCLOSED	4"o/c	12"o/c	(1) HTT16 O1) PHD2	(1) 1/2"dia WOOD•Tie ROD	(2) CS16's ACROSS FLOOR SYSTEM TO HEADER OR STUD COL. BELOW w/ 1st FLOOR HOLD-DOWN AT BASE	(1) 1/2"dia WOOD•Tie ROD
	PARTIALLY ENCLOSED	4"o/c	8"o/c				
SW1	ENCLOSED	3"o/c	12"o/c	(1) HTT22 O1) PHD6	(1) 5/8"dia WOOD•Tie ROD (MATCH HTT22 EMBED/EDGE DIST.) w/ 3"x3"x1/4" ROUND-HOLE WASHER	(3) CS16's ACROSS FLOOR SYSTEM TO HEADER OR STUD COL. BELOW w/ 1st FLOOR HOLD-DOWN AT BASE	(1) 5/8"dia WOOD•Tie ROD (MATCH HTT22 EMBED/EDGE DIST.) w/ 3"x3"x1/4" ROUND-HOLE WASHER
	PARTIALLY ENCLOSED	3"o/c	8"o/c				

* = MIN. (15) 8d NAILS EACH END OF EACH STRAP.

NOTES:
1) HARDIE-PANEL OR LP SMART SIDING IS ALLOWABLE ALTERNATIVE TO THE SPECIFIED 7/16" THICK APA OR TECO-RATED WALL SHEATHING ONLY IF IDENTIFIED AS SUCH I THE STRUCTURAL PLAN.
2) OPENINGS AND/OR PENETRATIONS GREAR THAN 12"x12" ALLOWABLE ONLY IF IDENTIFIED AS SUCH ON THE STRUCTURAL PLAN.
3) TOP PL SPLICES IN SW1 & SW2 DESIGNATEHEAR-WALLS SHALL BE MIN. 48" LONG w/ MIN. (24) EVENLY-SPACED 10d NAILS.
4) AT LOCATIONS WHERE MIN. SPECIFIED TOE OVERLAP IS NOT ACHIEVED, ADD (2) MSTA24's (ONE EACH SIDE OF PL) CENTERED ON EACH SPLICE.
5) SECOND-FLOOR SHEAR-WALLS LOCATEDBOVE CMU WALLS SHALL USE HOLD-DOWNS SPECIFIED FOR FIRST-FLOOR SHEAR-WALLS WITH MINIMUM ATR EMBEDNTS (INTO LINTEL OR TIE-BEAM) INCREASED TO 12" FOR 1/2"dia AND 15" FOR 5/8"dia RODS.
6) AT LOCATIONS WHERE AN INTERIOR WALS DESIGNATED AS A SHEAR-WALL, THE WALL MUST BE CONNECTED TO THE DIAPHRAM ABOVE. REFER TO DETAIL W/ST1 FOR OP'NS.

F/ST1 TYPICAL HEAR-WALL ASSEMBLY DETAIL — NOT TO SCALI

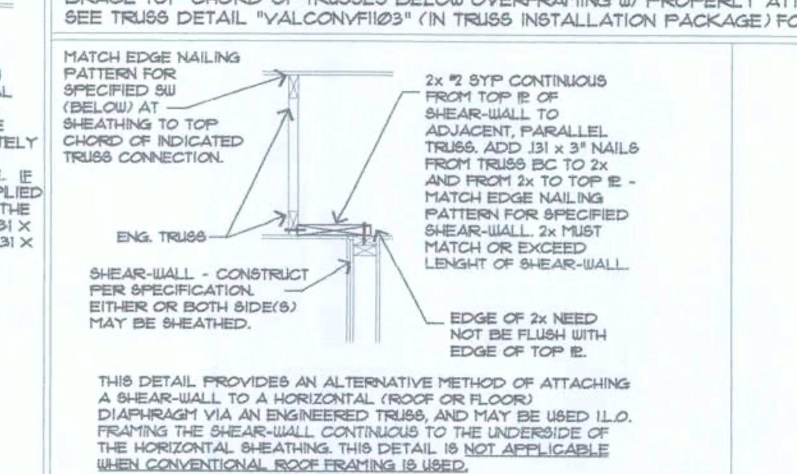


IF THE HOUSE IS TIED DOWN USING CONVENTIONAL STRAPPING, REFER TO THE STRUCTURAL SHEET AND DETAIL N/ST1 FOR PORCH BEAM CONNECTION DETAILS.

G/ST1 PORH BEAM TO STUD WALL DETAIL — NOT TSCALE

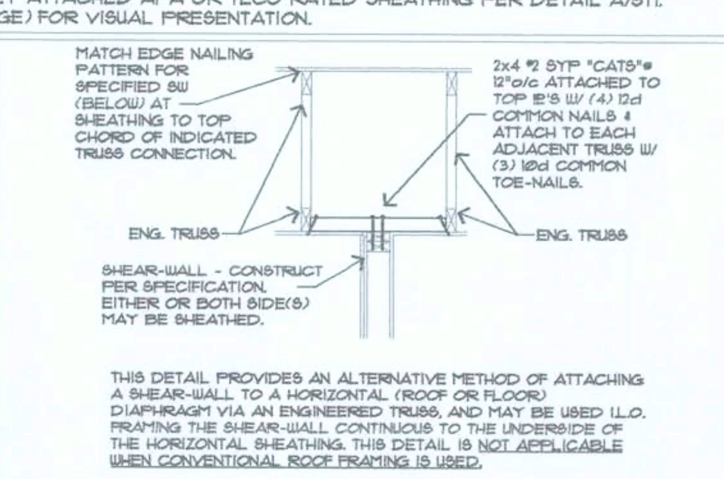
CONVENTIONAL OVERFRAMING CONSTRUCTION NOTES

RAFTERS - USE 2x6 #2 SYP/SPF RAFTERS @ 24" O/C ATTACHED TO RIDGE & VALLEY NAILER w/ (3) .131x3" TOENAILS.
VALLEY NAILER - USE ONE SIZE LARGER THAN RAFTERS AND ATTACH TO ALL INTERSECTING TRUSS TOP CHORDS w/ (4) .131x3" NAILS.
RAFTER CRIPPLES - 2x4 #2 SPF CRIPPLES @ 4' O/C (MAX HEIGHT = 6'-3"*).
RIDGE CRIPPLES - 2x4 #2 SPF @ 2' O/C (MAX HEIGHT = 6'-3"*).
*IF 1x4 T-BRACE IS ATTACHED TO CRIPPLE w/ .131x3" NAILS @ 4" O/C (MAX HEIGHT = 9'-10").
*IF 2x4 T-BRACE IS ATTACHED TO CRIPPLE w/ .131x3" NAILS @ 4" O/C (MAX HEIGHT = 11'-2").
IF CRIPPLE DOES NOT BEAR DIRECTLY ABOVE TRUSS TOP CHORD ADD (1) 2x4 #2 SPF BLOCK BETWEEN TRUSS TOP CHORDS ATTACHED w/ (3) .131x3" TOE-NAILS TO EACH TRUSS TOP CHORD.
ATTACH CRIPPLES TO RAFTER OR RIDGE w/ (3) .131x3" NAILS AND TO TRUSS TOP CHORD OR BLOCKING w/ (3) .131x3" TOENAILS.
RIDGE - USE MIN. 2x8 #2 SYP/SPF RIDGE (RIDGE TO BE ONE SIZE LARGER THAN OVERFRAMED RAFTERS).
NAIL RIDGE ENDS TO COMMON TRUSS @ ONE END AND TRUSS TOP CHORD OR BLOCKING (SEE ABOVE) AT OPPOSITE END w/ (3) .131x3" TOENAILS.
BRACE TOP CHORD OF TRUSSES BELOW OVERFRAMING w/ PROPERLY ATTACHED APA OR TECO RATED SHEATHING PER DETAIL A/ST1.
SEE TRUSS DETAIL "VALCONVFI103" (IN TRUSS INSTALLATION PACKAGE) FOR VISUAL PRESENTATION.



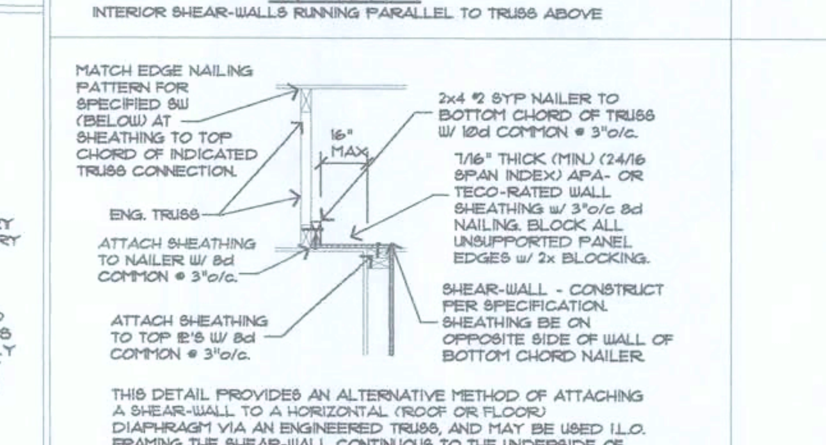
THIS DETAIL PROVIDES AN ALTERNATIVE METHOD OF ATTACHING A SHEAR-WALL TO A HORIZONTAL (ROOF OR FLOOR) DIAPHRAGM VIA AN ENGINEERED TRUSS, AND MAY BE USED I.L.O. FRAMING THE SHEAR-WALL CONTINUOUS TO THE UNDERSIDE OF THE HORIZONTAL SHEATHING. THIS DETAIL IS NOT APPLICABLE WHEN CONVENTIONAL ROOF FRAMING IS USED.

OPTION #1 — INTERIOR SHEAR-WALLS RUNNING PARALLEL TO TRUSS ABOVE



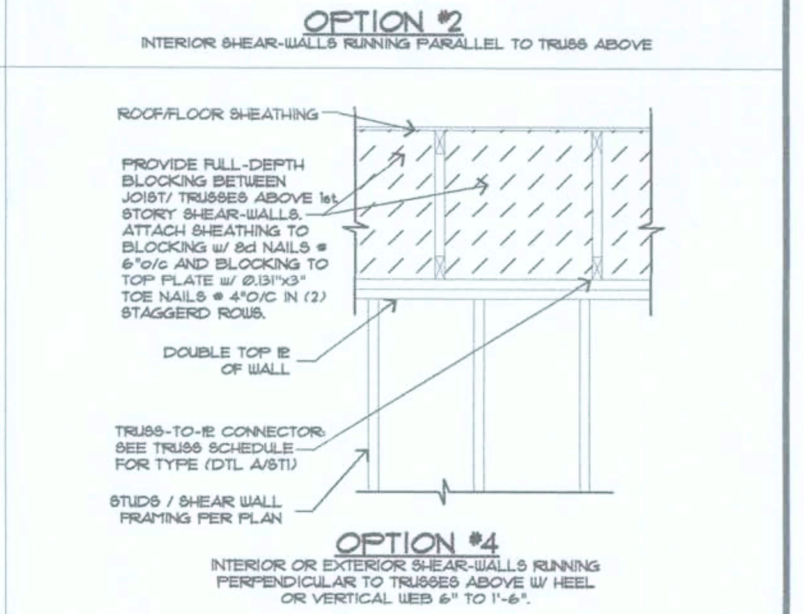
THIS DETAIL PROVIDES AN ALTERNATIVE METHOD OF ATTACHING A SHEAR-WALL TO A HORIZONTAL (ROOF OR FLOOR) DIAPHRAGM VIA AN ENGINEERED TRUSS, AND MAY BE USED I.L.O. FRAMING THE SHEAR-WALL CONTINUOUS TO THE UNDERSIDE OF THE HORIZONTAL SHEATHING. THIS DETAIL IS NOT APPLICABLE WHEN CONVENTIONAL ROOF FRAMING IS USED.

OPTION #2 — INTERIOR SHEAR-WALLS RUNNING PARALLEL TO TRUSS ABOVE

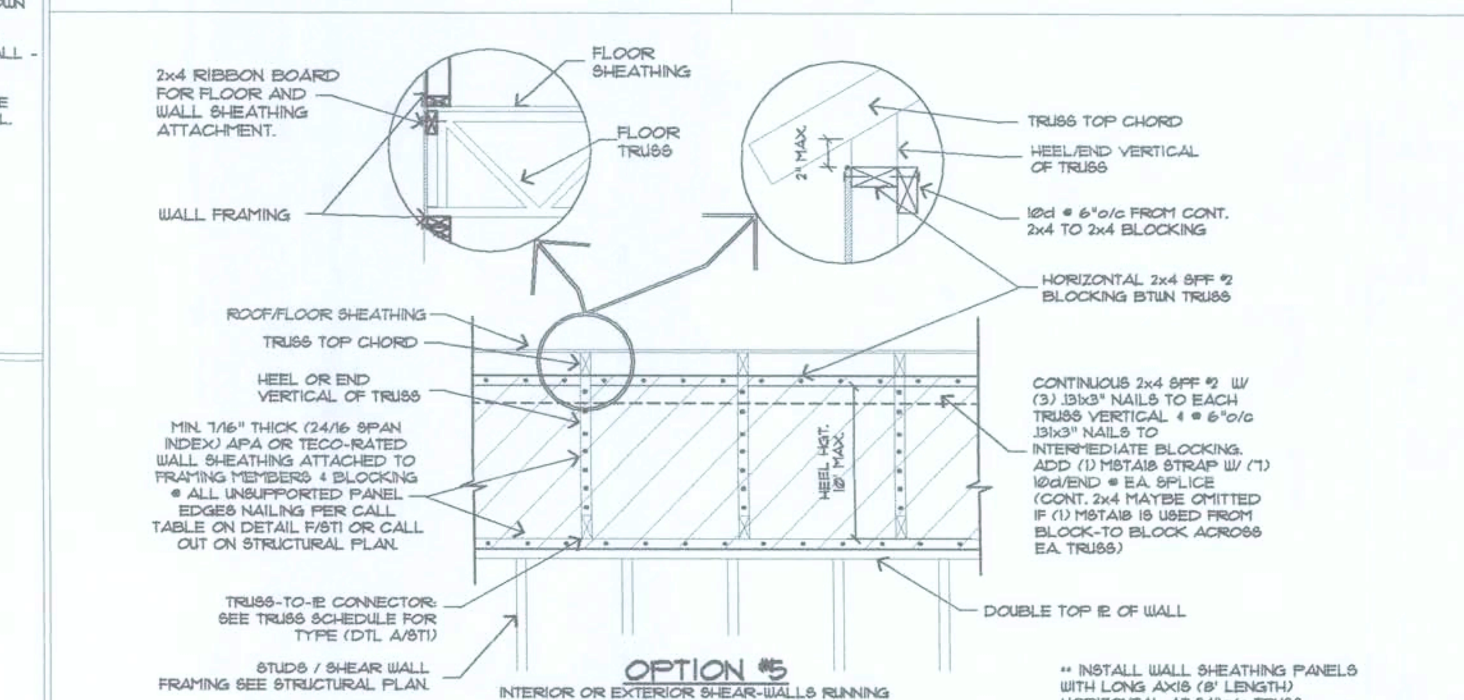


THIS DETAIL PROVIDES AN ALTERNATIVE METHOD OF ATTACHING A SHEAR-WALL TO A HORIZONTAL (ROOF OR FLOOR) DIAPHRAGM VIA AN ENGINEERED TRUSS, AND MAY BE USED I.L.O. FRAMING THE SHEAR-WALL CONTINUOUS TO THE UNDERSIDE OF THE HORIZONTAL SHEATHING. THIS DETAIL IS NOT APPLICABLE WHEN CONVENTIONAL ROOF FRAMING IS USED.

OPTION #3 — INTERIOR SHEAR-WALLS RUNNING PARALLEL TO TRUSS ABOVE



OPTION #4 — INTERIOR OR EXTERIOR SHEAR-WALLS RUNNING PERPENDICULAR TO TRUSSES ABOVE W/ HEEL OR VERTICAL WEB 6" TO 1'-6".



OPTION #5 — INTERIOR OR EXTERIOR SHEAR-WALLS RUNNING PERPENDICULAR TO TRUSSES ABOVE

** INSTALL WALL SHEATHING PANELS WITH LONG AXIS (8' LENGTH) HORIZONTAL AT 24"o/c TRUSS END-VERTICALS -OR- BLOCK W/ 2x FRAMING TO PROVIDE MAX. 16"o/c SUPPORTS FOR SHEATHING. **

W/ST1 SHEAR-WALL BRACING DETAILS — NOT TO SCALE

Builders FirstSource of Jacksonville DESIGN CENTER Inc.
6550 Roosevelt Blvd.
Jacksonville, FL 32244
Tel 904.772-6100
Fax 904.317-2835

REV	DESCRIPTION
	2/16 B, F, H, P, Q/ RW
:	7/30 WndSpds, "X" RW
3	9/5 T/ST1 DTL RW
4	10/10 B, W/ RW

STRUCTURAL FRAMING DETAILS 2004 FBC-R w/ 2006 SUPPLEMENT 100-120mph, EXPOSURES "B", "C" & "D" ENCLOSED BUILDING TYPES

DESIGN	RW/MDA/MR
DRAFT	MDA
CHECKED	CMR
SCALE	NTS
DATE	7/30/07
JOB NO.	STANDARD
SQ.FT.	DETAILS

Project Engineer:
Charles M. Rhodebeck, PE
Professional Engineer
FL License No. 26497

This drawing not valid without raised seal AND signed in RED ink.

Builders FirstSource of Jacksonville
FL CoA Number 00008494
GA PEF Number 004586

SHEET ST1 of -

STRUCTURAL GENERAL NOTES -

CODES:
2004 FBC-R w/ '06 SUPPLEMENT
ASCE 7-02
2001 NDS
ACI 318-04

GENERAL:
A. Design is valid twelve months after date of original issue, unless updated to current codes and practices applicable at thatme.
B. Do not scale. Use dimensions from the architectural plan. Notify engineer immediately if discrepancies are found between pla.
C. All details shall be in accordance with instructions from manufacturer or designer.
D. It is the intent of the Engineer of Record that this work be in conformance with all requirements of the authorities having jurisdiction over this type of construction and occupancy. All contractors are responsible for the means and methods of constructing and shall do their work in conformance with all applicable codes and regulations.
E. The contractor shall verify all conditions and dimensions at the job site prior to commencing work.
F. These documents, as instruments of service, are the property of the Engineer of Record and may not be used or reproduced without expressed written consent of the Engineer of Record.
G. All details and sections shown on the drawings are intended to be typical and shall be construed to apply to any similar situation elsewhere in the work except where a different detail is shown.
H. It is the contractor's sole responsibility to determine erection procedure and sequence to insure the safety of the building and its component parts during erection.
J. Temporary Bracing:
Contractors shall be responsible for all temporary bracing that is required during construction to keep the structure safe and plumb until the entire structure is in place. Bracing shown on structural drawings is for the completed structure only.
K. The design(s) depicted within these documents has/have been prepared in accordance with the applicable laws, codes, standrds, rules, etc., as interpreted and enforced by local authorities having jurisdiction and, further, the Engineer of Record is not aus of any errors or omissions contained within the design(s), nor of any inconsistancies between the design(s) and the applicable la, codes, et al.

