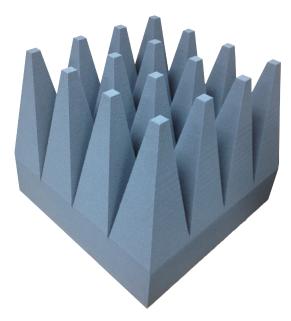


# EMC-20PCL

# **Features:**

- 80 MHz 40 GHz Frequency Range
- Ideal for New or Retrofit Chamber Installations
- Reduced Profile with Blunt Absorber Tips
- Non-Hygroscopic Substrate
- Available in Assorted Colors
- Designed for MIL-STD-461D/E/F, and RTCA-DO-160 Testing
- 0.5 Watt/in² or 775 Watt/m² CW Power Handling
- 90° C Maximum Service Temperature
- Fire Retardant: Meets NRL 8093 Tests1,2, & 3, MIT MS-8-21, UL 94, and DIN 4102-B2



ETS-Lindgren's EMC-20PCL Anechoic Absorber

**ETS-LINDGREN'S EMC-20PCL** is an ultra-broadband 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 blunt-tip geometry that is suited for low frequency operation.

is precision-cut into a pyramidal configuration and a coating is added for a pleasing appearance. Fifteen individual quality assurance checks take place during production.

This absorber features blunt-tips, which allow for greater working space within the chamber, while reducing the chances of absorber tip damage.

# **DESCRIPTION**

ETS-Lindgren manufactures EMC-20PCL 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

# **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-20PCL Anechoic Absorber can easilty be installed into either new construction, or as a retrofit to existing chambers.

# **Reduced Profile, Blunt-Tips**

The EMC-20PCL has a reduced profile, providing the user for a greater working space withing the chamber. Blunt-tips on this absorber reduce the chance of absorber tip damage.

# **Non-Hygroscopic Substrate**

The EMC-20PCL absorber is produced from a new, fire-retardant chemical formula that is non-hygroscopic. As a result, the absorber is not affected by moisture and will main-





tain its mechanical and RF performance over the life of the product.

#### **Assorted Colors**

The EMC-20PCL is now available in the original blue, black or white.

# **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-20PCL has excellent power handling capability. This absorber has been proven to safely withstand up to 775 w/m² (0.5 Watt/in²) CW power density (600 V/m) in RF and microwave frequency ranges.

For periods of time less than 10 minutes, 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**

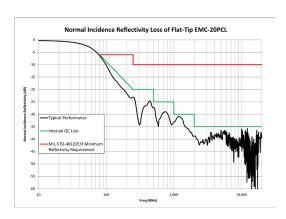
This absorber meets the fire retardant standards of NRL 8093 Tests 1, 2, 3, MIT MS-8-21, UL 94, and DIN 4102-B2: Tests for Flammability. EMC-20PCL has an ASTM E84-84 flame-spread index of 35 and a smoke developed index of 450.

# **Electrical Specifications**

MODEL	FREQUENCY	POWER HANDLING (CW)	POWER HANDLING (MAX)
EMC-20PCL	80 MHz - 40 GHz	600.0 V/m 775.0 W/m² 0.5 W/sq. in	1000 V/m 2650 W/m² 1.7 W/sq. in

# **Physical Specifications**

MODEL	DIMENSIONS (L X W X H)	WEIGHT	RATINGS: Fire retardant
EMC-20PCL	610 mm x 610 mm x 508 mm 24" x 24" x 20"	4.6 kg 10.1 lb	NRL 8093 Tests 1, 2 & 3 MIT MS-8-21, UL 94 and DIN 4102-B2



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