

**PRE-ENGINEERED WOOD TRUSSES**

TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THESE SPECIFICATIONS AND WHERE ANY APPLICABLE DESIGN FEATURE IS NOT SPECIFIED HEREIN, DESIGN SHALL BE IN ACCORDANCE WITH APPLICABLE PROVISIONS OF LATEST EDITION OF NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION (NDS) AMERICAN FOREST AND PAPER ASSOCIATION (AFPA), AND DESIGN SPECIFICATIONS FOR METAL PLATE CONNECTED WOOD TRUSSES (ANSI/TPI 1), TRUSS PLATE INSTITUTE (TPI), AND CODES OF JURISDICTION. FABRICATE, SUPPLY AND ERECT WOOD TRUSSES AS SHOWN ON THE DRAWINGS AND AS SPECIFIED. WORK SHALL INCLUDE ALL ANCHORAGE, BLOCKING, CURBING, MISCELLANEOUS FRAMING AND BRACING.

LUMBER USED FOR TRUSS MEMBERS SHALL BE IDENTIFIED BY GRADE MARK OF A LUMBER INSPECTION AGENCY, AND SHALL BE AS SHOWN ON DESIGN DRAWINGS. TRUSSES SHALL BE HANDLED DURING FABRICATION, DELIVERY AND AT JOBSITE SO AS NOT TO BE SUBJECTED TO EXCESSIVE BENDING. TRUSSES SHALL BE UNLOADED ON SMOOTH GROUND TO AVOID LATERAL STRAIN. TRUSSES SHALL BE PROTECTED FROM DAMAGE THAT MIGHT RESULT FROM ON-SITE ACTIVITIES AND ENVIRONMENTAL CONDITIONS. PREVENT TOPPING WHEN BANDING IS REMOVED.

HANDLE DURING INSTALLATION IN ACCORDANCE WITH HANDLING, INSTALLING AND BRACING WOOD TRUSSES (HIB-9), TPI, AND ANSI/TPI 1-1995. INSTALLATION SHALL BE CONSISTENT WITH GOOD WORKMANSHIP AND GOOD BUILDING PRACTICES. TRUSSES SHALL BE SET AND SECURED LEVEL AND PLUMB, AND IN CORRECT LOCATION. TRUSSES SHALL BE HELD IN CORRECT ALIGNMENT UNTIL SPECIFIED PERMANENT BRACING IS INSTALLED. CUTTING AND ALTERING OF TRUSSES IS NOT PERMITTED. CONCENTRATED LOADS (FULL BUNDLES OF DECKING) SHALL NOT BE PLACED ATOP TRUSSES UNTIL ALL SPECIFIED BRACING HAS BEEN INSTALLED AND DECKING IS PERMANENTLY NAILED IN PLACE. ERECTION BRACING IS ALWAYS REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND FURNISHING THE MATERIALS USED FOR INSTALLATION AND PERMANENT BRACING.

STRUCTURAL ENGINEER OF RECORD SHALL APPROVE SHOP DRAWINGS PRIOR TO SUBMITTAL TO BUILDING OFFICIAL. BUILDING OFFICIAL SHALL APPROVE SHOP DRAWING PRIOR TO INSTALLATION. TRUSSES SHALL BE FABRICATED FROM APPROVED SHOP DRAWINGS.

MANUFACTURER SHALL SUBMIT 3 COPIES OF TRUSS DESIGN DRAWINGS BEARING SEAL OF PROFESSIONAL ENGINEER FOR APPROVAL PRIOR TO ERECTION AND ENGINEERING FRAMING PLANS FOR ALL FLAT CHORD TRUSSES. ALL TRUSS SHOP DRAWINGS MUST BE REVIEWED AND APPROVED IN WRITING BY GENERAL CONTRACTOR PRIOR TO SUBMITTAL OF SHOP DRAWINGS TO STRUCTURAL ENGINEER AND MUST INCLUDE THE FOLLOWING:

1. STAMP AND SIGNATURE OF ENGINEER, WHO IS REGISTERED IN THE STATE WHERE THE JOB IS TO BE CONSTRUCTED, RESPONSIBLE FOR PREPARATION OF ALL TRUSS DESIGN AND LAYOUT DRAWING.
2. ALLOWABLE LOADS IN LBS/FEET FOR LUMBER & PLATES USED AS ALLOWED BY ICB, CURRENT ICB REPORT NUMBER & BY SOUTHERN BUILDING CODE CONGRESS INTERNATIONAL.
3. STRESS REDUCTION FACTORS USED FOR PLATES.
4. TOP AND BOTTOM CHORD DESIGN LOADS IN PLF.
5. SIZE, GAUGE, AND EXACT LOCATION BY DIMENSION OF PLATES.
6. LUMBER SPECIES AND GRADES USED.
7. NAME & TRADEMARK OF PLATE MANUFACTURER, TRUSS FABRICATOR & PROJECT NAME/LOCATION
8. CONCENTRATED LOAD REQUIREMENTS HAVE BEEN DESIGNED FOR AND SHOWN ON DOCUMENTS.
9. TRUSS CONNECTION HARDWARE REQUIREMENTS.

ALL TRUSSES MUST BE DESIGNED FOR UPLIFT LOADS. UPLIFT VALUES @ EACH TRUSS BEARING POINT MUST BE SHOWN ON TRUSS ENGINEERING SHEET.

ALL ROOF TRUSSES SHALL BE ATTACHED TO PERPENDICULAR NON-LOAD BEARING WALLS WITH TRUSS CLIPS. CEILING GMB SHALL BE ATTACHED TO BLOCKING ON THE WALL AND NOT TO THE TRUSS FOR A DISTANCE OF 18" FROM THE WALL.

ALL FLOOR TRUSSES ON THE LOWEST FLOOR w/ TRUSSES SHALL BE ATTACHED TO PERPENDICULAR NON-LOAD BEARING WALLS WITH TRUSS CLIPS. CEILING GMB SHALL BE ATTACHED TO BLOCKING ON THE WALL AND NOT TO THE TRUSS FOR A DISTANCE OF 18" FROM THE WALL.

LIVE LOAD DEFLECTION SHALL NOT EXCEED 1/400 FOR FLOOR TRUSSES AND 1/360 FOR ROOF TRUSSES.

THE MANUFACTURER SHALL SUPPLY ALL REQUIRED HANGERS, HOLD-DOWN CLIPS, AND OTHER SPECIAL HARDWARE.

**MASONRY**

ALL MASONRY WORK SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF BIA AND NCHA SPECIFICATION FOR CONCRETE MASONRY CONSTRUCTION (ACI 511.1-16) AND "SPECIFICATIONS FOR MASONRY STRUCTURE (ACI 530.1-02)" PUBLISHED BY THE AMERICAN CONCRETE INSTITUTE.

PROVIDE CONTINUOUS MASONRY BOND BEAM SPANNING ALL EXPANSION JOINTS & WALL INTERSECTIONS.

PROVIDE (2) #5 BENT BARS WITH 3-FOOT LEGS AT EVERY CORNER OR WALL INTERSECTION.

CONTINUOUS TIE OR BOND BEAMS SHALL BE REINFORCED WITH NOT LESS THAN 2 #5 CONTINUOUS BARS. LINTELS SHALL BE THE SIZES SHOWN AND REINFORCED AS INDICATED ON THE DRAWINGS.

REINFORCED MASONRY WALLS SHALL HAVE ALL REINFORCED CELLS FILLED WITH CONCRETE. CONCRETE MAY BE PLACED IN MAXIMUM VERTICAL LIFTS NOT TO EXCEED 4-FEET. ROUGHEN ALL SURFACES OF CONCRETE FILL WHICH ARE TO RECEIVE ADDITIONAL LIFTS ABOVE.

MASONRY WALLS SHALL HAVE "DUR-O-WALL" (OR APPROVED EQUAL) TRUSS TYPE HORIZONTAL REINFORCEMENT AT 16"oc VERTICALLY ABOVE GRADE AND 8"oc VERTICALLY BELOW GRADE. COORDINATE BRICK TIE BACK REQUIREMENTS WITH ARCHITECTURAL DRAWINGS. UNLESS NOTED OTHERWISE, STOP ALL HORIZONTAL JOINT REINFORCING AT CONTROL JOINTS.

BRICK VENEER WALLS TO HAVE NON-CORROSIVE METAL TIES AT 16"oc VERTICALLY AND HORIZONTALLY AND COMPLY WITH ASTM A82 WITH A153, CLASS B-2 COATING. MINIMUM WIRE DIAMETER SHALL BE 0.1875 INCHES. PROVIDE WEEP HOLES AT 24"oc AT BASE FLASHING.

PROVIDE MIN. 2 COURSES 8"x 16" SOLID BEARING AT BEAM & HEADER BEARING POINTS IN CMU WALLS.

A36 STEEL LINTEL SIZES FOR OPENINGS PER 4" THICKNESS OF MASONRY WALL AS FOLLOWS:  
 4'-0" SPAN OR LESS L3x3 1/2"x 5/16" 7'-4" SPAN OR LESS L5x3 1/2"x 5/16"  
 5'-0" SPAN OR LESS L4x3 1/2"x 5/16" 9'-0" SPAN OR LESS L6x3 1/2"x 5/16"  
 PROVIDE MIN. 6" BEARING, EACH END & BRICK TIES, 16"oc @ 1st COURSE ABOVE LINTEL.

FILL SOLIDLY w/ 2,500psi ASTM C-476 GROUT, ALL BOND BEAMS, CELLS THAT ARE REINFORCED, WILL SECURE EXPANSION BOLTS, SHEAR PLATE ANCHOR BOLTS OR OTHER MECHANICAL ATTACHMENTS AND ALL CELLS BELOW GRADE.

REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM A-615, GRADE 60. SHOP FABRICATES REINFORCING BARS, WHICH ARE SHOWN TO BE HOOKED, OR BENT. PROVIDE A MINIMUM LAP OF 48 BAR DIAMETERS AT ALL SPLICES, UNLESS INDICATED OTHERWISE.

UNLESS OTHERWISE NOTED, ALL WALLS SHALL BE LAID IN RUNNING BOND. BOND CORNERS AND INTERSECTIONS OF LOAD-BEARING WALLS.

PROVIDE VERTICAL REINFORCING BARS OF THE GIVEN SIZE AND SPACING AS INDICATED. PROVIDE BARS AT ALL WALL CORNERS, INTERSECTIONS AND OPENINGS EDGES.

PROVIDE REBAR DONNELS FROM FOUNDATIONS TO MATCH VERTICAL REINFORCING SIZE AND SPACING. DONNELS SHALL HAVE STANDARD 90-DEGREE HOOKS AND LAP WITH THE FIRST LIFT OF REINFORCING.

PROVIDE BOND BEAM LINTELS AND BRICK SHELF ANGLES ABOVE ALL WALL OPENINGS.

PROVIDE JOIST & BEAM BEARING PLATES w/ OTHER ACCESSORIES AS INDICATED, WITH 3 COURSES OF SOLIDLY GROUTED CMU BELOW ALL BEAM BEARINGS OVER A WIDTH OF 2'-8" CENTERED ON THE BEAM.