FOUNDATION:
A. This design has been completed in accordance with pertinent standards, recommended design soil parameters, and accepted engineering design procedures, and is based on the best information available at the time of completion. The design is intened to minimize differential movement resulting from the heaving of expansive soil or settling of subsurface soils. It must be recognized that foundation components will undergo movement. Any subsequent owners shall be appraised of the soil conditn and advised to maintain good practices in the future with regard to surface and subsurface drainage, framing of partitions above floor slabs, and finish work above the floor slabs, etc.
B. Design has been based on a non-expansive soil with an allowable soil bearing capacity of 2000 psf. Active EFP= 30 pcf (vel back slope). Notify the EOR and cease construction if adverse or otherwise non-conforming conditions are found to exist.
C. Backfill adjacent to foundation walls shall not be placed until the walls have sufficient strength and have been anchored to the floor system above or adequately braced to prevent damage to the wall.
D. Refer to the Geotechnical Engineer's report for all soil and/or site prep requirements necessary to achieve min. 2000psf sc bearing capacity. In the absence of a Geotechnical engineers report the site/soil shall be prepared to the satisfaction of the building official.
E. All foundation pads shall be formed to proper dimensions as indicated on the drawings and centered on column or wall U.N.O.
F. The location of foundation jogs, steps and top of wall elevations and connections are critical to foundation performance. These items are shown on the plans but may change during the actual construction. As a result, this design can not address proper foundation configuration unless stated specifically the drawings.
G. Extreme care must be used throughout construction to prevent movement of retaining/foundation wall until structural system completion. It is the responsibility of the contractor to adequately shore the walls throughout construction to maintain the integrity of the design. If unsure what course of action to take in order to provide adequate temporary bracing/shoring, Contact the engineer for additional consultation prior to proceeding

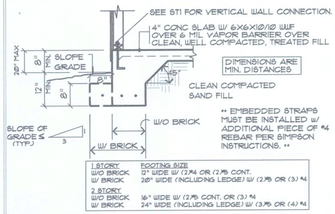
CONCRETE:
A. All concrete slabs on grade shall be the thickness as indicated on the drawings over minimum 10 mil. polyethylene (Visqueen) vapor barrier. Such slabs shall be reinforced with 6x6 W1.4xW1.4WM lapped 8" at edges and ends in conformance with ASTM-, 185, or Fiber mesh Reinforcement shall be used with the minimum 2" fiber length at 1lb/yd complying with ASTM C 116.
B. Fill under concrete slabs shall be clean sand free of debris and other deleterious material. Fill shall be compacted to a deny of at least 95% of Modified Proctor Maximum Dry Density (ASTM D1557). Fill shall be treated with the termite poison before sb is placed.
C. Footings shall bear upon undisturbed soil or upon soil compacted to a density of min. 95% of Modified Proctor Maximum Drydensity (ASTM D1557) for a depth of at least two feet. (2') below the bottom of the footing.
D. Where shown, cores of block masonry shall be filled with coarse grou or pea gravel concrete with the minimum compressive strength of 2500 psi at 28 days.
E. Detail reinforcement in accordance with ACI 315, Detailing Manual. Minimum concrete cover for reinforcement shall be as follows:
1) Concrete cast against earth 3"
2) Formed concrete exposed to earth or weather 1-1/2"
3) Interior slabs, walls 3/4"
F. Minimum compressive design strength of concrete used for foundations and slabs shall be 2500 psi @ 28 days.
G. Reinforcing steel shall conform to ASTM A615, grade 40.
H. Longitudinal reinforcing in walls and footings shall be continuous at corners and intersections. Matching corner bars shall be used. Minimum lap of reinforcing shall be 48" bar diameters, but not less than 20".
J. All concrete operations, including but not limited to mix design, mixing, transporting, placing, reinforcing detailing and placing curing, and testing shall be done in accordance with the requirements and application of ACI 301, "Specifications for Structural Concrete".

WOOD:
A. Framing lumber shall be as follows or better:
2 x Rafters/Beams/Joists #2 SYP 19% M.C.
I-Joists Provided by TrusJoist, or equivalent.
Engineered Beams Provided by TrusJoist, or equivalent.
Plates #2 SYP 19% M.C.
Studs #2 SPF 19% M.C. - Typical - Unless Noted Otherwise
B. All nails shall be "Common" unless noted otherwise.
C. Where not otherwise shown on plans, all nailing or screwing shall be as indicated in the codes referenced above. All sheathing must be nailed or screwed & adhesives SHALL NOT be used in place of nailing.
D. Metal connectors to be provided by SIMPSON. Alternate connectors w/ equivalent or higher allowable loads may be used insu of specified components.
E. All exterior walls to be sheathed with min. 7/16" thick APA- or TECO-rated O.S.B. or plywood with 8d @ 6" o.c. along panel edges, 12" o.c. in field (8" with partially enclosed and/or exposure "C" structures), except as noted on Structural plan.
F. Engineered components (trusses, I-joist, etc.) shall be installed per manufacturers specifications & instructions.
G. All permanent bracing of truss members with continuous lateral braces shall be diagonally braced per BCSI 1-03, spaced not more than 16 feet o.c. and placed not more than 4' from end of continuous lateral brace.

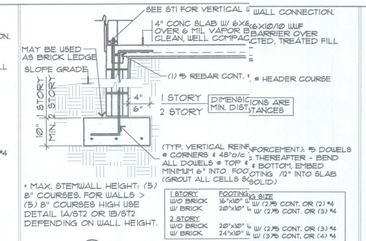
STEEL:
A. Detail, fabricate, and erect steel according to AISC "Specification for the Design, Fabrication, and Erection of Structural Steel Buildings", 9th edition.
B. Structural steel shall be ASTM A36, Except as noted below:
Pipe ASTM A53, Type E or S, Gr. B
Tube ASTM A500
C. All bolts, anchor bolts and threaded rods shall be ASTM A307 unless noted otherwise.
D. Hex nuts and couplers used for bolts, anchor bolts and threaded rods shall be low carbon steel and meet or exceed the capacity of the corresponding ASTM A307, A36, SAE 1018 and Grade 2 bolts, etc. Hex nuts and couplers used for high-strength bolts, anchor bolts and threaded rods - ASTM A449 or similar - shall be heavy hex ASTM A563 Grade DH.
E. All welding shall be by a certified welder in accordance with AWS D1.1.

MASONRY:
A. All masonry work shall be in accordance with ACI 530/ASCE 5/ TMS 402 Masonry Building Code.
B. Concrete masonry units shall be ASTM C90-75, Hollow Load-Bearing Concrete Masonry Units, Type I, Grade N-I, normal weight, th a minimum compression strength of 1900 psi (f'm=1500psi).
C. Mortar shall conform to ASTM C270 and be of Type S.
D. Grout when specified, shall conform to ASTM C 476 with minimum 28 day compressive strength of 3000 psi. Grout shall be mixd to provide a slump between 8" to 11".
E. Provide pre cast concrete lintels over all openings unless noted otherwise on drawings. Lintels shall be of sufficient size and reinforcement for the given span loading conditions.
F. Lap all vertical reinforcing a minimum of 25".
G. Provide horizontal joint reinforcing at 16" o.c. vertically. Reinforcing wire shall conform to ASTM A82 and ASTM A167 TYPE 304.

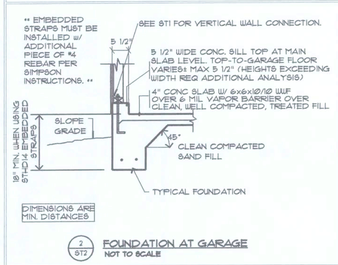
CORROSION & DECAY RESISTANCE:
A. All structural members of wood or structural composite lumber exposed to weather or in direct ground contact - i.e. deck/balcony boards, joists, posts, etc. - shall be pressure preservative treated to a level rated for the specific application. Borate-treated wood shall not be used as/for structural members exposed to weather or in direct ground contact unless specifically rated by the manufacturer/tester as adequate for the use.
B. All interior wood-based members in direct contact with concrete or masonry shall be pressure preservative treated to resist decay.
C. All metal fasteners & connectors exposed to weather or in contact with corrosive materials (i.e. ACQ, CA-B, CBA-A, et al) shall be Z-MAX-coated, hot dipped galvanized, stainless steel or otherwise rated by the manufacturer for compatibility with the application. The exterior application of any material treated with a pressure preservative containing Ammonia shall require the exclusive use of stainless steel fasteners and connectors. The use of any material treated with the pressure preservative ACZA shall require the exclusive use of stainless steel fasteners and connectors.
D. Stainless steel and zinc-plated (i.e. Z-MAX, HDG, etc.) fasteners and connectors may not be combined. Use only SS fasteners with SS connectors. Use only zinc-plated fasteners with zinc-plated connectors.
E. Regular inspection and maintenance of wood, wood-based and metal products used in outdoor or other corrosive environments or applications is necessary for continued, long-term satisfactory performance.



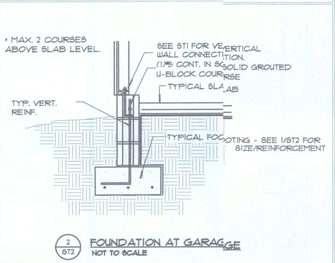
1 / ST2 TYPICAL FOUNDATION DETAIL
NOT TO SCALE



1 / ST2 TYPICAL FOUNDATION DETAIL
NOT TO SCALE



2 / ST2 FOUNDATION AT GARAGE
NOT TO SCALE



2 / ST2 FOUNDATION AT GARAGE
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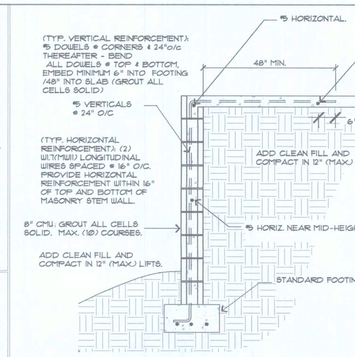
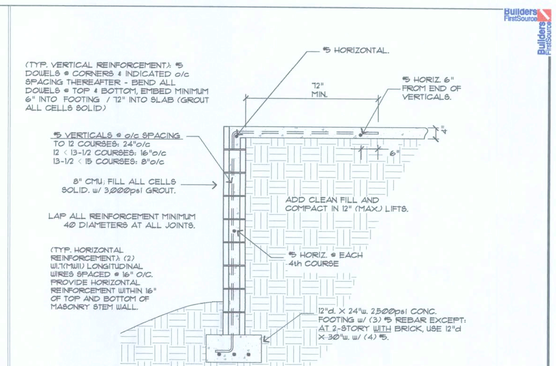
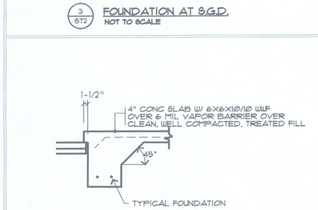


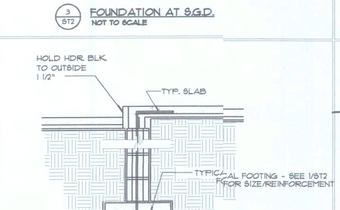
1A / ST2 6 <10 COURSES STEM WALL FOUNDATION
FOR STEM WALLS WITH 6 <10 COURSES



1B / ST2 10 <15 COURSES STEM WALL FOUNDATION
FOR STEM WALLS WITH 10 <15 COURSES & GU GP, SW or SP SOILS to 30# PSF LATERAL LOAD



3 / ST2 FOUNDATION AT S.G.D.
NOT TO SCALE



3 / ST2 FOUNDATION AT S.G.D.
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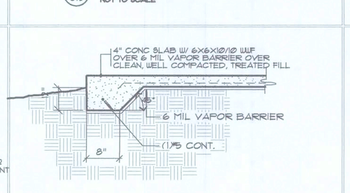
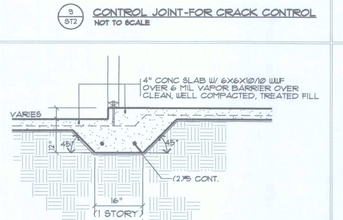
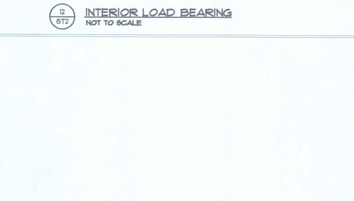


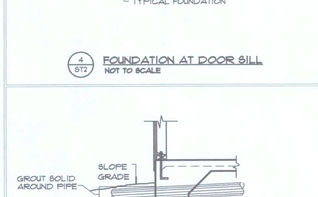
6 / ST2 SLOPED TURNED DOWN EDGE
NOT TO SCALE



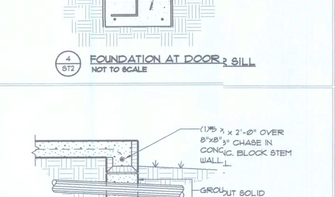
9 / ST2 CONTROL JOINT-FOR CRACK CONTROL
NOT TO SCALE



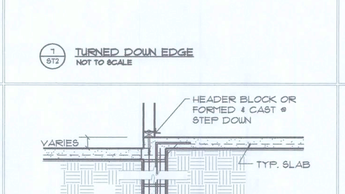
12 / ST2 INTERIOR LOAD BEARING
NOT TO SCALE



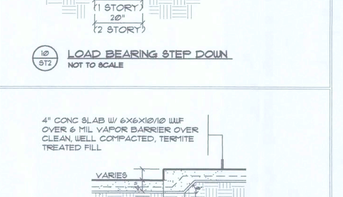
4 / ST2 FOUNDATION AT DOOR SILL
NOT TO SCALE



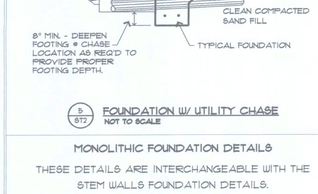
4 / ST2 FOUNDATION AT DOOR SILL
NOT TO SCALE



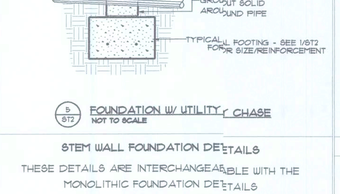
7 / ST2 TURNED DOWN EDGE
NOT TO SCALE



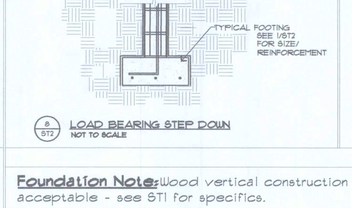
10 / ST2 LOAD BEARING STEP DOWN
NOT TO SCALE



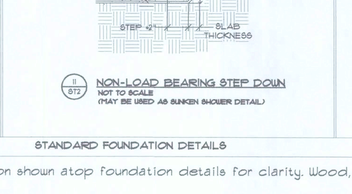
5 / ST2 FOUNDATION W/ UTILITY CHASE
NOT TO SCALE



5 / ST2 FOUNDATION W/ UTILITY CHASE
NOT TO SCALE



8 / ST2 LOAD BEARING STEP DOWN
NOT TO SCALE



11 / ST2 NON-LOAD BEARING STEP DOWN
NOT TO SCALE
(MAY BE USED AS SUNKEN SHOWER DETAIL)

MONOLITHIC FOUNDATION DETAILS

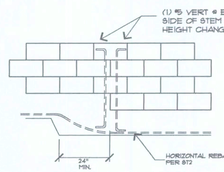
THESE DETAILS ARE INTERCHANGEABLE WITH THE STEM WALLS FOUNDATION DETAILS.

STEM WALL FOUNDATION DETAILS

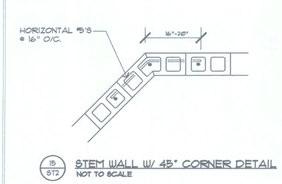
THESE DETAILS ARE INTERCHANGEABLE WITH THE MONOLITHIC FOUNDATION DETAILS

STANDARD FOUNDATION DETAILS

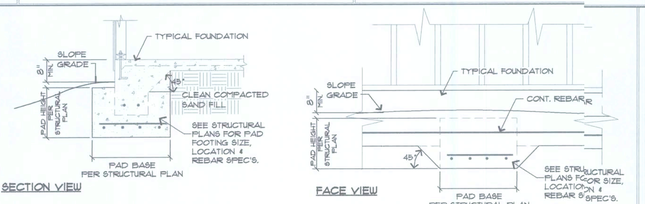
Foundation Note: Wood vertical construction shown atop foundation details for clarity. Wood, cmu, icf or other structural vertical construction acceptable - see STI for specifics.



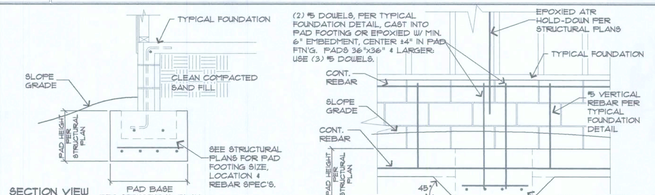
14 / ST2 STEM WALL HEIGHT CHANGE
NOT TO SCALE



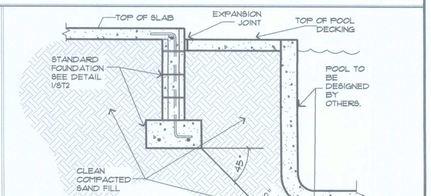
15 / ST2 STEM WALL W/ 45° CORNER DETAIL
NOT TO SCALE



16 / ST2 PAD FOOTING FOR MONO SLAB
NOT TO SCALE



17 / ST2 PAD FOOTING FOR STEM WALL
NOT TO SCALE



18 / ST2 FOUNDATION @ POOL
NOT TO SCALE

Builders FirstSource of Jacksonville DESIGN CENTER
6550 Roosevelt Blvd.
Jacksonville, FL 32244
Tel 904.772-6100
Fax 904.317-2835

REV	DESCRIPTION
1	1/09 CMR, et al R/U
2	1/16 D'CAY, CORR. R/U
3	2/6 2/ST2 8THD14 R/U
4	2/14 GEN. NOTES R/U

STRUCTURAL FOUNDATION DETAILS
2004 FBC-R w/ 2006 SUPPLEMENT
- ENCLOSED

DESIGN	RW/MDA/MR
DRAFT	JLB/MDA
CHECKED	CMR
SCALE	NTS
DATE	7/30/07
JOB NO.	STANDARD
SQFT.	DETAILS

Project Engineer:

Charles M. Rhodebeck, PE
Professional Engineer
FL License No. 26497

Builders FirstSource of Jacksonville
FL CoA Number 0000084494
GA PEF Number 004586

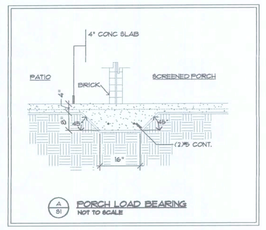
SHEET
ST2
of -

Shoe plates should never overhang the foundation/slab edge at the building perimeter. However, many times when the foundation is not properly placed - i.e. incorrect dimension(s), out of square, etc. - the vertical construction is positioned in a manner that results in a shoe plate overhanging the slab edge in an effort to keep the framing square. This results in numerous structural inadequacies that must be addressed in order to maintain the structural integrity of the building.

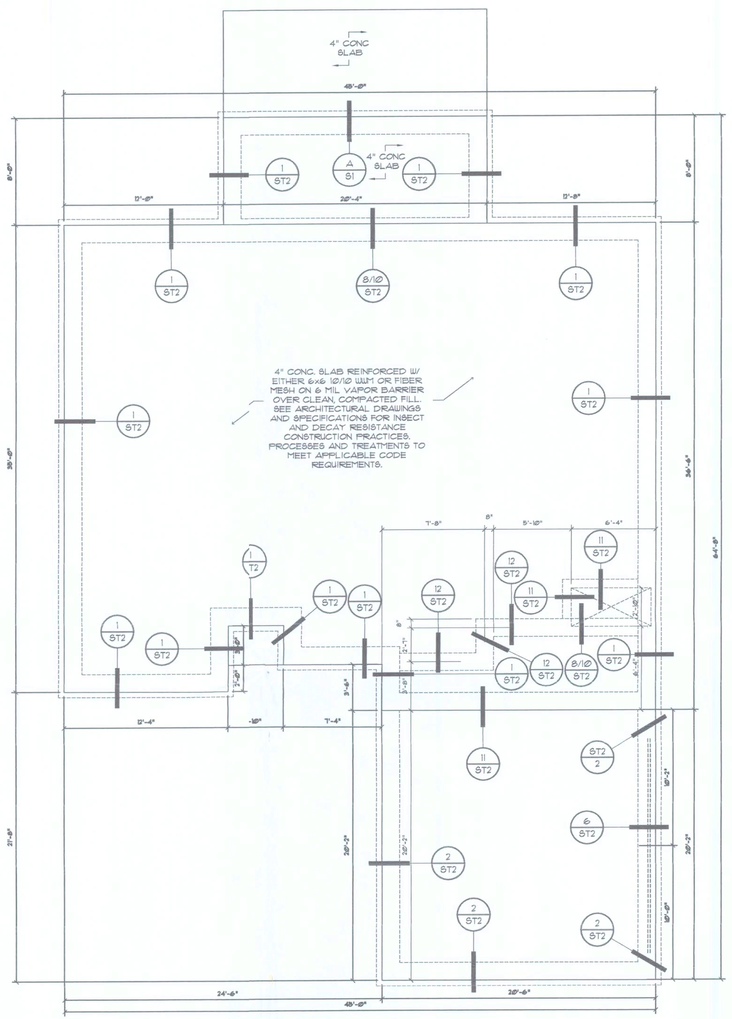
Since this condition should be easily recognizable at the time layout lines are popped on the slab, corrective action should be taken immediately rather than waiting until later when the repair is substantially more costly and time consuming. Corrective action at this stage is very simple: Increase the nominal size of the wall framing by two inches for walls overhanging the slab edge up to one-and-three-quarter (1¾) inches. Example: If a 2x4 wall is indicated, use 2x6 framing. The shoe plate material should either be treated for exposure or protected accordingly. Connectors - WOOD**Tie rods, sill plate anchors, etc. - should be sized and spaced according to the original design intent shown on the engineering and all minimum specified edge distances for the concrete shall be maintained. If conditions exist where the shoe plate will overhang the slab edge more than 1½", contact the Engineer of Record before proceeding.

