

All Steel Dodecagonal Pavilion

Technical Specifications



- I. **Design Criteria:** Structure(s) shall be designed to be free standing, open air pavilion, in conformance with all applicable building codes. Manufactured by RCP Shelters: PO Box 25, Stuart, FL 34995, Ph: 800-525-0207, fax: 772-288-0207, web: www.rcpshelters.com, e-mail: info@rcpshelters.com.
- II. **Scope:** The structure shall be a twelve sided dodecagon over a 4" minimum thickness reinforced slab. There shall be no center column. The owner or contractor shall be responsible for unloading, temporary storage, soil testing (if necessary), site preparation, concrete slab, & erection of structures. Structure will be designed by professional, registered engineers.
- III. **Frame:** All structural framing of the pavilion shall be structural tube steel with end caps to form a clean, neat appearance and no place for bird nesting or small animals to roost. The compression ring shall be structural steel plate. Since all connections will bolt together, field welding shall not be required. Bolts shall be concealed within the tubing where possible. The steel frame, railings (if applicable), & overhead ornamentation (if applicable) of the pavilion shall be prime painted.
- IV. **Columns:** The shelter shall be set on prepared footings. Foundation will be constructed to local code, the shelter manufacturer's design, & good construction practices for the specific site conditions. The structure shall have twelve tube steel corner columns. The structure shall be attached to the top of the concrete by use of anchor bolts, hidden inside column when possible.
- V. **Column/Frame Finish:** Steel columns & frame to be factory prime painted with a rust inhibitive modified alkyd primer according to Steel Structures Painting Council (SSPC-SP2) as outlined in AISC 6.5. The columns & frame shall be finished painted in the field with a weather resistant paint, supplied and applied by the contractor or owner.
 - **Factory Finish Paint: (Optional)** The columns and frame shall be factory finish painted with two coats weather resistant enamel paint.
 - **Powder Coat: (Optional)** The columns and frame shall receive one coat zinc rich primer, then top coated with polyester powder-coating, 4 to 6 mils. The frame shall be packaged in foam, cardboard, and stretch wrap to protect the finish during transit.
- VI. **Eave & Pitch:** Eave height to be minimum 7'-6". Both roof pitches shall be 6:12 in the roof plane, sloped in twelve directions.
- VII. **Roofing:** The roof system shall be 24-gauge galvanized steel panels with 1-3/16" high ribs, 12" on center. It shall be pre-cut into panels 3' wide by the length from the eave to the ridge. Angles shall be factory pre-cut. Matching roof trim & fasteners shall be supplied. Ribs shall run with the pitch of the roof for proper drainage. Hip and ridge beams must have cap plates for metal deck bearing. Metal deck cannot bear on beam corner only. This is structurally unsound and will be rejected. Panels shall be pre-painted with a "Kynar 500" paint system to a color selected by owner from the standard color chart.
- VIII. **Ornamentation: (Optional)** The pavilion shall have 2nd tier ornamentation on twelve sides. All ornamentation to be factory welded to steel beams. Height below the ornamentation shall be a minimum of 7'-6".
- IX. **Rails: (Optional)** The pavilion shall have a railing on up to eleven sides. All railings to be minimum 36" high with plate steel pickets. Owner to select design: "O," "picket," or "X."
- X. **Cupola: (Optional)** A dodecagonal, all steel, louvered cupola shall be included for the peak of the pavilion. Cupola to be factory built, assembled, & attached to the compression ring for ease of installation.
- XI. **Pre-engineered Package:** The shelter shall be pre-cut & pre-fabricated package that shall include the structural frame, panelized roof, fasteners, trim & installation drawings. The structure shall be shipped in a knocked down manner for minimum shipping charges.