



RESTROOM / SHELTER SPECIFICATIONS

Building structure as furnished by:

Cedar Forest Products
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800.552.9495

SPECIFICATIONS

Building material package shall be as designed and manufactured by Cedar Forest Products Company and specified herein. Any changes or departures from design shall be explained and documented by complete engineered drawings of a registered structural engineer at least seven days prior to the bid date. Also, bidder must be a reputable manufacturer of pre-cut buildings for at least two years and must be able to show a completed building of the type specified if requested by the owner. All dimensional lumber is nominal and various building products are available upon your request or building requirements. Cedar Forest Products Company also utilizes many other high quality construction materials, depending upon the particular application, justified economics, design considerations, and customer preference. Northern White Cedar is used in wall construction unless otherwise specified.

WALL TIMBERS

Wall timbers are nominal 4" X 8" Northern White Cedar. Timbers are milled to a double tongue and groove, v-groove booth side. Actual finish size of the timber shall be 3-1/2" thick by 7-1/2" tall with a 6-3/4" face. Moisture content shall not exceed 14% maximum measured throughout the piece. Timber is top-grade, kiln dried, unfinished Northern White Cedar allowing appearance of sound knots and other minimal growth traits. Face surface pattern shall be v- grooved on both interior and exterior faces and end-matched. Pine wall timber systems will not be acceptable.

ALLOWABLE DESIGN STRESSES

FC	Compression parallel to grain:	650 PSI
FC1	Compression perpendicular to grain:	425 PSI
FOV	Horizontal shear:	75 PSI
FB	Bending:	700 Lbs. PSI
FT	Tension parallel to grain:	425 Lbs. PSI
E	Modulus of elasticity:	1,000,000 PSI

STANDARD AND SPECIES OF LUMBER

All lumber shall conform to the current published standards of the following associations or agencies, as applicable unless otherwise specified herein:

- a. ASTM Designation D-245
- b. Western Wood Products Association – Grading for Western Lumber – Latest Edition

WALL TIMBERS

Timbers shall each be:

- Construction coded, numbered and lettered, for placement per course.
- Pre-cut to exact lengths per course.
- Pre-drilled for 1/4" x 10" timber screws. Screws are to be driven into timbers at < 36" on center.
- Pre-drilled for 1/4"x 6" corner screws. Screws are to be driven in one per corner.

Notches, beam pockets window and door openings to be pre-cut. Full heights are to be trimmed by the contractor on the building site.

Caulking and/or other air infiltration - heat flow deterrent measures for walls is required by the fabricator and is included.

FINISHES - APPLIED BY OTHERS IN FIELD AFTER CONSTRUCTION

Recommended Exterior Finish: All Cedar to receive two coats of Perma-Chink Lifeline Ultra-2 system and one coat of the Lifeline Advance, or equal. Color to be selected by owner/design professional.
Finish Coats - Material and Labor by Contractor.

Recommended Interior Finish: All Cedar Timbers, 1" x 8" T&G paneling and trim to receive three coats of water based urethane clear wood finish (Satin-Gloss). Type: non-flammable, acrylic. Color: clear when dry. Composition: acrylic urethane polymers in water. Contains no lead. Satin" also contains silica flattening agent or equal. **Finish Coats - Material and Labor by Contractor.**

STIFFENERS

Material and Quality Assurance: Structural glue laminated timber shall be in conformance with ANSI Standard A.190.1, American National Standard for structural glue laminated timber. Species: Laminated lumber shall be kiln-dried cedar, architectural appearance grade. Laminated stiffeners shall be 3-1/8" X 5-1/2". Manufacturers shall furnish connection steel and hardware for joining structural glue laminated timber members to their supports, exclusive of anchorage and embedment in masonry or concrete (**Anchor bolts, rebar, and other concrete reinforcement items are not furnished by Cedar Forest Products**).

