



## SIEPEL ELECTROMAGNETIC ABSORBER PYRAMIDAL & TRUNCATED MICROWAVE



### CUSTOMER'S BENEFITS

SEA-PM / TM is a premium series of broadband high-end pyramidal absorbers.

This new generation is used for the lining of anechoic chambers for EMC & antenna measurements (compact ranges, Radar Cross Section (RCS), Over-The-Air (OTA), IoT, 5G...)

- Long-lasting investment
- High performance at optimal cost
- Easy personalisation with a wide color palette
- Fast delivery, commercially available off-the-shelf

### ■ CHARACTERISTICS

- Extended reflectivity values up to 110 GHz
- High-quality polyurethane foam
- Maximum power handling: 2 kW/m<sup>2</sup> (CW)
- Maximum temperature: +160°C (320°F)
- Indoor use

### ■ LIV COATING CHARACTERISTICS & ADVANTAGES

- **This technological breakthrough in absorbers coating provides**
  - Softness and memory shape: no need to replace your absorbers on high traffic areas
  - Sturdiness: improved mechanical strength, no premature breakdown
  - Aesthetic: Brighter working environment
- A wide range of colors is available for a customized design

### ■ COMPLIANCE TO STANDARDS & DIRECTIVES

- Fire retardancy: compliant to NRL 8093 (tests 1, 2, 3), DIN 4102-B2, ISO 11925-2 Euroclass E, UL-94/HBF
- Environmental: RoHS compliant according to 2011/65/EU / REACH compliant according to EC 1907/2006 ; environmental tests compliant to standards (ISO/EN60068-2-1 & ISO/EN60068-2-78)
- Cleanroom conditions: ISO class 4 according to ISO 14644-1

### ■ REFLECTIVITY PERFORMANCES

- Values in dB at normal incidence
- These reflectivity performances are guaranteed for 25 years
- They are the result of an extensive experience in the manufacturing of electromagnetic absorbers.

TYPE	80 MHz	200 MHz	300 MHz	500 MHz	1 GHz	2 GHz	4 GHz	8 GHz	12 GHz	18 GHz	40 GHz	75 GHz	110 GHz
SEA-PM 3							-20	-20	-22	-25	-30	-36	-45
SEA-PM 5						-20	-21	-25	-31	-37	-38	-50	-50
SEA-PM 12					-19	-25	-33	-40	-43	-50	-50	-50	-50
SEA-PM 20				-13	-25	-36	-45	-46	-50	-51	-50	-50	-50
SEA-PM 30				-25	-36	-40	-48	-52	-52	-51	-50	-50	-50
SEA-PM 45				-27	-40	-42	-50	-52	-52	-51	-50	-50	-50
SEA-TM 50	-6	-20	-21	-25	-26	-27	-27	-27	-27	-30	-30	N/A	N/A
SEA-PM 66	-6	-21	-24	-37	-45	-46	-52	-52	-52	-51	-50	-50	-50
SEA-PM 85	-10	-25	-28	-42	-49	-50	-52	-52	-52	-51	-50	-50	-50
SEA-PM 100	-11	-26	-36	-45	-50	-52	-52	-52	-52	-51	-50	-50	-50
SEA-PM 115	-13	-26	-36	-45	-50	-52	-52	-52	-52	-51	-50	-50	-50

## SIEPEL ELECTROMAGNETIC ABSORBER PYRAMIDAL &amp; TRUNCATED MICROWAVE

## ■ DIMENSIONAL PROPERTIES

TYPE	OVERALL HEIGHT		PYRAMIDS PER ABSORBERS	WEIGHT		TIPS (for LIV coating only)
	cm	in		kg	lb	
SEA-PM 3*	2.8	1.1"	33x33	0.3	0.66	Painted
SEA-PM 5*	5.5	2.2"	33x33	0.6	1.32	Painted
SEA-PM 12*	11.5	4.5"	16x16	1.2	2.65	Painted
SEA-PM 20*	21	8.3"	9x9	2.0	4.41	Painted
SEA-PM 30*	30.5	12"	6x6	2.6	5.73	Painted
SEA-PM 45*	45.5	18"	4x4	3.6	7.94	Painted
SEA-TM 50*	50	20"	3x3	4.3	9.48	N/A
SEA-PM 66*	66	26"	3x3	5.1	11.24	Black
SEA-PM 85**	85	33.5"	1	1.6	3.53	Black
SEA-PM 100**	100	39.4"	1	1.8	3.97	Black
SEA-PM 115**	115	43.3"	1	2.1	4.63	Black

\*Base size 61 x 61 cm (2' x 2')

\*\* Base size 30.5 x 30.5 cm (1' x 1')

## ■ SIEPEL BY YOUR SIDE

- In-house full design & manufacturing exclusively in France since 1986, on a single site
- 60+ employees allocated to value-added business units: R&D, design, scheduling, drawing, manufacturing, testing, crating, logistics, installation, service...
- Engineering capabilities for the design of anechoic chambers according to your inputs (standard, building constraints), size of EUT...
- Commitment on quality cuttings for an easy installation and good looking
- Installation performed by our in-house technicians or detailed instructions provided to third-party
- Significant number of unique projects for demanding and prestigious customers worldwide
- Project management capabilities and customer proximity during the product's lifetime



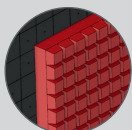
## QUALITY

- Siepel aims to deliver to its customers a high-level of quality for all products and services
- Thanks to an ISO 9001/ISO 17025 quality management system, our company continuously focuses on customer satisfaction and excellence
- Siepel fulfills its environmental obligations as REACH and RoHS directives, as well as other current regulations

## IN-HOUSE TESTING

- Quality controls performed as per IEEE standard 1128
- SEA-PM absorbers tested in Siepel's internal fire test lab as well as in independent test laboratories
- Reflectivity performances factory controlled, using cutting edge broadband equipment
- Factory Acceptance Tests (FAT): Reflectivity measurements from 30 MHz to 50 GHz

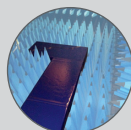
## AN EXTENSIVE RANGE OF EMC &amp; MICROWAVE ABSORBERS



Hybrids



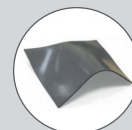
Weatherproof



Walkway



High power



Elastomeric absorbers