### SECTION 323500 - SITE SCREENING DEVICES

#### PART 1 - GENERAL

#### 1.1 SUMMARY

#### A. Section Includes:

- 1. Pre-formed thermoplastic panel for screening for buffering mechanical units.
- 2. Aluminum support framing for direct attachment of screen support columns are provided for attachment to concrete pad, piers, or footings provided by others.
- 3. Operable gates for access through screens.

#### B. Products Not Installed or Furnished in This Section:

- 1. Touch-up painting required for scratches and screw heads.
- 2. Field painting of prime painted screens

#### 1.2 REFERENCES

- A. American Society for Testing and Materials: Standard Specifications for
  - 1. ASTM B 221-13 Aluminum and Aluminum Alloy Extruded Bars, Rods, Wire Profiles, and Tubes.
- B. The Aluminum Association, Inc.
  - 1. AA ADM-1516166 (1994) Aluminum Design Manual
- C. American Society of Civil Engineers.
  - 1. ASCE 7-95 Minimum Design Loads for Buildings and Other Structures.

### 1.3 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. Framing shall be designed in accordance with the Aluminum Design Manual.
- a. ASCE 7-95 Minimum Design Loads for Buildings and Other Structures; American Society of Civil Engineers.

### 1.4 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.

## C. Samples:

- 1. Samples of Materials: Thermoplastic panels, Plankwall<sup>TM</sup>, Nature Screen <sup>TM</sup>, Metal Series
- 2. Color Selection: As specified.
- D. Certification: Manufacturer's Certificate of Compliance certifying that panels supplied meet or exceed requirements specified.
- E. Closeout Submittals: Warranty documents, issued and executed by manufacturer, countersigned by Contractor.

# 1.5 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with requirements of building authorities having jurisdiction in Project location.
- B. Manufacturer Qualifications: Minimum five (5) years documented experience producing systems specified in this section.

# 1.6 DELIVERY, STORAGE AND HANDLING

- A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly indicating manufacturer and material.
- B. Storage and Handling: Protect materials and finishes during handling and installation to prevent damage.

### 1.7 PROJECT CONDITIONS

A. Field Measurements: Take measurements of supporting paving, footings, or piers. Indicate measurements on shop drawings fully documenting any field condition that may interfere with the screen system installation.

## 1.8 COORDINATION

- A. Installer for work under this Section shall be responsible for coordination of panel and framing sizes and required options with the Contractor's requirements.
  - 1. Request information on sizes and options required from the Contractor.
- B. Submit shop drawings to the Contractor and obtain written approval of shop drawing from the Contractor prior to fabrication.
- C. Confirm size, type, and location of supporting construction as adequate to resist column supports.

#### 1.9 WARRANTY

A. If any part of the screen system fails because of a manufacturing defect within one year from the date of substantial completion, the manufacturer will furnish without charge the required replacement part(s). Any local transportation, related service labor or diagnostic call charges are

not included.

#### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Acceptable Products: Covrit Gates and Screening System by CityScapes International Inc, 4200 Lyman Ct. Hilliard, OH 43026. 1-877-727-3367 www.cityscapesinc.com www.covrit.com.
- B. Substitutions: Not permitted.

## 2.2 MATERIALS

- A. Plankwall<sup>TM</sup> ,PVC (Polyvinyl Chloride), ToughGate (Gates) are comprised of PVC (Polyvinyl Chloride) sheets.
  - 1. Minimum thickness: 3/16 inch (4.7625mm).
- B. Framing: Aluminum Plate, Shapes and Bar: ASTM B 221, alloy6005-T5, 6061-T5 or 6063-T5.
- C. Threaded Fasteners: All screws, bolts, nut and washers shall be Stainless steel.
  - 1. Corner assembly fasteners shall be #10-16 x stainless steel TEK screws.
  - 2. Provide lock washer or other locking device at all bolted connections.

#### 2.3 FABRICATION

- A. 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.
- B. Fabricate products to the following configurations:
  - 1. Panel Style: Plankwall Vertical.
  - 2. ToughGate Gate Style:
    - a. Madison.
  - 3. Panel and Gate Height: 8 feet.
  - 4. Gate Width: Per plans.
  - 5. Decorative Top Rail Trim Profile: Boxed.
- C. Trim and Closures: Fabricated and finished with the manufacturers standard coating system, unless shown otherwise on drawings.
- D. Framing: Fabricate and assemble components in largest practical sizes, for delivery to the site.
  - 1. Construct corner assemblies to required shape with joints tightly fitted.
  - 2. Supply components required for anchorage of framing. Fabricate anchors and related components of material and finish as required, or as specifically noted.
- E. Gate Hardware: Provide manufacturer's standard adjustable cradle pipe hinge of size required to fit support pipe provided.

1. Padlock with full-size key.

### 2.4 FINISHES

- A. Aluminum Framing: To be selected from manufacturer's standard colors.
- B. Panel Coating: Manufacturer's standard coating system, factory-applied.
  - 1. Color: Beechwood

#### **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

- A. 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.
- B. Fasten structural supports to paving, footings, or piers at spacing as indicated on approved shop drawings.
- C. 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.
- D. 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.
- E. Do not cut or abrade finishes which cannot be restored. Return items with such finishes to shop for required alterations.

## 3.3 ERECTION TOLERANCES

A. Maximum misalignment from true position: \( \frac{1}{4} \) inch (6.35 mm).

# 3.4 CLEANING AND PROTECTION

A. Remove all protective masking from material immediately after installation.

# A. 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.
- B. 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 323500**