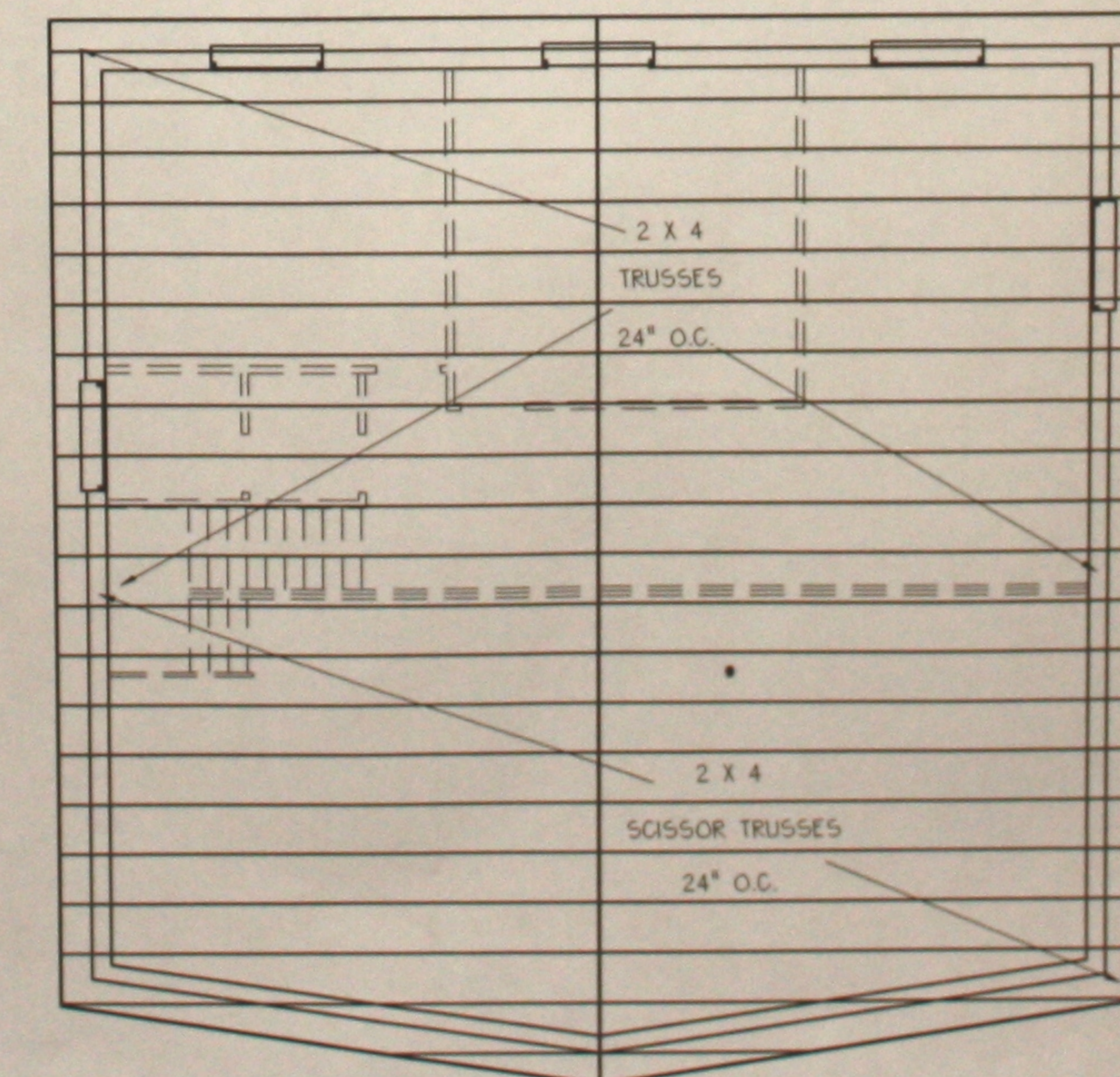


2nd FLOOR FRAMING PLAN  
SCALE 1/8" = 1'-0"



ROOF FRAMING PLAN  
SCALE 1/8" = 1'-0"

**FOOTING, FOUNDATION AND CONCRETE**

ALL FOOTINGS ARE BASED ON ALLOWABLE SOIL BEARING PRESSURE OF 1500 PSF. FOOTINGS SHALL BEAR ON UNDISTURBED SOIL OR ENGINEERED GRANULAR FILL COMPACTED TO 95% OF MAXIMUM DENSITY. NO FOOTINGS SHALL BE PLACED IN WATER OR FROZEN GROUND. ALL FOOTINGS MIN. 30" BELOW GRADE. CONTINUOUS AND MONOLITHIC POUR. CHANGES IN ELEV. SHALL BE STEPPED WITH STEP HEIGHT NOT HIGHER THAN 1/2 THE STEP LENGTH AND NOT GREATER THAN 4 FT. MIN. 6" THICKNESS ON VERT. STEP. FOOTINGS TO HAVE 2 #4 BAR CONTINUOUS. NOTIFY ENGINEER IF GRADE DROPS OVER 5 FEET IN 24 FEET (G.T. 1 TO 3 SLOPE) SO THAT APPROPRIATE DESIGN CHANGES MAY BE MADE TO FOUNDATION AND FOOTINGS. THIS ENGINEERING ASSUMES THAT THE SITE IS DRY AND STABLE AND DOES NOT PROVIDE ANY WARRANTY OF ANY KIND AGAINST SITE STABILITY OR PERFORMANCE. BUILDER SHALL ENSURE THAT THE REQUIREMENTS LISTED IN FIGURE R403.1.7.1 2006 IRC ARE MET. OR NOTIFY ENGINEER SO AN APPROPRIATE SOLUTION CAN BE DEVELOPED PRIOR TO START.

ALL FOOTINGS, FOUNDATIONS, AND INTERIOR SLABS SHALL BE NORMAL WT. CONCRETE WITH A COMPRESSIVE STRENGTH EQUAL TO AT LEAST 3,000 PSI WITHIN 28 DAYS AFTER POURING. THE WATER/CEMENT RATIO SHALL BE NO GREATER THAN 50 WITH A MINIMUM CEMENT CONTENT OF 504 LBS. PER CUBIC YARD. ALL CONC. WORK SHALL BE PLACED, CURED, STRIPPED, AND PROTECTED AS DIRECTED BY THE SPECIFICATIONS AND ACI STANDARDS AND PRACTICES.

ALL REINFORCING SHALL BE DETAILLED AND PLACED IN ACCORDANCE WITH ACI DETAILING MANUAL 315-77 AND ACI STANDARD 318-83. REINFORCEMENT SHALL BE FREE FROM MUD AND OIL AND OTHER NON-METALLIC COATINGS THAT HAMPER BONDING CAPACITY. ALL SPLICES IN CONTINUOUS REINFORCING SHALL LAP 36" AND SHALL BE MADE IN AN AREA OF COMPRESSION.

VERT + HORIZ. #4 BAR (GRADE 60) AS PER UTAH STATE AMENDMENT. OPENINGS TO HAVE 1 VERT. #4 BAR EA. SIDE OF OPENING TIED TO HORIZ. BAR. 2 #4 BAR ABOVE AND BELOW EA. WINDOW OPENING EXTENDING 36" BEYOND OPENING. BUILDER SHALL ENSURE THAT ALL CONDITIONS AND REQUIREMENTS FOR THE FOUNDATION AMENDMENT ARE FOLLOWED.

USE 1/2" X 10" ANCHOR BOLTS 32" O.C. FOR 8'-0" FOUNDATION WALLS OR LESS. USE SIMPSON STRAPPED STRIPS AS NOTED ON DRAWING.

OWNER/CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS LISTED ON THE DRAWING. VERIFICATION OF ALL SITE CONDITIONS INCLUDING SITE STABILITY IS THE RESPONSIBILITY OF OTHERS.

ALL SPLICES IN REINFORCEMENT SHALL LAP A MINIMUM OF 30 BAR DIAMETERS, UNLESS OTHERWISE NOTED. ALL CONSTRUCTION JOINTS SHALL BE KEYED WITH A KEY 1-1/2" DEEP AND A WIDTH OF 1/2 THE MEMBER. PLACE FOUND. REBAR WITHIN 2 1/2" FROM INTERIOR WALL SURFACE. ALLOW 14 DAYS FOR CONCRETE TO CURE PRIOR TO BACKFILL.

**FRAMING AND SHEATHING**

ALL STUDS TO BE MAX 16" O.C. FLOOR SHEATHING SHALL BE 3/4" T&G APA RATED 40/20 CDX SHEATHING NAILED WITH 8d NAILS 6" O.C. AT ALL PANEL EDGES, SUPPORTED EDGES, AND ALL BLOCKING. USE 8d NAILS 10" O.C. IN FIELD. NAILS SHALL BE MIN. 1/2" FROM EDGE OF PANEL. LAY SHEATHING WITH FACE GRAIN AT RIGHT ANGLES TO FRAMING AND GLUE WITH GLUE CONFORMING TO APA SPECS. FLOOR JOISTS SHALL BE BLOCKED AT ALL BEARING POINTS. BLOCK ALL HORIZ. EDGES OF WALL SHEATHING WITH 2 X 4 BLOCKING. USE 8d NAILS 6" O.C. EDGES + 10" O.C. FIELD. EXTEND SHEATHING OVER RIM JOIST AND NAIL TO WALL PLATES ABOVE AND BELOW. EXTEND SHEATHING DOWN TO SILL PLATE AND NAIL PER SHEAR WALL SCHEDULE.

