# LEVEL 7 Fixed Steel Defender Interview Security Screen Model: S-DEN-I

# 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.

#### 1.03 Warranty

The operation of the security screen supplied by Kane Innovations on the designated project is warrantied 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 open channel design, measuring 5/8" [15.875] x 1-3/8" [34.925] x 4-7/32" [107.15625] x 19/32" [15.08125] and formed of 12-gauge steel. The open channel design shall be reinforced by a "Z" shaped bar, measuring 5/8" [15.875] x 1-9/32" [32.54375] x 1-7/32" [30.95625] and formed of 12-gauge steel that shall support the wire cloth. The corners of the main frame shall be notched for self-aligning and robotically welded per AWS standards.
- B. The removable concealment plates, measuring 3-1/8" [79.375] x 1" [25.4] and formed of 16-gauge steel, are welded together at each corner using a 2" [50.8] square gusset. The concealment plates shall be secured to the back of the main frame to conceal the locking mechanism and the wire cloth supports using screws. Inside screws shall be #10 x ½" T.R. Torx PH SMS screws attaching the concealment plate to the reinforcement "Z," on center approximately 17." Outer screws shall be #10-24 x ½" P/FH TCS U/C, on center approximately 12."

#### 2.03 Subframe

The subframe shall be of open channel design, measuring  $\frac{34}{12}$  [19.05] x 1-7/16" [23.9625] x 1-7/16" [23.9625] and formed of 12-gauge steel on all sides. The corners of the subframe shall be notched for self-aligning and robotically welded to provide a rigid frame within which the main frame operates.

#### 2.04 Finish

- A. All interior and exterior surfaces of the main frame, subframe, and concealment plates shall be thoroughly cleaned in a 5-step bonderizing process. The surfaces shall receive an electrostatically applied thermoplastic, polyester powder coating (2.5 mil min. thickness) which shall be applied and baked to a hard mar-resistant finish in one of Kane's standard colors.
  - Dark Bronze

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

#### 2.05 Wire Cloth

- □ 12-mesh .028-inch diameter stainless steel wire cloth
- □ 10-mesh .047-inch diameter stainless steel wire cloth

#### 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. The 10 mesh wire cloth uses a 16-gauge stainless steel retainer clip measuring 13/32" [10.31875] x 1-31/32" [50.00625] at each clevis in lieu of the shock distributing bar used on 12 mesh.
- 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" 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.

# 2.07 Hardware

- A. Each screen shall include adjustment screws (1/4-20 x <sup>3</sup>/<sub>4</sub> P/RH TCS) and 16-gauge steel scribes channels. The 3/4" [19.05] x 1-5/8" [41.275] x 3/4" [19.05] scribe channels shall be supplied at the head and jambs if required.
- B. Each screen shall come fully assembled and tested from the factory.

# 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.
- C. After completion of installation, screens shall be adjusted, in working order and cleaned.

# PART 4 ENVIROMENTAL 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.