

## SECTION 10 82 13 - EQUIPMENT SCREENS

### PART 1 - GENERAL

#### 1.1 SUMMARY

A. Section Includes:

1. Rooftop equipment screens mounted to mechanical equipment.

#### 1.2 SYSTEM DESCRIPTION

A. Design Criteria:

1. Manufacturer is responsible for the structural design of all materials, assembly and attachments to resist snow, wind, suction and uplift loading at any point without damage or permanent set.
2. Design to resist ASCE 7-05 - Minimum Design Loads for Buildings and Other Structures

#### 1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's catalog data, detail sheets, specification and other data sufficient to indicate compliance with these specifications.
- B. Shop Drawings: Indicate layouts heights, component connection details, and details of interface with adjacent construction. Mark data to indicate roof top mechanical equipment to be enclosed.
- C. Samples: Screen panels, color as specified in Division 01 Section "Exterior Finishes and Colors."

#### 1.4 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with requirements of building authorities having jurisdiction in Project location.
- B. Manufacturer Qualifications: Minimum five years documented experience producing systems specified in this section.

#### 1.5 PROJECT CONDITIONS

- A. Field Measurements: Take measurements of actual Roof top unit for fit without gaps. Indicate measurements on shop drawings fully documenting any field condition that may interfere with the screen system installation.

## PART 2 - PRODUCTS

### 2.1 GENERAL

- A. Contractor's Option: Provide either equipment mounted screens or roof mounted screens unless otherwise indicated on the Drawings or required by authorities having jurisdiction.

### 2.2 EQUIPMENT MOUNTED SCREENS

- A. Basis of Design Product: Envisor Screening System; CityScapes Inc.

B. Materials

1. Thermoformed plastic Panels: Fabricated from rigid medium impact thermo-formed ABS (Acrylic Butylene Styrene) sheets.
  - a. Minimum Thickness **3/16-inch (5-mm)**.
2. Framing: Aluminum Plate, Shapes and Bar: ASTM B 221, alloy 6061-T5 or 6063-T5.
3. Threaded Fasteners: All screws, bolts, nut and washers shall be Stainless steel.
  - a. Corner assembly fasteners shall be #10-16 x stainless steel TEK screws. Length as required to develop full holding capacity of screw when fastened to Mechanical Equipment.
  - b. Provide lock washer or other locking device at all bolted connections.

C. Fabrication

1. Provide factory-formed panel systems with continuous interlocking panel connections and indicated or necessary components. Form all components true to shape, accurate in size, square and free from distortion or defects. Cut panels to precise lengths indicated on approved shop drawings.
  - a. Panel Style: Vertical]
  - b. Panel Design: Wide Rib
  - c. Panel Height: As required for equipment [**35-inch (889-mm)**][**52-inch (635-mm)**][**70-inch (1778-mm)**] vertical
2. Trim and Closures: Fabricated from 24-gage, **0.024-inch (0.61-mm)** metal, and finished with the manufacturers standard coating system, unless shown otherwise on drawings.
  - a. Provide top trim as indicated: 3" Lineal Band.
3. Framing: Fabricate and assemble components in largest practical sizes, for delivery to the site.
  - a. Construct corner assemblies to required shape with joints tightly fitted.
  - b. Supply components required for anchorage of framing. Fabricate anchors and related components of material and finish as required, or as specifically noted.

D. Finishes

1. Aluminum Framing: Mill.
2. Panel Coating: Manufacturer's standard coating system, factory-applied.
  - a. Color: Dark Bronze.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Installer's Examination: Examine conditions under which construction activities of this section are to be performed.
1. Submit written notification to Architect and screen manufacturer if such conditions are unacceptable.
  2. Beginning erection constitutes installer's acceptance of conditions.

3.2 INSTALLATION, GENERAL

- A. General: Install units in accordance with the manufacturer's instructions and approved shop drawings. Keep perimeter lines straight, plumb, and level. Provide brackets, anchors, and accessories necessary for a complete installation.

3.3 INSTALLATION, EQUIPMENT MOUNTED SCREENS

- A. Fasten structural supports to HVAC units without damaging operation of the unit.
1. Provide corner and mid-span assemblies as required by approved shop drawings so that the panels are supported uniformly.
  2. Fastening bottom rail using bolts to permit ease of access to HVAC units.
- B. Insert thermoplastic panels into structural supports, except where fixed attachment points are indicated. Butt thermoplastic panels to adjacent panels for uniform fit. Fasten fixed panels in accordance with the shop drawings.
- C. Metal Separation: Where aluminum materials would contact dissimilar materials, insert rubber grommets at attachment points, thus eliminating where dissimilar metals would otherwise be in contact.
- D. Do not cut or abrade finishes which cannot be restored. Return items with such finishes to shop for required alterations.

3.4 ERECTION TOLERANCES

- A. Maximum misalignment from true position: **1/4-inch (6-mm)**.

3.5 CLEANING AND PROTECTION

- A. Remove all protective masking from material immediately after installation.
- B. Protection:
  - 1. Ensure that finishes and structure of installed systems are not damaged by subsequent construction activities.
  - 2. If minor damage to finishes occurs, repair damage in accordance with manufacturer's recommendations; provide replacement components if repaired finishes are unacceptable to Architect.
- C. Prior to Substantial Completion: Remove dust or other foreign matter from component surfaces; clean finishes in accordance with manufacturer's instructions.
  - 1. Clean units in accordance with the manufacturer's instructions.

END OF SECTION 10 82 13