TYPICAL ROOF SHEATHING SHALL BE 7/16" RATED OSB SHEATHING NAILED WITH 8d NAILS 6" O.C. AT PANEL EDGES, SUPPORTED EDGES, AND ALL BLOCKING WITH 8d NAILS 12" O.C. ALONG INTERMEDIATE FRAMING MEMBERS. UNLESS OTHERWISE NOTED USE 2/2X10 WITH PLY FILLER FOR BEARING HEADS.

EXCEPT WHERE OTHERWISE NOTED, CONNECT ALL WOOD TO CONCRETE, WOOD TO STEEL WITH SIMPSON CONNECTORS. ALL WOOD TO WOOD CONNECTIONS TO CONFORM TO NAILING SCHEDULE IN CURRENT IRC. USE STRAPS AND CONNECTORS AS REQUIRED. SOLID 2" NOMINAL BLOCKING SHALL BE PROVIDED AT ENDS OR POINTS OF SUPPORT OF ALL WOOD JOISTS AND TRUSSES. INSTALL JOIST, RAFTER, AND BEAM HANGERS + POST CAPS PER MANUFACTURER'S SPECIFICATIONS.

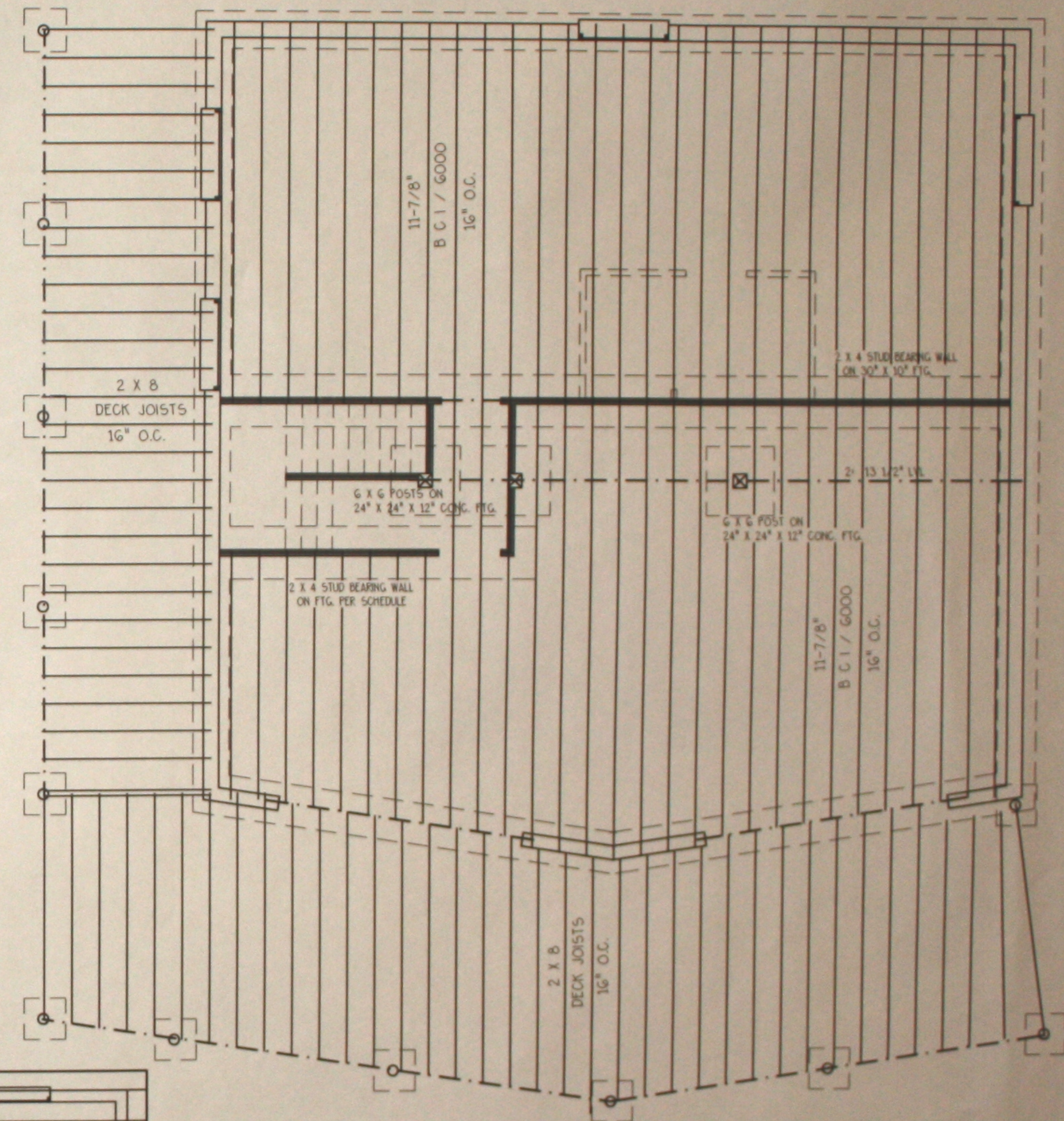
MINIMUM NAILING SHALL BE AS PER 25-0 UNIFORM BUILDING CODE. STAPLES CAN BE SUBSTITUTED FOR NAILS AT A RATE EQUAL TO LOAD VALUES PROVIDED BY 2006 IRC STANDARD OR ENGINEER APPROVAL. PROVIDE SOLID BEARING THROUGH FLOOR SYSTEMS AND POSTS DOWN TO CONC. FTG.

CONTRACTOR AND ALL SUB-CONTRACTORS SHALL FOLLOW ALL STANDARD BUILDING CODES, PRACTICES, AND REQUIREMENTS AS LISTED IN THE 2006 IRC.

USE BALCON FRAMING METHOD TO CONNECT FLOOR SYSTEMS IN SPLIT LEVEL DESIGNS. USE DOUBLE FLOOR JOIST UNDER EA. END OF SHEAR WALLS OVER CANT. FLOOR SECTIONS.

INSTALL JOIST AND RAFTER HANGERS AS PER MANUFACTURER'S SPECIFICATIONS. UNLESS OTHERWISE NOTED, CONNECT ALL HEADER TO STUD/POST, POST TO FLOOR, BEAM TO BEAM, RAFTER TO WALL OR TRUSS, ETC. WITH APPROPRIATE METAL CONNECTORS.

CONNECT EACH RAFTER OR TRUSS TO BEARING WALLS USING SIMPSON H2.5 OR EQUIV. CONNECTORS. CONNECT EACH CANT. FLOOR JOIST TO BEARING WALLS USING SIMPSON A35 OR EQUIV.



1st FLOOR FRAMING PLAN  
SCALE 1/8" = 1'-0"

**SHEAR WALL NOTES**

ALL EXTERIOR WALLS AND VERTICAL SURFACES AT STEPS IN ROOF SHALL BE SHEATHED WITH 15/32" APA RATED 24/0 OR BETTER STRUCTURAL WOOD PANELS. BLOCK ALL HORIZ. EDGES WITH 2" NOM. OR WIDER. 3" OR WIDER FRAMING AT ADJOINING PANEL EDGES. NAILS SHALL BE STAGGERED WHERE JOI NAILS ARE SPACED 3" O.C. OR LESS. SHEATHING SHALL EXTEND CONTINUOUS FROM FLOOR TO TOF PLATE FRAMING OR UPPER EXT. WALLS. NAILS SHALL BE PLACED NOT LESS THAN 1/2" FROM EDGE OF PANEL AND DRIVEN FLUSH BUT SHALL NOT PENETRATE THE SURFACE OF THE SHEATHING. EXTEND SHEATHING OVER RIM AND NAIL TO RIM AND WALL PLATES 4" O.C.

**SHEAR WALL SCHEDULE**

TYPE	SHEATHING	NAILING		ANCHOR BOLTS
		NAIL	FIELD	
TYPICAL	7/16" ONE SIDE	8d 6" O.C.	10" O.C.	1/2" 32" O.C.
SW-1	7/16" ONE SIDE	8d 4" O.C.	10" O.C.	1/2" 32" O.C.
SW-2	7/16" BOTH SIDES GLUE + NAIL	8d 4" O.C.	10" O.C.	1/2" 32" O.C.
SW-3	5/8" BOTH SIDES GLUE + NAIL	10d 4" O.C.	10" O.C.	1/2" 32" O.C.
SW-4	7/16" ONE SIDE, NAIL DRYWALL	8d 4" O.C.	10" O.C.	1/2" 32" O.C.
PSW	PERFORATED SHEAR WALL (SEE DETAIL)			

BRACED WALLS: GLUE AND NAIL SHEETROCK 7" O.C. BOTH SIDES.  
NOTE: STAPLES MAY BE SUBSTITUTED FOR 8d NAILS AT 1/2 SPACING.