If corrective action is not taken at this time, it is likely the wall(s) will require re-framing or substantial enhancements (more extensive than simply increasing the framing size by two inches) at a later date. If corrective action is delayed until after rough trades have been completed, it is likely those elements - wiring, plumbing, mechanical and security - will have to be removed from the wall while the repairs are made and replaced later. Additionally, if corrective action is delayed further until insulation, drywall, trim, etc. are installed, these elements will have to be removed and later replaced to properly effect the repair.

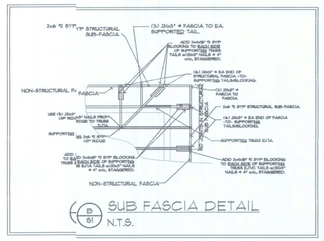
In conclusion, if a shoe plate is going to overhang a slab edge 1½" or less, immediately increase the wall size accordingly so that no additional or substantial repairs are required later. If a shoe plate is going to overhang a slab edge more than 1½", contact the Engineer of Record before proceeding.



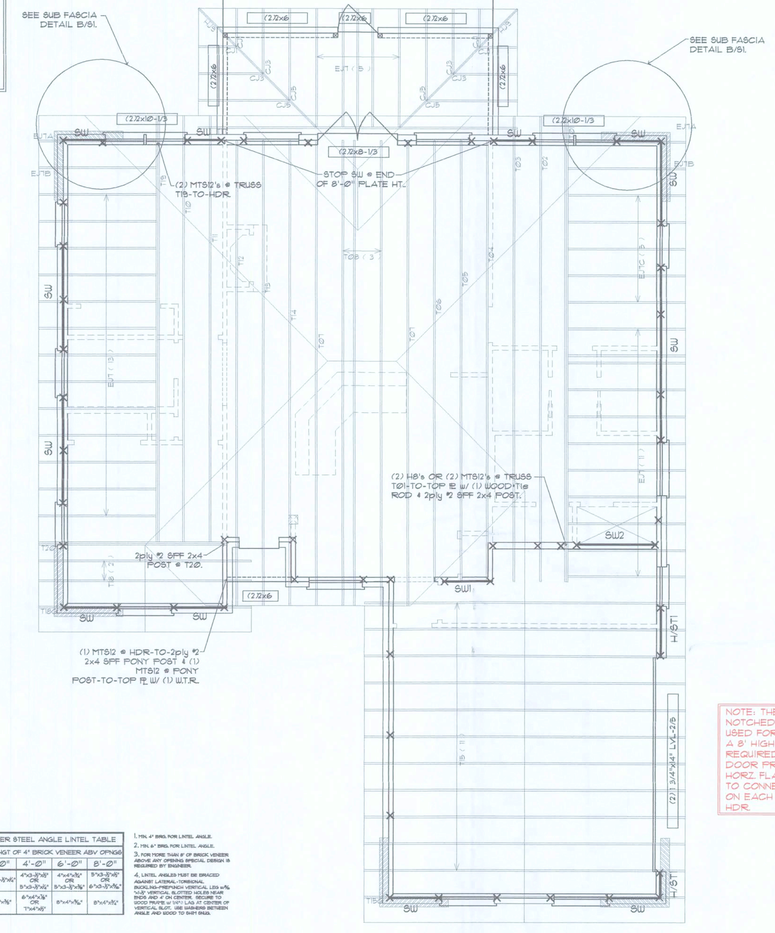
A/S1 PORCH LOAD BEARING
NOT TO SCALE



1 S1 FOUNDATION PLAN
3/16" = 1'-0"



B S1 SUB FASCIA DETAIL
N.T.S.



NOTE: THE TOP PLATE MAY BE NOTCHED IF 2ply 1¾" LVL IS USED FOR GARAGE HDR AND A 8' HIGH CLEARANCE IS REQUIRED FOR THE GARAGE DOOR PROVIDED (2) MT512A24 HORZ. FLAT STRAPS ARE USED TO CONNECT THE TOP PLATES ON EACH END TO THE GARAGE HDR.

2 S1 STRUCTURAL PLAN
3/16" = 1'-0"

BRICK VENEER STEEL ANGLE LINTEL TABLE				
MAX. OPENING	MAX HGT OF 4" BRICK VENEER ABV OPNG			
	2'-6"	4'-0"	6'-0"	8'-0"
8'-0"	8"x6"x5/16"	6"x4"x5/16" LONG LEG VERT.	6"x4"x5/16" LONG LEG VERT.	8"x6"x5/16" LONG LEG VERT.
16'-0"	6"x4"x5/16"	6"x4"x5/16" LONG LEG VERT. OR 7"x4"x5/16"	8"x4"x5/16"	8"x4"x5/16"

1. MIN. 4" BRG. FOR LINTEL ANGLE.
2. MIN. 8" BRG. FOR LINTEL ANGLE.
3. FOR MORE THAN 8' OF BRICK VENEER ABOVE ANY OPENING SPECIAL DESIGN IS REQUIRED BY ENGINEER.
4. LINTEL ANGLES MAY BE BRACED AGAINST LATERAL/TORSIONAL BUCKLING=PREFINISH VERTICAL LEG w/¾" MAX. VERTICAL SLOTTED HOLES NEAR ENDS & MIDDLE OF SPAN FOR (2) #10 WOOD PHIPS W/ MIN 1.65 lb. OF CENTER OF VERTICAL SLOT. USE WASHERS BETWEEN ANGLE AND WOOD TO SHIM ENDS.

PLAN NOTES -

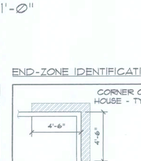
1) SEE SHEETS S11 & S12 FOR ADDITIONAL NOTES & DETAILS.
2) THESE DRAWINGS CONTAIN SPECIFIC INFORMATION INCLUDING, BUT NOT LIMITED TO, ARCHITECTURAL ELEMENTS, DIMENSIONS AND LOCATIONS PROVIDED BY OTHERS. BUILDERS FIRSTSOURCE IS NOT RESPONSIBLE FOR THE ACCURACY OF INFORMATION PROVIDED BY OR DERIVED FROM OTHER SOURCES.
3) ANY DISCREPANCY - DIMENSIONS, ORIENTATION, ETC. - BETWEEN THESE DRAWINGS AND THE ASSOCIATED ARCHITECTURAL and/or SITE DRAWINGS SHALL BE REPORTED TO BUILDERS FIRSTSOURCE AT ONCE AND NO CONSTRUCTION SHALL PROCEED UNTIL CORRECTED.
4) VERIFY BUILDING ORIENTATION WITH ARCHITECTURAL DRAWINGS AND SITE PLANS BEFORE COMMENCING CONSTRUCTION.
5) ALL INFORMATION OF A STRUCTURAL NATURE (i.e. BEAM/JOIST/COLUMN/HEADER/STUD/CONNECTOR/FOOTING/ETC. SIZE/GRADE/SPECIES/QUANTITY/STRENGTH/ETC.) SHOWN ON THESE BOARD # SEALED ENGINEERING DOCUMENTS SHALL SUPERSEDE ALL INFORMATION OF A SIMILAR NATURE SHOWN ON THE ASSOCIATED ARCHITECTURAL DRAWINGS.
6) MINIMUM REQUIRED BEARING LENGTHS SHOWN ON TJ-BEAM OUTPUT HAVE BEEN ACCOUNTED FOR IN THE DESIGN AND, WHEN APPROPRIATE, BEARING-ENHANCERS ADDED SO AS NOT TO EXCEED THE MAXIMUM ALLOWABLE BEARING CAPACITY OF ANY STRUCTURAL ELEMENT.
7) ANY STRUCTURAL ELEMENT SPECIFIED WITHIN THESE DRAWINGS MAY BE REPLACED WITH A LARGER, STRONGER AND/OR HIGHER-QUALITY ELEMENT/PART/MATERIAL WITHOUT ADDITIONAL ANALYSIS REQUIRED.
8) DO NOT SCALE THESE DRAWINGS. DO NOT ASSUME WALLS ARE 2x4 REGARDLESS THE ARCHITECTURAL DRAWINGS UPON WHICH THIS ENGINEERING IS BASED SCALES AS 2x4. REFER TO STUD SCHEDULE FOR MINIMUM STUD SIZE/SPECIES/SPACING FOR APPLICATION. STUD AND/OR COLUMN SIZES SHOWN ON STRUCTURAL PLAN SUPERSEDE THOSE SHOWN ON STUD SCHEDULE WHEN A COLUMN IS SPECIFIED AS LARGER THAN ADJACENT WALL FRAMING (ex. 3ply 2x6 POST IN A 2x4 WALL), THE ADJACENT FRAMING MAY BE EITHER FURRED-OUT TO MATCH THE COLUMN OR THE ENTIRE WALL MAY BE FRAMED WITH THE LARGER MATERIAL, AT CONTRACTOR'S DISCRETION.

LEGEND -

(2) 2x10-2 / 3 — HEADER/BEAM CALL-OUT
NUMBER OF KING-STUDS EACH SIE OF OPENING
NUMBER OF JACK-STUDS EACH SIE OF OPENING
SIZE OF HEADER MATERIAL (*2 SP U.N.O.)
NUMBER OF PLIES IN HEADER

ALL EXTERIOR HEADERS (2) 2x6-1/2 UNLESS NOTED OTHERSE
ALL INTERIOR HEADERS (2) 2x6-1/2 UNLESS NOTED OTHERSE
SW — SHEAR-WALL SEGMENT - REFER TO SHEET S11 FOR ADDITIONAL INFORMATION
APPROXIMATE WOOD*Tie ANCHORING ROD LOCAION. SEE "WOOD*Tie DETAILS & SPECIFICATIONS" ON PAGE S11 FOR ADDITIONALINFORMATION ON THE LOCATION AND INSTALLATION OF WOOD*Tie ANCHORINRODS
"RISD" IN PLACE OF A QUANTITY OF KING-STUDS IN A HEADR OR BEAM CALL-OUT INDICATES THE SPECIFIED HEADER OR BEAM IS RAISED ADVE THE fE LINE
INDICATES DIRECTIONAL ORIENTATION OF SPECIED FRAMING MEMBER

END-ZONE IDENTIFICATION -



SHADED/HATCHED CORNERS, AS IDENTIFIED AND DIMENSIONED ABOVE, INDICATE WALLS SEGMENTS WHERE END-ZONE PRESSURES SHALL APPLY TO COMPONENTS & CLADDING. WALLS NOT SHADED/HATCHED AS INDICATED ABOVE MAY USE INTERIOR-ZONE PRESSURES FOR COMPONENTS & CLADDING.

DESIGN LOADS -

USE (MIN.) 7/16" THICKNTNG w/ TILE ROOF

- ROOF LOADING (#125 LDF)
  TOP CHORD or RAFTER LL: 20psf DL: 15psf w/FG SHINGLES, 20psf+ w/ TILE
  BOT. CHORD or CLNG JOIST LL: 10psf** DL: 10psf
- FLOOR LOANG (#100 LDF) LL: 40psf DL: 15psf
- WIND LOADS (#160 LDF)
  110 MPH UD SPEED
- SEISMIC DECATEGROY (#160 LDF) "A"

* 20 psf DL FOR TILES - 16psf, PER FBC "APPENDIX A." TILES - 16psf REQRE ADDITIONAL ANALYSIS
** 20 psf LL FOR CEILING JOIST WHEN USED FOR LIGHT ATTIC STORAGE

SILL E-TO-FOUNDATION SHEAR CONNECTOR SCHEDULE E FOR WOOD*Tie APPLICATIONS

DESIGNATED SHEAR-WALLS - INTERIOR & EXTERIOR

SHEAR-WALL DESIGNATION	MAXIMUM C/C SPACING OF ANCHORS - IN INCHES			
	EXTERIOR WALLS		INTERIOR WALLS	
	3/4" TITEN HD	5/8"ø TITEN HD (MIN. 2x6 PRTNR)	3/4" TITEN HD	5/8"ø TITEN HD
8W	36"	28"	42"	32"
6W2	27"	21"	32"	24"
6W1	18"	14"	21"	16"

NOTES:
1) USE SIMPSON 3/4"ø OR 5/8"ø X 6" LONG TITEN HD SCREWS, U.N.O.
2) 3/4" TITEN HD's SHALL BE EMBEDDED MIN. 3" INTO 2,500psi CONCRETE
3) 5/8"ø TITEN HD's SHALL BE EMBEDDED MIN. 2¾" AND 5/8"ø TITEN HD'S SHALL BE EMBEDDED MIN. 2-3/4" INTO MIN. 2,500psi CONCRETE
4) 3/4" HIGH E HEIGHT DESIGNATED SHEAR-WALLS (i.e. 14" # ABOVE) USE "NON-DESIGNATED" ANCHOR SPACING SCHEDULE E INDICATED AS "DESIGNATED SHEAR-WALL" SCHEDULE.
5) 3/4"ø TITEN HD's USED IN EXTERIOR WALL AT CONCRETE EDGE DISTANCES OF 2" FOR 3/4"ø's & 1¾" FOR 5/8"ø's
6) TITEN HD's USED FOR EXTERIOR SHEAR-WALL APPLICATIONS MAY BE USED ONLY WITH MONOLITHIC FOUNDATIONS AND MAY NOT BE USED IN STEM-WALL APPLICATIONS.

1) AT EXTERIOR WALL APPLICATIONS WITH STEM-WALL FOUNDATIONS, USE EPOXIED ALL-THREAD 1ø's IN LIEU OF 3/4"ø TITEN HD's. USE 3/4"ø X 4-3/8" EMBEDMENT ALL-THREAD RODS w/ MIN. 3" CONC. EDGE DISTANCE FOR 3/4"ø TITEN HD's.
2) USE 5/8"ø TITEN HD's OR 5/8"ø X 5" EMBEDMENT ALL-THREAD RODS w/ MIN. 3" CONC. EDGE DISTANCE FOR 5/8"ø TITEN HD's.
3) ADD NUT AND WASHER AT TOP SHOE @ AT EACH ALL-THREAD.
4) USE SIMPSON TUO-PART EPOXY PER MANUFACTURER'S INSTRUCTIONS.
5) ALL PLATES SHALL BE ANCHORED WITHIN 12" OF EACH END OF EACH SEGMENT OR PIECE AND @ (2) ANCHORS.

2) ANCHORS AS FOLLOW:
ENG. EDGE DISTANCE AND SPACE AT HALF THE INDICATED ENG. EDGE DISTANCE AND MATCH SPACING
@ ALL SEGMENTS OR PIECES SHALL HAVE NO FEWER THAN

EXTERIOR WALL STUD SCHEDULE

(90mph, EXPOSURE B, FLEXIBLE FINISH, ENCLOSED)

STUD SIZE, SPECIES & GRADE	MAXIMUM E HEIGHT	
	END ZONE	INTERIOR ZONE
2x4 SPF 16"o/c	9'-7"	11'-10"
2x4 SPF 12"o/c	12'-2"	13'-8"
2x4 SPF 10"o/c	13'-3"	14'-8"
2x6 SPF 12"o/c	18'-10"	20'-2"
2x6 SYP 16"o/c	17'-3"	19'-3"
2x6 SYP 16"o/c	19'-11"	21'-7"
2x6 SYP 12"o/c	23'-7"	25'-3"
2x6 SYP 12"o/c	25'-10"	27'-9"
2x6 SYP 16"o/c	26'-11"	30'-1"
2x6 SYP 12"o/c	30'-1"	31'-3"

SPECIFIC STUD SIZE/GRADE/SPECIES/SPACING INDICATED ON STRUCTURAL PLANS & SUPERSEDE INFORMATION IN SCHEDULE.
ALL STUDS SHALL SPAN CONTINUOUSLY FROM FLOOR TO FLOOR OR FLOOR TO ROOF/CLNG ASSEMBLY WITHOUT BREAK OR INTERRUPTION UNLESS SPECIFICALLY DETAILED ON STRUCTURAL PLAN.
HT IS ALLOWABLE TO FOLLOW THE INTERIOR ZONE SCHEDULE FOR WALLS FALLING IN THE END ZONE REGION PROVIDED THAT DOUBLE STUDS @ THE SIDE/SPECIFIED GRADE/SPACING ARE USED.
DUE TO MATERIAL UNAVAILABILITY, E HEIGHTS > 24' MUST USE TIMBERSTRAND LSL STUDS @ 1.0, 8YP. HEIGHTS > 24' MAY USE TJI® ≠ CONTRACTORS DISCRETION.

