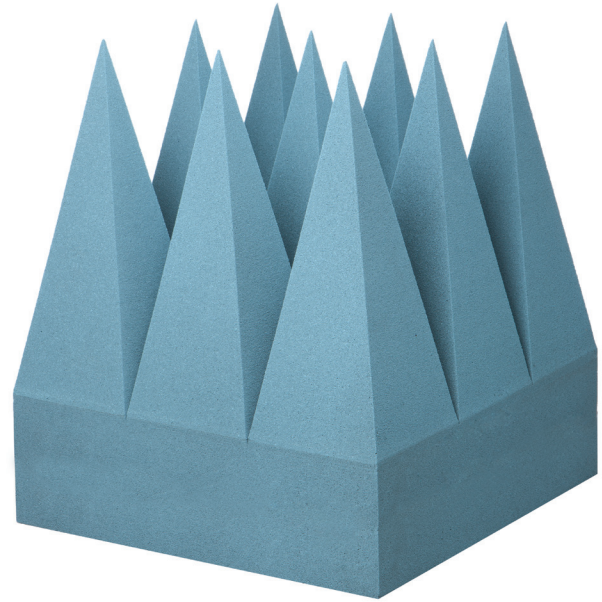


## Features:

- 80 MHz - 40 GHz Frequency Range
- Ideal for New or Retrofit Chamber Installations
- Non-Hygroscopic Substrate
- Designed for MIL-STD-461D/E/F, and RTCA-DO-160 Testing
- 0.5 Watt/in<sup>2</sup> or 775 Watt/m<sup>2</sup> CW Power Handling
- 90° C Maximum Service Temperature
- Fire Retardant: Meets NRL 8093 Tests 1, 2, & 3, MIT MS-8-21, UL 94, and DIN 4102-B2



ETS-Lindgren's EMC-24PCL Anechoic Absorber

**ETS-LINDGREN'S EMC-24PCL** is an ultra broadband microwave absorber which has been optimized for EMC applications. Its design is an evolution of traditional pyramidal polyurethane absorber and combines carefully balanced dielectric properties with a special geometry that is suited for low frequency operation.

## DESCRIPTION

ETS-Lindgren manufactures EMC-24PCL from high quality, low density polyurethane foam. A double immersion process evenly impregnates the foam with a proprietary conductive carbon formula and fire retardant salts. This process optimizes absorber performance and provides an extra degree of protection against water and fire damage.

After curing, the foam is precision-cut into a pyramidal configuration and a coating is added to appearance. Fifteen individual quality assurance checks take place during production.

## FEATURES

### Ultra-Broadband Performance

During the manufacturing process, our unique two-step impregnations are specially formulated to provide improved reflectivity performance below 200 MHz. This tuning is verified on each absorber piece in a large coaxial reflectometer which measures reflectivity vs. frequency from 20 MHz to 300 MHz to ensure consistency of performance.

### New or Retrofit Chamber Installation

EMC-24PCL anechoic absorber can easily be installed into either new construction, or as a retrofit to existing chambers.

### Non-Hygroscopic Substrate

EMC-24PCL absorber is produced from a fire-resistant chemical formula that is non-hygroscopic. As a result, the absorber is not affected by moisture and will maintain its mechanical and RF performance over the life of the product.

### Performance Standards

This absorber meets or exceeds MIL-STD-461 and RTCA-D0-160 performance requirements and is ideal for new installations or chamber retrofits. It provides an ultra broadband performance range of 80 MHz - 40 GHz.

### Power Handling

EMC-24PCL has excellent power handling capability. This absorber has been proven to safely withstand up to 775 w/m<sup>2</sup> (0.5 Watt/in<sup>2</sup>) CW power density (600 V/m) in RF and microwave frequency ranges.

For periods less than 10 minutes in duration, the absorber can safely handle up to 2650 W/m<sup>2</sup> (1.7 W/sq. in) power density (1000 V/m).

### Maximum Service Temperature

Max. service temperature is 90° C (190° F, continuous).

### Standards

This absorber meets NRL 8093 Tests 1, 2, 3, MIT MS-8-21, UL 94, and DIN 4102-B2: Tests for Flammability. EMC-24PCL has an ASTM E84-84 flame-spread index of 35 and a smoke developed index of 450.

## Electrical Specifications

MODEL	FREQUENCY	POWER HANDLING (CW)	POWER HANDLING (MAX)
EMC-24PCL	80 MHz - 40 GHz	600.0 V/m 775.0 W/m <sup>2</sup> 0.5 W/sq. in	1000 V/m 2650 W/m <sup>2</sup> 1.7 W/sq. in

## Physical Specifications

MODEL	DIMENSIONS (L X W X H)	WEIGHT	RATINGS: FIRE RETARDANT
EMC-24PCL	610 mm x 610 mm x 610 mm 24" x 24" x 24"	4.6 kg 10.1 lb	NRL 8093 Tests 1, 2 & 3 MIT MS-8-21, UL 94 and DIN 4102-B2

## Reflectivity Information

FREQUENCY	REFLECTION
60 MHz	- 3 dB
80 MHz	- 6 dB
100 MHz	-7 dB
200 MHz	-15 dB
250 MHz	- 20 dB
300 MHz	- 30 dB
500 MHz	- 35 dB
1 GHz	- 40 dB
2 GHz	- 50 dB
3 GHz	- 50 dB
6 GHz	- 50 dB
10 GHz	- 50 dB
18 GHz	- 50 dB
40 GHz	- 45 dB