**STRUCTURAL DETAILS**

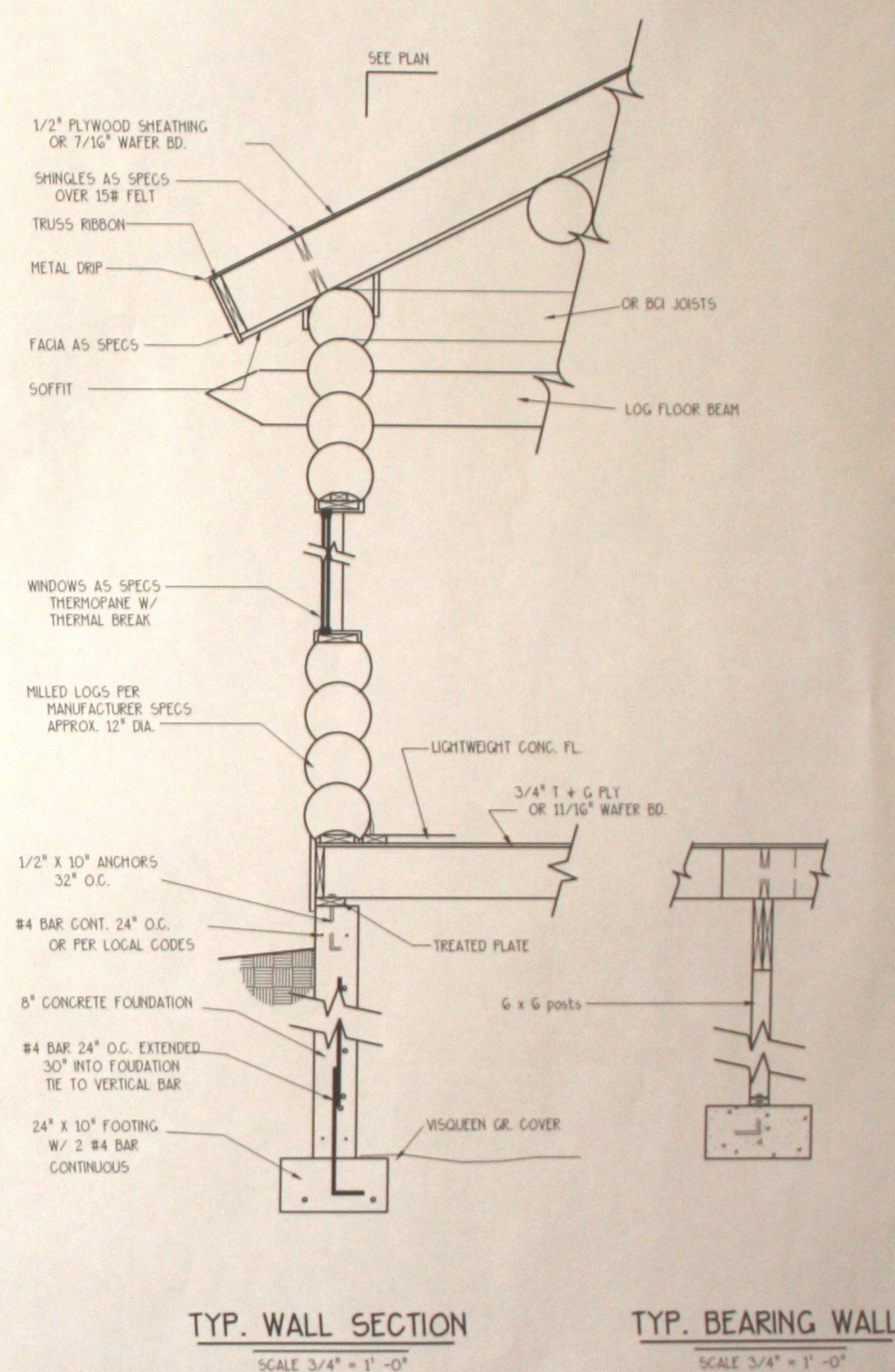
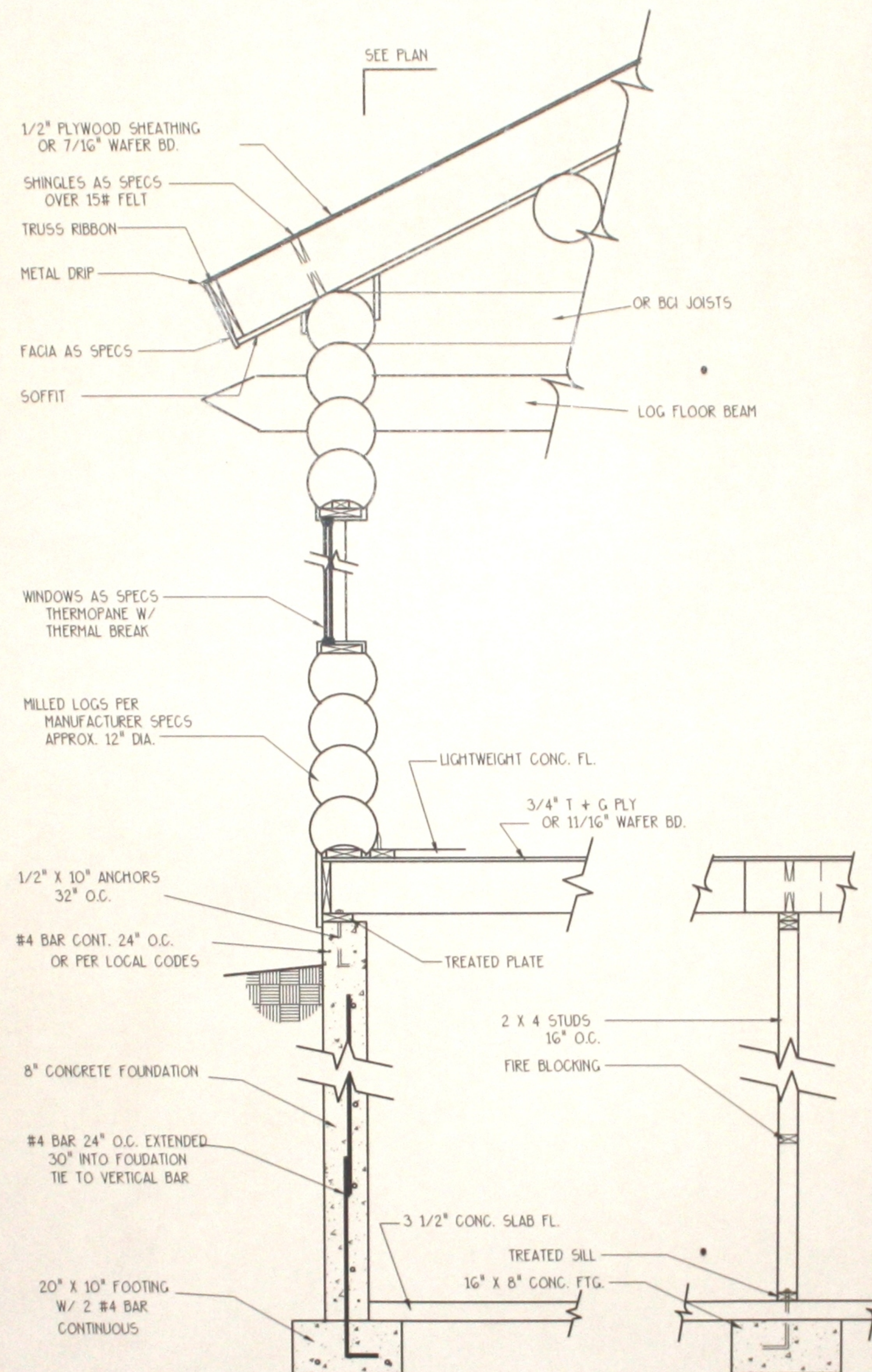
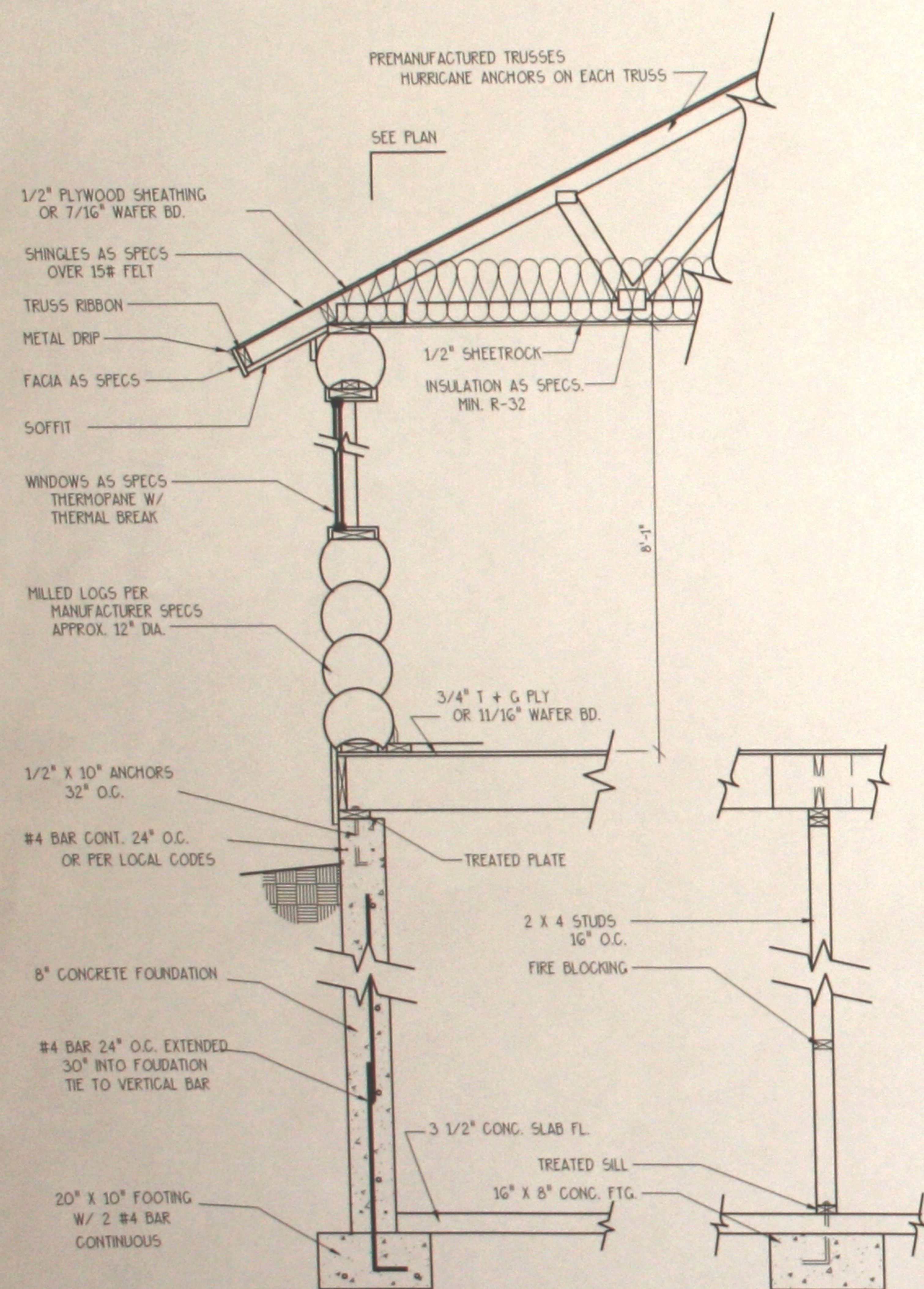
DESIGNED BY: BJA  
DATE: 12/20/14