PROVIDE CMU CONTROL JOINTS AS INDICATED, w/ ADDITIONAL JOINTS SUCH THAT THE SPACING BETWEEN JOINTS DOES NOT EXCEED A SPACING OF 3x WALL HEIGHT, 35' MAXIMUM, WHERE BEAMS OR LINTELS BEAR AT CMU CONTROL JOINTS, OFFSET & LAP THE VERTICAL REINFORCING AS INDICATED.

MASONRY CONTRACTOR SHALL PROVIDE ALL REQUIRED TEMPORARY BRACING DURING CONSTRUCTION.

**WOOD FRAMING**

NAIL IN ACCORDANCE WITH RECOMMENDED WOOD FASTENING SCHEDULE IN APPLICABLE BUILDING CODES (LATEST EDITION/HIGH WIND REGION). PROVIDE BLOCKING, BRIDGING AND BRACING PER SAME CODE. AT A MIN., PROVIDE BRIDGING AT EACH END OF THE JOIST, AND ONE ROW OF SOLID BRIDGING BELOW ALL INTERIOR BEARING PARTITIONS.

FASTENERS: JOIST HANGERS, HURRICANE ANCHORS, POST BASES AND OTHER FRAMING ANCHORS ARE TO BE AS MANUFACTURED BY SIMPSON STONG-TIE, U.S.P., OR EQUAL, AND ARE TO BE USED IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN SPECIFICATIONS. ALL FASTENERS TO BE 16 GA. MIN. UNLESS NOTED OTHERWISE. PROVIDE GALV. FINISH UNLESS NOTED OTHERWISE. JOIST HANGERS SHALL BE MIN. 16 GA. WITH SIZE AND PROFILE TO SUIT APPLICATION (U.N.O.). PROVIDE JOIST HANGERS FOR ALL FLUSH FRAMED JOISTS. ALL FASTENERS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE Z-MAX OR TRIPLE ZINC COATED, U.N.O.

THE NUMBER OF WALL STUDS AT BEARING POINTS OF 2X MEMBER BEAMS SHALL EXCEED THE NUMBER OF MEMBERS IN THE BEAM BY ONE. THE CENTERLINE OF THE BEAM SHALL BE THE CENTERLINE OF THE SUPPORTING WALL STUDS. (UNLESS NOTED OTHERWISE ON PLAN) ALL MICRO-LAM BEAMS SHALL HAVE 3 STUDS (MIN. & EXCEED WIDTH OF BEAM). CONTINUE THESE STUDS TO THE FOUNDATION WITH INTERMEDIATE SUPPORTS THROUGH FLOOR, BETWEEN LOWER WALL TOP PLATE & UPPER WALL BOTTOM PLATE.

ALL EXTERIOR POSTS TO BE TREATED 4x6 (U.N.O.). NOTCH TOP OF POST FOR BEAM BRG. (3" MAX.) AND THRU BOLT BEAM TO POST WITH (2) 1/2" DIA. GALV. BOLTS. ALTERNATE: PROVIDE COLUMN CAP CONNECTION WITH #4C SERIES BY SIMPSON STONG-TIE OR EQ. PROVIDE SOLID BLOCKING BELOW ALL COLUMNS, TO TRANSFER LOAD DIRECTLY TO FRAMING/FOUNDATION BELOW.

PROVIDE DOUBLE JOIST UNDER ALL PARTITIONS PARALLEL TO JOIST SPAN AND AROUND ALL FLOOR AND ROOF OPENINGS. SPACE & BLOCK IF PARTITIONS ABOVE IS A PLUMBING WALL. PROVIDE SOLID BLOCKING AT 12"oc BETWEEN JOISTS UNDER PARTITIONS ABOVE) WHICH ARE PARALLEL TO THE JOISTS BUT NOT DIRECTLY OVER THE JOISTS. BLOCKING SHALL BE NOT LESS THAN 2" IN THICKNESS & SHALL MATCH THE DEPTH OF THE JOISTS. TRUSSES MAY USE TRUSS BLOCKS.

ALL MULTI-PLY BEAMS SHALL BE NAILED WITH 3 ROWS OF 10d NAILS AT 8"oc STAGGERED OR BOLTED WITH 1/2" DIA. BOLTS AT 16"oc (U.N.O.).

PROVIDE COLLAR TIES OF 1x6 BOARDS AT UPPER 1/3 DOWN FROM RIDGE BEAMS SPACED 48"oc MAXIMUM. (FOR CONVENTIONAL FRAMING)

BALLOON FRAME ALL END WALLS WITH CATHEDRAL CEILING (U.N.O.).  
 2x4 @ 16"oc UP TO 9'-0", 2x6 @ 16"oc UP TO 14'-0" & 2x8 @ 16"oc UP TO 18'-0"

FASTEN GABLE-END WALL STUDS TO CEILING DIAPHRAGM BY FASTENING NAILER TO EACH STUD AND BY FASTENING CEILING TO NAILER WITH 8d NAILS AT 6"oc

WHERE DECKS FASTEN TO HOUSE FRAMING, PROVIDE CONTINUOUS TREATED LEDGER THRU-BOLTED TO FLOOR STRUCTURE WITH (2) 1/2" DIA. BOLTS AT 16"oc PROVIDE HOT-DIPPED GALV. JST. HANGER TO LEDGER.

ALL EXTERIOR WALLS SHALL BE STUDS AT 16"oc AS SPECIFIED ON PLANS WITH 7/16" OSB EXTERIOR SHEATHING. BLOCKING OF HORIZONTAL PANEL EDGES IS NOT REQUIRED. NAIL ALL REQUIRED PANEL EDGES WITH 8d NAILS AT 6"oc AND INTERMEDIATE STUDS WITH 8d NAILS AT 12"oc

ROOF AND FLOOR FRAMING LAYOUTS ARE PROVIDED TO ILLUSTRATE CONDITIONS OF CONSTRUCTION AND DO NOT NECESSARILY INDICATE SPECIFIC QUANTITIES OF MATERIALS OR COMPONENTS REQUIRED FOR CONSTRUCTION.

CONSTRUCTION BRACING SHALL BE PROVIDED BY THE CONTRACTOR TO MAINTAIN THE BUILDING PLUMB AND TRUE. THIS BRACING SHALL REMAIN UNTIL THE SPECIFIED SHEARWALLS ARE TOTALLY INSTALLED.

PRESCRIPTIVE BRACED WALL SEGMENTS SHALL HAVE STUDS AT 16"oc (MAX.) WITH 1/2" OSB EXTERIOR SHEATHING. BLOCKING OF HORIZONTAL PANEL EDGES IS NOT REQUIRED. NAIL ALL SHEATHING PANEL EDGES WITH 8d NAILS AT 6"oc AND INTERMEDIATE STUDS WITH 8d NAILS AT 12"oc

SHEARWALLS SHALL HAVE STUDS @ 16"oc (MAX.) WITH 1/2" OSB EXTERIOR SHEATHING (U.N.O., SEE PLAN). BLOCKING OF HORIZONTAL PANEL EDGES IS REQUIRED. NAIL ALL SHEATHING PANEL EDGES WITH 8d NAILS AT 6"oc (U.N.O., SEE PLAN) AND INTERMEDIATE STUDS WITH 8d NAILS AT 12"oc (U.N.O., SEE PLAN)

SHEAR WALL HOLD-DOWNS: ALL SHEAR WALLS SHOWN ON PLANS TO HAVE HOLD-DOWNS AT THE BASE AT EACH WALL END SHALL BE AS FOLLOWS:  
 \* AT UPPER FLOORS USE (2) SIMPSON HDBA'S OR (1) SIMPSON FT7 AT EACH END OF SHEAR WALL SEGMENT AND EACH EXTERIOR CORNER OF BUILDING (U.N.O., SEE PLAN)  
 \* AT CONCRETE FOUNDATIONS USE (1) SIMPSON HDBA AT EACH END OF SHEAR WALL SEGMENT AND AT EACH EXTERIOR CORNER OF BUILDING (U.N.O., SEE PLAN)  
 \* AT PILE/GIRDER SUPPORTED FLOOR, USE (2) SIMPSON HDBA'S OR (1) SIMPSON FT7 AT EACH END OF SHEAR WALL SEGMENT AND AT EACH EXTERIOR CORNER OF BUILDING (U.N.O., SEE PLAN)  
 \* PROVIDE 3 STUDS MIN. AT EACH HOLD-DOWN (U.N.O., SEE PLAN)  
 \* PROVIDE TRIPLE JOISTS BELOW SHEAR WALLS THAT RUN PARALLEL TO FLOOR FRAMING (U.N.O., SEE PLAN)

ALL INTERIOR SHEAR WALLS SHOWN ON THE PLANS SHALL HAVE STRUCTURAL SHEATHING THAT EXTENDS TO THE UNDERSIDE OF THE FLOOR SHEATHING ABOVE. WHERE JOISTS RUN PARALLEL TO THE SHEAR WALL, PROVIDE A DBL. JOIST ABOVE THE SHEAR WALL. WHERE JOISTS RUN PERPENDICULAR, PROVIDE 2X BRIDGING ABOVE SHEAR WALL AND "TOOTH" PLYWOOD AROUND JOISTS. NAIL THROUGH FLOOR SHEATHING ABOVE INTO WALL WITH (2) 10d NAILS AT 4"oc

ALTERNATE POWER NAILS (FOR FRAMING MEMBERS ONLY, - 0.1134 x 2 1/8" FOR 8d NAILS & 0.1316 x 3" FOR 16d NAILS  
 PROVIDE DEFORMED SHANK NAILS AS REQ. BY U.L. RATINGS.

**STEEL**

FABRICATION AND ERECTION OF ALL STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE LATEST SPECIFICATION OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.

PROVIDE WELDED CONNECTIONS TYPICALLY UNLESS OTHERWISE NOTED.

WELDS SHALL BE MADE ONLY BY WELDERS WHO HAVE BEEN PREQUALIFIED BY TESTS OF THE AMERICAN WELDING SOCIETY, PRESCRIBED IN THE STRUCTURAL WELDING CODE, ANS D.11 (LATEST EDITION).

ANY CONNECTION NOT SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS SHALL BE DESIGNED AND DETAILED BY THE STRUCTURAL STEEL FABRICATOR. SEE THE TYPICAL BEAM CONNECTION DETAILS ON THE DRAWINGS.

HILL BOTTOM OF ALL COLUMNS AND FINISH TOP OF ALL BASE PLATES IN ACCORDANCE WITH A.I.S.C. SPECIFICATIONS. BASE PLATES SHALL BE WELDED TO BOTTOM OF COLUMNS.

CONNECTIONS SHALL BE AISC STANDARD.

PROVIDE BASE PLATE FOR ALL STRUCTURAL STEEL BEAMS BEARING ON CONCRETE OR MASONRY. GROUT FOR SETTING BEARING SURFACES SHALL BE NON-SHRINK, NOT-STAINING, EQUAL TO "MASTERFLOX 713" BY THE MASTER BUILDERS CORPORATION.

SPECIFIED GROUT THICKNESS INCLUDES 1/4 INCH THICK LEVELING PLATES WHICH SHALL BE USED UNDER ALL BEAMS AND COLUMNS RESTING ON CONCRETE.

