

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

### **PART 1 GENERAL**

#### **1.1 SUMMARY**

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

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

- A. Concrete for shelter footings.
  - i. Standard models are surface mounted with anchor bolts supplied by installer.
  - ii. 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 Panels

1. Option: 10" V Panel
  - a) Aluminum alloy 3105-H14
  - b) 2 ¾" tall, 10" wide interlocking design
  - c) Available thickness: .032" and .038"
2. Option: 8" Flush Panel
  - a) Aluminum alloy 3105-H14
  - b) 2 ¾" tall, 8" wide interlocking design
  - c) Available thickness: .032"; .038"
3. Option: 24" Wide Multi-Rib Panel
  - a) Aluminum alloy 3004-H34
  - b) 2 ½" tall, 24" wide interlocking design
  - c) Aluminum Available thickness: .024"; .038"
  - d) ASTM A792, Grade 50 Galvalume steel
  - e) Galvalume Available thickness: 24 gauge
4. Option: 6" Wide Flush Extruded Panel
  - a) Aluminum alloy 6063 T6
  - b) 2-7/8" tall, 6" wide interlocking design
  - c) Available thickness: .065"

### B. Fascia

1. 5" Tall Gutter fascia extruded from aluminum alloy 6105-T6.
2. 5" Tall Projection fascia 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
  - a) Optional: Hollow Structural Section (HSS) steel tubing is used throughout the shelter and shall conform to ASTM A500 Grade B. 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 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