MM. YORK, P.E.  
LIC# 124074

Arnell's House Plans

Ogden, Utah Ph. 782-8200







# NOTES AND SPECIFICATIONS

## GENERAL

CONTRACTOR, SUBCONTRACTOR AND OWNER SHALL REVIEW AND BE RESPONSIBLE FOR INFORMATION CONTAINED IN ALL PROJECT DOCUMENTS PRIOR TO INITIATION OF ANY WORK ON THE PROJECT, AND SHALL VERIFY ALL CONDITIONS, DIMENSIONS AND ELEVATIONS, ECT., AT THE SITE. CONTRACTOR SHALL COORDINATE WORK PERFORMED BY ALL TRADES. DO NOT SILENTLY DISMISSE.

CONTRACTOR AND ALL SUBCONTRACTORS SHALL PERFORM THEIR TRADES AND DUTIES IN A MANNER CONFORMING TO THE PROCEDURES AND REQ. OF THE ADOPTED CODES AND PRACTICES OF THE COMMUNITY OR AREA IN WHICH THE CONSTRUCTION SHALL TAKE PLACE.

## FOOTINGS, FOUNDATIONS AND SLAB ON GRADE

FEEF OF THE SITE WILL CONSIST OF REMOVAL OF ALL SURFACE VEGETATION, TOPSOIL, NON-ENGINEERED FILL, AND OTHER MATERIALS FROM ALL AREAS WHICH WILL ULTIMATELY BE STRUCTURALLY LOADED.

ALL FOOTINGS ARE BASED ON THE ALLOWABLE SOIL BEARING PRESSURE INDICATED IN DESIGN CRITERIA. ANY SOIL CONDITIONS ENCOUNTERED DURING EXCAVATION THAT IS CONTRARY TO THOSE USED FOR DESIGN OF FOOTINGS AS OUTLINED IN WORKING DRAWINGS SHALL BE BROUGHT TO THE ATTENT. OF THE ENG. BEFORE PROCEEDING.

ALL FOOTINGS SHALL BEAR ON UNDISTURBED NATIVE SOIL, OR ENGINEERED GRANULAR FILL CONTRACTED TO TEST AT MAX DENSITY, BASED ON ASTM D1557 METHOD OF COMPACTION. FILL SHALL BE COMPACTED UNDER ALL CONCRETE WORK ON THE SITE.

NO FOOTINGS SHALL BE INSTALLED UPON LOOSE OR DISTURBED SOILS. SOO, KIBBISH, CONSTRUCTION DEBRIS, NON-ENGINEERED FILL, FROZEN SOIL, IN WATER, OR OTHER DESTRUCTIVE MATERIALS. IF SATISFAE FILL BECOMES LOOSE OR DISTURBED, THEY MUST BE COMPACTED TO THE REQ. STATED ABOVE.

ALL EXCAVATION ADJACENT TO AND BELOW FLOORING ELEV. FOR OTHER TRADES SHALL BE ACCOMPLISHED PRIOR TO POURING ANY FOOTING.

ALL EXTERIOR WALL FOOTINGS SHALL BE CONTINUOUS AND POURED MONOLITHIC. ALL CHANGES IN VERT. ELEV. SHALL BE STEPPED. STEP HEIGHT SHALL NOT BE HIGHER THAN 2/3 OF THE STEP LENGTH, BUT IN NO CASE SHALL THE STEP HEIGHT BE GREATER THAN 2'-6". THE MINIMUM THICKNESS OF THE VERT. STEP SHALL BE 10".

ALL FOOTINGS SHALL BE PLACED 12" MIN. BELOW UNDISTURBED EARTH. NO FOOTINGS SHALL HAVE LESS THAN 30" OF LOCAL FROST DEPTH, BETWEEN THE FINISHED GRADE AND THE BOTTOM OF THE FOOTING.

ALL FOOTING REINFORCEMENT AND WALL COLUMN DOWELS SHALL BE SECURELY TIED IN PLACE PRIOR TO POURING CONCRETE. PROVIDE DOWELS IN FOOTINGS AND FOUND. TO MATCH ALL VERT. BARS IN WALLS AND COLUMNS ABOVE. UNLESS NOTED OTHERWISE.

ALL SLABS ON GRADE SHALL BE IMMEDIATELY UNDERLAIN BY 4" OF FREE DRAINING GRANULAR MATERIAL, SUCH AS "P" GRAVEL, OR THREE QUARTERS OF 1" MINUS CLEAN GAP-GRADED GRAVEL. GRAVEL MAY BE PLACED UPON PROPERLY PREPARED SUBGRADE NATURAL SOILS, AND/OR STRUCTURAL FILL EXTENDING TO SUITABLE NATURAL SOILS.

FOUNDATION WATER PROOFING SHALL BE ASPHALT EMULSION.

ANCHOR BOLTS SHALL BE EXCEEDED IN AT LEAST 7" OF CONCRETE + 32" O.C. (MAX) AND WITHIN 12" OF EACH END AND SPACE OF 6" MIN. FOR THE FIRST 10" AND A 22. SLOPE THEREAFTER. ALL DRAINAGE FROM THE LOT SHALL DRAIN INTO APPROVED DRAINAGE SYSTEM.

STABILITY OF SLOPED SITES SHALL BE VERIFIED BY SOIL ENGINEER OR OTHER QUALIFIED PROFESSIONAL.

## CONCRETE

ALL FTGS. FOUND. AND INT. SLABS SHALL BE NORMAL WEIGHT CONCRETE, WITH A COMPRESSIVE EQUAL TO AT LEAST 3,000 PSI WITHIN 28 DAYS AFTER POURING. THE WATER/CEMENT RATIO SHALL BE NO GREATER THAN 0.50 AND SLUMP SHALL BE 3" OR LESS. MIN. CONCRETE CONTENT SHALL BE 500 LBS. PER CU. YD.

ALL CONCRETE WORK SHALL BE PLACED, CURED, STRIPPED, AND PROTECTED AS DIRECTED BY THE SPECS AND ACI STANDARDS AND PRACTICES.

BEFORE CONC. IS POURED CHECK WITH ALL TRADES TO INSURE PROPER PLACEMENT OF ALL OPENINGS, SLEEVES, CONDUITS, BOLTS, INSERTS, ETC.

