SECTION 13 47 00 – RADIO FREQUENCY (RF) SHIELDING

GENERAL

SUBMITTALS

Action Submittals:

Product Data: Manufacturer’s descriptive data and product attributes for shielding.

Informational Submittals:

Certificate of Compliance: Certification that installed products meet specified fire hazard requirements.

QUALITY ASSURANCE

Installer Qualifications: Firm specializing in work of this Section with minimum [2] [\_\_] years’ experience.

Provide RF shielding and foil tape from single manufacturer.

PRODUCTS

MANUFACTURERS

Contract Documents are based on products by Fi-Foil Company, [www.fi-foil.com](http://www.fi-foil.com)

Substitutions: [Refer to Division 01.] [Not permitted.]

MATERIALS

Radio Frequency (RF) Shielding:

Source: RF Shield.

Comply with: ASTM F3057 and ASTM D4935.

Description: Sensitive compartmented information facility shielding barrier.

* + - * 1. Outer layers: Minimum 99 percent pure aluminum foil.
        2. Inner layer: Fiberglass reinforcing and Kraft paper.

Type: [Perforated.] [Non-perforated (Solid).]

Fire hazard characteristics: Flame spread/smoke developed rating of 15/5, tested to ASTM E84.

Performance characteristics:

* + - * 1. Water vapor permeance: Less than 10 perms, tested to ASTM E96.
        2. Puncture resistance: 50 beach units, tested to ASTM C1136.
        3. Tensile strength: 50 pounds per inch width (MD); 25 pounds per inch width (XD), tested to ASTM C1136.
        4. Accelerated aging: 30 days at 95 percent RH, 120 degrees F (49 degrees C); no corrosion or delamination.
        5. Mold resistance: No growth, tested to ASTM C665.
        6. Emissivity: 0.03 percent, tested to ASTM E408.
        7. Shielding effectiveness: 73 dB attenuation average, tested to ASTM F3057.

\*\*\*\* OR \*\*\*\*

Performance characteristics:

* + - * 1. Water vapor permeance: Greater than 10 perms, tested to ASTM E96.
        2. Puncture resistance: 50 beach units, tested to ASTM C1136.
        3. Tensile strength: 45 pounds per inch width (MD); 25 pounds per inch width (XD), tested to ASTM C1136.
        4. Accelerated aging: 30 days at 95 percent RH, 120 degrees F (49 degrees C); no corrosion or delamination.
        5. Mold resistance: No growth, tested to ASTM C665.
        6. Emissivity: 0.03 percent, tested to ASTM E408.
        7. Shielding effectiveness: 73 dB attenuation average, tested to ASTM F3057.

ACCESSORIES

Electrically Conductive Aluminum Tape: 3302 by 3M or equivalent.

Aluminum Foil Tape: 1170 by 3M or equivalent.

FSK Insulation Facing Tape: FS-K7751 by Echo Tape or equivalent.

EXECUTION

INSTALLATION

Install insulation in accordance with manufacturer’s instructions.

END OF SECTION