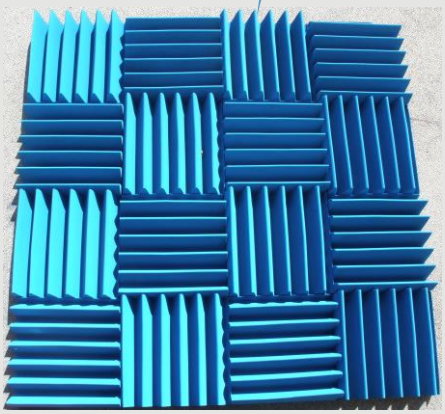
WAVY HYBRID ABSORBERS HW

HW are high performance electromagnetic absorbers installed over ferrite tiles and dedicated to EMC applications. The combination of ferrite tiles performance levels at lower frequencies and pyramidal matched absorbers in the upper frequency range results in broadband reflectivity performances from 30 MHz to 40 GHz. These absorbers are used in EMC anechoic chambers for EMI and EMS testing according to both commercial and military standards.

MAIN FEATURES



- To be combined with ferrites, either for new chambers, existing chambers or refurbishment
- Suitable for EMC anechoic chambers
- Very broadband frequency range 30 MHz – 40 GHz
- Small profile with outstanding absorption
- Performance levels guaranteed for 20 years
- Unique plastic paint

DESCRIPTION

- **Impedance matching between ferrite tiles and HW wavy absorbers:**
  - HW is impregnated with a specific formulated carbon solution (different from regular APM pyramidal absorbers). It provides **high performance** over the whole frequency range 30 MHz – 40 GHz.
  - It enables to meet the specifications of the commercial **EMI** standards (such as CISPR 16-1-4, CISPR 25, EN 50147-2, EN 55022, ANSI C63.4 and other similar standards) and **EMS** standards (EN / IEC 61000-4-3), as well as **MIL-STD** and **DO** applications.
- **Useful volume inside the anechoic chamber is optimized** due to the shape of HW absorbers.
- **Easy installation** of ferrite tiles and electromagnetic absorbers.
- **Optimized cost** compared with the regular range of HY hybrid pyramidal absorbers

GUARANTEED PERFORMANCES

These reflectivity performances values are outstanding and **guaranteed for 20 years**. They are the based on extensive experience in electromagnetic absorber manufacturing. The reflectivity performances of our absorbers are factory checked, using cutting-edge broadband equipment (14 m long coaxial line 1.83 x 1.83 m section, fully anechoic chamber with optimised design, Vector Network Analyzers). In addition, we offer to handle of the reflectivity measurements in our factory with SIEPEL engineers.

Guaranteed reflectivity performances (dB) of HW (normal incidence)
Combination of ferrites tiles and wavy hybrid absorbers

Type	30 MHz	50 MHz	80 MHz	100 MHz	150 MHz	300 MHz	500 MHz	1 GHz	2 GHz	4 GHz	8 GHz	12 GHz	18 GHz	40 GHz
HW 24	-19	-20	-20	-20	-17	-14	-13	-13	-11	-11	-14	-15	-20	-20

SIEPEL SAS – PA de Kermarquer, Impasse de la Manille - 56470 La Trinité-sur-Mer FRANCE
Ph.+33(0)2 97 55 74 95 – Email: sales@siepel.com - www.siepel.com

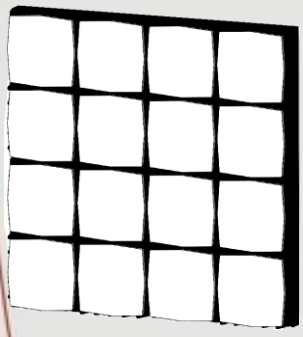
V4 – 24.10.17

WAVY HYBRID ABSORBERS HW

DIMENSIONS

Type	Total Overall Height (mm)	Total Overall Height (mm)*	Wave Height (mm)	Base Height (mm)*	Base Width (mm)	Weight (kg)*
HW 24	235	243	170	65	605 x 605	18,3

*Including ferrite tiles



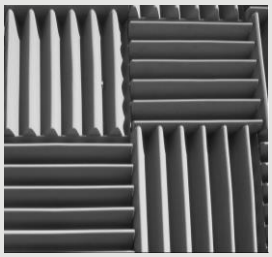
FINISHINGS

HW can be covered by white caps or painted with a special coating:

White caps help reflect light, thus increasing the brightness in the anechoic chamber. They are bonded to the unpainted absorbers

Two types of paint are available: aqueous or plastic.

SIEPEL **plastic paint coating** was developed to optimise carbon binding (no finger marks, and no pollution or carbon dust, enabling work in 100,000 class clean room conditions), improve aesthetics (brightness) and lifetime.



This coating is proposed in whatever colour you want: contact us to print your company's name or logo on your chamber

COMPLIANCE TO STANDARDS & DIRECTIVES

HW absorbers are tested in SIEPEL's internal fire test lab as well as in independent test laboratories. HW absorbers are compliant with the following tests and standards:

- ✓ ISO 11925-2 Euroclass E
- ✓ NRL 8093 – tests 1, 2 & 3
- ✓ DIN 4102 – B2
- ✓ UL 94 HBF upon request

Both aqueous and plastic paint coating were developed to enable work in ISO4 (ISO 14644-1 2015) clean room conditions.

EXTREME SOFTNESS – SHAPE MEMORY

HW absorbers have an excellent shape memory. The high quality materials used, in combination with the various paints we propose, provide the unique advantage of extreme softness, which is therefore not easily breakable (no carbon dust) and highly suitable for heavy duty chambers.

RF POWER HANDLING

HW absorbers are designed to handle a power density up-to 2 kW/m^2.

SIEPEL SAS – PA de Kermarquer, Impasse de la Manille - 56470 La Trinité-sur-Mer FRANCE
Ph.+33(0)2 97 55 74 95 – Email: sales@siepel.com - www.siepel.com

V4 – 24.10.17