**SCHEDULE OF CONSTRUCTION MATERIALS**

CONCRETE	LOCATION	COMP. STRENGTH	SLURP
	BASEMENT WALLS & FDN NOT EXPOSED TO WEATHER	3000 PSI (2)	4' +/- 1"
	BASEMENT SLABS AND INTERIOR SLABS ON GRADE	3000 PSI	4' +/- 1"
	BASEMENT WALLS, FENS, EXTERIOR WALLS & OTHER CONCRETE EXPOSED TO WEATHER	3000 PSI (3)	4' +/- 1"
	DRIVEWAYS, CURBS, WALKS, PATIOS, STEPS AND UNHEATED GARAGE FLOORS EXPOSED TO WEATHER	3500 PSI (3)	4' +/- 1"

NOTES  
 1) THE COMPRESSIVE STRENGTH IS BASED ON 28-DAY CONDITIONS STRENGTH.  
 2) CONCRETE SUBJECTED TO FREEZE AND THAW CONDITIONS DURING CONSTRUCTION SHALL BE AIR-ENTRAINED (4% +/- 1%).  
 3) CONCRETE SHALL BE AIR-ENTRAINED (4% +/- 1%).

MASONRY	MATERIAL	SPECIFICATION
	HOLLOW CMU	NORMAL HEIGHT: ASTM C90, GRADE N, Fm=1500 PSI
	FACE BRICK	ASTM C216, SEVERE WEATHER BRICK, TYPE FBX, Fm=2000 PSI
	STONE VENEER	OWNER APPROVED
	CONCRETE BRICK	ASTM C15 TYPE I, GRADE 8
	SOLID CMU	NORMAL HEIGHT: ASTM C45, GRADE N
	MORTAR: SINGLE W/ THE ABOVE GRADE	ASTM C270 PROJECTION SPECIFICATION MORTARS SHALL CONSIST OF TYPE I PORTLAND CEMENT, TYPE S HYDRATED LIME AND APPROVED AGGREGATE, WITH 1800 psi MINIMUM AVERAGE COMPRESSIVE STRENGTH OF 2-INCH CUBES AT 28-DAYS.
	MORTAR: SINGLE W/ THE BELOW GRADE	ASTM C270 PROJECTION SPECIFICATION MORTARS SHALL CONSIST OF TYPE I PORTLAND CEMENT, TYPE H HYDRATED LIME AND APPROVED AGGREGATE, WITH 2500 psi MINIMUM AVERAGE COMPRESSIVE STRENGTH OF 2-INCH CUBES AT 28-DAYS.
	MORTAR: VENEER	ASTM C270 PROJECTION SPECIFICATION MORTARS SHALL CONSIST OF TYPE I PORTLAND CEMENT, TYPE H HYDRATED LIME AND APPROVED AGGREGATE, WITH 750 psi MINIMUM AVERAGE COMPRESSIVE STRENGTH OF 2-INCH CUBES AT 28-DAYS.

REINFORCING STEEL	MATERIAL	SPECIFICATION
	REBAR	HIGH STRENGTH HEN BILLET STEEL CONFORMING TO ASTM A-615, GRADE 60 (60,000 PSI) - DEFORMED
	WELDED FABRIC	ASTM A-185

PROTECTION	CLEAR COVER (IN)
FOOTINGS AND OTHER CONCRETE POURED AGAINST EARTH	3"
FORMED CONCRETE EXPOSED TO EARTH	2"
FORMED CONCRETE NOT EXPOSED TO WEATHER OR EARTH	1 1/2"
SLABS ON GROUND, UNLESS OTHERWISE NOTED	MID-DEPTH OF SLAB
REINFORCED MASONRY WALLS	MID-DEPTH OF WALL

STRUCTURAL STEEL	SHAPE	SPECIFICATION
	I-BEAMS	STRUCTURAL STEEL I BEAMS SHALL CONFORM TO ASTM A572 GRADE 50 (50 KSI).
	TUBE	STRUCTURAL STEEL TUBING SHALL CONFORM TO ASTM A500, GRADE B, UNLESS OTHER SIDE NOTED IN THE PROJECT SPECIFICATIONS
	PIPE	STRUCTURAL STEEL PIPE SHALL CONFORM TO ASTM A36 (36KSI), UNLESS OTHER SIDE NOTED IN THE PROJECT SPECIFICATIONS
	ALL OTHER SHAPES	ALL OTHER STRUCTURAL STEEL, INCLUDING PLATES AND MISCELLANEOUS SHAPES SHALL CONFORM TO ASTM A36 (36KSI)
	CONNECTION	
	BOLTS	BOLTS FOR CONNECTING STRUCTURAL STEEL SHAPES SHALL BE ASTM A325-N, 1-INCH DIAMETER, UNLESS OTHERWISE NOTED ON THE DRAWINGS OR IN THE PROJECT SPECIFICATION
	ANCHOR BOLTS	ANCHOR BOLTS SHALL CONFORM TO ASTM A307.
	WELDS	WELDING ELECTRODES SHALL BE E70 SERIES

WOOD	MATERIAL	DIMENSION AND STRUCTURAL COMPOSITE LUMBER DESIGN VALUES (1)					
		F <sub>b</sub>	F <sub>t</sub>	F <sub>v</sub>	F <sub>c1</sub>	F <sub>c2</sub>	E x 10 <sup>6</sup>
UNTREATED FRAMING (2)	2x 3x, OR 2x	875	450	135	425	150	1.4
	5x5 AND LARGER (B)	600	300	125	425	425	1.0
	5x5 AND LARGER (P)	500	325	125	425	500	1.0
TREATED FRAMING (3)	2x4	1500	825	175	565	1650	1.6
	2x6	1250	725	175	565	1600	1.6
	2x8	1200	650	175	565	1550	1.6
	2x10	1050	575	175	565	1500	1.6
	2x12	975	550	175	565	1450	1.6
LVL	5x5 AND LARGER	850	550	165	375	525	1.2
	COLUMNS AND BEAMS	2650	1650	285	750	3000	1.7
LVL (2.0E)	BEAMS	3100	2150	285	750	3000	2.0

MATERIAL	DESIGN VALUES (1)	DESIGN VALUES (1)					
		F <sub>b</sub>	F <sub>t</sub>	F <sub>v</sub>	F <sub>c1</sub>	F <sub>c2</sub>	E x 10 <sup>6</sup>
UNTREATED FRAMING	BEAMS 2x4-12E	2400	1850	240	650	1600	1.8
	COLUMNS #2 DF	1700	1800	180	560	1750	1.6

MATERIAL	SPECIFICATION
PREFABRICATED WOOD I-JOISTS	PREFABRICATED WOOD I-JOISTS SHALL BE MANUFACTURED BY BOISE CASCADE, LLC. OR APPROVED SUBSTITUTE. THE MANUFACTURER SHALL SUPPLY ALL REQUIRED HANGERS, WEB STIFFENERS, SQUASH BLOCKS, BEVELED BEARING PLATES, AND OTHER SPECIAL HARDWARE. THE MANUFACTURER SHALL SUBMIT ERECTION DRAWINGS TO THE ENGINEER PRIOR TO FABRICATION ALL PREFABRICATED WOOD I-JOISTS SHALL BE INSTALLED AND BRACED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
PLYWOOD/OSB	DOC PSI, DOC PS2, CSA4087 OR CSA2025 ADVARTYTECH, STRUCTURE WOOD NOT ALLOWED.

NOTES  
 1) DESIGN VALUES ARE FOR NORMAL LOAD DURATION AND DRY SERVICE CONDITIONS. SEE NDS OR MANUFACTURER SPECIFICATION FOR A COMPREHENSIVE DESCRIPTION OF DESIGN VALUE ADJUSTMENT FACTORS.  
 2) FRAMING DESIGN VALUES ARE BASED ON SPF No.2.  
 3) FRAMING DESIGN VALUES ARE BASED ON STP No.2.

**GOVERNING BUILDING CODES AND STANDARDS**

THE FOLLOWING CODES AND STANDARDS, INCLUDING ALL SPECIFICATIONS REFERENCED WITHIN, SHALL APPLY TO THE DESIGN, CONSTRUCTION, QUALITY CONTROL AND SAFETY OF ALL WORK PERFORMED ON THE PROJECT. USE THE LATEST EDITIONS UNLESS NOTED OTHERWISE.  
 \* INTERNATIONAL RESIDENTIAL CODE (IRC), INTERNATIONAL CODE COUNCIL, INC., 2018  
 \* MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ANSI/ASCE 07-10), AMERICAN SOCIETY OF CIVIL ENGINEERS.  
 \* BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318-11, AMERICAN CONCRETE INSTITUTE.  
 \* ACI MANUAL OF CONCRETE PRACTICE - PARTS I THROUGH 5 - 2011  
 \* MANUAL OF STANDARD PRACTICE, CONCRETE REINFORCING STEEL INSTITUTE.  
 \* MANUAL OF STEEL CONSTRUCTION - 13TH EDITION, AMERICAN INSTITUTE OF STEEL CONSTRUCTION (INCLUDING SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS, SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM ASSES OR ANFO BOLTS, AND AISC CODE OF STANDARD PRACTICE WITH EXCEPTION, IF ANY, AS INDICATED IN THE SPECIFICATIONS).  
 \* MANUAL OF STEEL CONSTRUCTION, VOLUME II CONNECTIONS, ASD 13TH EDITION/LRFD 1ST EDITION, AMERICAN INSTITUTE OF STEEL CONSTRUCTION.  
 \* DETAILING FOR STEEL CONSTRUCTION, AMERICAN INSTITUTE OF STEEL CONSTRUCTION.  
 \* STRUCTURAL WELDING CODE ANS/AWS D 1.1-92, AMERICAN WELDING SOCIETY.  
 \* DESIGN MANUAL FOR FLOOR DECKS AND ROOF DECKS, STEEL DECK INSTITUTE.  
 \* SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS AMERICAN IRON AND STEEL INSTITUTE, AISI 900-2007.  
 \* BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530-10/ASCE 5-05/TMS 402-05) & SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1-05/ASCE 6-05/TMS 602-05).  
 \* NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION/ 2012, AMERICAN FOREST & PAPER ASSOCIATION.