FIRE RESISTANCE STANDARDS

Materials and systems used shall be in accordance with all the provisions of the Uniform Building Code; BOCA National Building Codes and Standard Building Code. Please check local code requirements to assure compliance.

FIRE RESISTANCE RATING

The fire endurance rating of the building load bearing cedar wall timbers shall be determined in accordance with the test procedures set forth in the American Society for Testing Materials, (ASTM E119) Fire Tests of Building Construction and Materials. Symmetrical, load bearing cedar timber wall when tested in accordance with ASTM E119-88, shall meet minimum one hour fire endurance and hose stream test.

A report of a one-hour fire endurance and hose stream test constructed on a symmetrical and load bearing cedar timber wall shall be provided by the manufacturer upon request.

DOORS

Exterior Door: Curries 607 Series Insulated 3/0 X 7/0 steel 18-gauge 1-3/4" thick flush, door. Prime finished grey. Field painting is required. Finish Coats: Surface preparation in accordance with SSPC-1 and or SSPC-2. Prime with Kem Kramik universal primer as manufactured by Sherwin Williams, or equal. Top coats (two required) of heavy duty Alkyd Enamel as manufactured by Sherwin Williams, or equal. Color to be selected by owner/design professional. **Finish Coats - Material and Labor by Contractor.**

Exterior doorframes: Curries 16 gauge, knocked down, with plumb anchors. Prime finished grey. Finish Coats: Surface preparation in accordance with SSPC-1 and or SSPC-2. Prime with Kem Kramik universal primer as manufactured by Sherwin Williams, or equal. Top coats (two required) of heavy duty Alkyd Enamel as manufactured by Sherwin Williams, or equal. Color to be selected by owner/design professional. **Finish Coats - Material and Labor by Contractor.**

HINGES

1-1/2 pair MacPro Five Knuckle Standard Weight MP79 or equal.

DOOR CLOSER

Hager 5200 Series, or equal.

DEAD BOLT

Double Cylinder Hager 3500 Series, or equal.

WINDOWS

Sierra Pacific H3 aluminum clad casements, std. Insulated, or equal.

LAMINATED ARCHES

Laminated timber shall conform to the American Institute of Timber Construction Standards, American Wood Systems and APA. Quality control provided in accordance with the American National Standards Institute ANSI/AITC-A 190.1-(latest edition), kiln-dried Southern Yellow Pine, glue laminated, sealed and wrapped. Laminated columns shall be sized to suit loading requirements. The roof system is designed to withstand 30 PSF live load and 20 PSF wind load.

CONNECTOR PLATES

Plates shall be fabricated from structural steel ASTM-A-36, steel plates shall be Powder coated. Standard color is Black. Unfinished zinc plated bolts.

ROOF DECKING

Machine stress-rated lumber, 2700 Fb-2.2 E (nominal) 2" x 6" #1 grade, single tongue and groove with V-joint on bottom face, kiln-dried Southern Yellow Pine, maximum moisture content shall be 19% or less selected for decking. Roof decking shall be field cut, specified lengths with all joints over supports. Graded in accordance with rules of the Southern Pine Inspection Bureau - (latest edition).

ROOF TRUSSES

TPI (Truss Plate Institute) standards sized for local codes. Pre-built engineered trusses on 24" centers or otherwise specified.

ROOF SHEATHING

APA rated sheathing, EXP 1, 19/32" thick, over trusses, unless otherwise specified.

ROOFING MATERIAL - FIBERGLASS SHINGLES

Shingles shall be square tab fiberglass, Class "A" fire rated, with a 30 year limited warranty. Shingles to be placed over 30 lb. felt and style "D" roof edge, conforms to ASTM D-3018. Roof applications will be per manufacturer's specifications. Color to be approved by owner/design professional.

Fasteners shall be conventional barbed shank roofing nails (11 or 12 gauge) with 3/8" diameter heads. Nails shall be of sufficient length to penetrate through the plywood sheathing on building with a ceiling. Metal roof edge shall be .024 aluminum brown and shaped as detailed on drawings.

