

LEVEL 7

Operable

Aluminum Defender Security Screen

Model: A-DEF-O

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

- A. Manufacturer shall submit shop drawings, showing details of attachment to surround materials and elevations showing scope of the project.
- B. Samples of materials as may be requested without cost to owner: frame sections, wire cloth, fasteners, mullion section, corner section, etc.
- C. Additional submittals shall be done in accordance to contract specification section 08663 part 1.05

1.03 Warranty

The operation of the security screen supplied by Kane Innovations on the designated project is warranted for one (1) year 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

- A. The main frame shall be of channel design, extruded from 6063-T6-aluminum alloy. Weight shall be not less than 1.30 lbs./ft. Thickness shall be a minimum of .156 [3.9624mm] and .125-inch. The corners of the main frame shall be mitered and internally robotically welded.
- B. A removable interlocking concealment plate, extruded from 6063-T6 aluminum alloy, .062-inch thick, .314 lbs./ft., shall be attached to the main frame using TORX® tamper-resistant screws.

2.03 Sub-frame

- A. The sub-frame shall be of channel design, extruded from 6063-T6-aluminum alloy. Weight shall be .515 lbs./ft. Wall thickness shall be .090-inch. The corners of the sub-frame shall be mitered, secured by an internal tension coupling assembly and shall be resistant to both torsion and flexural failure.
- B. The sub-frame shall have a continuous groove retaining a combination cushioning strip/insect shield. The depth of the sub-frame shall be no more than 1-3/4" [44.45].

2.04 Finish

- A. The aluminum 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.

2.05 Infill

- 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.

2.06 Wire Cloth Attachment

- A. The wire cloth hardware shall consist of clevises, stainless steel pins, bolts, washers, oil tempered coil springs and full tempered steel 1/8" [3.175] x 3/8" [9.525] shock distributing bars.
- B. Each shock absorber shall be individually mounted on an electroplated, oil tempered coil spring, which shall have a capacity of 175 pounds per 1/2" [12.7] of movement and spaced no more than 8" [203.2] apart.
- C. The four edges of the wire cloth shall be wrapped 180 degrees around continuous shock distributing bars for the full length of each edge, embedded within the yokes of the shock absorbers and held in position with stainless steel pins passing completely through the yoke and engaging the wire cloth twice.
- D. TORX® tamper-resistant screws shall penetrate the removable interlocking concealment plate and main frame approximately 12" [304.8] on center.

2.07 Locks and Releases

- A. Each screen shall have a concealed actuating ball bearing, 1/2" [12.7] diameter casehardened steel bolts. The bolts shall operate simultaneously from one key station with a special Bitt key.
 - Kane 107® Bitt key lock
 - Type 107N (four tumbler) (Egress not available with this option)
 - Keyed both sides
- B. Optional Emergency Releases:
 - Lift-Quick™
 - Push-Quick® release which conforms to NFPA 101 (5-2.1.7.1)
 - Down-Quick™

2.08 Hardware

- A. Each screen shall be provided with two or more concealed 13-gauge, electroplated steel hinges with 1/4" [6.35] diameter hardened, loose stainless steel pins and integral compression guards. Hinges shall be spaced at a maximum of 24" [609.6] on center. 13-gauge stainless steel hinge available.
- B. Each screen shall include adjustment screws (1/4-20 x 3/4" Phillips pan head thread cutting screw) and 1-3/16" [30.163] x 3/4" [19.050] x .060 aluminum scribes shall be supplied at the head and jams if required.
- C. 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

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

PART 4 ENVIRONMENTAL REPORTING

4.01 LEED Materials and Resources

- A. Recycled Content: This product contributes toward satisfying Credit 4 under LEED.
- B. Regional Material: This product can contribute toward satisfying Credit 5 under LEED.