

## **SECTION 10 70 00 – PROTECTIVE COVERS**

### **PART 1 GENERAL**

#### **1.1 SUMMARY**

- A. Work in this section includes furnishing and installation of Illini shelter as manufactured by Americana Outdoors and as indicated on drawings.
- B. Illini model shelter is four-sided with pre-fabricated structure and gable roof.

#### **1.2 RELATED ITEMS AND CONSIDERATIONS**

- A. Concrete for shelter footings.
  - 1. Standard models are surface mounted with anchor bolts supplied by installer.
  - 2. Top of footings shall be sloped to allow water drainage away from post.

#### **1.3 SUBMITTALS**

- A. Furnish shop drawings and confirm dimensions prior to fabrication.
- B. Complete shop drawings available showing structural component locations and positions, material dimensions, and details of construction and assembly.
- C. Structural engineer sealed drawings and calculations available if required.

#### **1.4 QUALITY ASSURANCE**

- A. Shelter must conform to applicable national and local building codes.
- B. Manufacturer Qualifications: Minimum 60 years experience in the manufacturing of protective covers of the type specified.

#### **1.5 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver and store all shelter components in protected areas until time of installation.

#### **1.6 WARRANTY**

- A. Shelter must include a twenty-five (25) year limited warranty on steel against material failure. Ten (10) year warranty against peeling, cracking, blistering, or crazing of the surface finish of aluminum and steel components. One (1) year warranty against defects in material and workmanship.

### **PART 2 PRODUCTS**

#### **2.1 MANUFACTURER**

- A. Americana Outdoors, #2 Industrial Drive, P.O. Box 1290, Salem, IL 62881;  
1-800-851-0865

#### **2.2 MATERIALS**

**A. Roof**

1. W Panel conforming to 24" width from center of locks, 2 ½" deep, and ribs 8" on center. Panels shall have a snap lock to form a watertight connection. Available in aluminum alloy 3004-H34, conforming to ASTM B209, with a baked enamel finish. Available in Galvalume® steel, conforming to ASTM A792 Grade 50, with a baked enamel finish that meets "Energy Star specification for cool roofs" reflective coating to reflect heat away from the shelter. Standard colors available per manufacturer's color chart.

**B. Fascia**

1. Gutter fascia and fascia trim extruded from aluminum alloy 6105-T6.
2. Ridge cap extruded from aluminum alloy 6105-T5.

**C. Structure**

1. Extruded aluminum tubing is used throughout the shelter and shall be fabricated from aluminum alloy 6063-T6 or 6061-T6. Size to be determined by engineering calculations.
2. Steel plate is used throughout the shelter and shall conform to ASTM A36. Thickness and size to be determined by engineering calculations.

**2.3 ACCESSORIES****A. Fasteners**

1. High strength bolts conform to ASTM A325. Bolts shall be hot dip galvanized. Sizes vary from ½" to ¾" diameter, to be determined by engineering calculations.
2. #12-24 and #8-18 hex washer head, self-drilling screws shall be stainless steel or coated with zinc.

**2.4 FABRICATION**

- A. Welding shall conform to the American Welding Society's specification for the material being welded. Welding electrodes shall be E70XX. Welders shall be AWS D1.1 certified with welding inspector on staff.
- B. All structural steel components shall be shop fabricated so that field assembly of components can be performed using only bolting and screw placement.

**2.5 FINISHES**

- A. All aluminum components are coated with anti-graffiti polyester triglycidyl isocyanurate (TGIC) powder and baked/cured at 400° F. This finish meets AAMA 2604-2 specification.
- B. All steel components are blasted to near-white condition and cleaned with a 3-stage process. Components are sprayed with an alkaline cleaner/phosphatizer, rinsed with ambient water, and a final rinse with a chemical sealer. Components are then coated with anti-graffiti polyester triglycidyl isocyanurate (TGIC) powder and baked/cured at 400° F. This finish meets AAMA 2604-2 specification.

**PART 3 EXECUTION****3.1 EXAMINATION**

- A. Examine substrates upon which shelter will be installed with installer present for compliance with requirements for conditions affecting performance or work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.
- C. Installer shall confirm dimensions and elevations to be as shown on drawings provided by Americana Outdoors.
- D. Installation shall be performed by an experienced installer and scheduled after all concrete and masonry in the area are completed.

**3.2 INSTALLATION**

- A. Installation shall be in strict accordance with manufacturer's shop drawings. General installation guidelines are supplied with each shelter.
- B. Particular attention should be given to protecting the finish during handling and installation.
- C. After installation, entire system should be left in a clean condition.

**END OF SECTION**