**PART 1 GENERAL**

1.01 **Description**

The security screens shown on the plans and herein specified are the products of Kane Innovations, Erie, Pennsylvania. This manufacturer’s name and products have been used to establish the standards of construction and quality of workmanship required for this project. Manufacturers bidding on this project must be actively engaged in the fabrication of specified items for a minimum of five (5) years prior to the bid date. Manufacturers requesting approval to bid their products as equal must submit to the Architect full-size drawings, including details of construction, and a complete operating security screen sample, ten (10) days prior to the bid date.

1.02 **Submittals**

1. Manufacturer shall submit shop drawings, showing details of attachment to surround materials and elevations showing scope of the project.
2. Samples of materials as may be requested without cost to owner: frame sections, wire cloth, fasteners, mullion section, corner section, etc.

1.03 **Warranty**

The operation of the security screen supplied by Kane Innovations on the designated project shall have a one (1) year warranty against any proven defective material or parts, as called for in the specifications and approved shop drawings. This warranty does not cover abuse by others.

**PART 2 PRODUCTS**

2.01 **Acceptable Manufacturers**

 Kane Innovations, Erie, PA

 🕿 (800) 773-2439

2.02 **Main Frame**

1. The main frame rails shall be of not less than 1 3/16”[30.163mm] x 1 3/8”[34.925mm] extruded from 6063-T6 aluminum alloy. All thickness shall be .080-inch. The corners of the main frame shall be mitered, fitted with an internal corner assembly then welded.
2. Removable barrier back rail, extruded from 6063-T6 aluminum alloy, .030- inch thick, .088 lbs./ft, shall be attached to the main frame using square drive TEK screws.

2.03 **Sub-frame**

1. Sub-frame shall be extruded from 6063-T6 aluminum alloy. Wall thickness shall be .090 inch. The corners of the sub-frame shall be mitered, secured by an internal tension coupling and shall be resistant to both torsion and flexural strength.

2.04 **Testing and Performance**

Certifications - Performance and testing must comply with impact test, sag test and forced entry resistance test of SMA 6001-02. Manufacturer must submit the AAMA Notice of Product Certification in compliance with CFR 200.935 as “Security Screen - Heavy”.

2.05 **Finish**

1. The *aluminum sub-frame* shall be thoroughly cleaned in a 5-step bonderizing process. An electrostatically applied thermoplastic, polyester powder coating shall be applied and baked to a hard mar-resistant finish in one of Kane’s standard colors. Coating shall meet or exceed AAMA 2603.
* White
* Gray
* Black
* Beige
* Dark Bronze
* Custom colors are available at additional cost with submission of color sample.
1. The main frame and infillshall be thoroughly cleaned in a 5 step bonderizing process. An electrostatically applied ***black***, thermoplastic, polyester powder coating shall be applied and baked to a hard mar-resistant finish. Coating shall meet or exceed AAMA 2603.

2.06 **Infill**

* 16-gauge mill-galvannealed steel with 63% open area
* 14-gauge mill-galvannealed steel with 51% open area
* 12-gauge mill-galvannealed steel with 51% open area
* 18-gauge stainless steel with 63% open area
* The barrier panels can accommodate optional insect screening.

2.07 **Infill Attachment**

1. The perforated panel shall be retained by a removable barrier back rail and square drive TEK screws.
2. Square drive TEK screws shall penetrate the barrier back rail, perforated panel and barrier frame approximately 6” on center.

2.08 **Emergency Egress Release**

* 1. Each barrier shall operate through a single point release mechanism. When the egress release is activated a sliding planar motion will free the barrier from the frame retention members. An outward pivoting motion will then open the panel for egress.
	2. Each barrier shall have a tamper shield installed at the emergency release to prevent tampering of the release mechanism from the exterior.

2.09 **Hardware**

1. Each barrier shall be provided with two clevis hinge pins to provide tracking of the operable barrier when the barrier is opened.
2. Each barrier shall come fully assembled and tested at the factory for operation.

**PART 3 EXECUTION**

3.01 **Inspection**

Verify that openings fit allowable tolerance, are plumb, level, provide a solid anchoring surface and comply with approved shop drawings.

3.02  **Installation**

1. Install in accordance with approved shop drawings and specifications.
2. Plumb and align faces in a single plane and erect screens square and true, adequately anchored to structure.
3. After completion of installation, screens shall be adjusted, in working order and cleaned.

**PART 4 ENVIRONMENTAL REPORTING**

4.01 **LEED Materials and Resources**

1. Recycled Content: This product contributes toward satisfying Credit 4 under LEED.
2. Regional Material – This product can contribute toward satisfying Credit 5 under LEED.