



# INSTRUMENT SUNSHADE / PANEL SHADE SPECIFICATION

## SECTION 13500 INSTRUMENT SUNSHADES / PANEL SHADES

### PART 1 GENERAL

#### 1.1 SECTION INCLUDES

- A. Instrument shades.

#### 1.2 RELATED SECTIONS

#### 1.3 REFERENCES

- A. ASTM D 638 – Standard Test Method for Tensile Properties of Plastics.
- B. ASTM D 790 – Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
- C. ASTM D 2583 – Test Method for Indentation Hardness of Rigid Plastics by Means of a Barcol Impressor.

#### 1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Test results of representative fiberglass reinforced plastic laminate.
- C. Shop Drawings: Show:
  - 1. Critical dimensions, jointing and connections, fasteners and anchors.
  - 2. Materials of construction.
  - 3. Sizes, spacing, and location of structural members, connections, attachments, openings, and fasteners.
  - 4. Color(s).
- D. Samples: 8-inch square sample of representative fiberglass reinforced plastic laminate.
- E. Manufacturer's installation instructions.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store products indoors or in weather protected area until installation. Protect from construction traffic and damage.

### PART 2 PRODUCTS

#### 2.1 MANUFACTURER

- A. The product shall be manufactured by TRACOM, Inc.; 6575-A Industrial Way, Alpharetta, Georgia 30004; Toll-Free Voice (877) 435-8637, Toll-Free Fax (866) 435-8637, [www.tracomfrp.com](http://www.tracomfrp.com).
- B. Requests for substitution must be made in writing and received by the engineer's office a minimum of ten (10) business days before bid opening. Substitutions shall be made in accordance with the provisions of Section 01600.
- C. Substitutions: Manufacturers not pre-approved shall not be allowed.
- D. Warranty: Shades shall be warranted to be free of defects in workmanship and materials for a period of two years from shipment.



## 2.2 INSTRUMENT SHADES

- A. Shade Type: Provide sunshades of the following type(s):
1. Size: \_\_\_\_\_ INCHES W x \_\_\_\_\_ INCHES D x \_\_\_\_\_ INCHES H.
    - i. Single-piece construction (sunshades).
    - ii. Single-piece construction with marine grade plywood reinforcing panel laminated into the back of the shade:
      - a. 1/2 inch thick (panel shades sizes 10-30)
      - b. 3/4 inch thick (panel shades sizes 40 and 50).
- B. Materials:
1. One-piece, fiberglass reinforced plastic.
  2. Gloss inside surfaces, free of irregularities.
  3. Minimum 3/16 inch wall thickness.
  4. Minimum 30% glass by weight.
  5. Isophthalic polyester resin.
  6. All corners shall be of a smooth and with minimum radius of 1/4 inch.
  7. 15 mil white Isophthalic U.V. resistant gel coat on all surfaces.
  8. Tensile strength (ASTM D 638): 14,000 PSI.
  9. Flexural strength (ASTM D 790): 27,000 PSI.
  10. Flexural modulus (ASTM D 790): 1,000,000 PSI.
  11. Barcol hardness (ASTM D 2583): 50.
  12. Black vinyl edge trim.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Verify that the shade is of the correct dimensions, fits the equipment to be covered, and is not damaged. Do not proceed with installation until condition deficiencies have been corrected.

### 3.2 INSTALLATION

- A. Install products in accordance with engineer's instructions, plans, blueprints, etc.
- B. Align the shade in the desired mounting position; horizontally leveling the shade with a bubble level.
- C. With a pencil, outline the desired location of the mounting holes on the mounting surface.
- D. Drill pilot holes in the outlined positions on the mounting surface with a variable speed drill. Drill to the desired depth of the mounting screws (mounting screws by others). The pilot holes should be drilled smaller the shank of the mounting screw.
- E. Position the shade against the mounting surface and install the mounting screws.
- F. Install the equipment either on the same mounting screws that support the shade or by screwing additional mounting screws into the shade.
- G. For additional installation instructions refer to latest revision of document SHADE-I.



3.3 ADJUST AND CLEAN

- A. Clean surfaces in accordance with the manufacturer's instructions.
- B. Remove trash and debris, and leave the site in a clean condition.

END OF SECTION

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