

CITY OF ODESSA
STANDARD SPECIFICATIONS

ITEM 800
WOOD FRAME STRUCTURES

800.1 GENERAL

The exterior walls, interior partitions, floors and roofs of wood frame construction shall be designed and constructed to develop adequate strength to resist all vertical and lateral forces due to both dead, and live loads. The building structure and foundation shall be designed to conform to the latest standards edition of the American Institute of Timber Construction (AITC). All items in the specification shall conform to the latest edition of BOCA (Building Officials & Code Administrators).

800.2 DESIGN

Structural lumber and timber and its fastenings shall be adequately designed and assembled to safely sustain all imposed loads. All lumber used for load supporting purposes shall be identified by the grade mark of a lumber grading inspection agency approved by the building official. Loads shall conform to Article 7 (Structural and Foundation Loads & Stresses) of the BOCA Basic Building Code.

800.3 SCOPE OF WORK

The contractor shall provide architectural, structural, mechanical plumbing and electrical construction drawings and specifications for the building, with the utilities extending to (5'-10') feet outside the building line.

The contract shall include delivery of the building with all roof material, all exterior wall panels, interior wall panel materials (not preassembled), plumbing fixtures, toilet fixtures, toilet partitions and accessories, doors, windows and light fixtures, F.O.B. Job Site. The contractor shall be responsible for concrete slab, plumbing, electrical, H.V.A.C. and building construction. Any subsequent changes shall be done in writing and agreed upon by both parties with copies to each party.

800.4 SITework

The site shall be rough graded, near level, in order to install the foundation for the building. Finish grading and walkways to the site will be done by the contractor. All work shall conform to the Specification Section 2A - Excavating, Backfilling and Grading.

800.5 TERMITE TREATMENT

After excavation for slab and footings, soil shall be treated to prevent termites. Treatment shall be underground pressure spray type at minimum spacing and depths to insure complete saturation of area covered by the shelter construction, and as recommended by Manufacturer of the chemical treatment. Chemicals and application shall meet standards and regulations of EPA, Federal, State, and Municipal requirements. Applicator shall be State licensed to perform chemical pest control. Application shall only be made when the Director's Inspector is on site. A 5-year cost free warranty shall be given to the Inspector at the completion of the treatment.

800.6 FOUNDATION AND FLOOR

Slab to be true to line and grade so building can be set square and properly meet utility stub outs. Slab shall be poured over compacted fill and vapor barrier; finish with a fine broom surface and apply masonry sealer. The foundation and floor shall be designed to accommodate all structural loads, uplift pressures, and wind loads. The design drawings shall bear the seal and signature of a Professional Engineer. Wall sill plates, a minimum of a two-by-four inch (2"x4") member, shall be sized and anchored to foundation walls or piers and at intermediate intervals as required to resist wind uplift. Anchor bolts shall be a minimum of one-half (½") inch diameter. The bolts shall be embedded in foundations to a depth of not less than eight (8") inches poured in place concrete, and not less than fifteen (15") inches in grouted unit masonry. There shall be a minimum of two (2) anchor bolts per section of plate and anchor bolts shall be placed twelve (12") inches from the end of each section of plate with intermediate bolts spaced a maximum of eight (8') feet on center. Concrete, reinforcing steel, forms shall conform to Architectural Specifications Section 3A, 3B, and 3C accordingly.

Concrete slab shall get a light broom finish. Edges shall be rounded with an edging tool having a radius of ¼".

800.7 BUILDING CONSTRUCTION

Building shall be constructed of wood. Anchor plates shall be a maximum of one foot from corners. All exposed screws shall be vandal resistant. Anchor bolts, assembly screws and bolts shall be supplied by manufacturer. Roof truss design shall provide a clear-span structure. All exterior wall panels shall be factory assembled. All doors and windows shall be of approved material and in accordance with the accepted engineering practice standards. All material shall be in strict compliance with American Society of Testing Materials (ASTM) and as shown on plans.

800.8 PLUMBING

The design and installation of plumbing systems, including sanitary and storm drainage, sanitary facilities, water supplies and storm water and sewage disposal in buildings shall comply with the requirements of this article and accepted engineering practice as defined in the plumbing code.

800.9 ELECTRIC WIRING AND EQUIPMENT

All such installations shall conform to the provisions of this article and accepted engineering practice as defined in the National Electrical Code.

800.10 FIRE PROTECTION SYSTEMS

Where fire protection systems are required, the installation methods, repair, operation or maintenance shall be in accordance with BOCA Basic Building Code & the Mechanical Code.

800.11 MECHANICAL EQUIPMENT AND SYSTEMS

All mechanical equipment and systems shall be constructed, installed and maintained in accordance with the Mechanical Code.