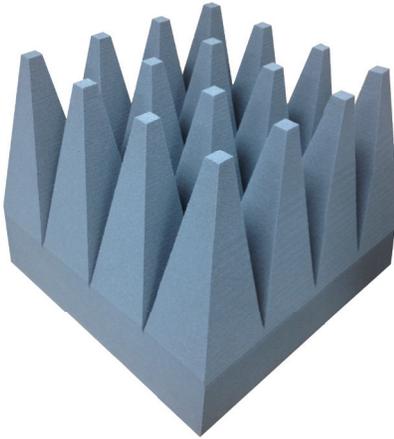


ABSORBER MODEL EMC-20PCL



MODEL EMC-20PCL

- Designed for MIL-STD-461D/E/F, and RTCA-DO-160 Testing
- Ultra Broadband Performance: 80 MHz to 40 GHz
- 540 V/m CW Radiated Field Strength
- Max. CM Power 0.5 Watt/in² or 775 Watt/m²
- Power Handling Fire Retardant: Meets NRL 8093 Tests 1, 2, & 3, MIT MS-8-21, UL 94, and DIN 4102-B2
- FlexSorb™ Available

ETS-Lindgren's EMC-20PCL is an ultra broadband absorber which has been optimized for EMC applications. 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. 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 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.

Features

New or Retrofit Chamber Installation

EMC-20PCL Anechoic Absorber can easily be installed into either new construction or as a retrofit to existing chambers.

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.

Performance Standards

EMC-20PCL absorber meets or exceeds MIL-STD-461D/E/F 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 to 40 GHz.

Power Handling

EMC-20PCL has excellent power handling capability. This absorber has been proven to safely withstand up to 0.5 Watt/in² CW power density in RF and microwave frequency ranges. Maximum service temperature is 90°C (190°F, continuous).

Reduced Profile, Blunt-Tips

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

Assorted Colors

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

Non-Hygroscopic Substrate

The EMC-20PCL absorber is produced from a fire-retardant 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.

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.

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Optional FlexSorb™ Treatment

ETS-Lindgren's optional FlexSorb covering is engineered to provide enhanced protection and durability for absorber installations in active test environments while preserving critical RF performance. Applied over absorber surfaces, FlexSorb helps protect against mechanical wear from foot traffic, airflow, dust accumulation, and incidental contact during routine testing and maintenance. The flexible, lightweight material conforms closely to absorber geometry, maintaining absorber shape and effectiveness without introducing meaningful measurement degradation.

FlexSorb has little to no impact on RF performance at frequencies below 18 GHz, with only minimal performance variation observed at higher frequencies. In addition to extending absorber service life, FlexSorb supports improved safety and cleanliness within EMC and wireless test chambers, making it well suited for high-use laboratories where long-term performance, reliability, and reduced maintenance are essential.

Technical Specifications

Electrical	
Frequency Minimum	80 MHz
Frequency Maximum	40 GHz
Power Handling (CW)	540.0 V/m
	775.0 W/m ²
	0.5 W/in ²
Power Handling (Max)	1000.0 V/m
	2650.0 W/m ²
	1.7 W/in ²

Physical	
Length	61.0 cm (24.02 in)
Width	61.0 cm (24.02 in)
Height	50.8 cm (20.00 in)
Weight	4.6 kg (10.14 lb)