SITE SPECIFIC SOILS REPORTS SHALL BE GIVEN PRECEDENCE OVER THE SPECS LISTED ABOVE.

## CONCRETE REINFORCING

ALL REINFORCEMENT SHALL BE DETAILLED AND PLACED IN ACCORDANCE WITH ACI DETAILING MANUAL 315-77 AND ACI STANDARD 318-83.

ALL METAL REINFORCEMENT SHALL BE DEFORMED TYPE BARS (EXCEPT #2 BARS) AND SHALL CONFORM TO THE REQUIREMENTS OF THE "STANDARD SPECIFICATIONS" A.S.T.M. A618 GRADE 60.

ALL SPICES IN CONTINUOUS CONCRETE REINFORCING BARS SHALL LAP 36 BAR DIA. ALL SUCH SPICES SHALL BE MADE IN A REGION OF COMPRESSION UNLESS OTHERWISE SHOWN. ALL CONTINUOUS REINFORCEMENT SHALL TERMINATE WITH A 90 DEGREE TURN OR A SEPARATE CORNER BAR.

REINFORCEMENT SHALL BE FREE OF MUD, OIL, OR OTHER NON-METALLIC COATINGS THAT ADVERSELY AFFECT BONDING CAPACITY.

ALL OPENINGS IN CONCRETE WALLS SHALL BE REINFORCED WITH 2 #5 BARS EXTENDING 2'-0" MIN. BEYOND THE EDGE OF THE OPENING AT EACH FACE OF OPENING PLUS 2 # 4 X 3'-0". AT EACH CORNER PLACED 45 DEG. TO THE HORIZ.

## HOLDDOWN NOTES

EXCEEDING HOLDDOWN ANCHORS ARE REQ. TO RESIST LATERAL OVERTURNING FORCES. HOLDDOWN SIZE AND LOCATIONS ARE INDICATED ON THE FOOTING AND FOUND. PLAN AND/OR IN THE HOLDDOWN NOTES.

ANCHORS SHALL BE INSTALLED FOLLOWING MANUFACT. SPECS. ALL FASTENERS SHALL BE INSTALLED AND MINIMUM EDGE/CORNER DISTANCES SHALL BE MET.

## PORCHES - WALKS - DRIVEWAYS - PATIOS

EXT. DOORS TO HAVE MIN. 36" X 36" LANDING - WITH STEPS AS REQ. BY GRADE.

MIN. THICKNESS SHALL BE 4" NORMAL WGT. CONC. WITH COMPRESSIVE STRENGTH EQUAL TO AT LEAST 4000 PSI WITHIN 28 DAYS. WATER/CEMENT RATIO NO GREATER THAN 0.50 AND SLUMP 3" OR LESS. MIN. CEMENT TO BE 575 LBS PER CU. YD.

## MASONRY

MASONRY AND STONE VENEER NOT EXCEEDING 5" IN THICKNESS MAY BE ANCHORED DIRECTLY TO STRUCTURAL STUDS.

WALL TIES SHALL BE CORROSION RESISTANT, AND IF MADE OF SHEET METAL, SHALL HAVE A MINIMUM THICKNESS OF 0.0200 INCH (NO. 22 GALVANIZED SHEET GAGED BY 3/4" OR 8" OF WIRE, SHALL HAVE A MIN. DIAMETER OF 0.146 INCH (NO. 9 B.W. GAGE). WALL TIES SHALL BE SPACED 50 AS TO SUPPORT NOT MORE THAN 1/20TH OF 50. FT. OF WALL AREA BUT SHALL NOT BE MORE THAN 24" IN CENTER HORIZ.

IN SEISMIC ZONES 3 AND 4, WALL TIES SHALL HAVE A UP OR HOOK ON THE EXTENDING LEG THAT WILL ENGAGE OR ENCLOSE A HORIZ. JOINT REINFORCEMENT WIRE HAVING A DIAMETER OF 0.146 INCH (NO. 9 B.W. GAGE) OR EQUIVALENT. THE JOINT REINFORCEMENT SHALL BE CONTINUOUS WITH BUTT SPICES BETWEEN TIES PERMITTED.

STUDS SHALL BE SPACED A MAX. OF 36" O.C. AND APPROVED PAPER SHALL FIRST BE APPLIED OVER THE SHEATHING OR WIREBES BETWEEN STUDS EXCEPT AS OTHERWISE PROVIDED IN SECTION 4.02, AND PORTNAIL SHALL BE SLOTTED INTO THE 1" SPACE BETWEEN FACING AND PAPER.

## CHIMNEYS

PROVIDE FLASHING AT WALL AND ROOF, OR ROOF AND CHIMNEY. SECTION 607-4.8.

REPLACE CHIMNEYS SHALL EXTEND AT LEAST 2'-0" ABOVE THE ROOF OPENING OR ANY PART OF THE BUILDING WITHIN 10'-0".

## FACTORY BUILT CHIMNEYS AND FIREPLACES

FACTORY BUILT CHIMNEYS AND FIREPLACES SHALL BE LISTED BY AN APPROVED TESTING AGENCY AND HAVE AN ICBO APPROVAL NUMBER. THEY SHALL BE INSTALLED IN EXACT ACCORDANCE WITH THE TERMS OF THEIR LISTINGS AND THE MANUFACTURERS INSTRUCTIONS. SPECIFIC APPROVAL NUMBERS AND INSTALLATION STANDARDS MUST BE MADE AVAILABLE TO THE BLDG. OFFICIAL.

HEARTH EXT. OF LISTED FACTORY BUILT FIREPLACES SHALL CONFORM TO THE CONDITIONS OF LISTING AND MANUFACTURERS INSTALLATION INSTRUCTIONS.

## MASONRY AND CONCRETE FIREPLACES

UNLESS A SPECIFIC DESIGN IS PROVIDED, EVERY MASONRY OR CONCRETE CHIMNEY IN SEISMIC ZONES 2, 3 AND 4 SHALL BE REINFORCED WITH NOT LESS THAN #4 STEEL REINFORCING BARS CONFORMING TO THE PROVISIONS OF U.B.C. CHAPTER 19 OR 21. THE BARS SHALL EXTEND THE FULL HEIGHT OF THE CHIMNEY AND SHALL BE SPICED IN ACCORDANCE WITH THE APPLICABLE REQ. OF U.B.C. CHAPTER 19 OR 21. IN MASONRY CHIMNEYS THE VERT. BARS SHALL HAVE A MIN. COVER OF 1/2" OF GROUT OR MORTAR TOPPED TO A POURING CONSISTENCY. THE BARS SHALL BE TIED HORIZ. AT 18" INTERVALS WITH NOT LESS THAN 1/4" DIAMETER STEEL TIES. THE SLOPE OF THE INCLINED PORTION OF THE OFFSET IN VERT. BARS SHALL NOT EXCEED 2 UNITS VERT. IN 1 UNIT HORIZ. TWO TIES SHALL ALSO BE PLACED AT EACH ADDITIONAL 18" VERT. BARS. WHERE THE WIDTH OF THE CHIMNEY EXCEEDS 40", TWO BONDING #4 VERTICAL BARS SHALL BE PROVIDED FOR EACH ADDITIONAL FIVE INCHES IN THE CHIMNEY OR FOR EACH ADDITIONAL 40" IN WIDTH OR FRACTION THEREOF.

IN SEISMIC ZONES 2, 3 AND 4, ALL MASONRY AND CONCRETE CHIMNEYS SHALL BE ANCHORED AT EACH FLOOR OR CEILING LINE MORE THAN 6" ABOVE GRADE, EXCEPT WHEN CONSTRUCTED COMPLETELY WITHIN THE EXT. WALLS OF THE BLDG. ANCHORAGE SHALL CONSIST OF 2x 3/16" BY 1" STEEL STUBS CAST AT LEAST 12" INTO THE CHIMNEY WITH A 180 - DEGREE BEND WITH A 4" EXTENSION AROUND THE VERTICAL REINFORCING BARS IN THE OUTER FACE OF THE CHIMNEY.

EACH STRAP SHALL BE FASTENED TO THE STRUCTURAL FRAMEWORK OF THE BLDG. WITH TWO 1/2" DIAMETER BOLTS PER STRAP. WHERE THE JOISTS DO NOT HEAD INTO THE CHIMNEY, THE ANCHOR STRAP SHALL BE CONNECTED TO 2" X 4" TIES CROSSING A MIN. OF 4 JOISTS. THE TIES SHALL BE CONNECTED TO EACH JOIST WITH TWO 1/2" NAILS, AS AN ALTERNATIVE TO THE 2" BY 4" TIES, EACH ANCHOR STRAP SHALL BE CONNECTED TO THE STRUCTURAL FRAMEWORK BY TWO 1/2" DIAMETER BOLTS IN AN APPROVED MANNER.

TWO OR MORE FLUES IN A CHIMNEY SHALL BE SEPARATED BY MASONRY NOT LESS THAN 4" INCHES THICK BOND ED INTO THE MASONRY WALL OF THE CHIMNEY.

