**LEVEL 4**

**Aluminum Guardian Screen**

**Model : A-GRD-Z**

**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 **Certifications**

A. Performance and testing must comply with impact and forced entry resistance test in accordance with Paragraphs 4.3 & 5.3 of the SMA 6001-2002 specification and rated as “Security Screen - Heavy”

B. Impact Test - Resist 100 ft. lbs. of force without stretching the screen material more than 3 inches and without tearing the screen cloth at any point.

C. Forced Entry Test - Resist a prying load of 150 lbs. and simultaneous pulling of 300 lbs. without springing the lock of pulling the frame.

2.03 **Main Frame**

 A. The main frame shall be not less than 1" x 2" wide, and extruded from 6063-T6 aluminum alloy. Weight shall be not less than .410 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.

 B. 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.

2.04 **Finish**

1. The main 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

❑ Dark Bronze

❑ Beige

❑ Custom colors are available at additional cost with submission of color sample.

1. Anodized finish options:
* Clear anodize (215-R1)
1. The stainless steel wire cloth and concealment plate shall be thoroughly cleaned in a 5-step bonderizing process. An electrostatically applied black, thermoplastic, polyester powder coating shall be baked to a hard mar-resistant finish.

2.05 **Infill**

***Wire Cloth***

❑ 12-mesh .023-inch stainless steel

❑ 12-mesh .028-inch stainless steel

2.06 **Infill Attachment**

1. The infill shall be formed at 90 degrees and retained by a removable concealment plate and square drive TEK screws.
2. Square drive TEK screws shall penetrate the concealment plate; infill and main frame approximately 6” on center.

2.07 **Hardware**

Each screen shall have one the following to hold it in position:

1. Four (4) steel set screws
2. (Optional) Tension Springs
3. Each screen shall come fully assembled and tested at the factory for operation.

**PART 3 EXECUTION**

3.01 **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.

3.02 **Inspection**

Verify that the screen frame is fully engaged in the insect screen track.

**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.