

## 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 personnalisation with a wide range of colours
- Fast delivery, commercially available off-the-shelves

### CHARACTERISTICS

- Extended reflectivity values up to 110 GHz
- High-quality foam
- Maximum power handling : 2kW/m<sup>2</sup> (CW) for SEA-PM & 1.7kW/m<sup>2</sup> (CW) for SEA-TM
- Maximum temperature: +160°C (320°F)
- Indoor use

### LIV COATING ADVANTAGES

- **This technological breakthrough in absorbers coating provides**
  - Softness and memory shape: no need to replace your absorbers on high trafic areas
  - Sturdiness: improved mechanical strength, no premature breakdown
  - Aesthetic: brighter working environment
- A wide range of colours 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	800 MHz	900 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			-8	-13	-21	-23	-25	-36	-45	-46	-50	-51	-50	-50	-50
SEA-PM 30			-12	-25	-31	-33	-36	-40	-48	-52	-52	-51	-50	-50	-50
SEA-PM 45			-22	-27	-35	-37	-40	-42	-50	-52	-52	-51	-50	-50	-50
SEA-TM 50	-6	-20	-21	-25	-25	-25	-26	-27	-27	-27	-27	-30	-30	N/A	N/A
SEA-PM 66	-6	-21	-24	-37	-41	-43	-45	-46	-52	-52	-52	-51	-50	-50	-50
SEA-PM 85	-10	-25	-28	-42	-46	-47	-49	-50	-52	-52	-52	-51	-50	-50	-50
SEA-PM 100	-11	-26	-36	-45	-48	-49	-50	-52	-52	-52	-52	-51	-50	-50	-50
SEA-PM 115	-13	-26	-36	-45	-48	-49	-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)
	mm	in		kg	lb	
SEA-PM 3*	28	1.1"	33x33	0.3	0.66	Painted
SEA-PM 5*	55	2.2"	33x33	0.6	1.32	Painted
SEA-PM 12*	115	4.5"	16x16	1.2	2.65	Painted
SEA-PM 20*	210	8.3"	9x9	2.0	4.41	Painted
SEA-PM 30*	305	12"	6x6	2.6	5.73	Painted
SEA-PM 45*	455	18"	4x4	3.6	7.94	Painted
SEA-TM 50*	500	20"	3x3	4.3	9.48	N/A
SEA-PM 66*	660	26"	3x3	5.1	11.24	Black
SEA-PM 85**	850	33.5"	1	1.6	3.53	Black
SEA-PM 100**	1000	39.4"	1	1.8	3.97	Black
SEA-PM 115**	1150	43.3"	1	2.1	4.63	Black

\*Base size 610 x 610 mm (24" x 24") \*\* Base size 305 x 305 mm (12" x 12") Typical dimensions and weights

## ■ SIEPEL BY YOUR SIDE

- Your project under control : managed by our in-house design & manufacturing business units
- 60+ employees allocated to value-added business units: R&D, design, scheduling, drawing, manufacturing, testing, crating, logistics, installation, service...
- Engineering capabilities for the standard or custom design of anechoic chambers according to your request
- Commitment on outstanding finishes
- Installation performed by our highly qualified supervisors
- Significant number of unique projects for demanding and prestigious customers worldwide
- Project management capabilities and customer proximity during the product's lifetime



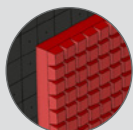
## QUALITY

- 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 environmental obligations as REACH and RoHS directives, as well as other current regulations

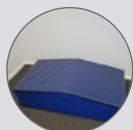
## IN-HOUSE TESTING

- Quality controls performed as per IEEE standard 1128
- SEA absorbers are 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  
SEA-HY & HYT



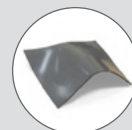
Weatherproof  
SEA-WP



Walkway  
SEA-WW



High power  
SEA-HP



Elastomeric  
SEA-ELS & ELP