COMPONENTS & CLADDING PRESSURES - IN "PSF"

NET OPNG or TRIBS. AREA in Square Feet	WALLS				ROOFS - PITCHES 3/12 ≤ 12/12				ROOFS - PITCHES > 12/12			
	END-ZONES		INT.-ZONES		END-ZONE E 2'-ZONES		INT.-ZONES		END-ZONE E 2'-ZONES		INT.-ZONES	
	POS. (+)	NEG. (-)	POS. (+)	NEG. (-)	POS. (+)	NEG. (-)	POS. (+)	NEG. (-)	POS. (+)	NEG. (-)	POS. (+)	NEG. (-)
< 20' ft.	47.8	-29.1	47.8	-23.6	42.8	-42.1	42.8	-19.9	-68.3		49.9	-29.8
20' < 50' ft.	43.8	-27.2	43.8	-22.6	41.4	-38.2	41.4	-19.4		-46.9	48.4	-29.0
50' < 100' ft.	43.5	-24.6	43.5	-21.3	40.8	-33.8	40.8	-18.6	-56.2		47.6	-28.1
> 100' ft.	43.3	-22.6	43.3	-20.4	40.8	-29.1	40.8	-18.1	-42.4		47.1	-27.5

TRIBS. 3/12 ≤ 12/12		GARAGE DOORS PARTIALLY IN END-ZONE							
GH C-ZONES	GH E-ZONES	PRESSURES FOR GARAGE DOORS WITH ONE END ONLY EXTENDING MAX. 9'-0" INTO AN END-ZONE. ALL PRESSURES NEGATIVE (-) EXCEPT AS NOTED.							
NEG. (-)	NEG. (-)	DOOR SIZE	LENGTH (IN FEET) OF DOOR INTO END-ZONE						POS. (+)
			1'	2'	3'	4'	5'	6'	PSF
-19.3	-29.8	8' x 7' # LGR DOORS	-21.8	-22.2	-22.6	-23.0	-23.4	-23.8	49.5
-19.4	-24.3	16' x 7' # LGR DOORS	-28.9	-28.9	-28.7	-28.8	-21.6	-21.8	48.9
-18.6	-22.9								
-18.1	-21.8								
-34.9	-36.9								
-34.3	-34.3								
-33.2	-33.2								

FRAMING CONNECTOR SCHEDULE

GLIP, TIE or STRAP*	FASTENERS or NAILS
H2.5	(5) 8d PER END
H8	(4) 8d PER END
H8	(5) 16d x 1-1/2" PER END
MT512	(14) 16d OR 10d x 1-1/2" TOTAL
MTS12	(18) 16d OR (24) 10d x 1-1/2" TOTAL
LGT2	(18) 16d SINKERS TO TRUSS, (4) 16d SINKERS TO E x FOST
H16, -16S, -16-2	(2) 16d x 1-1/2" TO TRUSS, (8) TO SUPPORT
MST42	(18) 10d TOTAL
MST48	(24) 16d TOTAL
MST424	(18) 16d TOTAL
MST37	(42) 16d TOTAL
MST48	(46) 16d TOTAL
MST60	(56) 16d TOTAL
CB66	(36) 8d or (26) 10d TOTAL
BPH4, -6, -8	(12) 16d x 1-1/2"
HPAHD22	(23) 16d
LTP4	(12) 8d x 1-1/2" TOTAL
A35	(12) 8d x 1-1/2" TOTAL
MST42E	(12) 16d x 1-1/2"
MST48E	(12) 16d x 1-1/2"
LGT2-MASONRY	(18) 16d SINKERS TO TRUSS, (3) 1/4"ø x 2-1/4" TITEN SCREWS TO WALL
MTSM16	(7) 16d OR 10d x 1-1/2" TO TRUSS, (4) 1/4"ø x 2-1/4" TITEN SCREWS TO WALL
MTSM16	(8) 16d OR 10d x 1-1/2" TO TRUSS, (4) 1/4"ø x 2-1/4" TITEN SCREWS TO WALL
H16, -16S, -16-2	(2) 16d x 1-1/2" TO TRUSS, (8) 1/4"ø x 2-1/4" TITEN SCREWS TO WALL
RSTR	(8) 1/4"ø x 3" SDS TO TRUSS, (2) 1/2"ø x 3" TITEN HD's TO WALL
MSTAM36	(8) 16d TO FRAMING, (4) 1/4"ø x 2-1/4" TITEN TO MASONRY

FRAMING-TO-FOUNDATION / MASONRY CONNECTOR SCHEDULE

NAILS / SCREWS TO FRAMING MEMBERS	HARDWARE/ CONNECTOR	ASSTM 307: (1/4@ 3/8") ATRK SIZE	INT LOCATIONS	EXT/MCMD FOUNDATIONS		EXT/STEM-WALL FOUNDATIONS		CMU WALL TIE-BEAM / LINTEL	
			MIN EMBED	MIN EMBED	MIN EDGE DIST	MIN EMBED	MIN / MAX EDGE	MIN EMBED	EDGE DIST
(12) 16d	ABU-44, -66	5/8"ø	3"	5"	3"	5"	1-3/4" / 6"	N/A	
(18) 16d / EACH	LTT20B	1/2"ø (EA)	4-1/4" w/ MIN 2-1/2" SPC'G	5-1/2"	4" w/ 2-1/2" SPC'G 3" w/ 4" SPC'G	5-1/2"	6 <MAX 3" SPC'G	6 <MAX 3" SPC'G	
(22) 16d	SINGLE MST	5/8"ø	5-1/2"	5-1/2"	3"	5"	1-3/4" / 6"	5"	6
2x (22) 16d	DOUBLE MST	(2) 5/8"ø	5-1/2"	5-1/2"	3"	5"	2-1/2" / 4"	5"	6
(18) 16d	SINGLE MTT16	5/8"ø	5-1/2"	7-1/2"	2"	5"	1-3/4" / 6"	5"	6
2x (18) 16d	DOUBLE MTT16	(2) 5/8"ø	5-1/2"	5-1/2"	4"	5"	2-1/2" / 4"	5"	6
2x (18) 16d	TANDEM MTT16	(2) 5/8"ø	5-1/2"	5-1/2"	5"	5"	1-3/4" / 6"	N/A	
(32) 16d Sinkers	SINGLE HTT22	5/8"ø	5-1/2"	5-1/2"	2"	5"	1-3/4" / 6"	N/A	
2x (32) 16d Sinkers	DOUBLE HTT22	(2) 5/8"ø	5-1/2"	5-1/2"	5"	SEE PLAN		N/A	
(18)-3/4"ø x 3" SDS	SINGLE PHD6	7/8"ø	8"	8"	3"	13-1/2"	3-1/2" / 4"	13-1/2"	6
2x (18)-3/4"ø x 3" SDS	DOUBLE PHD6	(2) 7/8"ø	8"	13-1/2"	3"	13-1/2"	3-1/2" / 4"	13-1/2"	6
(28)-3/4"ø x 3" SDS	SINGLE HDQ8	7/8"ø	8"	13-1/2"	1-3/4"	SEE PLAN		N/A	
2x (28)-3/4"ø x 3" SDS	DOUBLE HDQ8	(2) 7/8"ø	13-1/2"	13-1/2"	4"	SEE PLAN		N/A	
(24)-3/4"ø x 3½" SDS	SINGLE HHQ21	7/8"ø	9"	9"	3"	SEE PLAN		N/A	
2x (24)-3/4"ø x 3½" SDS	DOUBLE HHQ21	(2) 7/8	8"	8"	4"	SEE PLAN		N/A	
(18) 16d	HGT2, HGT3	(2) 3/4"ø	1"	5"	3"	SEE PLAN		5-1/2"	6
(16) 16d	HGT4	(2) 3/4"ø	1"	5"	3"	SEE PLAN		5-1/2"	6

*FRAMING" and "FRAMING-TO-FOUNDATION" CONNECTOR SCHEDULE NOTES:
1) USE SIMPSON AT ACRYLIC TIE TWO-PAART EPOXY FOR ATR-TO-FOUND. CONNECTIONS U.N.O.
2) ALL DIMENSIONS (NOD DIAMETER, EMBEDMENT, EDGE, ETC.) ARE MINIMUM DISTANCES U.N.O.
3) "DOUBLE" HOLD-DOWNS REQUIRE MINIMUM 8" SPACING BETWEEN ATR ANCHORS U.N.O.
4) EDGE DISTANCE DIMENSIONS TO BE MEASURED FROM THE EXTERIOR FACE OF THE FOUNDATION, CURB OR CMU WALL TO THE ¢ OF THE ATR ANCHOR
5) MIN. EDGE DISTANCE DOES NOT APPLY AT INTERIOR CURB LOCATIONS ONLY IF THE MIN. EMBEDMENT IS MEASURED FROM THE LOWER SLAB ELEVATION
6) ALL PARTS / MATERIALS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS & DIRECTIONS
7) "SDS" = SIMPSON STRONG-DRIVE "SCREW-IN" SIZES U.N.O.
8) MINIMUM ROD SIZE/GRADE, EMBEDMENT & EDGE DISTANCE SHOWN ON PLAN SUPERSEDES MINIMUMS SHOWN ON THIS CHART
9) MINIMUM EDGE DISTANCES OF 4" OR MORE REQUIRE MINIMUM 6" WALL FRAMING
10) MINIMUM 8" SPACING BETWEEN META- or HETA- ANCHORS U.N.O.
11) MINIMUM 1-1/2" EDGE DISTANCE FOR TITEN SCREWS
12) MINIMUM 4" EDGE DISTANCE FOR TITEN SCREWS

BUILDING DESIGN CRITERIA

CODE:	'04 FBC-R ENCLOSED
BUILDING TYPE:	1
BASIC WIND SPEED:	110mph (3 sec. gust)
BUILDING CATEGORY:	II
WIND IMP. FACTOR:	1.00
WIND EXPOSURE:	B
INT. PRESSURE COEF.:	+0.18 / -0.18
EXTERIOR WALL FINISH:	FLEXIBLE

THIS BUILDING MAY BE USED IN A WIND-BORNE DEBRIS REGION ONLY IF GLAZED OPENINGS ARE PROTECTED or IMPACT-RESISTANT

REV	DESCRIPTION
1	-
2	-
3	-
4	-

ROCK CONTRACTORS
LOT 9 SUMMERSET MEADOWS
CUSTOM
STRUCTURAL PLAN
APPLICATION # 0801-112

DESIGN	MEB
DRAFT	MEB
CHECKED	EAH
SCALE	3/16
DATE	1-7-2007
JOB NO.	L249154
SQFT	2283

Engineer:
Charles M. Rhodebeck, PE
Professional Engineer
FL License No. 26497
This drawing package without raised seal AND signature IS VOID.
Builders FirstSource of Jacksonville
FL CoA Number 00008494
GA PEF Number 004586

SHEET S1 of

SHEATHING THICKNESS & ATTACHMENT SCHEDULE

8d RING SHANK PER R803.2.3.1 OF '04 ('06) FBC-R; MIN. Ø.113" NOMINAL SHANK dia., RING dia. Ø.012" OVER SHANK dia., 16-20 RINGS PER INCH, Ø.280" dia. FULL ROUND HEAD, MIN. 2" LENGTH.

BLOCK ALL PANEL EDGES OF WALL SHEATHING.

MIN. WALL SHEATHING & NAILING MAY BE OVERRIDDEN BY REQUIRED SHEARWALL NAILING (SEE F/STI).

*** MIN. 19/32" (40/20) WITH TILE ROOFING, UNLESS NOTED OTHERWISE.

WIND SPEED & EXPOSURE	ROOF SHEATHING (supported @ 24" O/C MAX.) MIN. THICKNESS *** (SPAN INDEX)	8d RING SHANK NAILING INT ZONE	8d RING SHANK NAILING PERIMETER/ END ZONES	WALL SHEATHING* (supported @ 16" O/C MAX.) MIN. THICKNESS (SPAN INDEX) HORIZONTAL APPLICATION	VERT APP. W/ OUT STUCCO	VERT APP. W/ STUCCO	8d COMMON NAILING ** INT ZONE	8d COMMON NAILING END ZONE
120 D	19/32" (40/20)	6"/12"	4"/4"	7/16" (24/16)	15/32" (32/16)	15/32" (32/16)	6"/12"	6"/6"
120 C, 110 D	15/32" (32/16)	6"/12"	4"/4"	7/16" (24/16)	15/32" (32/16)	15/32" (32/16)	6"/12"	6"/6"
120 B, 110 C, B, 100 D, C, B	7/16" (24/16)	6"/12"	6"/6"	7/16" (24/16)	7/16" (24/16)	15/32" (32/16)	6"/12"	6"/12"

TRUSS-TO-PL CONNECTORS

EXCEPT AS NOTED ON STRUCTURAL PLAN(S)	
UPLIFT (LBS)	CONNECTION
Ø-415	(1) H2.5
Ø-465	(1) H5
Ø-745	(1) H8
Ø-990	(1) H10
465-930	(2) H5's
745-1000	(2) H8's
Ø-1000	(1) H16/H16S TO TOP PL
Ø-1000	(1) MTS12 TO TOP PL
1001 & ABV	SEE STRUCTURAL PLAN

* TOENAILS TO TOP PLATE NOT REQUIRED

TYPICAL EXTERIOR WALL

EXTERIOR STUD WALL SPECIFICATIONS — SEE STRUCTURAL SHEET FOR EXTERIOR WALL FRAMING.

TYPICAL INTERIOR BEARING WALL

INT. LOAD-BEARING STUD WALL SPECS — EXCEPT AS NOTED ON STRUCTURAL PLAN(S)	
EFFECTIVE PL HT. (FT.)	ALLOWABLE STUD
TO 8'-1 1/8"	2x4 SS SPF STUDS @ 16" O/C
TO 10'-1 1/8"	2x4 #2 SPF STUDS @ 16" O/C
TO 18'-7"	2x6 #2 SPF STUDS @ 12" O/C
TO 21'-7"	2x6 #2 SYP STUDS @ 12" O/C

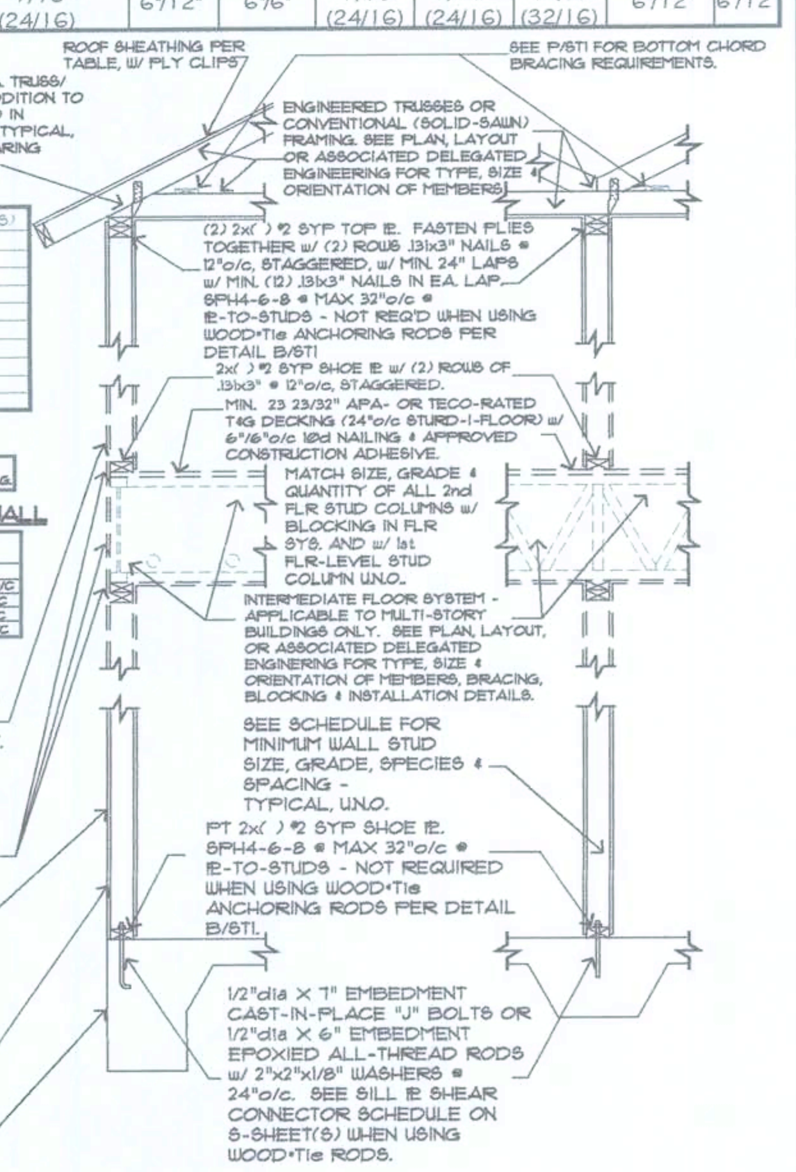
ATTACH 2nd FLR STUDS TO 1st FLR STUDS (OR BEAMS) w/ CS16 STRAPS (28" + DEPTH OF FLR SYS. IN LENGTH) @ MAX. 32"o/c w/ (11) 10d/END, CENTERED ON FLR SYS., TYPICAL, INT. & EXT. WALLS. NOT REQUIRED WHEN USING WOOD•Tie ANCHORING RODS PER DETAIL B/STI

FASTEN EXT. WALL SHEATHING TO TOP PL, SHOE PL & RIM or RIBBON w/ PRESCRIBED "EDGE NAILING" SIZE/SPACING.

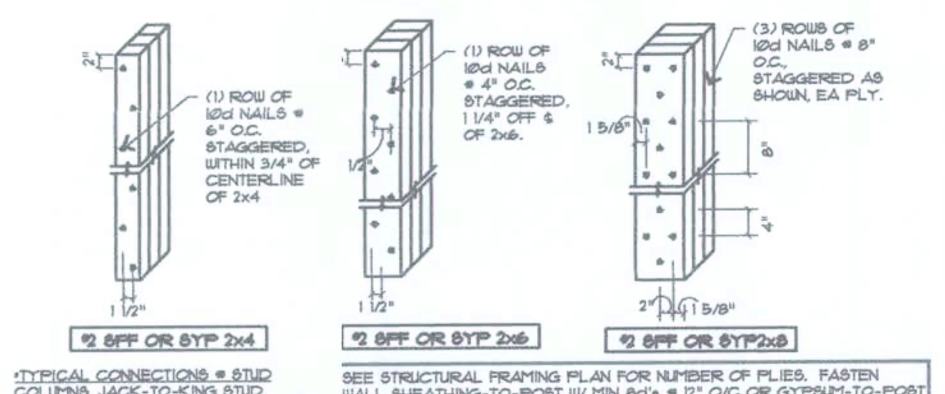
WITH 4" BRICK VENEER EXTERIOR FINISH, ADD CORRUGATED GALV. BRICK TIES @ 24"o/c HORZ. & 16"o/c VERT. BRICK TIES MUST BE FASTENED THRU SHTN'G TO WALL STUDS.

WALL SHEATHING PER TABLE

MONOLITHIC-STYLE FOUNDATION SHOWN. SEE SHEET ST2 FOR APPROVED FOUNDATION TYPES/STYLES.



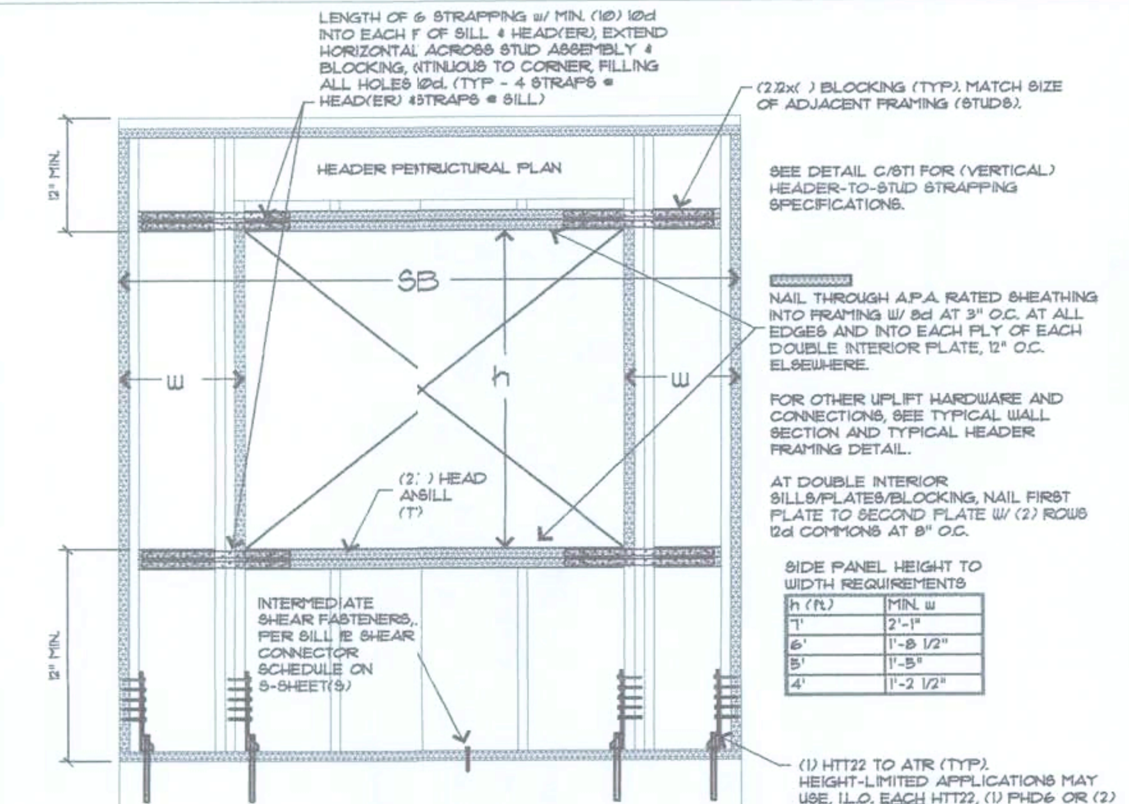
A / STI **TYPICAL ONE- & TWO-STORY WALL DETAIL** — NOT TO SCALE



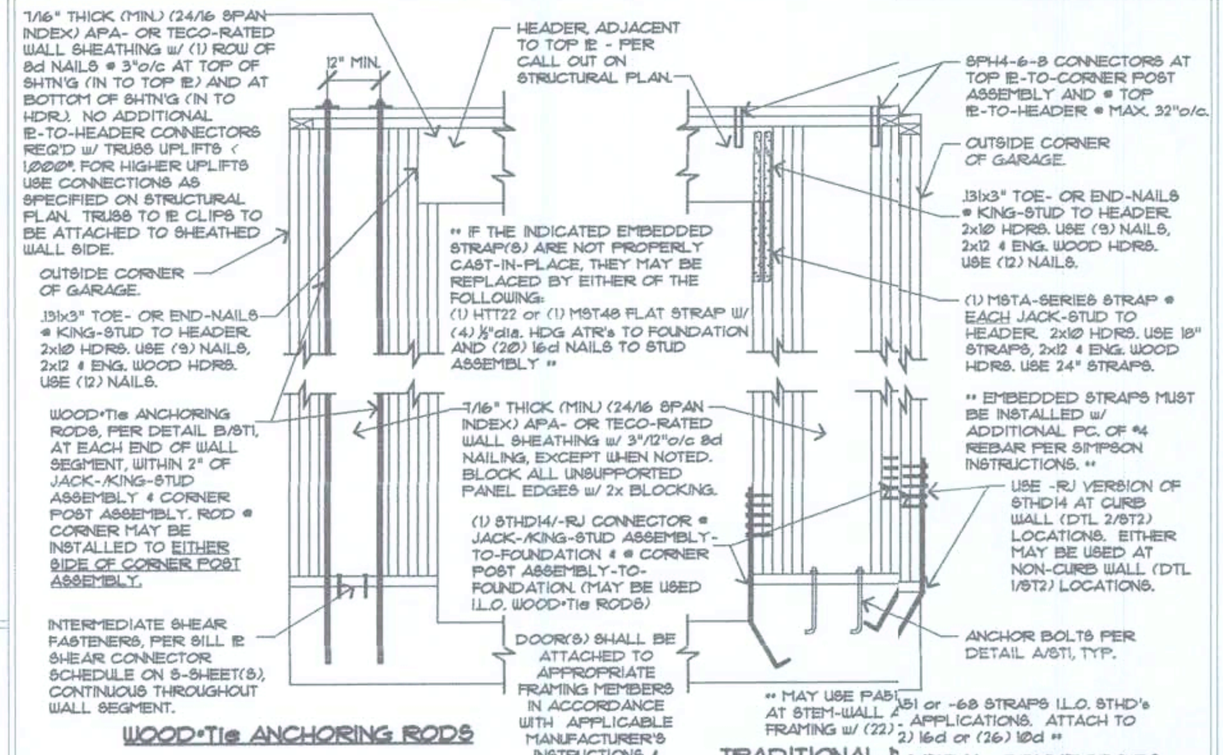
•TYPICAL CONNECTIONS @ STUD COLUMNS, JACK-TO-KING STUD ASSEMBLIES, CORNER POST, ETC. •SPECIFIED NAILING REQUIRED FOR EVERY PLY IN ADDITION TO 2 PLY'S.

