

LEVEL 5 Operable Steel NarrowLine Security Screen Model: S-NR5-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 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 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 rails shall be of not less than 16-gauge 1" [25.4mm] x 1" [25.4] seamless welded galvanized steel tubing with high strength die cast metal corners which are pneumatically inserted into the frame ends with an interference fit.
- B. A removable face plate, extruded from 6063-T6 aluminum alloy, .062-inch thick .212 lbs./ft., shall be attached to the sides of the main frame using square drive Tek screws. The faceplate corner bead shall integrate with the sub-frame to conceal the hardware and fasteners.

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 subframe 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 subframe shall be no more than 1 3/4".

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

- A. The *sub-frame, faceplates and scribe angles* 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. Coating shall meet or exceed AAMA 2603.

- White
- Dark Bronze
- Gray
- Beige
- Black
- Custom colors are available at additional cost with submission of color sample

- 215 R1 Clear Anodized at additional cost

- B. The *main frame and 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 applied and baked to a hard mar-resistant finish. Coating shall meet or exceed AAMA 2603.

2.06 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 12-mesh to the inch from .035 [0.89] 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 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

2.07 Infill Attachment

- A. The perforated panel shall be attached to the mainframe with hex-head Tek Screws.
- B. Wire cloth shall be hemmed 180 degrees and retained by Hex-head Tek Screws. (for 12 mesh .028 wire cloth only)
- C. Hex-head Tek screws shall penetrate the infill and main frame approximately 4" [101.6] on center.

2.08 Emergency Egress Release

- A. Each screen shall have two steel latches, which operate simultaneously from a *Roto-Lift*TM emergency release. The emergency release mechanism shall be contained within the tubular mainframe. Each *Roto-Lift*TM shall be outfitted with a secure spring-loaded activator to rotate the inhibitor, which allows the steel latches to open. When the *Roto-Lift*TM is activated the steel latches are simultaneously released and the screen opens for instant egress. No plastic parts will be accepted.
- B. Each screen shall have a tamper shield installed at the emergency release to protect the screen hardware from exterior tampering.
- C. Optional lock: Exterior mounted, keyed cam lock

2.09 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. 13-gauge stainless steel hinge available.
- B. Each screen shall include adjustment screws (1/4-20 x 3/4 Philips pan head thread cutting fastener) and .062-inch thick aluminum scribes. The 1-3/16" [30.1625] x 3/4" [19.05] scribes shall be supplied at the head and jams if required.
- C. Each screen shall come fully assembled and tested from the factory.

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

- 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.