**DESIGN LOADS**

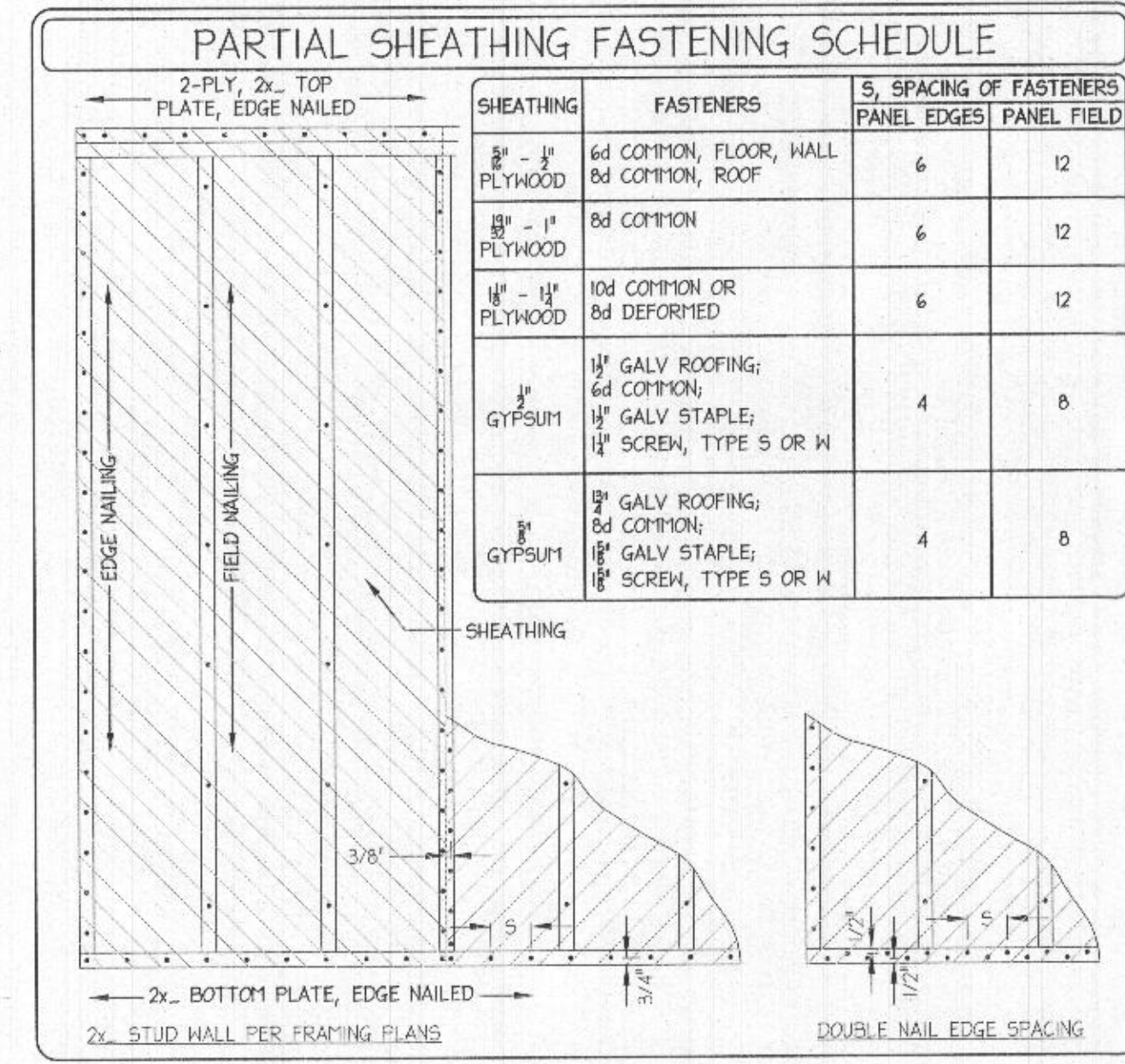
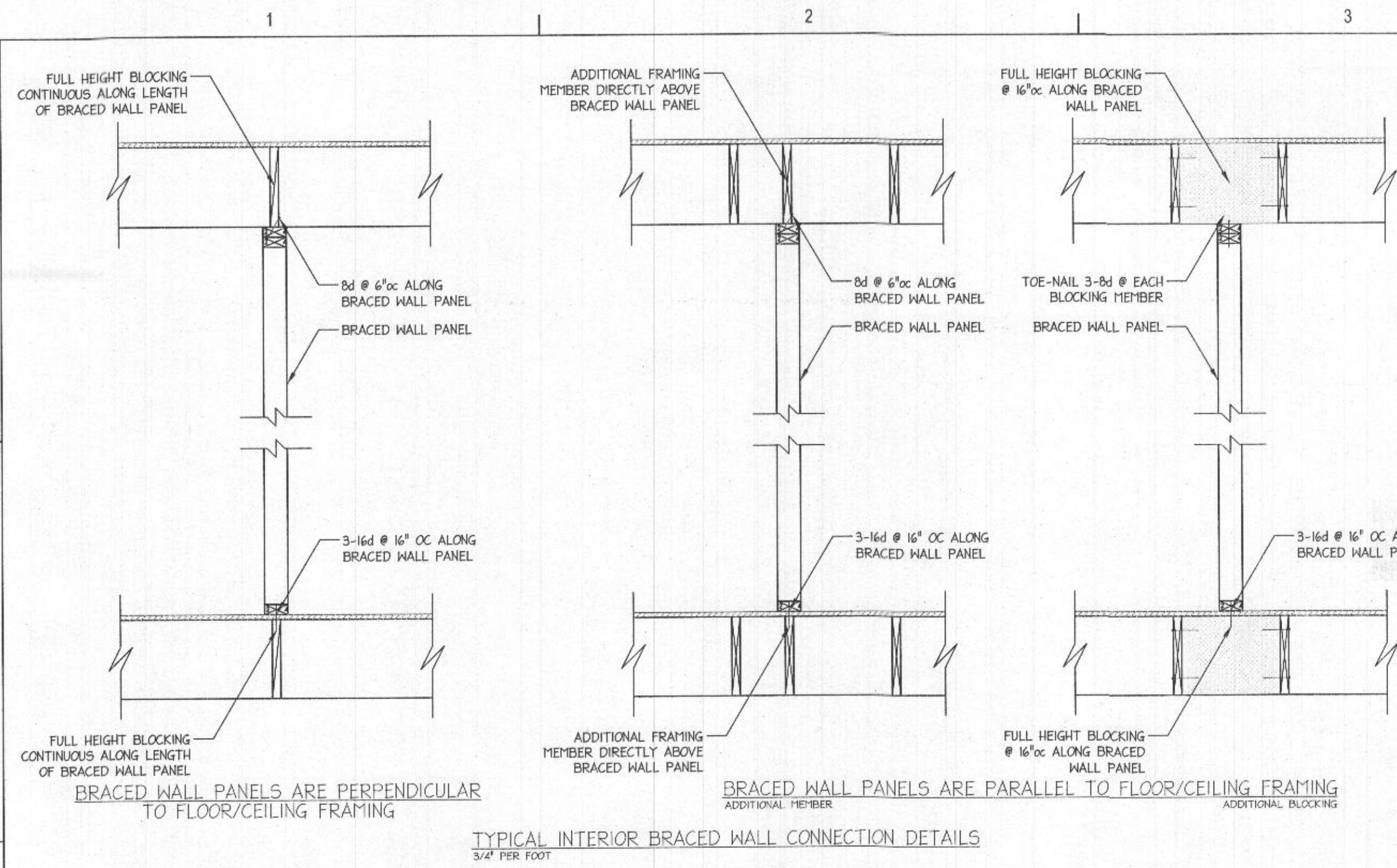
	LIVE LOADS	DEAD LOADS	TOTAL
ROOF TRUSSES	30 PSF	10 PSF (TOP & BOTTOM)	50 PSF
RAFTERS	30 PSF	12 PSF	42 PSF
ATTIC FLOORS (TYP)	30 PSF	12 PSF	42 PSF
LTD STORAGE	20 PSF	12 PSF	32 PSF
NO STORAGE	10 PSF	5 PSF	15 PSF
SLEEPING ROOFERS	30 PSF	12 PSF	42 PSF
OTHER FLOORS	40 PSF	12 PSF	52 PSF
GARAGE FLOORS	50 PSF	50 PSF	100 PSF
DECKS	40 PSF	10 PSF	50 PSF
BALCONY	60 PSF	10 PSF	70 PSF
STAIRS	40 PSF	20 PSF	60 PSF
ROOF LIVE LOAD	DESIGN MINIMUM	30 PSF	16 PSF

MIND LOAD	BASIC WIND SPEED (3 SEC GUST)	15 MPH
	WIND PRESSURE (ROOF AVG.)	10.0 PSF
	WIND PRESSURE (WALL AVG.)	27.9 PSF
	WIND LOAD IMPORTANCE	1.0
	WIND EXPOSURE CATEGORY	EXPOSURE B

SNOW LOAD	GROUND SNOW LOAD (F <sub>s</sub> )	30 PSF
	THERMAL FACTOR	1.1
	SNOW EXPOSURE FACTOR (C <sub>e</sub> )	1.0
	SNOW LOAD IMPORTANCE FACTOR	1.00
	SNOW LOAD (ROOF)	18 PSF
	MINIMUM SNOW LOAD	20 PSF
	RAIN-ON-SNOW	23.0 PSF