SEE STRUCTURAL FRAMING PLAN FOR NUMBER OF PLIES. FASTEN WALL SHEATHING-TO-POST W/ MIN 8d's @ 12" O/C OR GYPSUM-TO-POST W/ MIN 5d's @ 4" O/C. IF MORE THAN 3 PLY'S ARE USED, CONNECT EACH OUTER PLY TO SHEATHING AS SPECIFIED.

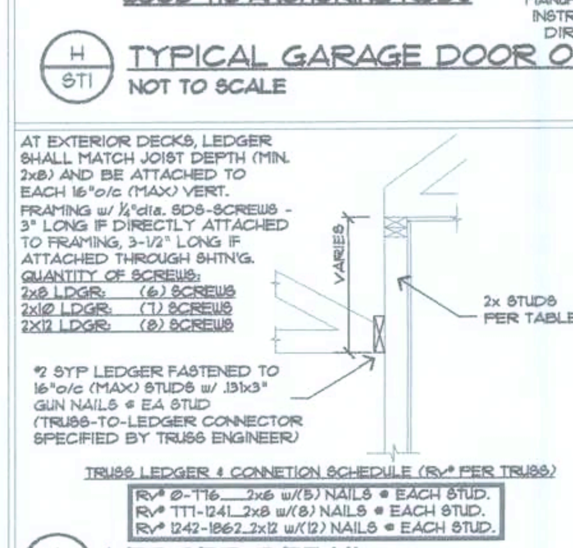
D / STI **MULTIPLE PLY POST CONNECTIONS** — NOT TO SCALE



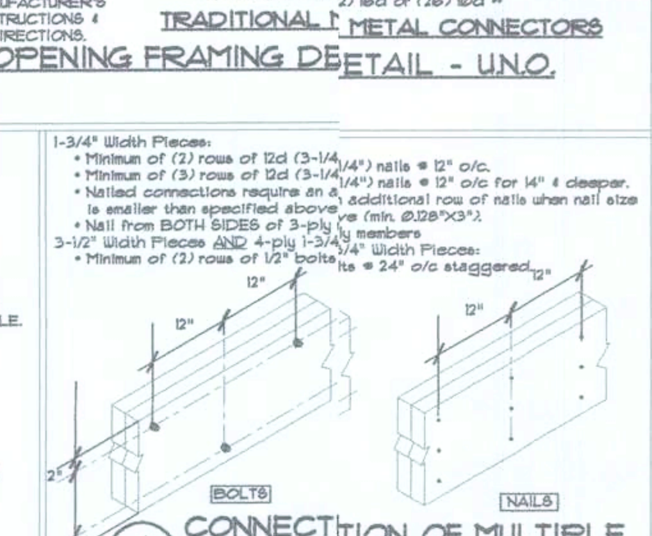
E / STI **SWB - SPECIAL SHEARWALL DETAIL** — NOT TO SCALE



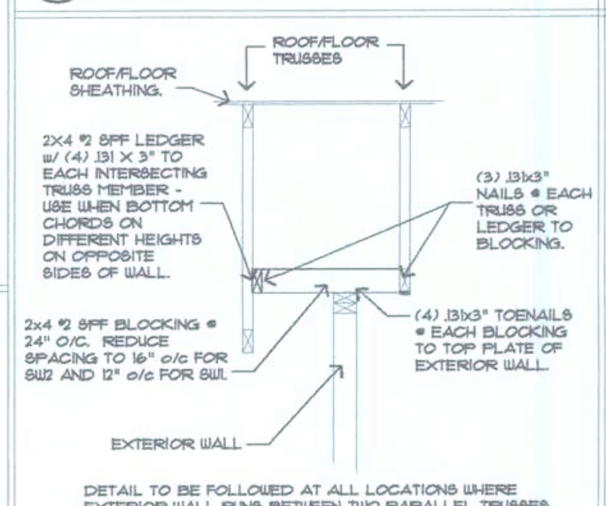
H / STI **TYPICAL GARAGE DOOR OPENING FRAMING DETAIL - U.N.O.** — NOT TO SCALE



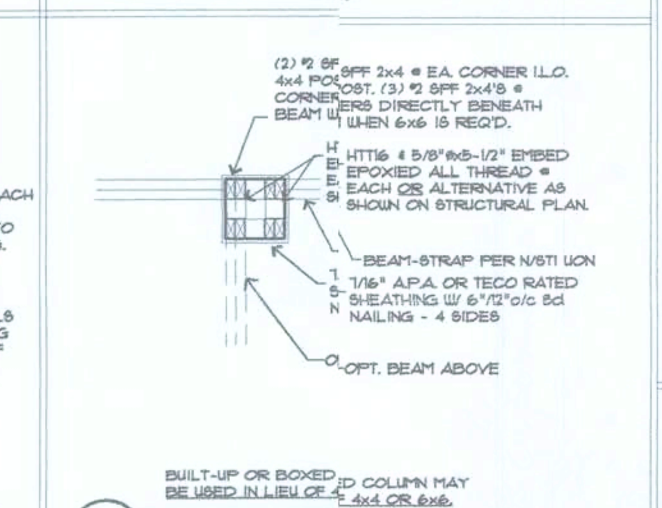
I / STI **LEDGER DETAIL** — NOT TO SCALE



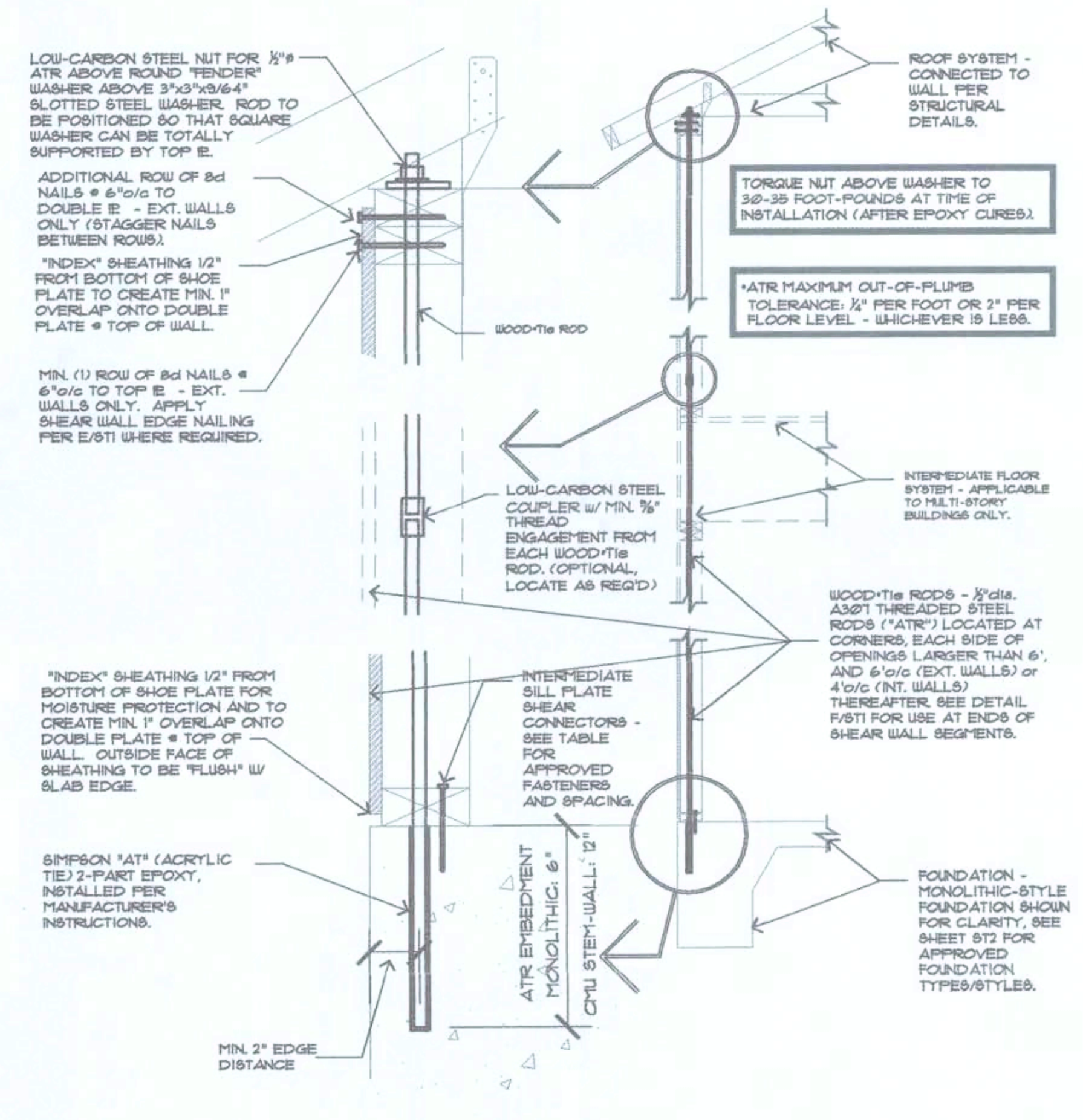
J / STI **CONNECTION OF MULTIPLE PLYS OF SCL BEAMS U.N.O.** — NOT TO SCALE



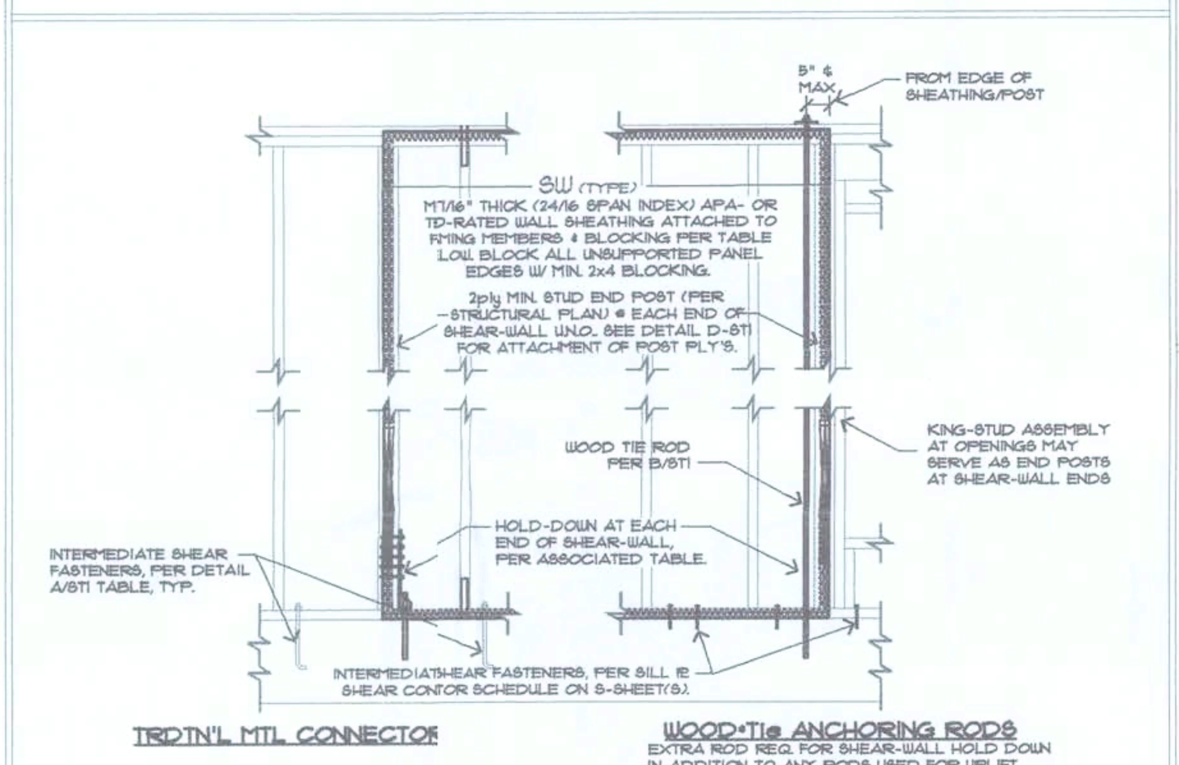
K / STI **TRUSS BLOCKING DETAIL** — NOT TO SCALE



L / STI **BOXED COLUMN DETAIL** — NOT TO SCALE



B / STI **WOOD•Tie DETAILS & SPECIFICATIONS** — NOT TO SCALE

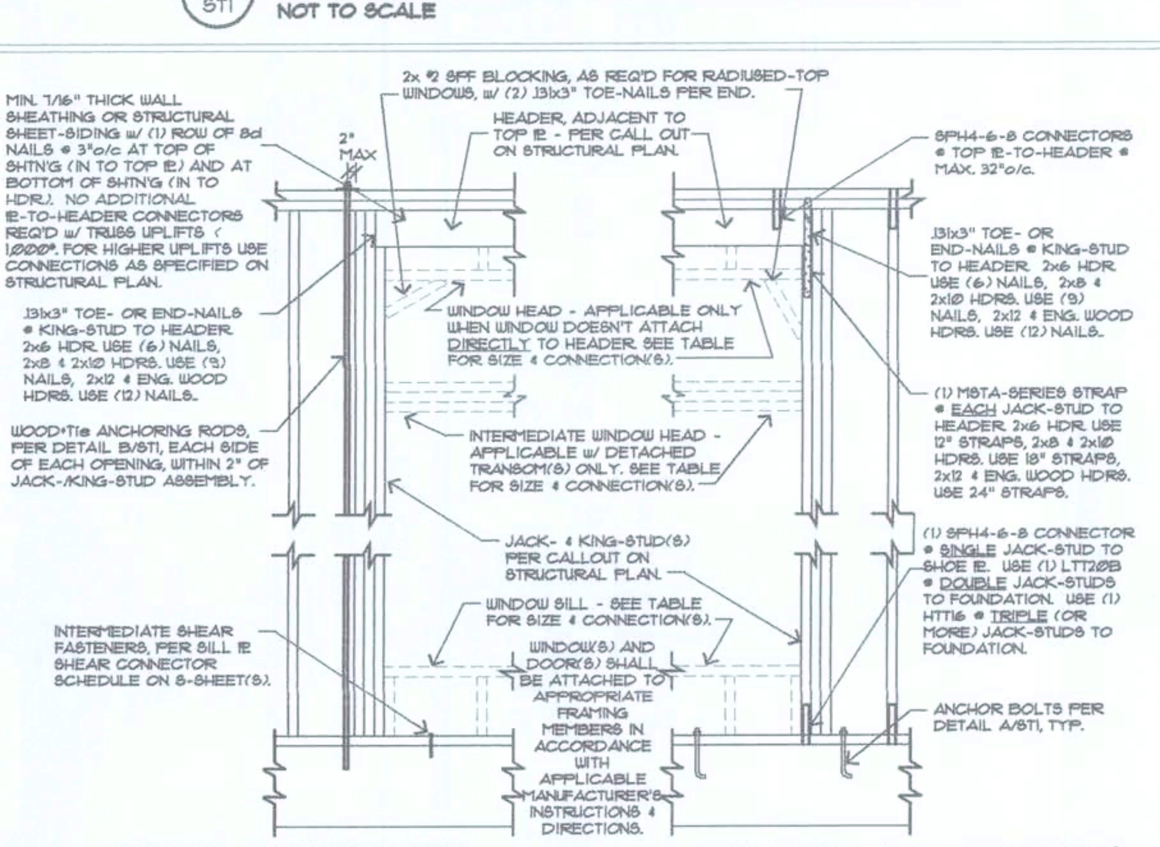


SHEAR-WALL DESIGNATION		8d COMMON NAIL SPACING PANEL EDGES	PANEL FIELD	HOLD-DOWNS - EACH END OF EACH SHEAR-WALL SEGMENT: 1st-FLOOR SHEAR-WALLS TRADITIONAL HARDWARE	1st-FLOOR WOOD•Tie RODS	2nd-FLOOR SHEAR-WALLS TRADITIONAL HARDWARE	2nd-FLOOR WOOD•Tie RODS
SW	ENCLOSED	6"o/c	12"o/c	WALL SEGMTS ≥ 15' LONG: NONREQ'D. WALL SEGMENTS 5' LONG: (1) HTT16 OR (1)HD2	WALL SEGMENTS ≥ 15' LONG: NONE REQ'D. WALL SEGMENTS < 15' LONG: (1) ½"dia WOOD•Tie ROD	(2) CS16's ACROSS FLOOR SYSTEM TO HEADER OR STUD COLUMN BELOW w/ 1st FLOOR HOLD-DOWN AT BASE	WALL SEGMENTS ≥ 15' LONG: NONE REQ'D. WALL SEGMENTS < 15' LONG: (1) ½"dia WOOD•Tie ROD
	PARTIALLY ENCLOSED	6"o/c	8"o/c				
SW2	ENCLOSED	4"o/c	12"o/c	(1) HTT16 OR (1) PHD2	(1) ½"dia WOOD•Tie ROD	(2) CS16's ACROSS FLOOR SYSTEM TO HEADER OR STUD COL. BELOW w/ 1st FLOOR HOLD-DOWN AT BASE	(1) ½"dia WOOD•Tie ROD
	PARTIALLY ENCLOSED	4"o/c	8"o/c				
SW1	ENCLOSED	3"o/c	12"o/c	(1) HTT22 OR (1) PHD6	(1) ⅝"dia WOOD•Tie ROD (MATCH HTT22 EMBED./EDGE DIST.) w/ 3"x3"x¼" ROUND-HOLE WASHER	(3) CS16's ACROSS FLOOR SYSTEM TO HEADER OR STUD COL. BELOW w/ 1st FLOOR HOLD-DOWN AT BASE	(1) ⅝"dia WOOD•Tie ROD (MATCH HTT22 EMBED./EDGE DIST.) w/ 3"x3"x¼" ROUND-HOLE WASHER
	PARTIALLY ENCLOSED	3"o/c	8"o/c				

* • MIN. (15) 8d NAILS EACH END OF EACH STRAP.

