

10 7050 Exterior Sun Control Devices

PART 1 – GENERAL

1.1 Summary

- A. Provide a fixed custom translucent sunshade to assist in controlling the effects of the sun.
- B. Related work specified elsewhere
 - 1. _____ Concrete Section
 - 2. _____ Sheet Metal Work Section
 - 3. _____ Glazed Aluminum Curtain Wall Section
- C. The drawings show the extent of the work, the profile and depth of the sunshade to be provided. and hereby defined to include all sunshade devices of the type shown and specified herein.

1.2 Submittals

- A. Product Data
 - 1. Submit specifications, data, and installation instructions from the manufacturer of the sunshades.
- B. Shop Drawings
 - 1. Submit for architect's approval shop drawings, standard details or cut sheets for each sunshade.
 - 2. Show anchorage details and connections for all component parts.
- C. Structural calculations [OPTIONAL]
 - 1. Submit engineering analysis of design loads. Calculations shall be stamped and signed by a professional engineer in the jurisdiction of the project.
- D. Samples
 - 1. Submit one sample translucent sunshade, minimum 12" long in specified color for approval.
- E. Warranty
 - 1. Provide a written warranty to the owner that all products will be free of defective materials or workmanship for a period of one year from date of installation.

PART 2 - PRODUCTS

2.1 Manufacturers

- A. Basis of Design – DanpaShade system as manufactured by Danpal North America, Inc. 3959 Bur Wood Dr, Suite 400 Waukegan, IL 60085 312-724-8166 Email: TechnicalServices@danpal.com No substitutions.
- B. Other manufacturers must be approved 10 days prior to bid date by Architect and listed in addendum.

2.2 Materials

- A. Aluminum Extrusions: ASTM B211, Alloy 6063-T5 or better
- B. Fasteners: Unless otherwise noted, fasteners to be stainless steel, 300 series non-magnetic.
- C. Anchors and Inserts: Use non-ferrous metal or hot dip galvanized anchors and inserts for installation as required for corrosion resistance. Use stainless steel expansion bolt devices for drill in place anchors or inserts as required, to be set into concrete or masonry work.

2.3 Components

- A. Provide Danpal fixed sunshades from architectural grade polycarbonate.
- B. Brackets / framing shall be 6065-T5 or better.

2.4 Sunshade Model

A. DanpaShade AURA Sunshade System

- 1. Sunshades: 30mm thick x 300 mm wide tapered polycarbonate sunshade with Z-frame internal structure with Kinetic shade-shift technology.
- 2. Color: Color to be chosen by architect from Danpal full range of colors.
 - i. Exterior color: Clear IC51
 - ii. Vertical color: Fern Green FG25
 - iii. Diagonal color: Sky Blue 25
- 3. Anchor bracket: **[90-45 [5-degree increments]]** degrees aluminum brackets in 6005A-T61 or better alloy.
- 4. Orientation: Sunshade to be **[vertical] [horizontal]** orientation
- 5. End Caps: [Black] [White] [Grey]

OR

B. DanpaShade UMBRA Sunshade System

- 1. Sunshades: 16mm thick x 600 mm wide micro-cell technology.
Color: [Frost Blue IR PB30] Color to be chosen by architect from Danpal full range of colors.
- 2. Perimeter frame: 6063-T5 or better alloy.
- 3. Orientation: Sunshade to be **[vertical] [horizontal]** orientation

2.5 Aluminum Finish

- A. General: Finish on exposed aluminum shall be compliant with the performance standards set forth by AAMA All exposed ALUMINUM FINISH shall be from manufacturer standard color range:
 - 1. Options as follows:
 - a. Class I, clear anodic finish: Clear Anodize with 5 year warranty
 - b. [OPTIONAL] Manufacturer to furnish Kynar coating to meet AAMA 2604. A 10 year limited warranty shall begin on the date of material shipment.
 - c. [OPTIONAL] Manufacturer to furnish Kynar coating to meet AAMA 2605 . A 20 year limited warranty shall begin on the date of material shipment.

PART 3 - EXECUTION

3.1 Examination: Examine openings to receive the work. Do not proceed until any unsatisfactory conditions have been corrected.

3.2 Installation

- A. Delivery: At the time of delivery all materials shall be visually inspected for damage. Any damaged boxes, crates, sunshade sections, etc. shall be noted on the Bill of lading and immediately reported to the shipping company and the material manufacturer.
- B. Handling: Material shall be handled in accordance with sound material handling practices and in such a way as to minimize racking
- C. Comply with manufacturer's instructions and recommendations for installation of the work.
- D. Verify dimensions of supporting structure at the site by accurate field measurements so that the work will be accurately designed, fabricated, and fitted to the structure.
- E. Anchor sunshades to the building substructure as indicated on manufacturers drawings.
- F. Erection Tolerances:
 - 1. Maximum variation from plane or location shown on the approved shop drawings: 1/8" per 12 feet of length, but not exceeding 1/2" in any total building length or portion thereof (non-cumulative).
 - 2. Maximum offset from true alignment between two members abutting end to end, edge-to-edge in line or separated by less than 3": 1/16" (shop or field joints). This limiting condition shall prevail under both load and no-load conditions.
- G. Cut and trim component parts during installation only with the approval of the manufacturer, and in accordance with his recommendations.
- H. Do not install warped, bowed, deformed, or otherwise damaged materials. Remove and replace any material damaged during the installation process as directed.
- I. Install sunshades level and plumb.

3.3 Protection

- A. Protect installed materials to prevent damage by other trades. Use materials that may be easily removed without leaving residue or permanent stains.

3.4 Adjusting and cleaning

- A. Immediately clean exposed surfaces of the louvers to remove fingerprints and dirt accumulation during the installation process. Do not let soil remain until the final cleaning.
- B. Before final inspection, clean exposed surfaces with water and a mild soap or detergent not harmful to the material finishes. Do not use any abrasive material on the sunshades. Thoroughly rinse surfaces and dry.

End of Section