



747 CONGRESS
LLC



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GENERAL NOTES

S1.0

Prepared For:

Consultant:

Architect

Project:

Revisions:

Seal:

Date:

7 JULY 2016

S1.0

STRUCTURAL GENERAL NOTES

DESIGN LOADS: International Building Code, IBC 2009 Edition, except as noted
Occupancy Category, Table 1604.5 II Standard
Roofs: Ground Snow, Pg 60 psf (used for drifting calculations)
Snow Exposure Factor Ce Table 1608.3.1 1.0
Snow importance Factor, Is Table 1604.5 1.0
Snow Thermal Factor, Ct Table 1608.3.2 1.1
Floors: Residential 40 psf
Lateral Wind IBC 1603.1.4, ASCE 7-05 Analytic Method
3 Second Gust Velocity 100 mph
Importance Factor 1.0
Building Category and Internal Pressure Coefficient
IBC 1609.2, ASCE Figure 6-5 Enclosed
Exposure B
Components and Cladding Pressures DP 25 uno. Also see arch.

FOUNDATION DESIGN:
Foundations are designed without an engineer's soil investigation. Foundation design criteria was assumed for purpose of foundation design and shall be confirmed by a soils engineer, at owner's expense, prior to construction. (This procedure may require revisions to foundation design, at additional expense to the owner, if soils engineer determines that such design criteria are inappropriate for this building site.)

-Footings-
Design of footings is based on
Maximum allowable bearing pressure 1,500 psf

CONCRETE AND REINFORCEMENT:
Concrete shall conform to applicable provisions of ACI-301 and 318.
Minimum 28 day compressive strength (F'c) as follows:
Footings and Walls: 3,000 w/ 4-6% air entrainment.
Interior Slabs: 4,000 psi w/ fibermesh
Cement Type: I/II
Deformed reinforcement: ASTM A615 grade 60, except bars specified to be field_bent, stirrups, and ties which shall be grade 40.
Fibermesh: 100% virgin polypropylene, fibrillated fibers as manufactured by Fibermesh Co. per ASTM C-1116 type 111 4.1,3 and ASTM C-1116 performance level one, 1.5 lb. per cubic yard.
Welded Wire Fabric (WWF): ASTM A185. See also plan.
Typical minimum foundation reinforcing 2 #5 top and bottom, (except as noted) continuous at corners and steps.
Reinforcement shall be fabricated and placed per ACI Manual of Standard Practice (ACI_315). At splices, lap bars 50 diameters unless noted otherwise.
Minimum 2 #5 around all four sides of all openings, extend min. 2' beyond openings.
Concrete cover over reinforcing: 1-1/2" for concrete placed against forms; 3" for concrete placed against earth. See also drawings.
In continuous members, splice top bars at mid span and bottom bars over supports.
Keep reinforcement clean and free of dirt, oil, and scale. Oil forms prior to placing reinforcement.

PLANT FABRICATED / PRE-ENGINEERED WOOD FRAMING:
Trussed floor joists and roof joists shall be designed and stamped by a registered engineer to support the full dead loads and the superimposed design loads noted on the drawings.
All pre-engineered trusses shall be designed for the deflection listed unless noted other on plans:
Eave: Total Load = 1/240 or 1" max. Live Load = 1/600
Roof: Total Load = 1/240 or 1" max. Snow Load = 1/360
Stresses shall not exceed those listed in the current NDS. 15% stress increase may not be used.
Web arrangement and member forces shall be determined by the fabricator.
Manufacture and installation of trusses shall comply with
ANSI/TPI 1 "National Design Standard for Metal-Plate-Connected Wood Truss Construction",
TPI H1B "Commentary and Recommendations for Handling Installing and Bracing Metal Plate Connected Wood Trusses",
TPI DSB "Recommended Design Specification for Temporary Bracing of Metal Plate Connected Wood Trusses".
Calculations and shop drawings, including member sizes, lumber species and grades, and substantiating data for connector capacities, shall be submitted to the Architect and Engineer for review prior to fabrication.
Manufactured "I"-series roof and floor joists shall be by TJI/ILevel, LPI, BCI, NJI, OJ with structural wood flanges and webs, and carry Code approval for the composite section.
Bridging and blocking shall be installed according to the fabricator's requirements.
Shop drawings shall be submitted to the Architect for review prior to fabrication.
Beams noted as LVL on plan shall be 1-3/4" wide Laminated Veneer Lumber beams of the depth noted on plan
Shall be plant-fabricated and manufactured by I Level,
Shall have the following minimum allowable design stresses:
Fb = 2600 psi Fv = 285 psi Fc (||) = 2460 psi Fc(°) = 750 psi E = 1900 ksi
Beams noted as PSL on plan shall be plant-fabricated
Manufactured by I Level, and have the following minimum allowable design stresses:
Fb = 2900 psi Fv = 290 psi Fc (||) = 2900 psi Fc(°) = 750 psi E = 2000 ksi