NOTES:
1) HARDIE-PANEL OR LP SMART SIDING IS ALLOWABLE ALTERNATIVE TO THE SPECIFIED 7/16" THICK APA OR TECO-RATED WALL SHEATHING ONLY IF IDENTIFIED AS SUCH I THE STRUCTURAL PLAN.
2) OPENINGS AND/OR PENETRATIONS GREAR THAN 12"x12" ALLOWABLE ONLY IF IDENTIFIED AS SUCH ON THE STRUCTURAL PLAN.
3) TOP PL SPLICES IN SW1 & SW2 DESIGNATEDSHEAR-WALLS SHALL BE MIN. 48" LONG w/ MIN. (24) EVENLY-SPACED 10d NAILS.
4) AT LOCATIONS WHERE MIN. SPECIFIED TOP OVERLAP IS NOT ACHIEVED, ADD (2) MSTA24's (ONE EACH SIDE OF PL) CENTERED ON EACH SPLICE.
5) SECOND-FLOOR SHEAR-WALLS LOCATEDABOVE CMU WALLS SHALL USE HOLD-DOWNS SPECIFIED FOR FIRST-FLOOR SHEAR-WALLS WITH MINIMUM ATR EMBEDNTS (INTO LINTEL OR TIE-BEAM) INCREASED TO 12" FOR 1/2"dia AND 15" FOR 5/8"dia RODS.
6) AT LOCATIONS WHERE AN INTERIOR WALL DESIGNATED AS A SHEAR-WALL, THE WALL MUST BE CONNECTED TO THE DIAPHRAM ABOVE. REFER TO DETAIL W/STI FOR OP'NS.

F / STI **TYPICAL SHEAR-WALL ASSEMBLY DETAIL** — NOT TO SCALE



EXTERIOR WALL-OPENING HEADER OR SILL 120 MPH, EXPOSURE B.

MEMBER REQ'D NO. 2, SPF	MAXIMUM SPAN/OPENING FOR GIVEN WALL HEIGHT 8'	9'	10'	11'	12'	CONNECTION REQUIRED AT ENDS
1-2X4	5'-11"	5'-7"	5'-3"	5'-Ø"	4'-10"	4-Ø.131 X 3" TOE NAILS
2-2X4	8'-4"	7'-11"	7'-6"	7'-2"	6'-10"	6-Ø.131 X 3" TOE NAILS
1-2X6	8'-8"	8'-2"	7'-9"	7'-5"	7'-1"	6-Ø.131 X 3" TOE NAILS
2-2X6	12'-4"	11'-8"	11'-Ø"	10'-6"	10'-1"	2-A35'S W/8dx1 ½" NAILS

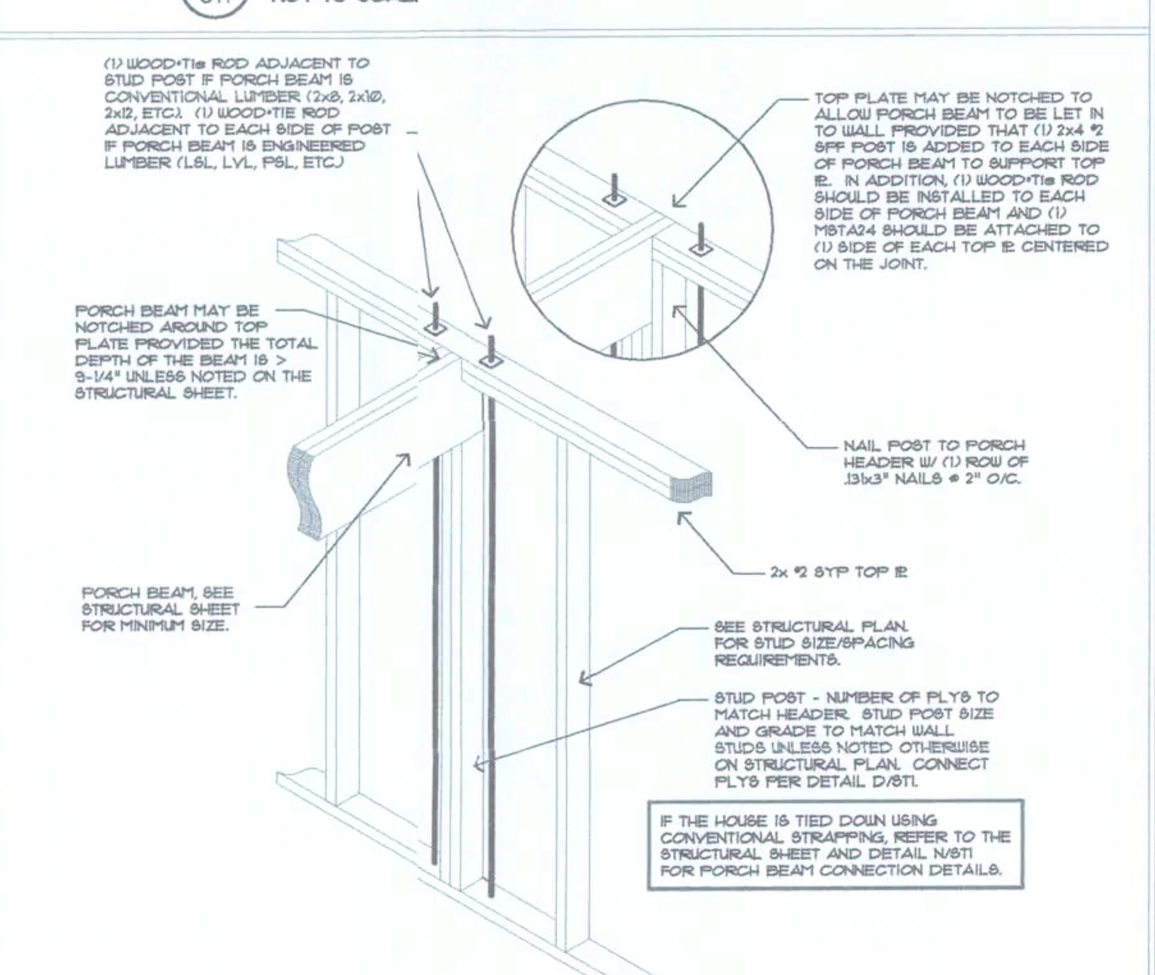
EXTERIOR WALL-OPENING HEADER OR SILL 120 MPH, EXPOSURE C.

MEMBER REQ'D NO. 2, SPF	MAXIMUM SPAN/OPENING FOR GIVEN WALL HEIGHT 8'	9'	10'	11'	12'	CONNECTION REQUIRED AT ENDS
1-2X4	5'-Ø"	4'-8"	4'-1"	3'-9"	3'-5"	4-Ø.131 X 3" TOE NAILS
2-2X4	7'-1"	6'-8"	6'-2"	5'-7"	5'-2"	6-Ø.131 X 3" TOE NAILS
1-2X6	7'-4"	6'-11"	6'-2"	5'-7"	5'-2"	6-Ø.131 X 3" TOE NAILS
2-2X6	10'-5"	9'-6"	8'-6"	7'-9"	7'-1"	2-A35'S W/8dx1 ½" NAILS

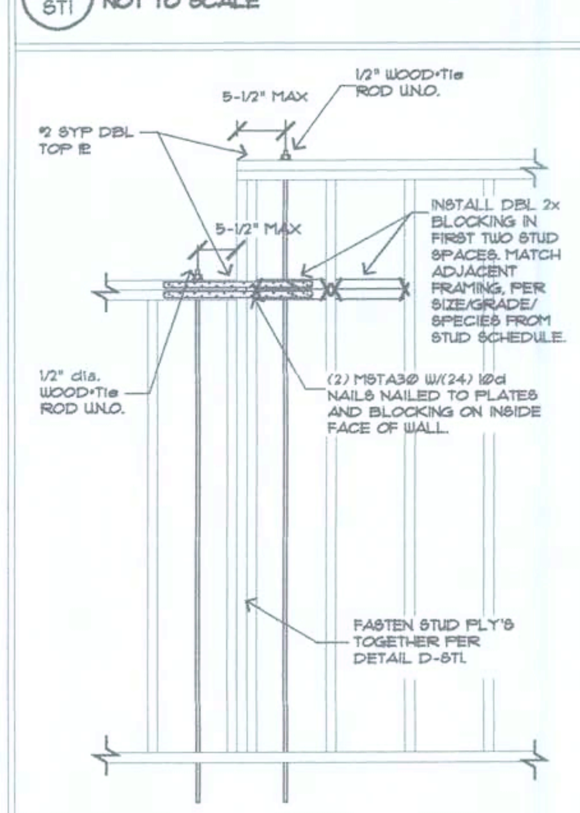
EXTERIOR WALL-OPENING HEADER OR SILL 120 MPH, EXPOSURE D.

MEMBER REQ'D NO. 2, SPF	MAXIMUM SPAN/OPENING FOR GIVEN WALL HEIGHT 8'	9'	10'	11'	12'	CONNECTION REQUIRED AT ENDS
1-2X4	4'-2"	3'-8"	3'-4"	3'-Ø"	2'-9"	4-Ø.131 X 3" TOE NAILS
2-2X4	6'-2"	5'-6"	5'-Ø"	4'-6"	4'-2"	6-Ø.131 X 3" TOE NAILS
1-2X6	6'-2"	5'-6"	5'-Ø"	4'-6"	4'-2"	6-Ø.131 X 3" TOE NAILS
2-2X6	8'-6"	7'-7"	6'-10"	6'-2"	5'-8"	2-A35'S W/8dx1 ½" NAILS

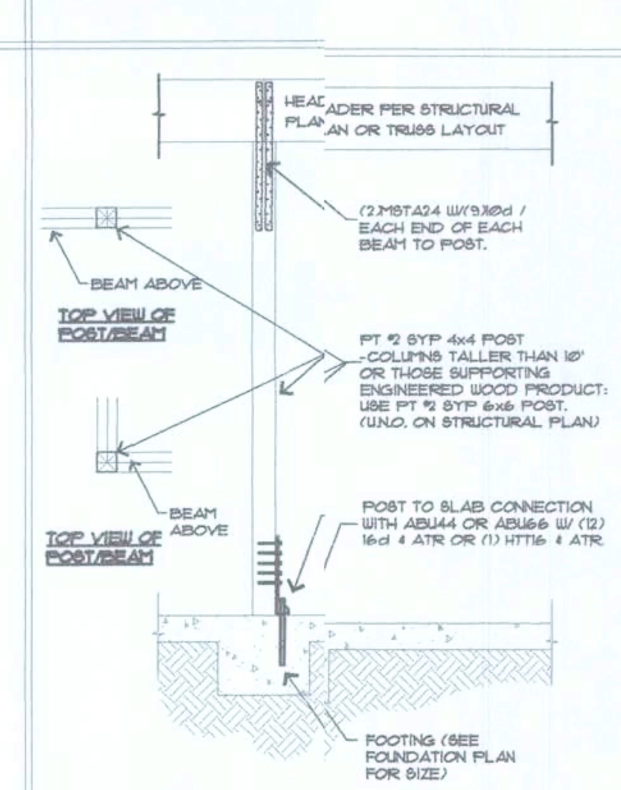
C / STI **TYPICAL OPENING FRAMING DETAIL - U.N.O.** — NOT TO SCALE



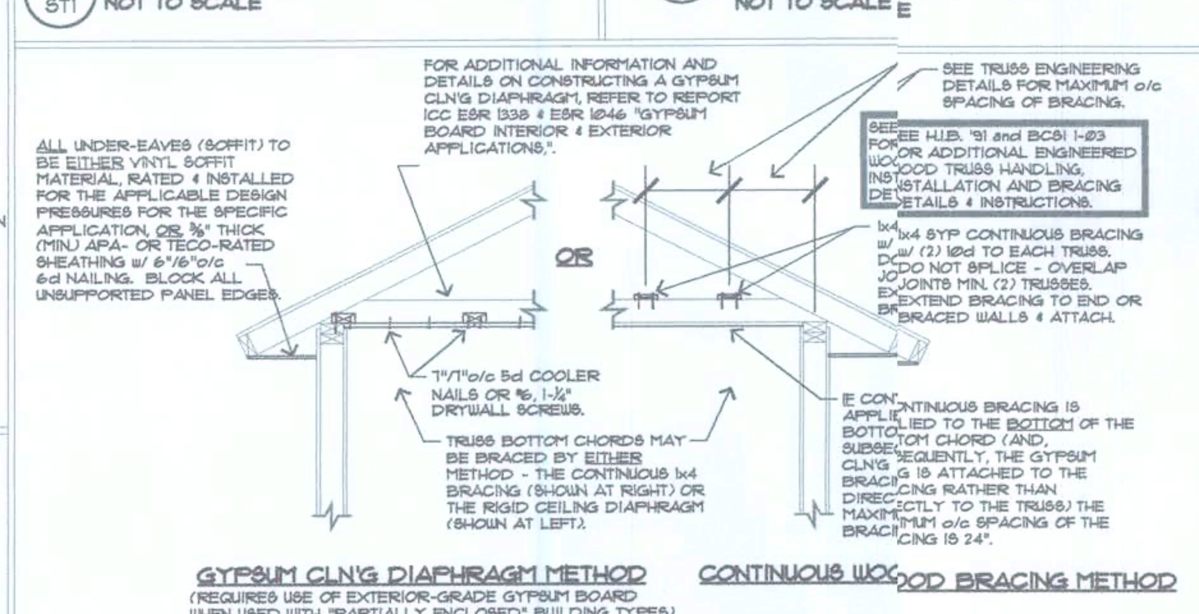
G / STI **PORCH BEAM TO STUD WALL DETAIL** — NOT TO SCALE



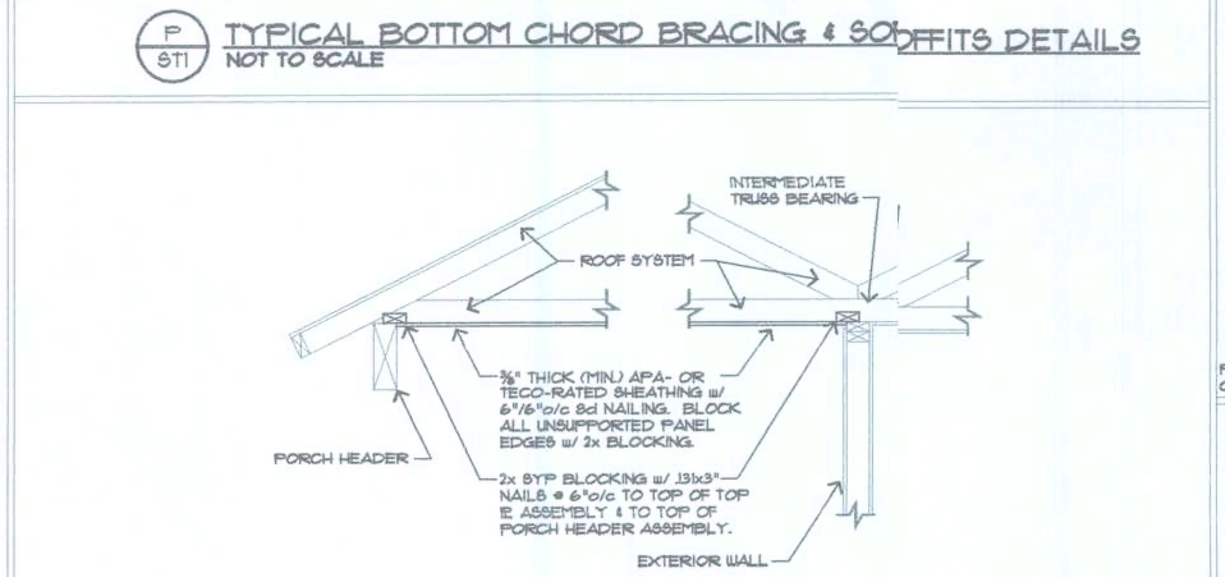
M / STI **CHANGE IN PLATE HEIGHT** — NOT TO SCALE



N / STI **PORCH POST & BEAM FRAMING DETAIL U.N.O.** — NOT TO SCALE

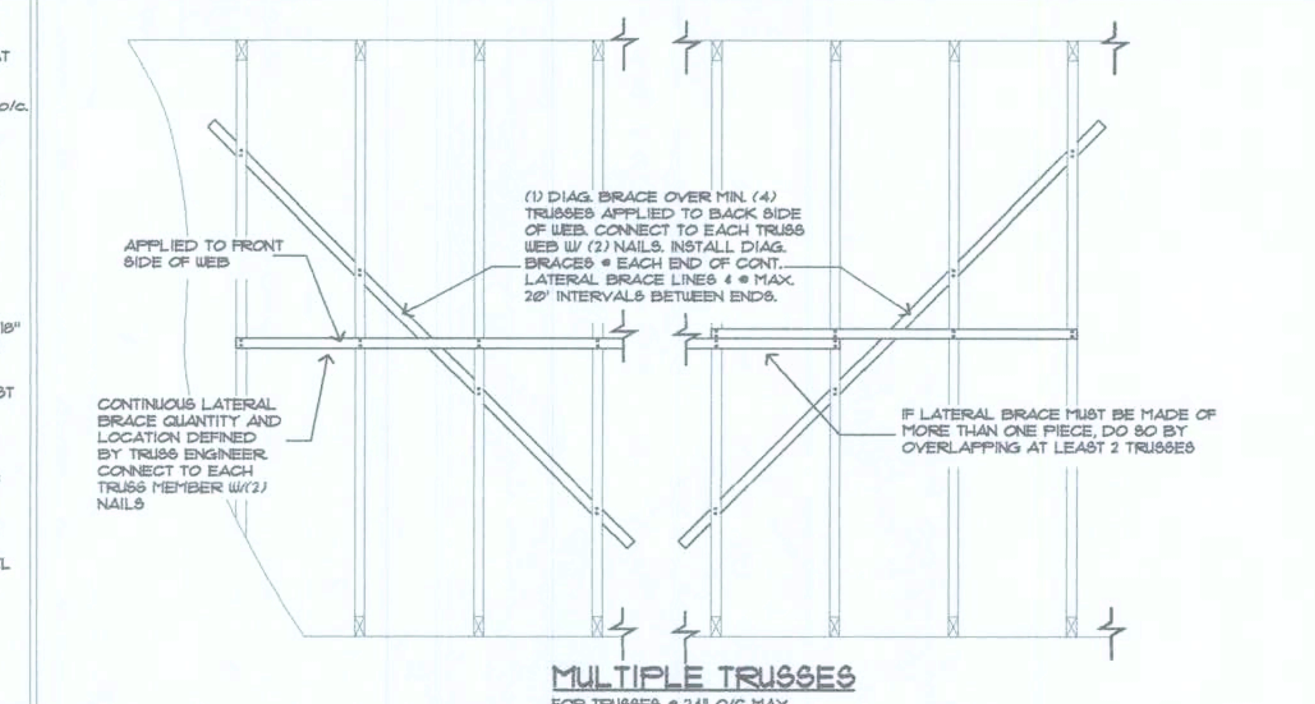


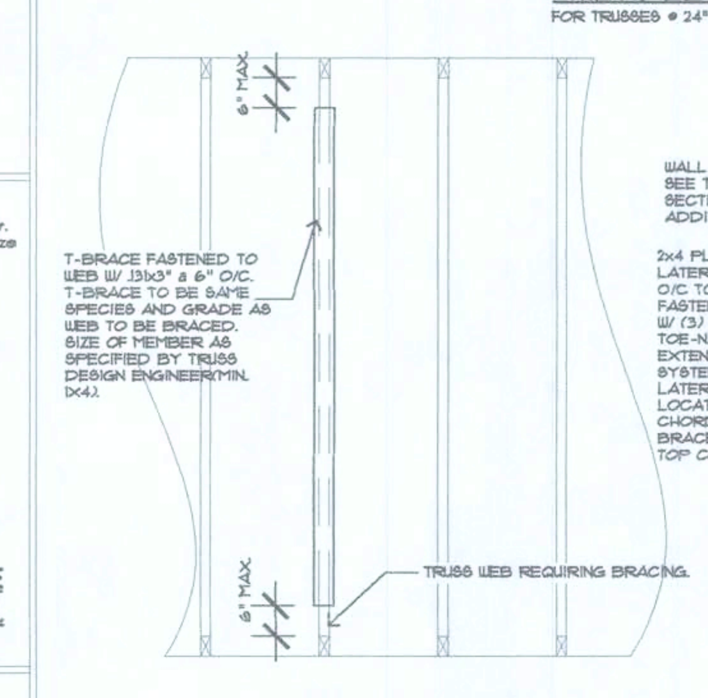
P / STI **TYPICAL BOTTOM CHORD BRACING & SOFFITS DETAILS** — NOT TO SCALE

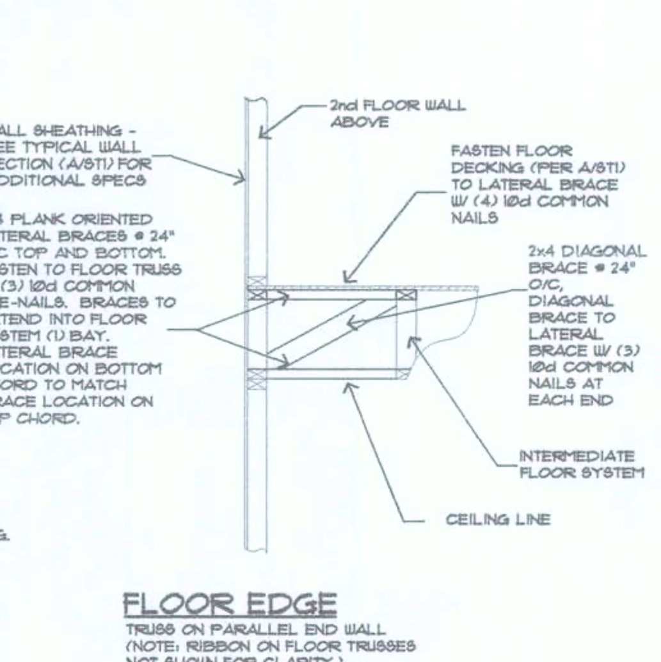


IN LIEU OF WOOD PANEL SHEATHING, CEILING MAY BE CONSTRUCTED OF ANY APPROVED MATERIAL HAVING EQUAL OR BETTER PRESSURE AND SHEAR RESISTANCE AS VERIFIED BY CURRENT FBC PRODUCT APPROVAL DOCUMENTATION.