MASONRY WALLS OF FIREPLACES SHALL NOT BE LESS THAN 8" IN THICKNESS. WALLS OF FIREBOXES SHALL NOT BE LESS THAN 10" IN THICKNESS, EXCEPT THAT WHERE A LINING OF FIREBRICK IS USED, SUCH WALLS SHALL NOT BE LESS THAN A TOTAL OF 8" IN THICKNESS. THE FIREBOX SHALL BE AT LEAST 20" IN DEPTH. JOINTS IN FIREBOX SHALL NOT EXCEED 1/4".

COMBUSTIBLE MATERIALS SHALL NOT BE PLACED WITHIN 6" OF THE FIREPLACE OPENING. NO SUCH COMBUSTIBLE MATERIAL WITHIN 12" OF THE OPENING SHALL PROJECT MORE THAN 1/8" FOR EACH 1" CLEARANCE FROM SUCH OPENING.

THE HEARTH SHALL EXTEND AT LEAST 16" FROM THE FRONT OF AND AT LEAST 8" BEYOND EACH SIDE OF THE FIREPLACE OPENING. WHERE THE FIREPLACE OPENING IS 6" 50. FT. OR LARGER, THE HEARTH EXTENSION SHALL EXTEND AT LEAST 20" IN FRONT OF, AND AT LEAST 12" BEYOND EACH SIDE OF THE FIREPLACE OPENING.

EXCEPT FOR FIREPLACES WHICH OPEN TO THE EXTERIOR OF THE BUILDING, THE HEARTH SHAL BE READILY DISTINGUISHABLE FROM THE SURROUNDING OR ADJACENT FLOOR.

MASONRY FIREPLACES AND CHIMNEYS SHALL HAVE AT LEAST 2" OF CLEARANCE TO ANY INT. COMBUSTIBLE CONSTRUCTION. CLEARANCE TO EXT. COMBUSTIBLE CONSTRUCTIONS 1" OR 1/2" OF SHEETROCK.

## LUMBER

JOISTS ..... DOUG FIR #2 BTR HEADERS ..... DOUG FIR #2 BTR POSTS ..... DOUG FIR #2 BTR STUDS NON-BEARING WALLS ..... DOUG FIR STUD GRADE BTR STUDS BEARING WALLS ..... DOUG FIR #2 BTR PRE-FAB TRUSSES/JOISTS ..... AS PER MFG. SPECIFIED SILL PLATES IN CONTACT W/ CONCRETE ..... DOUG FIR #2 BTR (PRESSURE TREATED FOR MOISTURE PROTECTION)

ALL MULTIPLE PLATES AND LEDGERS SHALL BE NAILED TOGETHER WITH 160 NAILS AT 8" O.C.

STUD WALLS SHALL RUN CONTINUOUS BETWEEN POINTS OR HORIZ. SUPPORT. PROVIDE BRACING WHERE OTHERWISE.

BLOCK ALL HORIZ. EDGES OF PLYWOOD WALL SHEATHING WITH 2" NOMINAL BLOCCING. BLOCK EDGES OF PLYWOOD ON FLOORS AND ROOF AS DIRECTED ON DRAWINGS.

PLACE 2 STUDS MINIMUM AT ALL BEAMS, HEADERS, AND GROSS TRUSS BEARING POINTS UNLESS NOTED OTHERWISE.

## EXTERIOR WALLS

SIDING: ALUMINUM OR VINYL PER OWNER. STUCCO: SYNTHETIC STUCCO PRODUCT (SEE PLAN - CHECK WITH OWNER). MASONRY VENEER: FACE BRICK OR ROCK (SEE PLAN - CHECK WITH OWNER). EXTERIOR PAINTING: PENETRATING STAIN OR OIL BASE ENAMEL.

WOOD MEMBERS SHALL NOT BE USED TO PERMANENTLY SUPPORT THE DEAD LOAD OF ANY MASONRY EXCEPT NONSTRUCTURAL FLOOR OR ROOF SURFACING NOT MORE THAN 4" THICK, OR INTERIOR WALL FINISH OF MASONRY VENEER. WHEN ROOF SUPPORTING MEMBERS ARE DESIGNED TO SUPPORT THE ADDITIONAL LOAD AND TO LIMIT THE DEFLECTION AND SHRINKAGE TO 1/500 OF THE SPAN.

BRICK TIES SHALL BE 22 GA. AT 36" O.C. EACH WAY WITH NO. 9 WIRE BED JOINTS WITH TIES.

ALL WEATHER EXPOSED SURFACES SHALL HAVE A WEATHER-RESISTIVE BARRIER TO PROTECT THE INTERIOR WALL COVERING. BARRING PAPER SHALL BE FREE FROM HOLES AND BREAKS OTHER THAN THOSE CREATED BY FASTENERS AND CONSTRUCTION SYSTEM DUE TO ATTACHING OF THE BUILDING PAPER, AND SHALL BE APPLIED OVER THE STUDS OR SHEATHING OF ALL EXTERIOR WALLS. SUCH FELT OR PAPER SHALL BE APPLIED HORIZ. WITH THE UPPER LAYER LAPPED OVER THE LOWER LAYER NOT LESS THAN 2". WHERE VERT. JOINTS OCCUR, FELT OR PAPER SHALL BE LAPPED NOT LESS THAN 6" BARRIER SHALL EXTEND ABOVE, SOTTO AND FASO TO TOP PLATE PROVIDE 2 LAYERS BEHIND STUCCO SURFACES). ALSO PROVIDE METAL OR EQUAL FLASHING AT FOUND. AND BRICK VENEER OR STONE HALL WALLS WHERE WATER FROM WEATHER BARRIER COULD ENTER DRILLING.

STUCCO SYSTEM SHALL BE AN APPROVED SYSTEM WITH ICBO EVAL. SERVICE NUMBER. ALL "SYSTEMS" MUST BE APPLIED IN STRICT COMPLIANCE WITH THE MANUFACTURERS' RECOMMENDATIONS INCLUDING REQUIREMENTS FOR SELF-FLUSHING LATH, FLASHINGS, CORNER TREATMENT AND EXPANSION CONTROL JOINTS. CONTRACTOR WILL BE RESPONSIBLE TO PROVIDE ICBO NUMBER.

PROVIDE COUNTERFLASHING AND GALLING OF ALL EXTERIOR DOORS AND WINDOWS PER CODE AND MANUFACTURER.

GALLS AND FLASH AT FOLLOWING LOCATIONS: ALL BASE FLASHING, SEAMS AND JOINTS, JOINT INTERSECTIONS OF STUCCO, SIDING OR BRICK VENEER WITH DIFFERENT MATERIALS BOTH HORIZONTAL AND VERTICAL.

STAIRS, LANDINGS, AND BALCONIES SHALL BE POSITIVELY ANCHORED TO THE HOUSE.

## SHEAR WALL NOTES

ALL EXTERIOR WALLS, INTERIOR WALLS INDICATED ON THE PLANS, AND VERT. SURFACES AT STEPS IN ROOF SHALL BE SHEATHED WITH APA RATED 24/0 (OR BTR) COX STRUCTURAL 1 PANEL SIDING, OR OTHER GRADES COVERED IN CURRENT BLDG. CODE. TYPICAL NAILING SHALL BE INDICATED IN THE SHEAR WALL SCHEDULE.

BLOCK ALL HORIZ. PANEL EDGES WITH 2" NOMINAL OR WIDER FRAMING. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3" NOMINAL OR WIDER AND NAILS SHALL BE STAGGERED WHERE NAILS ARE SPACED 3" OR LESS O.C.

STAPLES OR T-NAILS MAY BE USED IN PLACE OF NAILS FOR SHEATHING PROVIDED THE PROPER EQUIVALENT SIZE AND SPACING ARE USED (SEE TABLE OF EQUIVALENT FASTENERS).

SHEATHING SHALL EXTEND CONTINUOUS FROM THE FLOOR FRAMING TO HIGH ROOF FRAMING OR UPPER LEVEL EXT. WALLS VERT. SURFACES AT STEPS IN ROOF).

NAILS SHALL BE SPACED NOT LESS THAN 3/8" FROM THE EDGES AND ENDS OF SHEATHING AND SHALL BE DRIVEN FLUSH BUT SHALL NOT FRACTURE THE SURFACE OF THE SHEATHING.

ALL SHEATHING SHALL EXTEND CONTINUOUS FROM SILL PLATE TO ROOF OR FLOOR SHEATHING.

## PARTITION FRAMING

JOISTS UNDER AND PARALLEL TO BEARING PARTITIONS SHALL BE DOUBLED. JOISTS UNDER AND PARALLEL TO ALL OTHER PARTITIONS SHALL BE DOUBLED WHEN THE LENGTH OF SUCH WALL EXCEEDS 1/3 THE LENGTH OF JOISTS 12" AND LONGER.

