20 Church Road PO Box 482 Emigsville, PA 17318 (717) 767-2779 Phone (717) 767-2918 Fax www.harmonyspi.com

# 1050 Series Security Screen Specification

# **SECTION 1: GENERAL**

#### 1.01 Description

The 1050S series security barrier described in this specification provides a pleasing style and design while offering excellent physical deterrence against glass breakage and forcible entry through windows by potential vandals. While these screens will deter forcible entry, it should be understand that this screen does not guarantee protection against forcible entry by a persistent vandal.

# 1.02 Submittals

- A. Manufacturers' submittals will include shop drawings, installation details and elevations showing the scope of the project.
- B. Samples of materials, frame sections, fasteners, corner sections, infill, color, etc. may be requested by client on a per job basis.

# 1.03 Warranty

Manufacturing materials and workmanship for the barriers supplied by Harmony Products, Inc. are warranted for one (1) year. Finish is warranted for one (1) year. Warranty does not cover abusive actions by others, deterioration of metals, metal finish fading and other materials beyond normal weathering.

#### **SECTION 2: PRODUCTS**

#### 2.01 Acceptable Manufacturers

Harmony Products, Inc.

20 Church Road, PO Box 482, Emigsville, PA 17318

(717) 767-2779 • (717) 767-2918 fax Website: www.harmonyspi.com

# 2.02 Main Frame

- A. Certification/Testing The performance must comply with ANSI/SMA 6001-02 (heavy class) "American National Standard Specifications for Metal Protection Screens" for impact, sag and forced entry resistance testing. Harmony will supply test reports stating that this guard meets such guidelines.
- B. The main frame rails and brace bar members shall not be less than 1"x1 ¼"x16 gauge steel tubing and will have high strength die cast metal corner keys that will be pneumatically inserted and compression fit. This will ensure meeting the performance requirements of section 2.02(A) and the structural integrity of the product.

#### 2.03 Sub Frame

Sub frame material shall be of channel design, extruded from 6063-T5 aluminum alloys with a structural wall thickness of .125". The corners of the sub frame shall be mitered, and mechanically crimped. The sub frame shall include a T-Groove for a combination cushioning strip and insect barrier.

#### 2.04 Faceplate

The faceplate material shall be extruded 6063-T5 aluminum and not be less than .062 thick. The faceplate conceals the infill attachment screws. Hex head screws attach the faceplate to the mainframe on equal spacing ranging from 9" to 12".

#### 2.05 Finish

- A. The main frame, sub frame, faceplates, scribe angles, infill, emergency release and brace bar material shall receive a five stage pretreatment to thoroughly clean and prepare the surface to receive a baked on powder coating. This process provides a hard, durable, uniform and environmentally safe finish.
- B. Optional coatings available upon request.

# 2.06 Infill

- A. Screen Cloth
  - 1. Stainless steel 12x12x.028 wire mesh
  - 2. Stainless steel 12x12x.023 wire mesh
  - 3. Stainless steel 10x10x.047 wire mesh
- B. Perforated Panels
  - 1. 18 ga. Stainless steel with 63% open area
  - 2. 16 ga. galvannealed with 63% open area
  - 3. 14 ga. galvannealed with 51% open area
  - 4. 12 ga. galvannealed with 51% open area

#### 2.07 Fasteners

All exposed fasteners shall be tamper resistant.

# 2.08 Hardware

- A. Hinges- Barriers will be supplied with 2 or more 13 ga. zinc plated hinges with compression guards and shall be concealed and inaccessible from the exterior.
- B. Installation Hardware Each barrier will be supplied with standard adjustment screws, j-channel, scribe angle, h-mullion and mounting hardware to accommodate variations in window sizes and out-of-square conditions. Installation fasteners are by others.
- C. Locking Devices- Barriers will be supplied with a concealed locking device and tamper shield.
- D. Emergency Release- Where fire code required emergency release; barriers shall have a tamper resistant latch type assembly that will release the latch upon the application of force in the direction of egress travel. No plastic parts are to be used and all hardware materials should be made of corrosion resistant materials. Emergency releases shall meet NFPA 101 section 7.2.1.7.1 and SMA 3.2.5.
- E. Exterior Key Access (optional)- Barriers will be equipped with an exterior keyed lock that operates the locking mechanism.

# **SECTION 3: EXECUTION**

# 3.01 Inspection

Verify that all openings are plumb, level and provide a solid anchoring surface in compliance with fit tolerances and approved shop drawings.

#### 3.02 Installation

- Installation shall be in accordance with specifications and approved shop drawings.
- B. Erect barriers aligned, square, plumb and adequately anchored.
- C. Barriers shall be adjusted, clean and in working order after completion of installation.