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