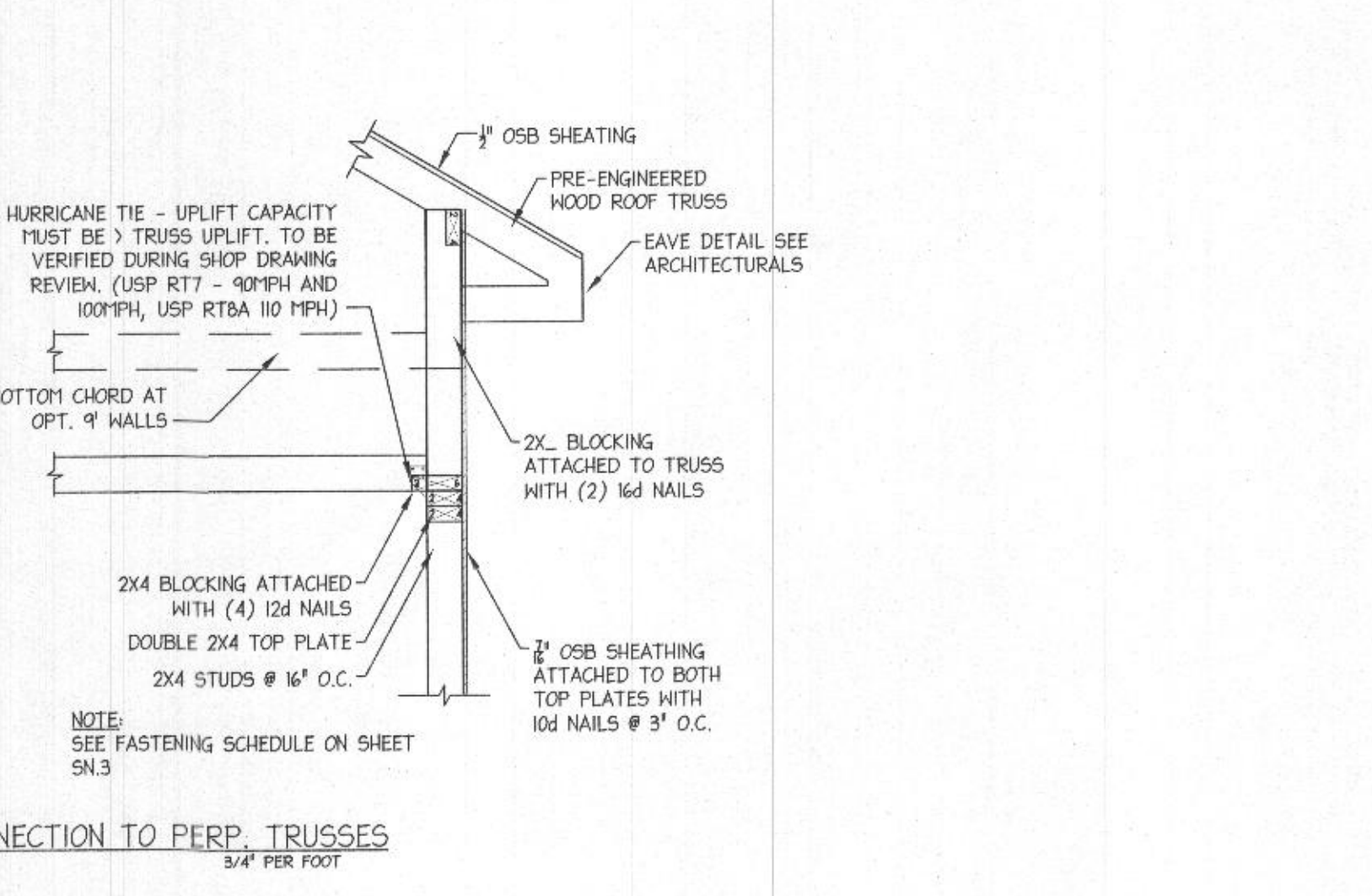
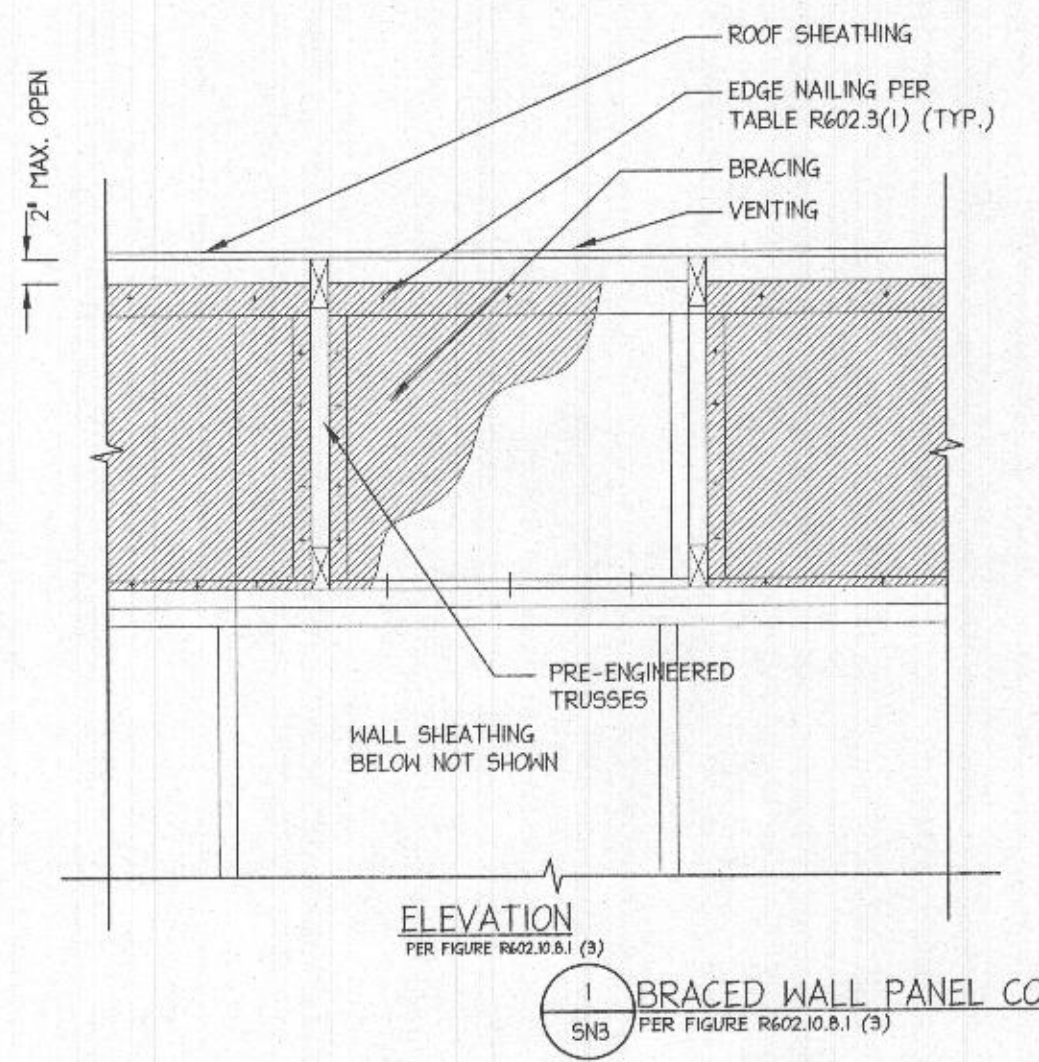
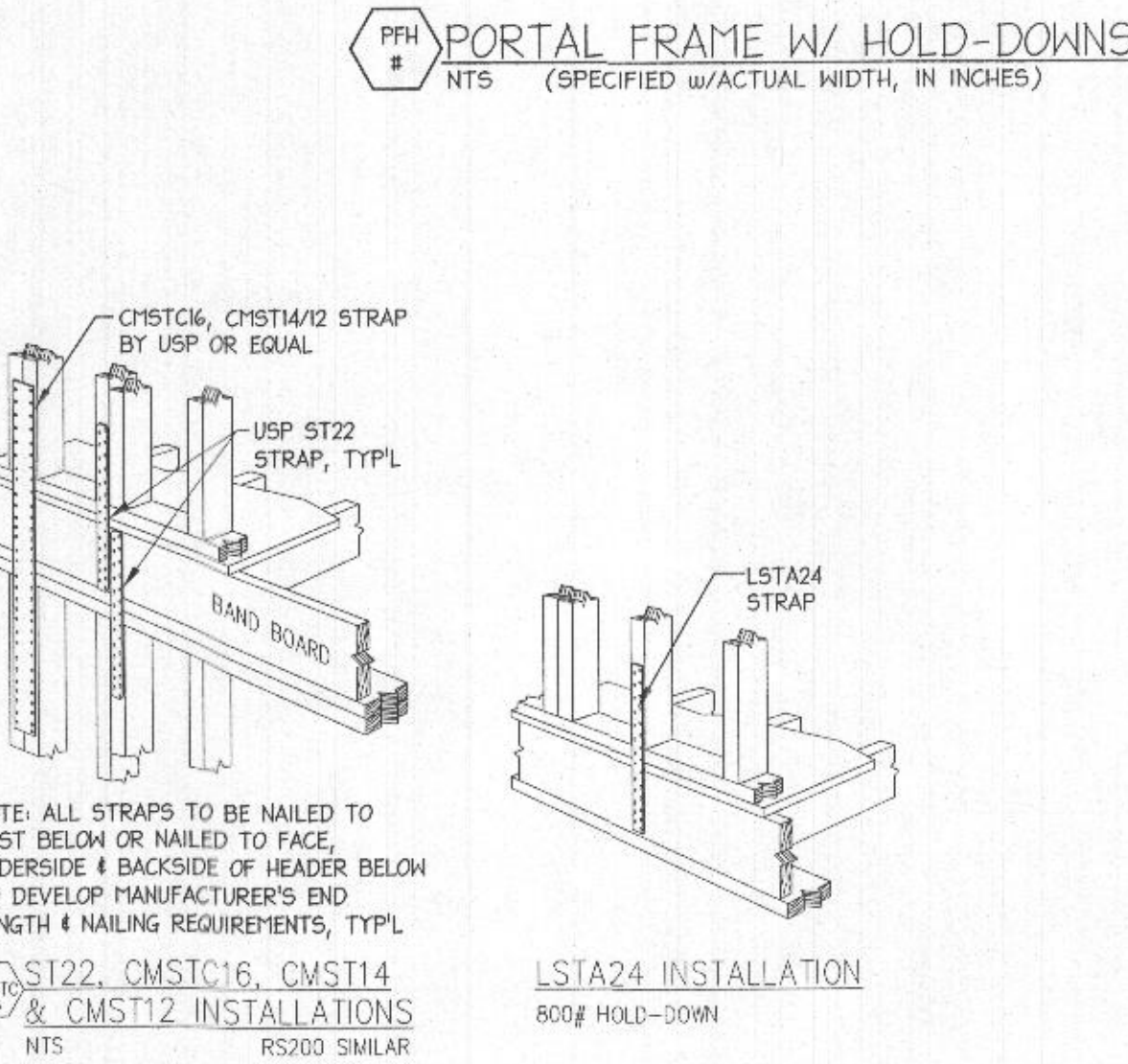
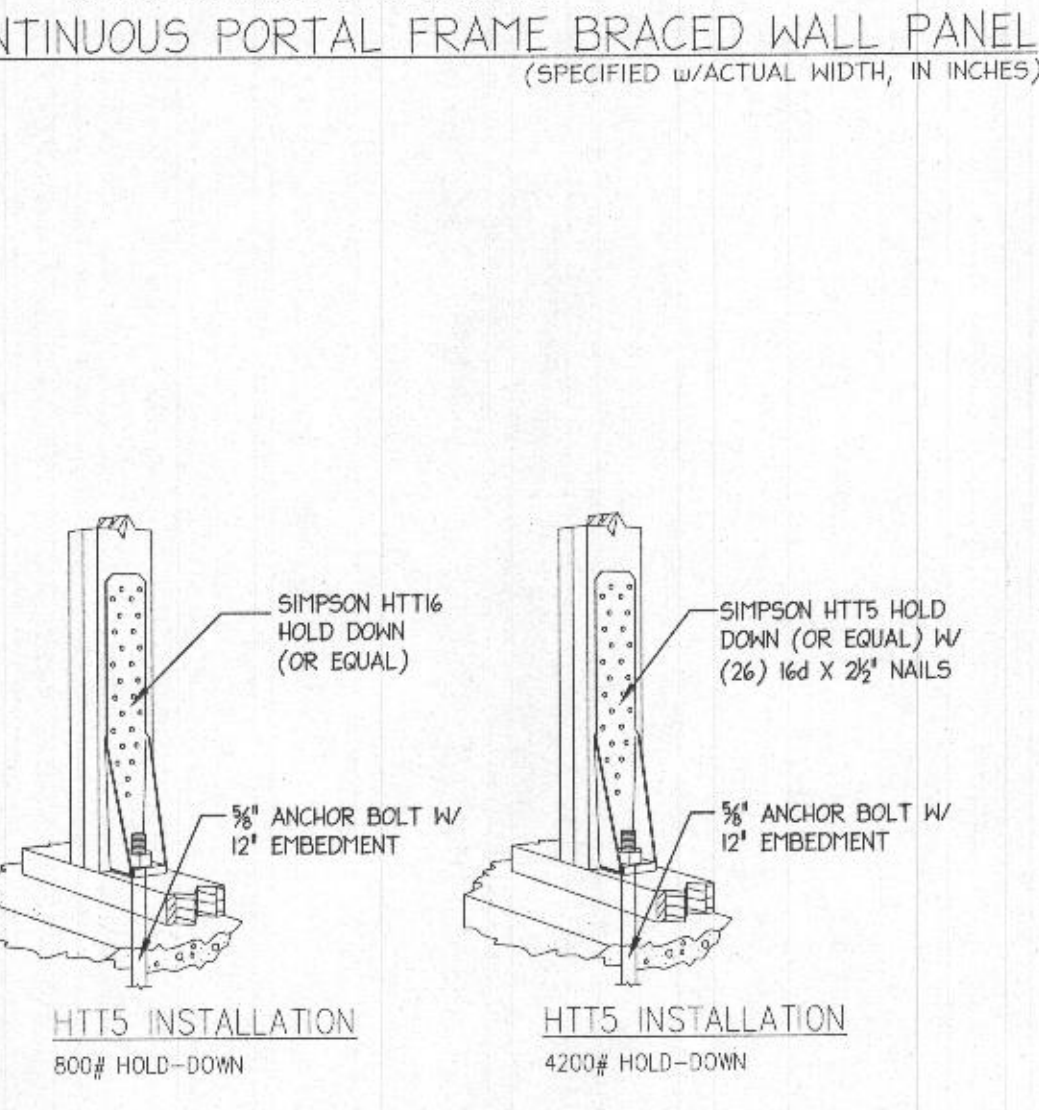
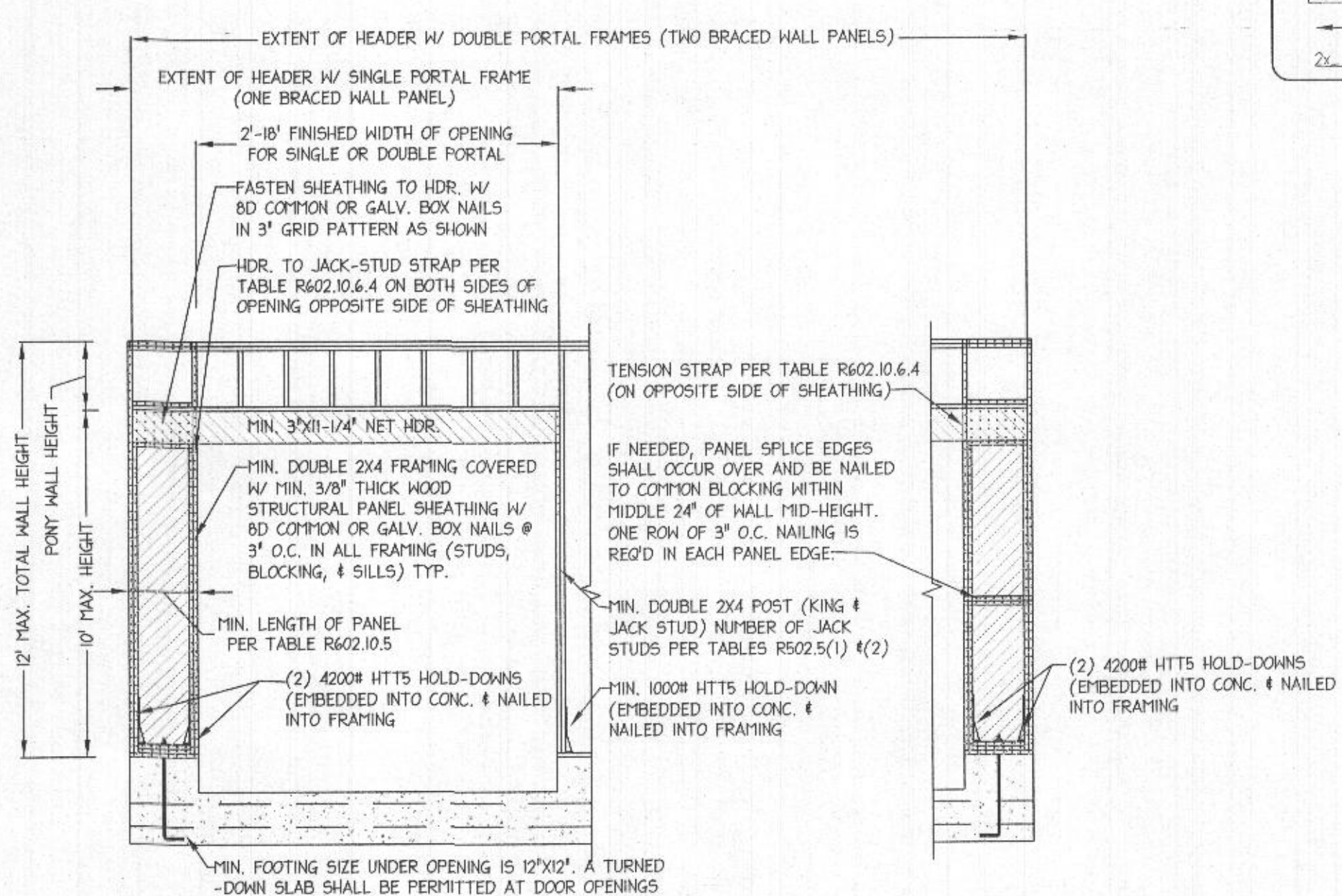
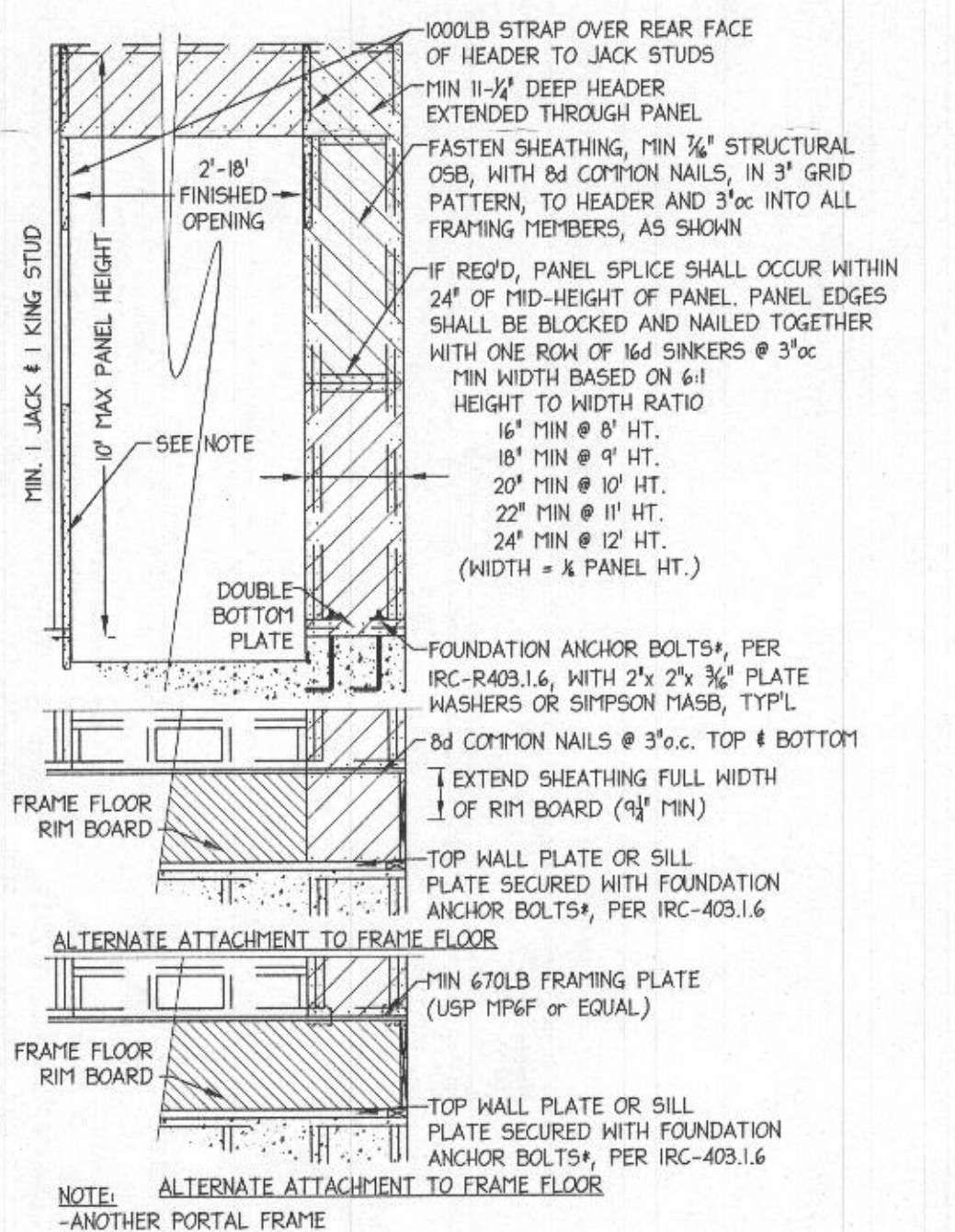
\*ADDITIONAL DRIFT AND SLIDING SNOW LOADS HAVE BEEN CONSIDERED WHERE AP





