**LEVEL 4**

**Top-Hinged**

**Aluminum Protector Security Screen**

**Model: A-PRO-B**

**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, 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 may be requested without cost to owner: frame sections, infill sections, fasteners, 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 shall be not less than 1” [25.4mm] x 1-1/2” [38.1mm] wide, double hollow, “L” shape and extruded from 6063-T6 aluminum alloy. Weight shall be not less than .422 lbs/ft., with a nominal thickness of .075- inch. The corners of the main frame shall be mitered, fitted with an internal tension coupling assembly and fastened. The screen frame shall have an integral groove for the retention of a combination cushioning strip/insect shield.
2. A removable concealment plate, extruded from 6063-T6 aluminum alloy shall be attached to the main frame using square drive TEK screws. Weight shall be not less than .068 lbs./ft. with a nominal thickness of .050-inch.

2.03 **Finish**

1. The main frame and brace shall be thoroughly cleaned in a 5-step bonderizing process. An electrostatically applied thermoplastic, polyester powder coating (2.5 mil min. thickness) 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.

 215 R1 Clear Anodized (Also additional cost)

1. The concealment plate shall be thoroughly cleaned in a 5-step bonderizing process. An electrostatically applied **black**, thermoplastic, polyester powder coating (2.5 mil min. thickness) shall be applied and baked to a hard mar-resistant finish. Coating shall meet or exceed AAMA 2603.
2. The infill shall be thoroughly cleaned in a 5-step bonderizing process. An electrostatically applied **black**, thermoplastic, polyester powder coating (2.5 mil min. thickness) shall be baked to a hard mar-resistant finish. Coating shall meet or exceed AAMA 2603.

2.04 **Infill**

***Wire Cloth***

* Wire cloth shall be woven 12-mesh to the inch from .023 [0.58] inch diameter Type 304 stainless steel wire and double crimped.
* Wire cloth shall be woven 12-mesh to the inch from .028 [0.71] inch diameter Type 304 stainless steel wire and double crimped.
* Wire cloth shall be woven 10-mesh to the inch from .047 [1.19] inch diameter Type 304 stainless steel wire and double crimped.

***Perforated Panel***

* + 16-gauge mill-galvannealed with 63% open area
  + 14-gauge mill-galvannealed with 51% open area
  + 12-gauge mill-galvannealed with 51% open area
  + 18-gauge stainless steel with 63% open area

2.05 **Infill Attachment**

1. The perforated panel shall be retained by a removable concealment plate and square drive TEK screws.
2. Wire cloth shall be hemmed 180 degrees and retained by a removable concealment plate and square drive TEK screws. (for 12 mesh .028 wire cloth only)
3. Square drive TEK screws shall penetrate the concealment plate, infill and main frame approximately 4” [101.6] on center.

2.06 **Emergency Egress Release**

Each screen shall have two stainless steel spring loaded slide/lock bolts for emergency egress from the inside.

2.07 **Hardware**

1. Each screen shall have an aluminum continuous piano hinge, 2” [50.8] open, .060-inch thickness with a 1/8” [3.175] diameter stainless steel pin, attached to the main frame at the head with square drive TEK screws. An electrostatically applied thermoplastic, polyester powder coating (2.5 mil min. thickness) shall be applied and baked to a hard mar-resistant finish.
2. Each screen shall come fully assembled and tested at the factory for operation.

**PART 3 EXECUTION**

3.01 **Inspection**

Verify that openings fit allowable tolerances 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.