GENERAL NOTES

- The latest edition, document A-201 of the A.I.A. "General Conditions of the Contract for the Condition of Buildings" is a part of these specifications. All work, labor and materials shall comply to all local, county and state building, electrical, health and sanitary codes.
- Contractor shall visit site to familiarize himself with scope of work.
- Any damage to adjacent properties shall be paid for at contractor's expense.
- All equipment and workmanship must be skilled and performed by the workmen in a thorough, faithful, and workmanlike manner to the best of their ability, in conformity to the drawings and specifications.
- The owner shall render inspection of the project. The architect shall not have supervision, control or change of the work.
- Verify all utility locations in area before doing any digging.
- All dimensions should be read and calculated. Do not scale drawings. If dimensions are in question, obtain clarifications from architect.

Every attempt has been made in the preparation of these drawings to avoid mistakes. The designer cannot be held liable for any errors or omissions in these drawings.

DESIGN LOADS

- Design loads are all dead loads plus:
  - Main floor live loads (kitchen level)..... 40 PSF
  - All other floors..... 40 PSF
  - Balconies..... 60 PSF
  - Decks..... 50 PSF
  - Suspended Garages..... 50 PSF
    or 2000 Pound Point Load at any Location
  - Attic floor live loading with the following:
    - Areas accessible by permanent stairs..... 30 PSF
    - With Storage..... 20 PSF
    - Without Storage..... 10 PSF
  - Roof live load..... 20 PSF
  - Wind load..... 90 MPH
  - Conforms with Seismic Design Criteria for Zone D-2
  - Snow load..... 20 PSF
- All designs are in accordance with the 2000 International Building Code.

1. MASONRY

1.1 All masonry blocks shall conform to ASTM C-90.
1.2 All brick shall conform to ASTM C-216 FM = 1500 PSI.
1.3 Mortar shall be type "M" conforming to ASTM C-270.
1.4 Top courses of C.M.U. foundation walls shall be filled or solid including the courses under any steel beam or corbelled C.M.U.
1.5 Corrugated brick ties shall not be less than No. 22 gauge by ⅞" and be installed not more than 24" o/c. horizontally and shall support not more than 3.25 square feet of wall area.
Weep holes shall be located @ 48" o/c (N.C.) and 32" o/c (I.B.C.) and not less than 3/16" in diameter. Weepholes shall be located immediately above the flashing.
1.6 Flashing:
6 mil poly or other corrosion-resistive material shall be located beneath the first course of masonry above finished ground level above foundation wall or slab and at other points of support, including structural floors, shelf angles and lintels. Top of base flashing shall be installed with a minimum 2" lap behind building paper or water repellent sheathing.
1.7 Anchorage:
Masonry veneer shall be anchored to the supporting wall with corrosion-resistant metal ties. Where veneer is anchored to wood backings through the use of corrugated sheet metal ties, the distance separating the veneer from the sheathing material shall be a maximum of 1 inch.

2. FOOTINGS AND FOUNDATIONS

2.1 Soil bearing capacity assumed as 2000 PSF unless noted otherwise or as determined by standard penetrometer test.
2.2 All continuous wall footings for one or two-story houses are 8"x16" and for three-story houses are 8"x20". Reinforcing in footings should be two (2) #4 bars if not noted on the plans. Reinforcement not required by Code, unless footings are on disturbed soil or compacted fill.
All continuous wall footings for one or two-story 4" brick veneer over wood framing are 8"x20" and for three-story 4" brick veneer over wood framing are 8"x24".
2.3 All interior piers are 8"x16" CMU up to a maximum height of 32". All piers over 32" high must be filled with Type S mortar. Maximum height for 8"x16" filled pier is 6'-4". Piers larger than 8"x16" are noted on the plans. Pier cap blocks should be 8" of solid masonry.
2.4 Footings for 8"x16" piers are 20"x30"x10" unless noted otherwise. Reinforcing to be as noted on plans.
2.5 Concrete shall have a compressive strength of 3000 PSI in 28 days unless noted otherwise. No concrete shall be poured in temperatures below 40° Fahrenheit unless heat to be provided during curing for two days. The bottom of all footings must be 12" below grade.
2.6 All rebar splices shall be a minimum of 2'-0" unless otherwise noted.
2.7 Any special foundations for structures shall be designed by a Licensed Professional Engineer upon receiving soil capacity specifications for all soil considered to affect the structure.
2.8 Chimney footing sizes are shown on the structural design drawings. Masonry chimney footings must be a minimum of 12" thick with 12" projection on all sides.
2.9 Foundation walls back-filled with soil and supporting structural framing shall be constructed up to 4' max. height. Use bituminous damproofing or membrane waterproofing on exterior.
2.10 Special retaining wall designs to be designed by a state licensed engineer.