**PARTIAL FASTENING SCHEDULE**

MARK	CONNECTION	FASTENING	DETAIL
1	TOP PLATE TO STUD, END NAIL	2X4 2-16d 2X6 3-16d 2X8 4-16d 2X10 5-16d 2X12 6-16d	(5)
2	DOUBLE TOP PLATE, FACE NAIL	10d @ 24" OC	(1, 2, 3)
3	BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	16d TOENAILS @ 6" OC (MIN 2 PER BLOCK)	(6, 7)
4	CEILING JOISTS TO PLATE, TOE NAIL	(2) 16d	(1, 2)
5	CEILING JOIST/COLLAR TIE TO RAFTER, FACE NAIL	(6) 16d (MIN)	(1, 2)
6	RAFTER / TRUSS TO PLATE, TOE NAIL	(3) 16d	(1, 2)
7	BLOCKING TO JOIST OR RAFTER, EACH END	(2) 16d, TOE NAIL OR (2) 16d, END NAIL	(8, 9, 10, 11)
8	STUD TO SOLE PLATE, END NAIL	2X4 (2) - 16d 2X6 (3) - 16d 2X8 (4) - 16d 2X10 (5) - 16d 2X12 (6) - 16d	(1, 2)
9	SOLE PLATE TO JOIST OR BLOCKING AT BRACED WALL SEGMENTS, FACE NAIL	3-16d @ 16" OC 4-16d @ 19.2" OC OR 5-16d @ 24" OC	(8, 9, 10, 11)
10	SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL	2-16d @ EACH JOIST OR BLOCKING	(1, 2)
11	SOLE PLATE TO RIM BOARD, FACE NAIL	16d @ 16" OC	(1, 2)
12	RIM BOARD TO TOP/ SILL PLATE, TOE NAIL	10d @ 6" OC	(8, 9, 10, 11)
13	JOIST TO RIM BOARD, END NAIL	(3) 16d	(8, 9, 10, 11)
14	JOIST TO TOP / SILL PLATE OR GIRDER, TOE NAIL	(2) 16d	(8, 9, 10, 11)
15	SILL PLATE TO FOUNDATION WALL	3/8" ANCHOR BOLTS (7" MIN EMBEDMENT INTO WALL) @ 48" OC (MAX) (MIN 2 PER PLATE, WITH 1 WITHIN 12" OF END OF PLATE)	(8, 9, 10, 11)
16	TOP PLATE LAPS SPlice, FACE NAIL (4'-0" MINIMUM)	(8) 16d	(16)
17	DOUBLE STUDS, FACE NAIL (STAGGER)	10d @ 12" OC EACH FACE	(16)
18	JACK STUD TO KING STUD, FACE NAIL (STAGGER)	10d @ 12" OC EACH FACE	(16)
19	KING STUD TO HEADER, FACE NAIL - EACH PLY	(3) 16d	(17, 18, 19)
20	CONTINUED HEADER, TWO PIECES	16d @ 16" OC ALL EDGES & 4-16d NAILS AT ENDS	(17, 18, 19)
21	BUILT UP HEADER, TWO PLIES WITH 1/2" SPACER	16d @ 16" OC ALL EDGES & 4-16d NAILS AT ENDS	(17, 18, 19)
22	TOP PLATE LAP AT WALL INTERSECTION, FACE NAIL	(2) 10d	(20, 21)
23	CEILING JOIST TO JOIST, LAP OVER PARTITION	(5) 10d FACE NAILS	(20, 21)
24	RAFTER TO RIDGE, VALLEY OR HIP RAFTER	(3) 16d FACE NAILS, (4) 16d TOE NAILS	(23, 24)
25	BUILT-UP CORNER STUDS (THREE STUDS MINIMUM)	16d @ 16" OC	(24)
26	BUILT-UP BEAM AND GIRDERS, 2-INCH LUMBER LAYERS, NAILING PER LAYER	16d @ 16" OC ALL EDGES & 4-16d NAILS AT ENDS AND SPLICES	(24)
27	INTERMEDIATE SUPPORT POST TO HEADER, TOE NAIL	(2) 16d EACH PLY OF POST	(25)