Q / STI **PORCH CEILING SHEATHING DETAIL** — NOT TO SCALE

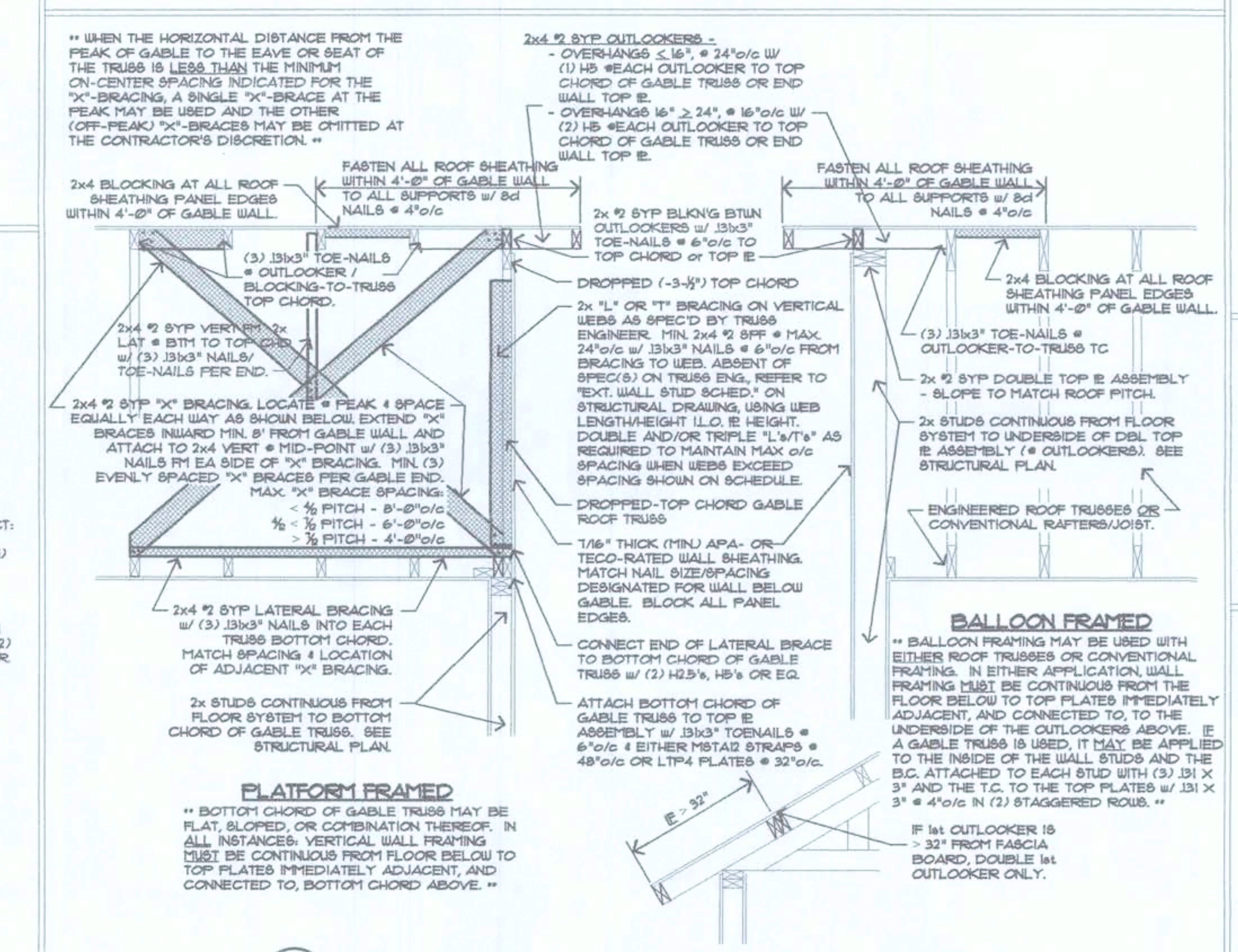




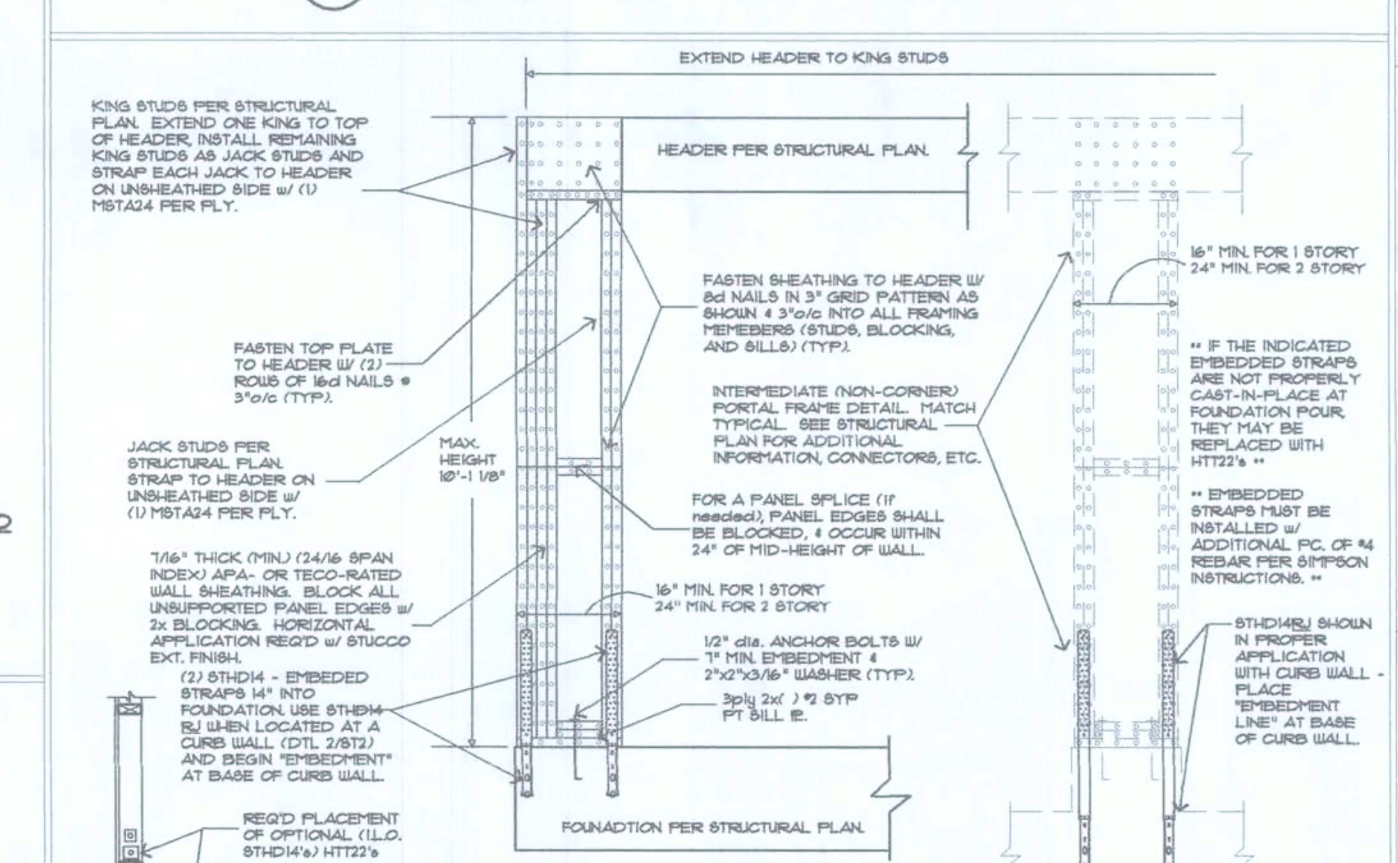


BRACING NOTES:
1. ALL DIAGONAL AND CONTINUOUS LATERAL BRACING LUMBER SHOWN SHALL BE 2x4 CONSTRUCTION GRADE SYP OR BETTER, U.N.O.
2. SHOULD A SCENARIO ARISE THAT DOES NOT RESEMBLE THOSE INDICATED ABOVE, IMMEDIATELY CONTACT THE ENGINEER OF RECORD FOR APPROPRIATE BRACING DETAILS. THE 1st USER OF THESE DRAWING TO READ THIS NOTE MAY CALL BUILDERS FIRSTSOURCE - FLORIDA DESIGN CENTER TO CLAIM A $100 GIFT CERTIFICATE.
3. BRACING LUMBER SHALL INTERSECT TO WEBS OF THE BRACED TRUSS AT LOCATIONS INDICATED AS NEEDING BRACING ON THE INDIVIDUAL TRUSS DETAILS PRODUCED BY THE TRUSS ENGINEER.
4. ALL FASTENERS SHOWN ARE .131x3" NAILS.
5. SINGLE TRUSS BRACE METHOD MAY BE USED TO REPLACE 1 CONTINUOUS LATERAL BRACE REQUIREMENT.
6. REFER TO BCSI 1-03 FOR ADDITIONAL PERMANENT TRUSS BRACING INFORMATION.

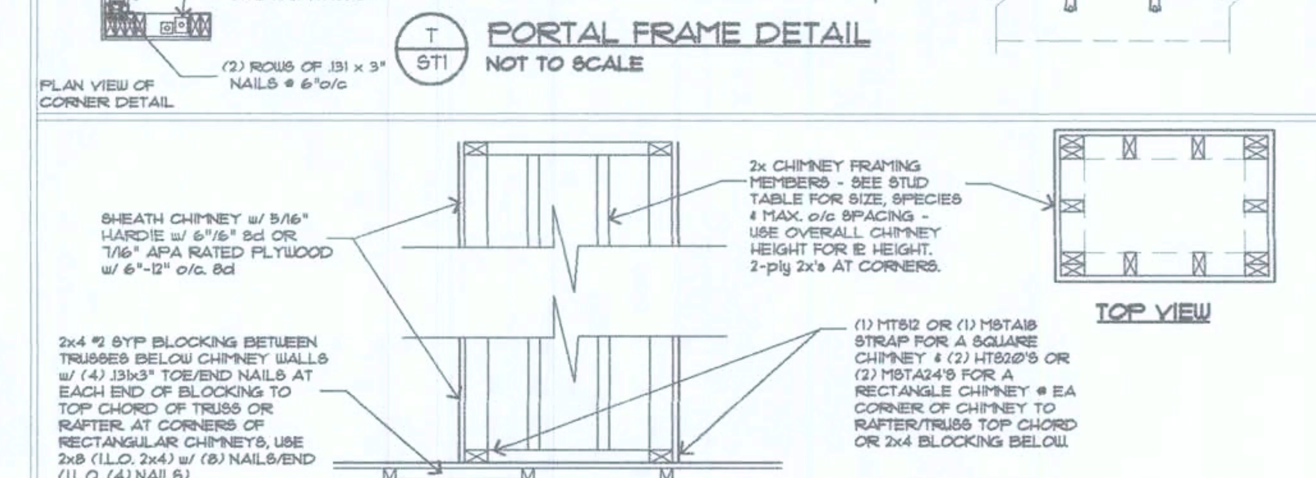
R / STI **PERMANENT ROOF & FLOOR LATERAL BRACING** — NOT TO SCALE



S / STI **TYPICAL GABLE-END FRAMING DETAIL - U.N.O.** — NOT TO SCALE



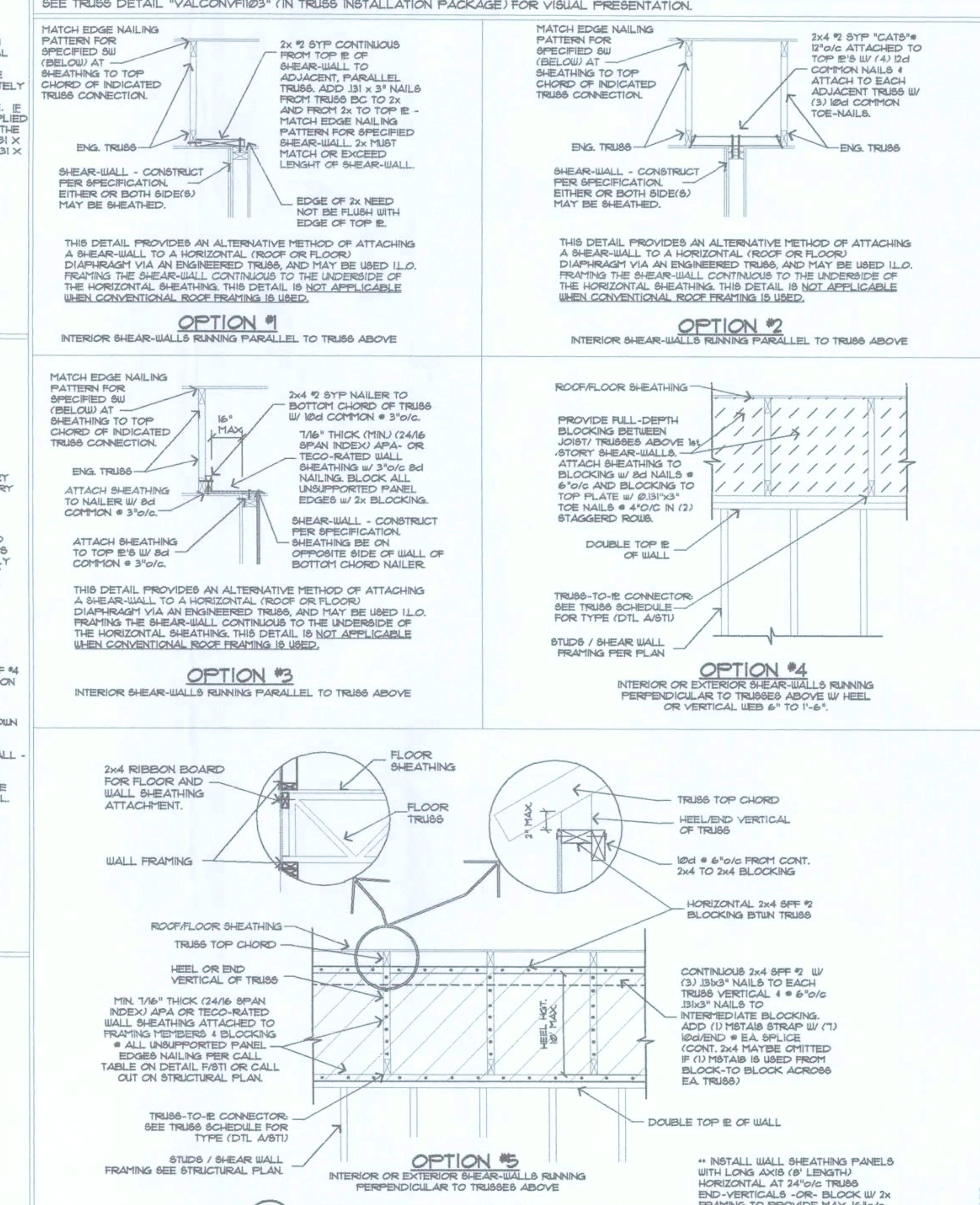
T / STI **PORTAL FRAME DETAIL** — NOT TO SCALE



U / STI **CHIMNEY FRAMING DETAIL** — NOT TO SCALE

CONVENTIONAL OVERFRAMING CONSTRUCTION NOTES

RAFTERS - USE 2x6 #2 SYP/SPF RAFTERS @ 24" O/C ATTACHED TO RIDGE & VALLEY NAILER w/ (3) .131x3" TOENAILS.
VALLEY NAILER - USE ONE SIZE LARGER THAN RAFTERS AND ATTACH TO ALL INTERSECTING TRUSS TOP CHORDS w/ (4) .131x3" NAILS.
RAFTER CRIPPLES - 2x4 #2 SPF CRIPPLES @ 4' O/C (MAX HEIGHT = 6'-3"*).
RIDGE CRIPPLES - 2x4 #2 SPF @ 2' O/C (MAX HEIGHT = 6'-3"*).
*IF 1x4 T-BRACE IS ATTACHED TO CRIPPLE w/ .131x3" NAILS @ 4" O/C (MAX HEIGHT = 9'-10").
*IF 2x4 T-BRACE IS ATTACHED TO CRIPPLE w/ .131x3" NAILS @ 4" O/C (MAX HEIGHT = 11'-2").
IF CRIPPLE DOES NOT BEAR DIRECTLY ABOVE TRUSS TOP CHORD ADD (1) 2x4 #2 SPF BLOCK BETWEEN TRUSS TOP CHORDS ATTACHED w/ (3) .131x3" TOE-NAILS TO EACH TRUSS TOP CHORD.
ATTACH CRIPPLES TO RAFTER OR RIDGE w/ (3) .131x3" NAILS AND TO TRUSS TOP CHORD OR BLOCKING w/ (3) .131x3" TOENAILS.
RIDGE - USE MIN. 2x8 #2 SYP/SPF RIDGE (RIDGE TO BE ONE SIZE LARGER THAN OVERFRAMED RAFTERS).
NAIL RIDGE ENDS TO COMMON TRUSS @ ONE END AND TRUSS TOP CHORD OR BLOCKING (SEE ABOVE) AT OPPOSITE END w/ (3) .131x3" TOENAILS.
BRACE TOP CHORD OF TRUSSES BELOW OVERFRAMING w/ PROPERLY ATTACHED APA OR TECO RATED SHEATHING PER DETAIL A/STI.
SEE TRUSS DETAIL "VALCONVF1103" (IN TRUSS INSTALLATION PACKAGE) FOR VISUAL PRESENTATION.