FIRE-ROCK STUD SPACES OVER 10' IN HEIGHT, FURRED SPACES, SOFFITS, DROPPED CEILINGS, COVE CEILINGS, STAIRS STRINGERS AT TOP AND BOTTOM OF STAIRS, BEARING WALLS, AND CEILING JOIST LINES, ETC. FIRESTOPPING SHALL CONSIST OF 2" NOMINAL LUMBER.

FIRE-ROCK OPENINGS AROUND VENTS, PIPES, DUCTS, CHIMNEYS, AND FIREPLACES AT CEILING AND FLOOR LEVELS WITH APPROVED NONCOMBUSTIBLE MATERIALS.

## ROOF FRAMING + TRUSS NOTES

TRUSSES AND GROSS LOADS SHALL BE DESIGNED FOR ALL TRIJUTARY LOADING. ROOF TRUSSES SHALL BE DESIGNED FOR UNBALANCED SNOW LOADS, EAVE LOADS, DRIFT, AND SLUING LOADS.

TRUSSES AND GROSS LOADS SHALL BE DESIGNED TO SUPPORT ALL MECHANICAL LOADS FROM APPLICABLE HVAC EQUIPMENT.

DESIGN TRUSSES TO LIMIT DEFLECTION TO THE SPAN.

CHECK DIMENSIONS WITH DRAWINGS AND FIELD VERIFY WITH CONTRACTOR. TRUSS MANUFACTURER IS RESPONSIBLE TO PROVIDE WEB AND CHORD MEMBERS TO SATISFY LOADING AND CONNECTION REQUIREMENTS.

ALTHOUGH SUGGESTED CONNECTION HANGER SIZES MAY BE INDICATED ON THE PLANS, ALL TRUSS HANGER CONNECTIONS (IE. TRUSS TO BEAM, TRUSS TO GROSS TRUSS, AND GROSS TRUSS TO GROSS TRUSS) SHALL BE DESIGNED BY THE TRUSS SUPPLIER/MANUFACTURER. CONNECTION HANGER SIZE AND ENGINEERING SHALL BE INCLUDED WITH THE SHOP DRAWINGS.

TRUSS PRE-ENGINEERED JOINT CONNECTORS SHALL HAVE I.C.B.O. CERT.

OVERBUDS SHALL BE CONSTRUCTED USING 2 X 6 MINIMUM SPACED AT LEAST 24" O.C. WITH 8'-0" MAX. SPAN. SUPPORT OVERBUDS JOINTS AT PANEL POINTS OF TRUSSES. SEE OVERBUD DETAIL.

PROVIDE ATTIC ACCESS WITH MIN. 22" X 30" OPENING FOR EACH ROOF. SEE PLAN FOR LOCATION.

## DECKS - HANDRAILS - GUARDRAILS

DECKS SHALL BE CONSTRUCTED TO PROVIDE ADEQUATE SUPPORT FOR APPLICABLE HORIZ. AND VERT. LOADING. MIN. 60 PSF LIVE LOAD.

DECK AND BALCONY RAILINGS AND GUARDRAILS SHALL BE CAPABLE OF SUPPORTING A MINIMUM OF 20 PSF APPLIED HORIZONTALLY AT RIGHT ANGLES TO THE RAIL.

THE MOUNTING OF HANDRAILS SHALL BE SUCH THAT THE COMPLETED HANDRAIL AND SUPPORTING STRUCTURE ARE CAPABLE OF WITHSTANDING A LOAD APPLIED IN ANY DIRECTION OF AT LEAST 200 LBS.

## DOORS

ENTRY DOOR: STEEL INSULATED  
OTHER EXTERIOR DOORS: STEEL INSULATED  
ADDITIONAL INFORMATION: NET ALL EXTERIOR DOORS ALIKE  
INTERIOR DOORS: G-PANEL (SEE PLAN FOR SIZES - ALL DOORS ARE 6'-8" IN HEIGHT UNLESS NOTED OTHERWISE)  
CASINGS: COLONIAL TYPE  
BASE: COLONIAL TYPE  
SPECIALTY HOLDINGS: SEE PLAN FOR APPLICATION - CHECK WITH OWNER FOR SIZE AND MATERIAL  
ADDITIONAL INFORMATION: DOORS TO BE PAINT GRADE UNLESS SPECIFIED BY OWNER

## STAIRS

TREADS: 3/4" FIR OR PARTICLE BOARD - ATTACH WITH ADHESIVE NAILS  
RISERS: 3/4" PINE OR EQUAL  
STRINGERS: 2" X 12" FIR  
HANDRAIL: TO MEET LOCAL BUILDING CODES (CHECK WITH OWNER FOR STYLE AND MATERIAL)

STAIRWAYS SHALL HAVE A MAX. RISE OF 8" AND A MIN. RISE OF 4". THE MIN. RUN SHALL BE 9" LENGTH OF TREAD MEASURED FROM NOSE TO NOSE). THE LARGEST TREAD RUN OR RISE WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8".

WINDERS IN WINDING STAIRWAYS NEED A MIN. 6" DIMENSION TREAD ON THE INSIDE OF THE STEP WITH A 9" TREAD REQUIRED AT A POINT 12" FROM THE NARROW SIDE.

STAIRWAYS IN HOMES SHALL NOT BE LESS THAN 36" IN WIDTH.  
EVERY STAIRWAY SHALL HAVE A LANDING WITH A DIMENSION EQUAL TO THE WIDTH OF THE STAIR MEASURED IN THE DIRECTION OF TRAVEL (NEOT EXCEED 44").

STAIRWAYS WITH 4 OR MORE RISERS SHALL HAVE AT LEAST ONE HANDRAIL (EXCEPT THE STAIRWAYS OPEN ON ONE OR BOTH SIDES SHALL HAVE HANDRAILS PROVIDED ON OPEN SIDE OR SIDES). HANDRAILS SHALL BE PLACED 34"-38" ABOVE THE NOSE OF THE TREADS, VERT. TO THE TOP OF THE RAIL. THEY SHALL BE CONTINUOUS THE FULL LENGTH OF THE STAIRS. THE HANDROP PORTION SHALL BE NOT LESS THAN 1 1/4" NOR MORE THAN 2" IN GROSS-SECTIONAL DIMENSIONS. HANDRAILS PROJECTING FROM A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1 1/2" BETWEEN THE WALL AND THE HANDRAIL. ENDS SHALL BE RETURNED TO THE WALL OR TERMINATE IN HENEL POSTS OR SAFETY TERMINALS.

EVERY STAIRWAY SHALL HAVE A HEADROOM CLEARANCE OF NOT LESS THAN 6'-8". SUCH CLEARANCE SHALL BE MEASURED VERT. FROM A LINE ALONG THE TREAD NOSING TO THE SOFFIT ABOVE AT ALL POINTS.

ENCLOSED USABLE SPACE UNDER STAIRS SHALL HAVE THE WALLS AND SOFFITS PROTECTED ON THE ENCLOSED SPACE AS REQUIRED FOR ONE-HOUR FIRE RESISTIVE CONSTRUCTION.

GUARDRAILS SHALL BE PROVIDED TO PROTECT UNENCLOSED SIDES OF ROOMS, CORRIDORS, STAIRS, RAMP, ETC. WHICH ARE MORE THAN 30" ABOVE THE FLOOR OR GRADE BELOW. THE GUARDRAIL SHALL BE AT LEAST 36" HIGH AND SHALL HAVE INTERMEDIATE RAILS OR AN ORNAMENTAL PATTERN SUCH THAT A SPHERE 4" IN DIAMETER CANNOT PASS THROUGH. THE TRIANGULAR SPACE CREATED BY THE STAIR AND A BOTTOM RAIL MAY BE CONSTRUCTED SO A 6" SPHERE WILL NOT PASS THROUGH.

STAIRS, LANDINGS, AND BALCONIES SHALL BE POSITIVELY ANCHORED TO THE HOUSE.

## CRAWL SPACES

WOOD GRIDDERS SHALL BE LOCATED NO LESS THAN 12" ABOVE EXPOSED GROUND.

CRAWL SPACES SHALL BE PROVIDED WITH AN 18" X 24" ACCESS HOLE. IF A FURNACE IS LOCATED IN THE CRAWL, SPACE THE MIN. ACCESS HOLE SHALL NOT BE LESS THAN 30" X 30", OR SIZE OF THE EQUIPMENT IF LARGER.

CRAWL SPACE VENTILATION SHALL BE PROVIDED BY OPENINGS IN THE EXTERIOR FOUNDATION WALLS. SUCH OPENINGS SHALL HAVE A NET AREA OF NOT LESS THAN 1 SQ. FT. FOR EACH 150 SQ. FT. OF UNDER FLOOR AREA. OPENINGS SHALL BE LOCATED AS CLOSE TO THE CORNERS AS POSSIBLE AND SHALL PROVIDE GROSS VENTILATION. OPENINGS ARE TO BE PROVIDED WITH A 3/4" CORROSION RESISTANT MESH. WHERE GROUND WATER IS NOT A PROBLEM, THE BUILDING OFFICIAL MAY ALLOW OPERABLE LOUVERS AND MAY ALLOW VENT OPENINGS TO BE REDUCED 10% OF THE REQUIREMENT. PROVIDED THE UNDER-FLOOR GROUND SURFACE IS COVERED WITH AN APPROVED VAPOR BARRIER.