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5051 GRAPE MYRTLE CT  
ELLICOTT CITY, MD 21042

ARCHITECT \_\_\_\_\_

CONTRACTOR \_\_\_\_\_

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 24518 EXPIRATION DATE: 01-21-2023



SCALE: AS NOTED  
DRAWN BY: AA CHECKED BY: JMO

ISSUE: \_\_\_\_\_ DATE: \_\_\_\_\_  
ISSUED FOR PERMITS: \_\_\_\_\_ 03-10-2023

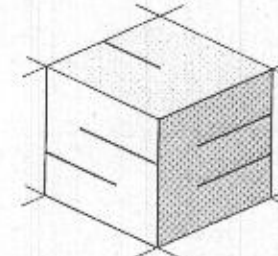
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**GENERAL STRUCTURAL NOTES & SCHEDULES**

**S003**

- LEGEND**
- ▨ INTERIOR LOAD BEARING WALL
  - SQUASH BLOCKS
  - BP BLOCKING PANELS
  - ⊕ PLUMBING DROP

  
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PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 24518 EXPIRATION DATE: 01-21-2025

  
 03/10/2023

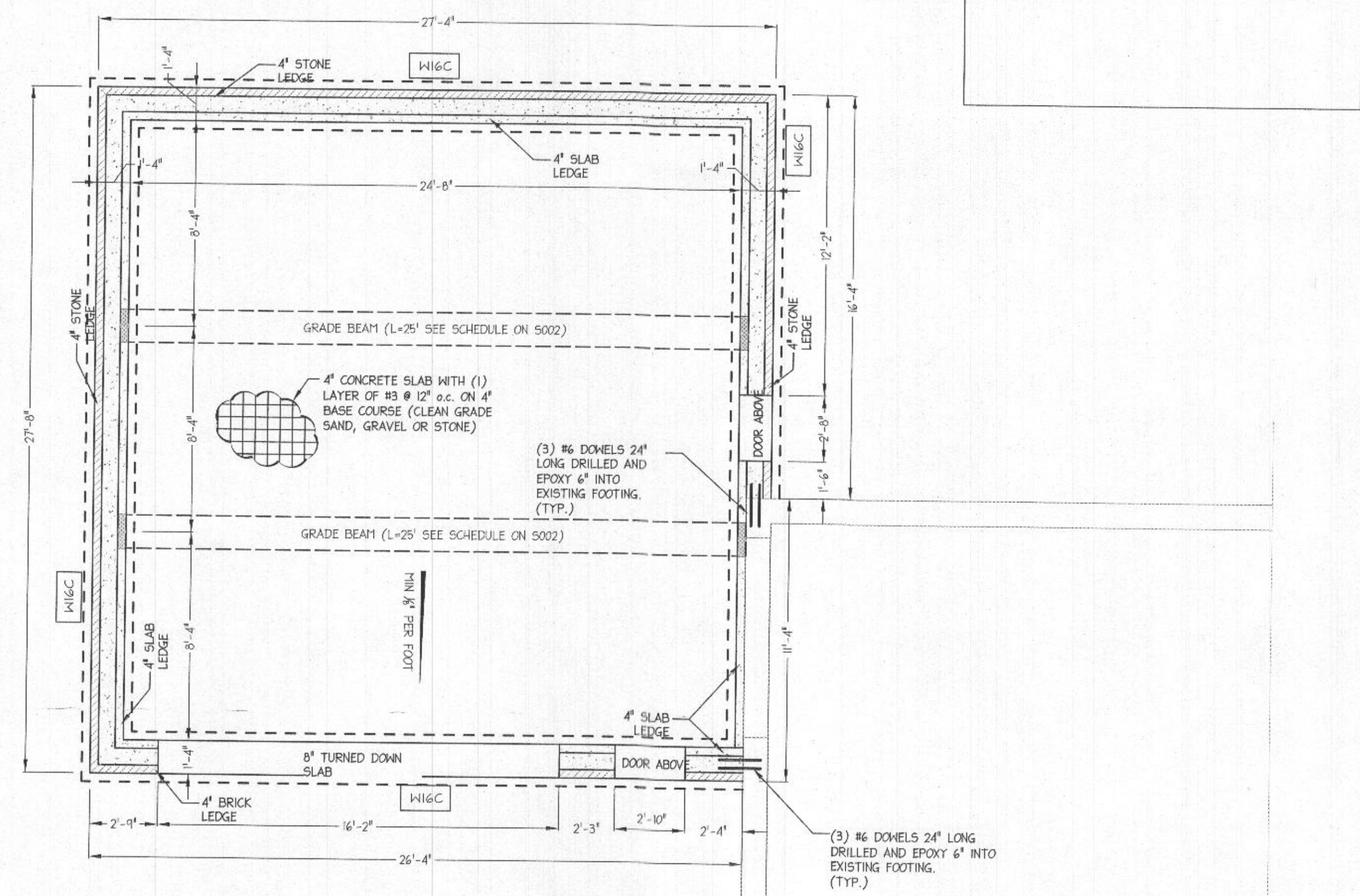
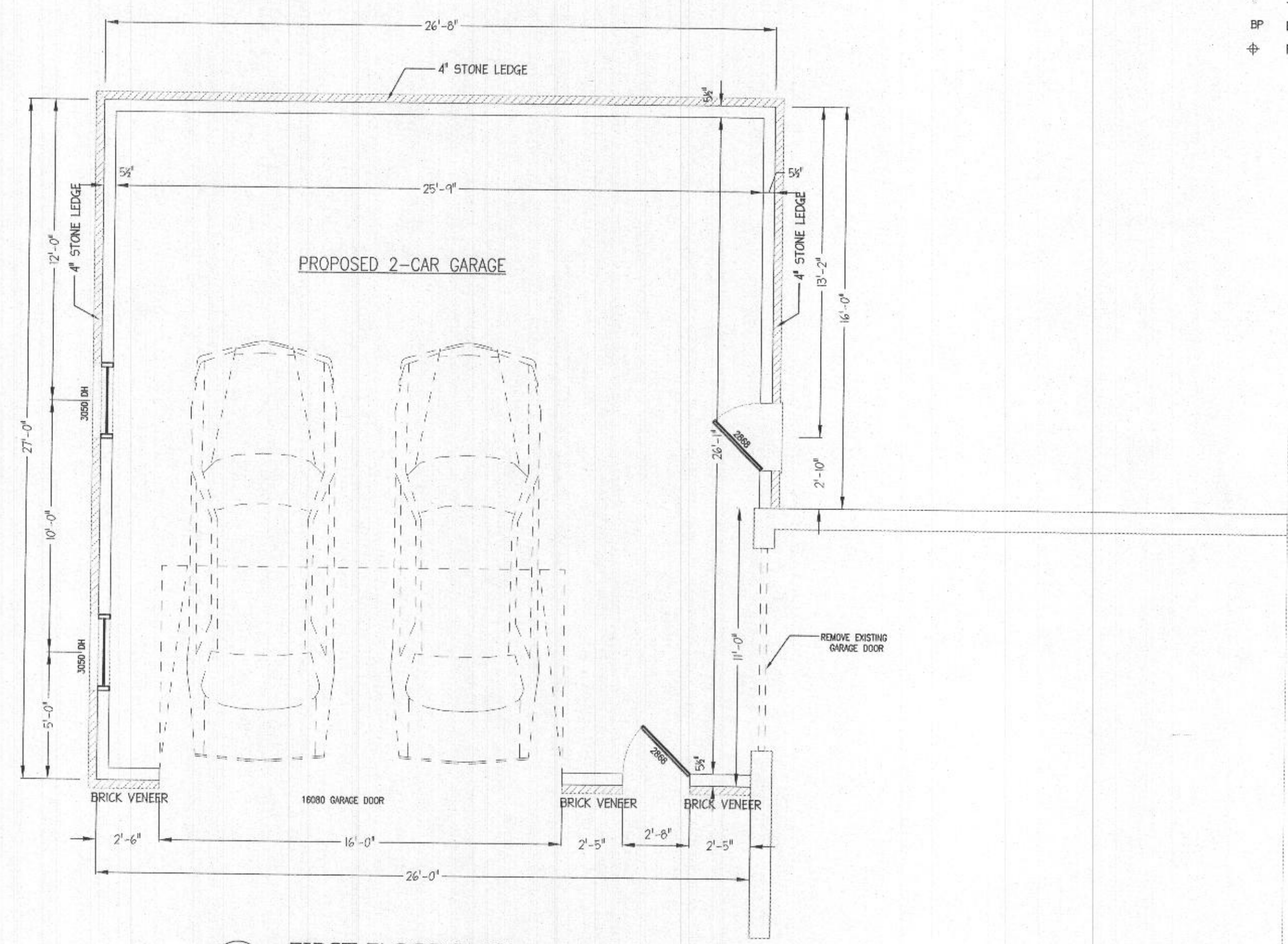
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ISSUE:	DATE:
ISSUED FOR PERMITS	03-10-2023

**FOUNDATION AND FIRST  
FLOOR  
PLAN & NOTES**

S004



**BEAM & POST SCHEDULE**

BEAM MARKS ARE PRECEDED BY # OF FLIES - 1, 2, 3 OR 4 AND END WITH 'F', FLUSH CONDITION INDICATOR, IF APPLICABLE.  
EXAMPLE: 3SYP20F INDICATES A 3-PLY, SYP#2, 2x6, FLUSH MARK.