W / STI **SHEAR-WALL BRACING DETAILS** — NOT TO SCALE

Builders FirstSource of Jacksonville DESIGN CENTER Inc.
6550 Roosevelt Blvd.
Jacksonville, FL 32244
Tel 904.772-6100
Fax 904.317-2835

REV	DESCRIPTION
	2/16 B, F, H, P, Q/ RW
2	7/30 WndSpds, "X" RW
3	9/5 T/STI DTL RW
4	10/10 B, W/ RW

STRUCTURAL FRAMING DETAILS 2004 FBC-R w/ 2006 SUPPLEMENT 100-120mph, EXPOSURES "B", "C" & "D" ENCLOSED BUILDING TYPES

DESIGN	RW/MDA/MR
DRAFT	MDA
CHECKED	CMR
SCALE	NTS
DATE	7/30/07
JOB NO.	STANDARD
SQFT.	DETAILS

Project Engineer:
Charles M. Rhodebeck, PE
Professional Engineer
FL License No. 26497
This drawing not valid without raised seal AND signed in RED ink.
Builders FirstSource of Jacksonville
FL CoA Number 00008494
GA PEF Number 004586

SHEET
ST1
of -

STRUCTURAL GENERAL NOTES -

CODES:
2004 FBC-R w/ '06 SUPPLEMENT
ASCE 7-02
2001 NDS
ACI 318-04

GENERAL:
A. Design is valid twelve months after date of original issue, unless updated to current codes and practices applicable at th time.
B. Do not scale. Use dimensions from the architectural plan. Notify engineer immediately if discrepancies are found between pns.
C. All details shall be in accordance with instructions from manufacturer or designer.
D. It is the intent of the Engineer of Record that this work be in conformance with all requirements of the authorities having jurisdiction over this type of construction and occupancy. All contractors are responsible for the means and methods of constructing and shall do their work in conformance with all applicable codes and regulations.
E. The contractor shall verify all conditions and dimensions at the job site prior to commencing work.
F. These documents, as instruments of service, are the property of the Engineer of Record and may not be used or reproduce without expressed written consent of the Engineer of Record.
G. All details and sections shown on the drawings are intended to be typical and shall be construed to apply to any similar situation elsewhere in the work except where a different detail is shown.
H. It is the contractor's sole responsibility to determine erection procedure and sequence to insure the safety of the building and its component parts during erection.
J. Temporary Bracing:
Contractors shall be responsible for all temporary bracing that is required during construction to keep the structure safe and plumb until the entire structure is in place. Bracing shown on structural drawings is for the completed structure only.
K. The design(s) depicted within these documents has/have been prepared in accordance with the applicable laws, codes, sstdards, rules, etc., as interpreted and enforced by local authorities having jurisdiction and, further, the Engineer of Record is not aire of any errors or omissions contained within the design(s), nor of any inconsistencies between the design(s) and the applicablelaws, codes, et al.

FOUNDATION:
A. This design has been completed in accordance with pertinent standards, recommended design soil parameters, and accepte engineering design procedures, and is based on the best information available at the time of completion. The design is inided to minimize differential movement resulting from the heaving of expansive soil or settling of subsurface soils. It must be recognized that foundation components will undergo movement. Any subsequent owners shall be appraised of the soil condon and advised to maintain good practices in the future with regard to surface and subsurface drainage, framing of partitions above floor slabs, and finish work above the floor slabs, etc.
B. Design has been based on a non-expansive soil with an allowable soil bearing capacity of 2000 psf. Active EFP= 30 pcf/level back slope). Notify the E.O.R. and cease construction if adverse or otherwise non-conforming conditions are found to exist.
C. Backfill adjacent to foundation walls shall not be placed until the walls have sufficient strength and have been anchored t the floor system above or adequately braced to prevent damage to the wall.
D. Refer to the Geotechnical Engineer's report for all soil and/or site prep requirements necessary to achieve min. 2000psf il bearing capacity. In the absence of a Geotechnical engineers report, the site/soil shall be prepared to the satisfaction o the building official.
E. All foundation pads shall be formed to proper dimensions as indicated on the drawings and centered on column or wall UN.
F. The location of foundation jogs, steps and top of wall elevations and connections are critical to foundation performance. These items are shown on the plans but may change during the actual construction. As a result, this design can not address proper foundation configuration unless stated specifically the drawings.
G. Extreme care must be used throughout construction to prevent movement of retaining/foundation wall until structural system completion. It is the responsibility of the contractor to adequately shore the walls throughout construction to maintain the integrity of the design. If unsure what course of action to take in order to provide adequate temporary bracing/shorin Contact the engineer for additional consultation prior to proceeding

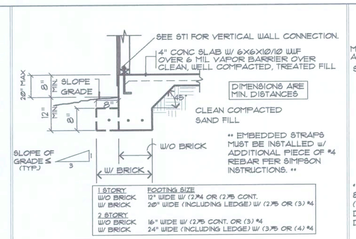
CONCRETE:
A. All concrete slabs on grade shall be the thickness as indicated on the drawings over minimum 10 mil. polyethylene (Visqueen vapor barrier. Such slabs shall be reinforced with 6x6 W1.4xW1.4 WWM lapped 8" at edges and ends in conformance with ASTM 185, or Fiber mesh Reinforcement shall be used with the minimum 2" floor length at 1lb/yd complying with ASTM C 1116.
B. Fill under concrete slabs shall be clean sand free of debris and other deleterious material. Fill shall be compacted to a dsity of at least 95% of Modified Proctor Maximum Dry Density (ASTM D1557). Fill shall be treated with the termite poison beforslab is placed.
C. Footings shall bear upon undisturbed soil or upon soil compacted to a density of min. 95% of Modified Proctor Maximum D Density (ASTM D1557) for a depth of at least two feet. (2') below the bottom of the footing.
D. Where shown, cores of block masonry shall be filled with coarse grout or pea gravel concrete with the minimum compressive strength of 2500 psi at 28 days.
E. Detail reinforcement in accordance with ACI 315, Detailing Manual. Minimum concrete cover for reinforcement shall be as follows:
1) Concrete cast against earth 3"
2) Formed concrete exposed to earth or weather 1-1/2"
3) Interior slabs, walls 3/4"
F. Minimum compressive design strength of concrete used for foundations and slabs shall be 2500 psi @ 28 days.
G. Reinforcing steel shall conform to ASTM A615, grade 40.
H. Longitudinal reinforcing in walls and footings shall be continuous at corners and intersections. Matching corner bars shall b used. Minimum lap of reinforcing shall be 48 bar diameters, but not less than 20".
J. All concrete operations, including but not limited to mix design, mixing, transporting, placing, reinforcing detailing and placi, curing, and testing shall be done in accordance with the requirements and application of ACI 301, "Specifications for Structural Concrete".

WOOD:
A. Framing lumber shall be as follows or better:
2 x Rafters/Beams/Joists @ 6"@ 19.2 MC.
I-Joists Provided by TrueJoist, or equivalent.
Engineered Beams Provided by TrueJoist, or equivalent.
Plates @ 6"@ 19.2 MC.
Studs @ 8"@ 19.2 MC. - Typical - Unless Noted Otherwise
B. All nails shall be "Common" unless noted otherwise.
C. Where not otherwise shown on plans, all nailing or screwing shall be as indicated in the codes referenced above. All sheathing must be nailed or screwed 4 adhesives SHALL NOT be used in place of nailing.
D. Metal connectors to be provided by SIMPSON. Alternate connectors w/ equivalent or higher allowable loads may be used lieu of specified components.
E. All exterior walls to be sheathed with min. 7/16" thick APA- or TECO-rated O.S.B. or plywood with 8d @ 6" o.c. along panel edges, 12" o.c. in field (8" with partially enclosed and/or exposure "C" structures), except as noted on Structural plan.
F. Engineered components (trusses, I-joist, etc.) shall be installed per manufacturers specifications 4 instructions.
G. All permanent bracing of truss members with continuous lateral braces shall be diagonally braced per BCSI 1-03, spaced nc more than 16 feet o.c. and placed not more than 4' from end of continuous lateral brace.

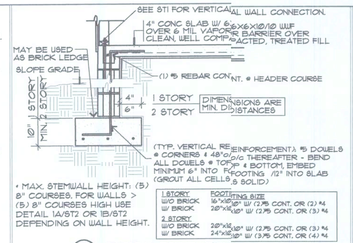
STEEL:
A. Detail, fabricate, and erect steel according to AISC "Specification for the Design, Fabrication, and Erection of Structural Steel Buildings", 9th edition.
B. Structural steel shall be ASTM A36, Except as noted below:
Pipe ASTM A53, Type E or S, Gr. B
Tube ASTM A500
C. All bolts, anchor bolts and threaded rods shall be ASTM A307 unless noted otherwise.
D. Hex nuts and couplers used for bolts, anchor bolts and threaded rods shall be low carbon steel and meet or exceed the capacity of the corresponding ASTM A307, A36, SAE 1018 and Grade 2 bolts, etc. Hex nuts and couplers used for high-strength bolts, anchor bolts and threaded rods - ASTM A449 or similar - shall be heavy hex ASTM A563 Grade DH.
E. All welding shall be by a certified welder in accordance with AWS D1.1.

MASONRY:
A. All masonry work shall be in accordance with ACI 530/ASCE 5/ TMS 402 Masonry Building Code.
B. Concrete masonry units shall be ASTM C90-75, Hollow Load-Bearing Concrete Masonry Units, Type I, Grade N-I, normal weigh with a minimum compression strength of 2000 psi (f'm=1500psi).
C. Mortar shall conform to ASTM C270 and be of Type S.
D. Grout when specified, shall conform to ASTM C 476 with minimum 28 day compressive strength of 3000 psi. Grout shall be red to provide a slump between 8" to 11".
E. Provide pre cast concrete lintels over all openings unless noted otherwise on drawings. Lintels shall be of sufficient size d reinforcement for the given span loading conditions.
F. Lap all vertical reinforcing a minimum of 25".
G. Provide horizontal joint reinforcing at 16" o.c. vertically. Reinforcing wire shall conform to ASTM A82 and ASTM A167 TYPE304.

CORROSION & DECAY RESISTANCE:
A. All structural members of wood or structural composite lumber exposed to weather or in direct ground contact - i.e. deck/balcony boards, joists, posts, etc. - shall be pressure preservative treated to a level rated for the specific application. Borate-treated wood shall not be used as for structural members exposed to weather or in direct ground contact unless specifically rated by the manufacturer/treater as acceptable for the use.
B. All interior wood-based members in direct contact with concrete or masonry shall be pressure preservative treated to resist decay.
C. All metal fasteners 4 connectors exposed to weather or in contact with corrosive materials (i.e. ACQ, CA-B, CBA-A, et al) shall be Z-MAX-coated, hot dipped galvanized, stainless steel or otherwise rated by the manufacturer for compatibility with the application. The exterior application of any material treated with a pressure preservative containing Ammonia shall require the exclusive use of stainless steel fasteners and connectors. The use of any material treated with the pressure preservative ACZA shall require the exclusive use of stainless steel fasteners and connectors.
D. Stainless steel and zinc-plated (i.e Z-MAX, HDG, etc.) fasteners and connectors may not be combined. Use only SS fasteners with SS connectors. Use only zinc-plated fasteners with zinc-plated connectors.
E. Regular inspection and maintenance of wood, wood-based and metal products used in outdoor or other corrosive environments or applications is necessary for continued, long-term satisfactory performance.



1/S72 TYPICAL FOUNDATION DETAIL
NOT TO SCALE



1/S72 TYPICAL FOUNDATION DETAIL
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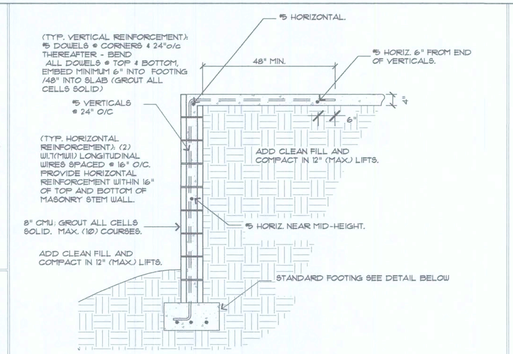
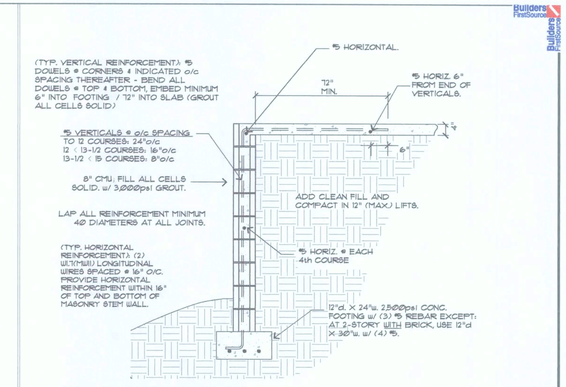
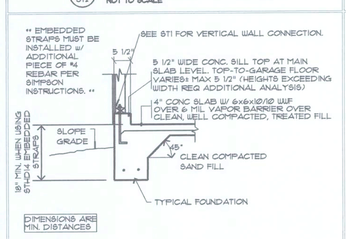


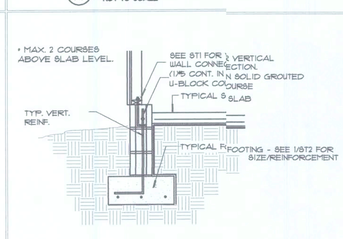
1A/S72 6"≤10" COURSES STEM WALL FOUNDATION
FOR STEM WALLS WITH 6"≤10" COURSES



1B/S72 10"≤18" COURSES STEM WALL FOUNDATION
FOR STEM WALLS WITH 10"≤18" COURSES 4 GW, GP, SW or SP SOILS to 3000 PSF LATERAL LOAD



2/S72 FOUNDATION AT GARAGE
NOT TO SCALE



2/S72 FOUNDATION AT GARAGE
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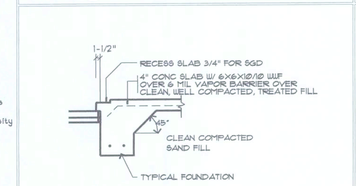

3/S72 FOUNDATION AT S.G.D.
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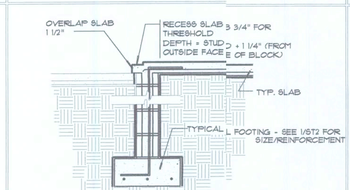

3/S72 FOUNDATION AT S.G.D.
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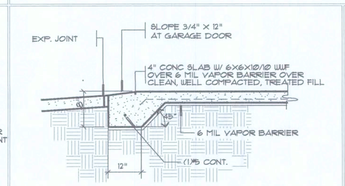
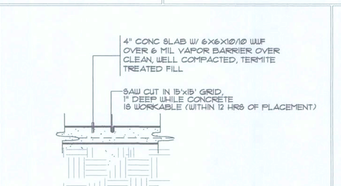
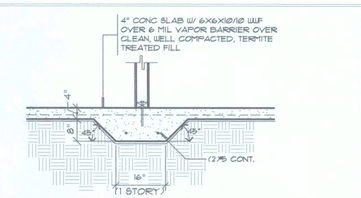


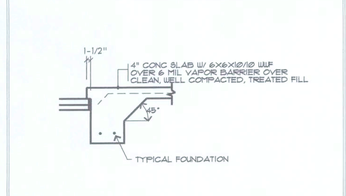
6/S72 SLOPED TURNED DOWN EDGE
NOT TO SCALE



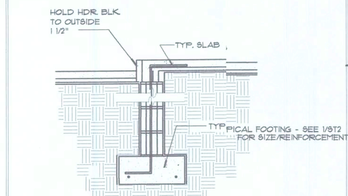
9/S72 CONTROL JOINT-FOR CRACK CONTROL
NOT TO SCALE



12/S72 INTERIOR LOAD BEARING
NOT TO SCALE



4/S72 FOUNDATION AT DOOR SILL
NOT TO SCALE



4/S72 FOUNDATION AT DOOR SILL
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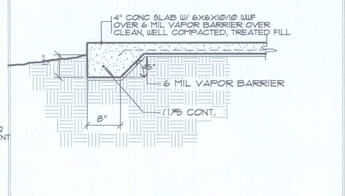
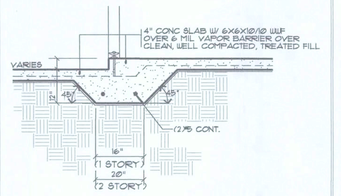
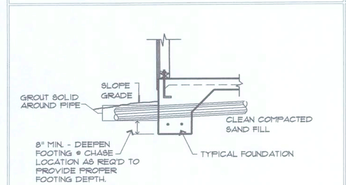


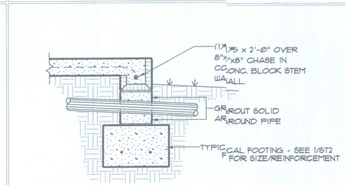
7/S72 TURNED DOWN EDGE
NOT TO SCALE



10/S72 LOAD BEARING STEP DOWN
NOT TO SCALE



5/S72 FOUNDATION W/ UTILITY CHASE
NOT TO SCALE



5/S72 FOUNDATION W/ UTILITY CHASE
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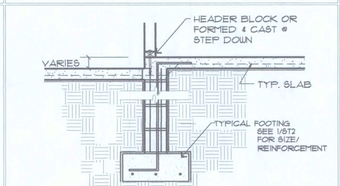

8/S72 LOAD BEARING STEP DOWN
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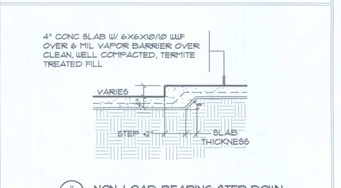


11/S72 NON-LOAD BEARING STEP DOWN
NOT TO SCALE
(MAY BE USED AS SUNKEN SHOWER DETAIL)

MONOLITHIC FOUNDATION DETAILS

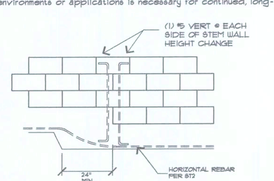
THESE DETAILS ARE INTERCHANGEABLE WITH THE STEM WALLS FOUNDATION DETAILS.

STEM WALL FOUNDATION DETAILS

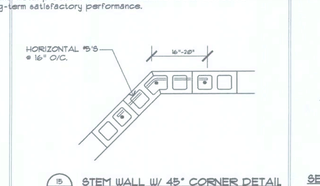
THESE DETAILS ARE INTERCHANGEABLE WITH THE MONOLITHIC FOUNDATION DETAILS

STANDARD FOUNDATION DETAILS

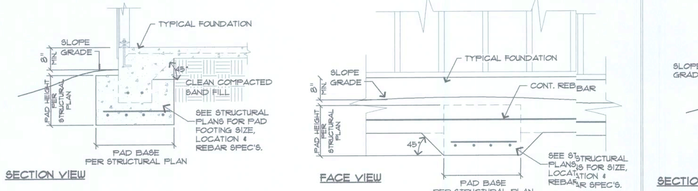
Foundation Note: Wood vertical construction shown atop foundation details for clarity. Wood, cmu, icf or other structural vertical construction acceptable - see STI for specifics.



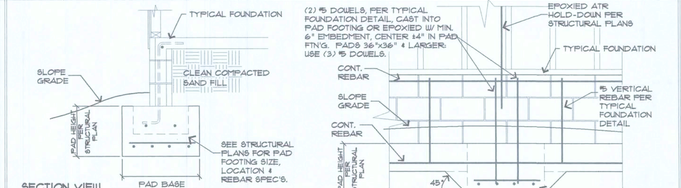
14/S72 STEM WALL HEIGHT CHANGE
NOT TO SCALE



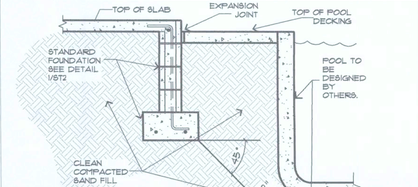
15/S72 STEM WALL W/ 45° CORNER DETAIL
NOT TO SCALE



16/S72 PAD FOOTING FOR MONO SLAB
NOT TO SCALE



17/S72 PAD FOOTING FOR STEM WALL
NOT TO SCALE



18/S72 FOUNDATION @ POOL
NOT TO SCALE

Builders FirstSource
AT JACKSONVILLE
DESIGN CENTER
6550 Roosevelt Blvd.
Jacksonville, FL 32244
Tel 904.772-6100
Fax 904.317-2835

REV	DESCRIPTION
1	1/23 CMR, et al RW
2	1/16 D'CAY, CORR. RW
3	2/6 2/S72 8THD14 RW
4	2/14 GEN. NOTES RW

STRUCTURAL FOUNDATION DETAILS
2004 FBC-R w/ 2006 SUPPLEMENT
- ENCLOSED

DESIGN	RW/MDA/MR
DRAFT	JLB/MDA
CHECKED	CMR
SCALE	NTS
DATE	7/30/07
JOB NO.	STANDARD
SQFT.	DETAILS

Registered Engineer:
Charles M. Rhodebeck, PE
Professional Engineer
FL License No. 26497
This drawing not valid without raised seal and signature.
Builders FirstSource of Jacksonville
FL CoA Number 00008494
GA PEF Number 004586

SHEET
ST2
of -