NOTE: ALL POINT LOADS FROM ROOF BRACES, JACK STUDS, AND BEAM SUPPORTS – WHETHER WOOD OR STEEL – CANNOT BEAR ON SHEATHING ALONE. BLOCKING EQUAL TO OR BETTER THAN THE SPECIFIED STUDS OR COLUMN PROVIDED FOR POINT LOAD SUPPORT MUST BE CARRIED THROUGH ALL CONSTRUCTION TO THE FOUNDATION.

3. FRAMING CONSTRUCTION - OTHER THAN ROOF

3.1 Crawl space girders and band boards as noted on plans. Maximum clear span to be 4'-8" (6'-0" o/c spacing of piers) unless noted otherwise.
Framed floors: Crawl space girders are to be (3)-2x10s and crawl band shall be (2)-2x10s.
Trussed floors: To be (1)-1"x_" truss height. Rim board when joists are perpendicular and _" truss height. LVL rim board when joists are parallel unless noted otherwise.
- On all open web floor trusses over a 10' span, a minimum single line of 2x4s shall be nailed to diagonal members or vertical members in the approximate mid-span as a load distribution member.

3.2 To avoid most cracking in finished hardwood floors over any girders, use the following procedure:
A. Nailing Patterns
i. All floor joists must be toe-nailed to their support girders with a minimum of 3-8d nails at each end from each side. Larger nails will split and render the toe-nail ineffective. No end-nailing through the girder or band is permitted except for temporary construction purposes.
ii. If dropped girders are used, end-lap all joists 12" minimum and side-nail each with a minimum of 3-16d nails at each end of joist. Ledger strips should be nailed with 3-16d nails at each joist end, with nails spaced 3" apart.
iii. Nail multiple-member built-up girders with three rows of 16d nails staggered at 32" o/c, 2" down from the top, 2" up from the bottom, and at mid-depth. Use 3-16d nails at each end of each piece in the joints through the members making up the multiple-girder. If the girder nailing pattern is omitted, then the shrinkage will accumulate over the girders and an objectionable crack will develop in the finished hardwood floor over the girder line.
B. At all girders where the joists change direction, install bridging at 6" o/c for a minimum of six joist spacings beyond any joist direction change. This will insure shrinkage distribution over the floor and not let it accumulate at the girder.
C. There must be wood blocking through-bolted to the steel beam with joist toe-nailed and attached to the beam with metal hangers under any hardwood floors that pass over a steel beam supporting floor joists.

3.3 All crawl space framing lumber must be Southern Yellow Pine. All remaining floors may be Spruce Pine fir #2 unless noted otherwise.
3.4 Steel beams must have (5)-2x4 jack studs under each end support unless noted otherwise on the structural plans. All studs must be nailed together with two (2) vertical rows of 16d nails at 8" o/c, unless noted otherwise.
3.5 LVL beams must have (3)-2x4 jack studs under each end support unless noted otherwise on the structural plans. All studs must be nailed together with two (2) vertical rows of 16d nails at 8" o/c, unless noted otherwise.
3.6 Masonry lintels:
A. For spans up to 6 ft: Use 3½"x3½"x¼" steel angles.
B. For spans from 6 ft to 10 ft: Use 5"x3½"x5/16" steel angles.
C. For spans from 10 ft to 18 ft: Use a pair of 9 gauge wires in each of the first 3 courses of brick on a 5"x3½"x¼" steel angle. Lap all 9 gauge wire splices 12" minimum and extend wires 12" minimum into jambs. Temporarily support steel angle before laying masonry. Shoring may be removed five days following the installation of masonry.
D. When structural steel beams with bottom plates are used to support masonry, the bottom plate must extend the full length of the steel beam. This provides support to the ends of the plate by bearing on the adjacent masonry jambs. The beam should be temporarily shored prior to laying the masonry. The shoring may be removed five days after laying the masonry.