MARK	SIZE	LUMBER	MARK	SIZE	LUMBER
SPP26	2x6	SPP#2	L5L4	3x6	L5L4
SPP28	2x6	SPP#2	L5L5	3x6	L5L5
SPP210	2x10	SPP#2	L5L7	3x6	L5L7
SPP212	2x12	SPP#2	L5L8	3x6	L5L8
SYP26	2x6	SYP#2	L5L9	3x6	L5L9
SYP28	2x6	SYP#2	L5L12	3x6	L5L12
SYP210	2x10	SYP#2	L5L11	3x6	L5L11
SYP212	2x12	SYP#2	L5L17	3x6	L5L17
LVL5	3x6	LVL	L5L14	3x6	L5L14
LVL7	3x6	LVL	L5L16	3x6	L5L16
LVL9	3x6	LVL	L5L18	3x6	L5L18
LVL12	3x6	LVL	PA	POST ABOVE	
LVL17	3x6	LVL	P1	1-2x4 POST	
LVL17B	3x6	LVL		(DEFAULT, IF NOT SPECIFIED)	
LVL14	3x6	LVL	P2	2-2x4 BUILT-UP POST	
LVL16	3x6	LVL	P3	3-2x4 BUILT-UP POST	
LVL18	3x6	LVL	P4	4-2x4 BUILT-UP POST	
LVL20	3x6	LVL	P5	5-2x4 BUILT-UP POST	
LVL24	3x6	LVL		#BUILT-UP POSTS SHALL MATCH	

**FOOTING SCHEDULE**

2000 PSF SOIL BEARING CAPACITIES  
CONTACT ENGINEER IF OTHER SOIL CONDITIONS ARE ENCOUNTERED

MARK	SIZE	WALL / BEAM DIMENSION	MARK	SIZE	SQUARE FOOTINGS
PSL#1	3x6	2.0E PSL	W8	8x8	W8
PSL#2	3x6	2.0E PSL	W10	10x10	W10
PSL#3	3x6	2.0E PSL	W12	12x12	W12
PSL#4	3x6	2.0E PSL	W14	14x14	W14
PSL#5	3x6	2.0E PSL	W16	16x16	W16
PSL#6	3x6	2.0E PSL	W18	18x18	W18
PSL#7	3x6	2.0E PSL	W20	20x20	W20
PSL#8	3x6	2.0E PSL	W24	24x24	W24
PSL#9	3x6	2.0E PSL	W28	28x28	W28
PSL#10	3x6	2.0E PSL	W32	32x32	W32
PSL#11	3x6	2.0E PSL	W36	36x36	W36
PSL#12	3x6	2.0E PSL	W40	40x40	W40
PSL#13	3x6	2.0E PSL	W44	44x44	W44
PSL#14	3x6	2.0E PSL	W48	48x48	W48
PSL#15	3x6	2.0E PSL	W52	52x52	W52
PSL#16	3x6	2.0E PSL	W56	56x56	W56
PSL#17	3x6	2.0E PSL	W60	60x60	W60
PSL#18	3x6	2.0E PSL	W64	64x64	W64
PSL#19	3x6	2.0E PSL	W68	68x68	W68
PSL#20	3x6	2.0E PSL	W72	72x72	W72
PSL#21	3x6	2.0E PSL	W76	76x76	W76
PSL#22	3x6	2.0E PSL	W80	80x80	W80
PSL#23	3x6	2.0E PSL	W84	84x84	W84
PSL#24	3x6	2.0E PSL	W88	88x88	W88
PSL#25	3x6	2.0E PSL	W92	92x92	W92
PSL#26	3x6	2.0E PSL	W96	96x96	W96
PSL#27	3x6	2.0E PSL	W100	100x100	W100
PSL#28	3x6	2.0E PSL	W104	104x104	W104
PSL#29	3x6	2.0E PSL	W108	108x108	W108
PSL#30	3x6	2.0E PSL	W112	112x112	W112
PSL#31	3x6	2.0E PSL	W116	116x116	W116
PSL#32	3x6	2.0E PSL	W120	120x120	W120
PSL#33	3x6	2.0E PSL	W124	124x124	W124
PSL#34	3x6	2.0E PSL	W128	128x128	W128
PSL#35	3x6	2.0E PSL	W132	132x132	W132
PSL#36	3x6	2.0E PSL	W136	136x136	W136
PSL#37	3x6	2.0E PSL	W140	140x140	W140
PSL#38	3x6	2.0E PSL	W144	144x144	W144
PSL#39	3x6	2.0E PSL	W148	148x148	W148
PSL#40	3x6	2.0E PSL	W152	152x152	W152
PSL#41	3x6	2.0E PSL	W156	156x156	W156
PSL#42	3x6	2.0E PSL	W160	160x160	W160
PSL#43	3x6	2.0E PSL	W164	164x164	W164
PSL#44	3x6	2.0E PSL	W168	168x168	W168
PSL#45	3x6	2.0E PSL	W172	172x172	W172
PSL#46	3x6	2.0E PSL	W176	176x176	W176
PSL#47	3x6	2.0E PSL	W180	180x180	W180
PSL#48	3x6	2.0E PSL	W184	184x184	W184
PSL#49	3x6	2.0E PSL	W188	188x188	W188
PSL#50	3x6	2.0E PSL	W192	192x192	W192
PSL#51	3x6	2.0E PSL	W196	196x196	W196
PSL#52	3x6	2.0E PSL	W200	200x200	W200
PSL#53	3x6	2.0E PSL	W204	204x204	W204
PSL#54	3x6	2.0E PSL	W208	208x208	W208
PSL#55	3x6	2.0E PSL	W212	212x212	W212
PSL#56	3x6	2.0E PSL	W216	216x216	W216
PSL#57	3x6	2.0E PSL	W220	220x220	W220
PSL#58	3x6	2.0E PSL	W224	224x224	W224
PSL#59	3x6	2.0E PSL	W228	228x228	W228
PSL#60	3x6	2.0E PSL	W232	232x232	W232
PSL#61	3x6	2.0E PSL	W236	236x236	W236
PSL#62	3x6	2.0E PSL	W240	240x240	W240
PSL#63	3x6	2.0E PSL	W244	244x244	W244
PSL#64	3x6	2.0E PSL	W248	248x248	W248
PSL#65	3x6	2.0E PSL	W252	252x252	W252
PSL#66	3x6	2.0E PSL	W256	256x256	W256
PSL#67	3x6	2.0E PSL	W260	260x260	W260
PSL#68	3x6	2.0E PSL	W264	264x264	W264
PSL#69	3x6	2.0E PSL	W268	268x268	W268
PSL#70	3x6	2.0E PSL	W272	272x272	W272
PSL#71	3x6	2.0E PSL	W276	276x276	W276
PSL#72	3x6	2.0E PSL	W280	280x280	W280
PSL#73	3x6	2.0E PSL	W284	284x284	W284
PSL#74	3x6	2.0E PSL	W288	288x288	W288
PSL#75	3x6	2.0E PSL	W292	292x292	W292
PSL#76	3x6	2.0E PSL	W296	296x296	W296
PSL#77	3x6	2.0E PSL	W300	300x300	W300
PSL#78	3x6	2.0E PSL	W304	304x304	W304
PSL#79	3x6	2.0E PSL	W308	308x308	W308
PSL#80	3x6	2.0E PSL	W312	312x312	W312
PSL#81	3x6	2.0E PSL	W316	316x316	W316
PSL#82	3x6	2.0E PSL	W320	320x320	W320
PSL#83	3x6	2.0E PSL	W324	324x324	W324
PSL#84	3x6	2.0E PSL	W328	328x328	W328
PSL#85	3x6	2.0E PSL	W332	332x332	W332
PSL#86	3x6	2.0E PSL	W336	336x336	W336
PSL#87	3x6	2.0E PSL	W340	340x340	W340
PSL#88	3x6	2.0E PSL	W344	344x344	W344
PSL#89	3x6	2.0E PSL	W348	348x348	W348
PSL#90	3x6	2.0E PSL	W352	352x352	W352
PSL#91	3x6	2.0E PSL	W356	356x356	W356
PSL#92	3x6	2.0E PSL	W360	360x360	W360
PSL#93	3x6	2.0E PSL	W364	364x364	W364
PSL#94	3x6	2.0E PSL	W368	368x368	W368
PSL#95	3x6	2.0E PSL	W372	372x372	W372
PSL#96	3x6	2.0E PSL	W376	376x376	W376
PSL#97	3x6	2.0E PSL	W380	380x380	W380
PSL#98	3x6	2.0E PSL	W384	384x384	W384
PSL#99	3x6	2.0E PSL	W388	388x388	W388
PSL#100	3x6	2.0E PSL	W392	392x392	W392
PSL#101	3x6	2.0E PSL	W396	396x396	W396
PSL#102	3x6	2.0E PSL	W400	400x400	W400
PSL#103	3x6	2.0E PSL	W404	404x404	W404
PSL#104	3x6	2.0E PSL	W408	408x408	W408
PSL#105	3x6	2.0E PSL	W412	412x412	W412
PSL#106	3x6	2.0E PSL	W416	416x416	W416
PSL#107	3x6	2.0E PSL	W420	420x420	W420
PSL#108	3x6	2.0E PSL	W424	424x424	W424
PSL#109	3x6	2.0E PSL	W428	428x428	W428
PSL#110	3x6	2.0E PSL	W432	432x432	W432
PSL#111	3x6	2.0E PSL	W436	436x436	W436
PSL#112	3x6	2.0E PSL	W440	440x440	W440
PSL#113	3x6	2.0E PSL	W444	444x444	W444
PSL#114	3x6	2.0E PSL	W448	448x448	W448
PSL#115	3x6	2.0E PSL	W452	452x452	W452
PSL#116	3x6	2.0E PSL	W456	456x456	W456
PSL#117	3x6	2.0E PSL	W460	460x460	W460
PSL#118	3x6	2.0E PSL	W464	464x464	W464
PSL#119	3x6	2.0E PSL	W468	468x468	W468
PSL#120	3x6	2.0E PSL	W472	472x472	W472
PSL#121	3x6	2.0E PSL	W476	476x476	W476
PSL#122	3x6	2.0E PSL	W480	480x480	W480
PSL#123	3x6	2.0E PSL	W484	484x484	W484
PSL#124	3x6	2.0E PSL	W488	488x488	W488
PSL#125	3x6	2.0E PSL	W492	492x492	W492
PSL#126	3x6	2.0E PSL	W496	496x496	W496
PSL#127	3x6	2.0E PSL	W500	500x500	W500
PSL#128	3x6	2.0E PSL	W504	504x504	W504
PSL#129	3x6	2.0E PSL	W508	508x508	W508
PSL#130	3x6	2.0E PSL	W512	512x512	W512
PSL#131	3x6	2.0E PSL	W516	516x516	W516
PSL#132	3x6	2.0E PSL	W520	520x520	W520
PSL#133	3x6	2.0E PSL	W524	524x524	W524
PSL#134	3x6	2.0E PSL	W528	528x528	W528



