

EAGLE GROUP NORTHEAST CORPORATION

PO Box 89 Woonsocket, RI 02895

Tel: 401-767-2242 Fax: 401-767-2255 E-mail: info@eaglegroupne.com

Technical Data Sheet No. 100-10

E-SHIELD WPAL – EMI Shielding with PSA

Benefits:

E-SHIELD WPAL is a 0.0050" thick aluminum foil for use as an emi/rfi shield against electrical interference. The foils are easy to work with and very effective across a wide range of frequencies, shielding against unwanted signals in or out of rooms and buildings,

E-SHIELD WPAL may be used to form shielded enclosures of almost any size or shape, with primary use in construction with low-cost shielded rooms, shielded anechoic chambers and other shielded test rooms.

E-Shield products are unique as they come with Pressure Sensitive Adhesive (PSA) as the bonding mechanism. PSA offers a no-mess, no odor simple method of application method for applying the E-SHIELD to substrates. E-SHIELD is also available without PSA backing.

TYPICAL SHIELDING

PERFORMANCE

Insertion Loss per MIL STD 285

<u>FREQUENCY</u>	<u>dB Down</u>
200 KHz, Magnetic Field	- 25
200 KHz, Electrical Field	- 80
1 MHz, Electrical Field	- 80
10 MHz, Electrical Field	- 80
400 MHz, Plane Wave	- 60
10 GHz, Plane Wave	- 60

E-SHIELD WPAL is applied like wallpaper, covering all surfaces: floor, walls and ceiling. Other than normal cleanliness, and dust free, no special preparation is required. The foil may be stapled or glued in-place or ordered with a **Pressure Sensitive Adhesive (PSA)**. **E-SHIELD** products should be overlapped by a minimum of 3" to avoid RF leakage. For maximum effectiveness, seams may be taped with electrically conductive adhesive tape or sealed with an electrically conductive film. Adjoining sheets must be overlapped, caulk.

Do not solder or weld **E-SHIELD WPAL**. **E-SHIELD WPAL** has moderate resistance towards corrosion. Special precautions are required in wiring and operating shielded rooms to ensure proper grounding and to avoid danger of electrical shock.

E-SHIELD WPS will resist corrosion damage, even under severe conditions; however, galvanic coupling with anodic materials such as aluminum should be avoided. WPAL has moderate resistance toward corrosion. Special precautions are required in wiring and operating shielded rooms to ensure proper grounding and to avoid danger of electrical shock.

E-SHIELD products are available with a vinyl pigment coating on the outer surface for architectural appeal. The vinyl coating is UV resistant and can be used in outdoor environments. All Pantene color is available. Contact your Representative for more details.

AVAILABILITY

Standard roll width of **E-SHIELD** is 24". Other sizes are available. A variety of lengths are available. Please contact your Representative with your requirements to receiving pricing and ordering information.

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