

SECTION 10700 - EXTERIOR SUN CONTROL SCREENS

City of San Diego, CWP Guidelines

PART 1 -- GENERAL

1.1 WORK OF THIS SECTION

- A. The WORK of this Section includes providing exterior sun control screens and all appurtenant work, complete.

1.2 RELATED SECTIONS

- A. The WORK of the following Sections applies to the WORK of this Section. Other Sections of the Specifications, not referenced below, shall also apply to the extent required for proper performance of this WORK.

- 1. Section 08520 Aluminum Windows, Horizontal, Sliding

1.3 CODES

- A. The WORK of this Section shall comply with the current editions of the following codes as adopted by the City of San Diego Municipal Code:

- 1. Uniform Building Code

1.4 SHOP DRAWINGS AND SAMPLES

- A. The following shall be submitted in compliance with Section 01300:

- 1. Manufacturer's product specifications, standard details and installation instructions.
- 2. One complete, full-size sample sun control screen as well as manufacturer's color charts consisting of sections of actual exposed components with integral or applied finishes showing full range of colors and materials available. After approval, sample may be installed in the WORK providing it is clearly identified and its location recorded for further reference as the minimum standard of quality for remaining sun control screen installations.
- 3. Shop drawings for special components and application conditions of exterior sun control screens which are not fully dimensioned or detailed in manufacturer's product data. Relationships to adjoining work shall be clearly defined.
 - a. Typical elevation layout shall be included indicating proposed division between screen units and meeting edges at corners. Sections and details shall be provided at head, jambs and sill, clearly defining relationships between screen units and windows and

other related items. Overall dimensions shall be included for screens as well as related window units, with specific clearances for operating units and hardware.

- b. A schedule shall be provided of all units to be furnished, including field measurements at each location.

1.5 OWNER'S MANUAL

- A. The following shall be included in the OWNER'S MANUAL in compliance with Section 01300:
 1. Product Data: Manufacturer's maintenance and repair recommendations.

1.6 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. **Delivery of Materials:** Manufactured materials shall be delivered in original, unbroken packages or containers bearing the manufacturer's label. Packages or containers shall be delivered to the site with seals unbroken.
- B. **Storage:** All materials shall be carefully stored in an area that is protected from deleterious elements in a manner recommended by the product manufacturer. Storage shall be in a manner that will prevent damage to this material or marring of its finish.

PART 2 -- PRODUCTS

2.1 SUN CONTROL SCREENS

- A. **General:** Sun control screens shall consist of rigid aluminum-framed metal mesh screening applied to the outside surfaces of exterior windows and having the following characteristics:
 1. Horizontal components shall be louvered at such an angle that screen provides 100 percent shade to windows at sun altitude angles of 40 degrees or greater, with shade installed vertically.
 2. Screens shall afford an open "free-air" area of no less than 70 percent of the exposed screen surface.
 3. Insect Protection: Sun control screens shall provide no less than 17 horizontal divisions to the vertical inch for insect screening.
 4. Screens shall be provided which are complete assemblies produced by one manufacturer, including hardware, accessory items, mounting brackets, and fastenings.
 5. Screens shall be provided in colors and material finishes as indicated or, if not indicated, as selected by the CONSTRUCTION MANAGER.

B. **Frames:** Sun control screening shall be positively anchored into extruded aluminum perimeter frames of 6063-T5 alloy, anodized to minimum 204-R1 specification. Method of perimeter anchorage shall serve to maintain uniform screen tautness and maintain consistent tilt of the shading louvers.

1. Size and type of perimeter frames shall be as recommended by the manufacturer for the size and type of opening.
2. At continuous window wall installations, sun control screens shall be fabricated so that ends occur only over mullions or other defined vertical separations, unless otherwise indicated.
3. Color and finish of perimeter frames shall be as selected by CONSTRUCTION MANAGER.

C. **Fasteners, Anchors and Hardware:** All fasteners, anchors and hardware shall be of stainless steel or anodized aluminum. Exposed components shall be finished to match screen frames.

2.2 MANUFACTURERS

A. Products of the type indicated shall be manufactured by one of the following (or equal):

1. KSI Shading Systems, Inc.
2. Phifer Fire Products

PART 3 -- EXECUTION

3.1 INSTALLATION

- A. **General:** CONTRACTOR shall install exterior sun control screen units in compliance with manufacturer's instructions. Units shall be positioned level, plumb, secure, at proper height and location relative to adjoining window units and other related work. Units shall be securely anchored with proper clips, brackets, anchorages, suited to the type of mounting indicated.
- B. Adequate clearance shall be provided between sash and screens to permit unencumbered operation of sash hardware, where present.
- C. Metal parts shall be isolated from concrete and mortar to prevent galvanic action. Tape or thick coating or other means recommended by the manufacturer shall be used to effect a separation.

** END OF SECTION **