NOTE: SEE PLAN FOR APPLICATION.

## OCCUPANCY SEPARATION

FIRE SEPARATION IS REQUIRED BETWEEN A RESIDENCE AND AN ATTACHED GARAGE. IN THIS CASE FIRE RESISTIVE CONSTRUCTION MAY BE LIMITED TO MATERIALS APPROVED FOR ONE-HOUR CONSTRUCTION ON THE GARAGE SIDE.

FIRE-RESISTIVE PROTECTION OF SEPARATION SHALL BE VERT. AND/OR HORIZ. PROTECTION MUST EXTEND UNINTERRUPTED FROM CONCRETE TO EXTERIOR SHEATHING. WALLS COMMON TO HOUSE AND GARAGE MUST BE COMPLETELY PROTECTED. ALL STRUCTURAL MEMBERS SUPPORTING THE FIRE SEPARATION, SUCH AS BEARING WALLS, COLUMNS AND BEAMS MUST ALSO BE PROTECTED.

TYPICAL GARAGE WALLS AND CEILINGS SHALL BE USE (2) 1/2" TYPE "X" GYP. BD. ON CEILING + (1) 5/8" TYPE "X" GYP. BD. ON ALL WALLS. PROVIDE 2 LAYERS OF 5/8" TYPE "X" GYP. BD. WHERE 1-JOISTS OR RAFTERS FORM PART OF THE GARAGE FIRE SEPARATION. PROVIDE FILL INSUL. IN ALL AREAS BORDERING HOME.

ANY DOOR BETWEEN THE HOUSE AND GARAGE SHALL BE A SELF-CLOSING, TIGHT FITTING SOLID WOOD DOOR, 1 3/8" THICK OR A 20 MINUTE LABELED DOOR.

ATTIC ACCESS DOORS LOCATED IN GARAGES SHALL BE OF ONE-HOUR FIRE-RESISTIVE CONSTRUCTION AND HAVE A POSITIVE LATCH AND HINGE. THE SUPPORT MEMBERS SHALL BE OF 2" NOMINAL MATERIALS, ALL FASTENERS SHALL BE SREWED INTO A SOLID MEMBER (NO SCREWING NINGES AND LATCHES INTO SHEETROCK ONLY).

DUCT PENETRATIONS SHALL BE A MIN. 26 GAUGE SHEET METAL WITH ANY OPENINGS INTO THE GARAGE PROTECTED BY FIRE DAMPERS.

NO WINDOWS ARE PERMITTED IN GARAGE FIRE WALL OR IN DOOR BETWEEN THE HOUSE AND GARAGE.

FIRE-RESISTIVE WALLS AND PARTITIONS MAY HAVE OPENINGS FOR STEEL ELECTRICAL OUTLET BOXES NOT EXCEEDING 16 SQ. INCHES IN AREA. PROVIDED THE AGGREGATE AREA OF SUCH OPENINGS IS NOT MORE THAN 100 SQ. INCHES FOR ANY 100 SQ. FT. OF WALL OR PARTITION AREA. OUTLET BOXES ON OPPOSITE SIDES OF WALLS AND PARTITIONS SHALL BE SEPARATED BY A HORIZ. DISTANCE OF AT LEAST 24". ELECTRICAL BOXES IN WALL BETWEEN HOUSE AND GARAGE SHALL BE STEEL OR RATED FOR AT LEAST 1-HOUR CONSTRUCTION BY AN APPROVED TESTING AGENCY.

FIRE SEPARATION NEED NOT BE PROVIDED BETWEEN A HOUSE AND A GARPORT HAVING NO ENCLOSED USES ABOVE, PROVIDED THE GARPORT IS ENTIRELY OPEN ON TWO OR MORE SIDES.

UNDER NO CIRCUMSTANCES SHALL A GARAGE HAVE ANY OPENING INTO A ROOM USED FOR SLEEPING PURPOSES.

## INSULATION (REFER TO RESCHECK FOR EXACT REQUIREMENTS)

CEILING: R-38 MIN. BLOWN IN CELLULOSE.  
WALLS: R-13 MIN. 2X4 WALLS OR R-19 MIN. 2X6 WALLS BLOWN IN CELLULOSE. BASEMENT WALLS: R-13 MIN. 2X4 WALLS OR R-19 MIN. 2X6 WALLS BLOWN IN CELLULOSE WHERE APPLICABLE. (TO MEET LOCAL BUILDING CODES).  
MIN. JOISTS: R-11 MIN. FIBERGLASS BATT.  
VAPOR BARRIER: MIN. OF 4 MIL. POLYETHYLENE TO BE INSTALLED OVER INSULATION ON COLD WALL APPLICATIONS AND UN-VENTED CEILINGS.

EXPANDING FOM TO BE USED AROUND ALL WINDOWS, DOORS AND OTHER EXTERIOR OPENINGS.

PROVIDE INSULATION BATTLES IN ATTIC SPACE - CONTRACTOR TO VERIFY.

THE INSULATION AROUND THE PERIMETER OF A SLAB ON GRADE FLOOR SHALL EXTEND DOWNWARD FROM THE TOP OF THE SLAB FOR A MIN. OF 24" OR DOWNWARD TO THE BOTTOM OF THE SLAB AND THEN HORIZ. BENEATH THE SLAB FOR A MIN. DISTANCE OF 24".

DUCTS, PLUMBING, AND ENCLOSURES INSTALLED IN CRAWL SPACE, GARAGE, UN-INSULATED BASEMENT, ATTIC, OR OTHER UN-INSULATED SPACE SHALL BE THERMALLY INSULATED WITH INSULATION HAVING A THERMAL RESISTANCE (R) VALUE OF NOT LESS THAN R-4.0.

TYPEX OR EQUIV. WEATHER BARRIER ON SHEATHING BETWEEN SHEATHING AND EXTERIOR FACING MATERIAL.

## CEILINGS, ROOM DIMENSIONS, ETC.

CEILING HEIGHT IS REQ. TO A MIN. OF 7'-6" IN ALL HABITABLE ROOMS. KITCHENS, HALLS AND BATHROOMS MAY HAVE A CEILING OF 7'-0". THE BOTTOM OF EXPOSED BEAMS SPACED 48" OR MORE O.C. MAY BE ALSO 7'-0". A FURRED CEILING MAY BE AS LOW AS 7'-0", BUT 2/3 OF THE ROOM MUST HAVE A CEILING HEIGHT OF 7'-0" OR MORE. A SLOPED CEILING REQ. THE FURRED CEILING HEIGHT IN AT LEAST 1/2 OF THE ROOM. NO PORTION OF THE ROOM MAY BE USED TO COMPUTE MIN. AREA WHERE THE CEILING IS LESS THAN 5'-0".

HOUSES SHALL HAVE AT LEAST ONE ROOM WHICH SHALL HAVE NOT LESS THAN 120 SQ. FT. OF FLOOR AREA. OTHER HABITABLE ROOMS, EXCEPT KITCHENS, SHALL HAVE AN AREA OF NOT LESS THAN 70 SQ. FT.

HABITABLE ROOMS OTHER THAN A KITCHEN SHALL BE NOT LESS THAN 7' IN ANY DIMENSION.

HALLWAYS SHALL NOT BE LESS THAN 36" WIDE. HALLWAYS SHALL HAVE A CLEAR CEILING HEIGHT OF NOT LESS THAN 7' MEASURED TO THE LOWEST PROJECTION.

CLOTHES DRESSING WHICH PASS THROUGH MORE THAN ONE FLOOR CANNOT EXCEED 9 SQ. FT. AND SHALL BE LINED WITH SHEETROCK COVERED WITH 26 GA. SHEET METAL HAVING LOCKRAPPED JOINTS. ALL OPENINGS INTO THE ENCLOSURE SHALL HAVE TIGHT FITTING, SELF-CLOSING DOORS.

AN ATTIC ACCESS OPENING, NOT LESS THAN 22" X 30", SHALL BE PROVIDED AT ROOF/CEILING AREAS. THERE SHALL BE 30" OF HEADROOM OVER THE OPENING. IF THERE IS LESS THAN 30" MAX. HEIGHT IN THE ATTIC, ACCESS NEED NOT BE PROVIDED. THE OPENING SHALL BE LOCATED IN THE HALLWAY OR OTHER READILY ACCESSIBLE AREA. SEE "OCCUPANCY SEPARATION" FOR ATTIC ACCESS LOCATED IN GARAGE AREAS.

## ROOFING, GUTTERS + DOWNSPOUTS

SHEATHING (SEE ROOF SHEATHING NOTES)  
SHINGLES: 240B 25 YEAR ASPHALT SHINGLES. SEE PLAN FOR ITEM USED.

UNDERLAYMENT: ONE (1) LAYER 158 FELT  
MULTI-LAP ROOFING FELT FROM EAVE TO 12" INSIDE WALL.  
METAL EDGING: ALUMINUM .007 DWP METAL EDGING