STRUCTURAL WOOD FRAMING:
In-Grade Base Values have been used for design.
2x framing shall be Spruce-Pine-Fir S4S No. 2 and better unless noted.
All lumber shall be 19% maximum moisture content, unless noted.
Solid timber beams and posts shall be Douglas Fir-Larch No. 1.
Studs shall be Spruce-Pine-Fir S4S No. 2 and better.
Top and bottom plates shall be Spruce-Pine-Fir S4S No. 2 and better.
Wood in contact with concrete shall be pressure-treated Spruce-Pine-Fir S4S No. 2 or Southern Yellow Pine.
Conventional light framing shall comply with IBC Section 2308.
Except as noted otherwise, minimum nailing shall be provided as specified in IBC Table 2304.9.1 "Fastening Schedule."

ALL PLYWOOD SHEATHING SHALL BE OSB SHEATHING AND SHALL BE APA GRADED WITH PANEL IDENTIFICATION INDEX, THICKNESS, AND NAILING AS NOTED ON THE DRAWINGS,
Nail wall sheathing with 8d commons at 6" o.c. at panel edges, and 12" o.c. at intermediate framing except as noted.
SHEATH ALL EXTERIOR WALLS. SHEATH INTERIOR WALLS AS SHOWN ON THE DRAWINGS. BLOCK AND NAIL ALL EDGES BETWEEN STUDS.
Sheathing shall be continuous from bottom plate to top plate. Cut in "L" and "T" shapes around openings. Lap sheathing over rim joists min. 4" at all floors to tie upper and lower stud walls together.
Minimum height of sheathing panels shall be 16" to assure that plates are tied to studs.
Minimum 3-8d per stud and nail plates with "edge nail" spacing.
Sole plate at all perimeter walls and at designated shear walls shall be nailed as for braced panels with 3-16d x 3 1/2" long box nails (coated or deformed shank) per 16". 12d nails are not acceptable.
Provide solid blocking between joists under jamb studs of openings.
Pre-engineered, prefabricated trusses shall be designed for the fabricator by a Professional Engineer Registered in the State of construction, and shall comply with Code Requirements.
Truss to truss connections specified shall be by truss supplier, unless specifically noted on the drawings.
Lower chord of gable end trusses shall be anchored to wall plate with framing anchors at 4'-0 spacing and laterally braced to roof framing at 8'-0 spacing.
Truss supplier shall specify all floor and roof truss bracing and bridging.
All roof rafters, joists, trusses, and beams shall be anchored to supports with metal framing anchors.
Light gage framing anchors shown or required, shall be Simpson "Strong Tie" or equal Code approved connectors and installed with the number and type of nails recommended by the manufacturer to develop the rated capacity.
Note that heavy-duty hangers and skewed hangers may not be stocked locally and require special order from the factory.
All beams and trusses shall be braced against rotation at points of bearing.
Unless otherwise indicated, install two lengths of solid blocking x joist depth x 12 inches long in floor framing under column loads. Columns must have a continuous load path to foundation.
Lead holes for lag screws shall be drilled in accordance with Table 6.23 of the ATC Timber Construction Manual, 3rd edition.

ABBREVIATIONS KEY table with columns for Abbreviation, Description, and Abbreviation, Description, and Abbreviation, Description.

STRUCTURAL DRAWING INDEX

Table with 2 columns: Drawing ID and Description, listing S1.0 GENERAL NOTES, S1.1 FOUNDATION PLAN, S1.2 FIRST FLOOR FRAMING PLAN, S1.3 SECOND FLOOR FRAMING PLAN, S1.4 THIRD FLOOR FRAMING PLAN, S1.5 ROOF FRAMING PLAN, S2.0 SECTIONS, and S2.1 SECTIONS.