FASCIA

Cedar, S4S, 2" x 8" sound tight knot, kiln dried.

SOFFIT

1" x 8" tongue and groove Cedar, sound tight knot, kiln dried, unless otherwise specified

EXTERIOR TRIM

1 X Cedar "D"/ Better Grade, kiln-dried to be provided, per plan. Contractor will need to cut and install trim based on standard practices. **Finish nails are to be provided by contractor.**

INTERIOR

Walls: Will be per plan, 2" x 4" studs, 16" on center covered by 1" X 8" kiln-dried sound tight knot, T&G Paneling (except on bathroom fixture walls). **Field framed and finished by others.**

Restroom Fixture Walls: 4' x 8' .090 Fiberglass Reinforced Panel sanitary wall covering will be per plan. Color to be white.

Trim: 1 x nominal, species per plan, "D"/ Better Grade, kiln-dried, surfaced on four sides, Contractor will need to cut and install trim based on standard practices. **Finish nails are to be provided by contractor.**

Recommended Interior Finish: All Cedar Timbers, 1" x 8" T&G paneling and trim to receive three coats of water based urethane clear wood finish (Satin-Gloss). Type: non-flammable, acrylic. Color: clear when dry. Composition: acrylic urethane polymers in water. Contains no lead. Satin" also contains silica flattening agent or equal. **Finish Coats - Material and Labor by Contractor.**

PLUMBING & ELECTRICAL PACKAGES AVAILABLE UPON REQUEST

Customized kits of supplies for each building are available, **local plumber or electrician needed for installation and code compliance.**

STRUCTURE RECEIVING & INSTALLATION

The fabricator shall furnish complete drawings showing necessary construction details. Installation of the structure shall be done with a competent supervisor in the construction trades according to Cedar Forest Products installation instructions providing proficient construction practices and procedures. The general contractor is responsible for:

- A. Using Non-marring slings and/or padded forks when handling steel and wood.
- B. Unloading the carrier/freight company. A crane or lift truck capable of lifting up to 4,000lb bunks is needed for unloading at the destination site.
- C. All trucks must be unloaded promptly at destination. Any detention or demurrage charges caused by delay in unloading will be responsibility of contractor/ purchaser.
- D. All orders will be scheduled to meet customer's requests to the best of our ability, however, Cedar Forest Products Company will not be responsible for specific time deliveries nor accept any back-charges for failure of trucks to arrive as scheduled.
- E. Security of materials after its arrival at the destination.
- F. Protecting building products after arrival at destination from weather, sunlight, and damage. Materials shall be placed on blocks well off the ground and separated with wood strips so that air can circulate around each member. Cover top and bottom with moisture-resistant paper.
- G. Using proper building practices recognized by OSHA and to have experience installing shelters of similar construction. These trades include but are not limited to: masonry work, steel construction, sheet metal work, carpentry, electrical and paint finishing.
- H. Required shimming, cutting, and minor adjustments for proper building erection.
- I. Examination of final work by verifying that the erection of the structure was done in conformance to the installation instructions provided by Cedar Forest Products and local building codes.
- J. Installing all components according to manufacturer's installation instructions and these specifications.
- K. Not attempting any field modifications or repairs without first contacting Cedar Forest Products.
- L. Field or Site Tests and Inspections. They are not required by Cedar Forest Products but may be required by the customer and/or by the local building inspector.

ENGINEERING

Building material packages that are designed and manufactured by Cedar Forest Products are reviewed by a registered structural engineer. Stamped structural drawings by a registered engineer licensed in the state of the project are available upon request. Structural calculations are available for an additional fee. Not included in our package is the site specific design of the foundation. No foundation stamped engineer drawings or calculations are provided by Cedar Forest Products. The purchaser must consult with a local registered structural engineer if the soil bearing conditions are different than those indicated in our drawings. The design, excavation, and construction of the structure(s) foundation must be verified by a local registered structural engineer.

END OF SECTION