3.7 All masonry or stone veneer over lower roofs must have a structural steel angle, minimum 4"x3½"x¼", lag bolted to the adjacent wall studs to prevent sliding of the veneer. A minimum of a double rafter must be installed below masonry climbs. Thin-set veneer attachments provided by the contractor may supercede this specification, see IBC 703.7 for detail.
3.8 All rafter braces must have 2 studs from the wall top plate through all floors solid to the foundation or supporting beam below. No braces shall be attached to the top wall plate without studs directly under them.
3.9 Where non-bearing parallel partitions fall between floor joists, 2x4 ladders @ 16" o/c must be placed perpendicular to the joists to support the plywood decking or double joist installed directly below wall.
3.10 All wood I-joists must be braced in accordance with the manufacturer's directions plus any details shown on the plans. Load bearing partitions, jacks, beams and column supports must be solidly blocked through the floor as the joists and plywood may not be able to carry the concentrated point loads. All point loads must be carried to the foundations with blocking and/or beams.

(NOTE: All beams and double joists, ect., have been shown for a load bearing purpose. Placement of the load carrying members shown in the plans in locations other than under the structural element they are intended to carry is the responsibility of the contractor. Exact beam locations are not to be scaled from the framing plans.)

3.11 All two-story open rooms with full height openings must be braced to resist pressure resulting from 90 MPH design fastest-mile wind speed or as prescribed for specified wind zones per ASCE 7-98. Any special wall reinforcing shall be shown on the plans provided. Two-story open rooms must be balloon-framed with 2x6s @ 16" o/c as a minimum (no exceptions.)
3.12 Stud walls to be listed below unless otherwise noted on the structural plans:
A. Interior One & Two Story walls (with intermediate floors)
i. Load bearing..... 2x4 @ 16" o/c
ii. Non-load bearing..... 2x4 @ 24" o/c allowable, 16" o/c preferred
B. Interior Three Story Walls
i. Load bearing (2nd & 3rd Floor)..... 2x4 @ 16" o/c
ii. Load bearing (1st Floor)..... 2x4 @ 12" o/c
or 2x6 @ 16" o/c
iii. Non-load bearing..... 2x4 @ 16" o/c
C. Basement Walls
i. Load bearing..... 2x4 @ 12" o/c
ii. Non-load bearing..... 2x4 @ 16" o/c
D. Exterior Walls
Exterior walls for three stories shall be 2x6 @ 16" o/c with ½"x4'x8' OSB sheathing or C-DX plywood over entire exterior.
3.13 Headers shall be as shown unless otherwise noted on the plans:
A. Interior
i. Spans up to 2'-6"..... 2-2x6s
ii. Spans 2'-6" to 3'-6"..... 2-2x8s
iii. Spans 3'-6" to 6'-6"..... 2-2x10s
iv. Spans 6'-6" or more..... See Plan
B. Exterior
i. Spans up to 2'-0"..... 2-2x6s
ii. Spans 2'-0" to 3'-0"..... 2-2x8s
ii. Spans 3'-0" to 5'-0"..... 2-2x10s
iv. Spans 5'-0" to 6'-8"..... 2-1¾"x9¼" LVLs or 2-2x12s
v. Spans 6'-8" or more..... See plan
C. Garage Doors (at truss loaded bearing walls)
i. 8' Garage Door.....(2)-1¾"x11¼" LVLs.....3 Jacks
2 Kings Each side, Full height
ii. 16' Garage Door.....(2)-1¾"x18" LVLs.....5 Jacks
2 Kings Each side, Full height

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