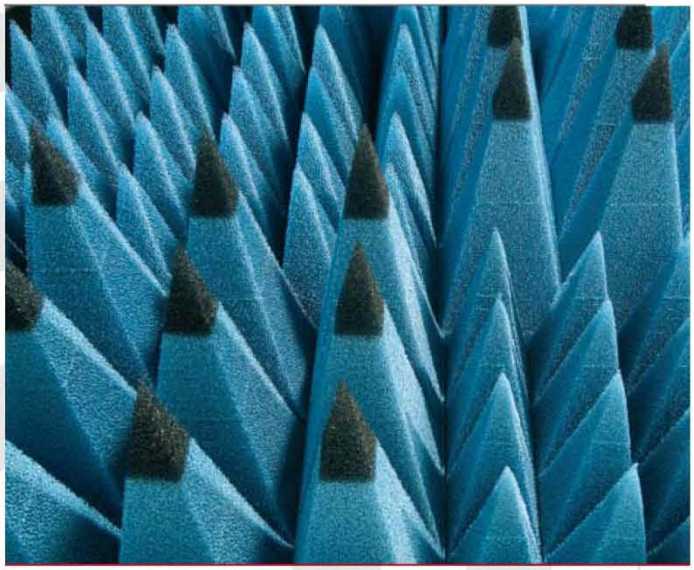
Description :

ECCOSORB SPY is a high performance pyramidal absorber, made from lightweight open-cell foam and is designed for medium range power densities.
Its shape and electrical performance are similar to those of ECCOSORB VHP.

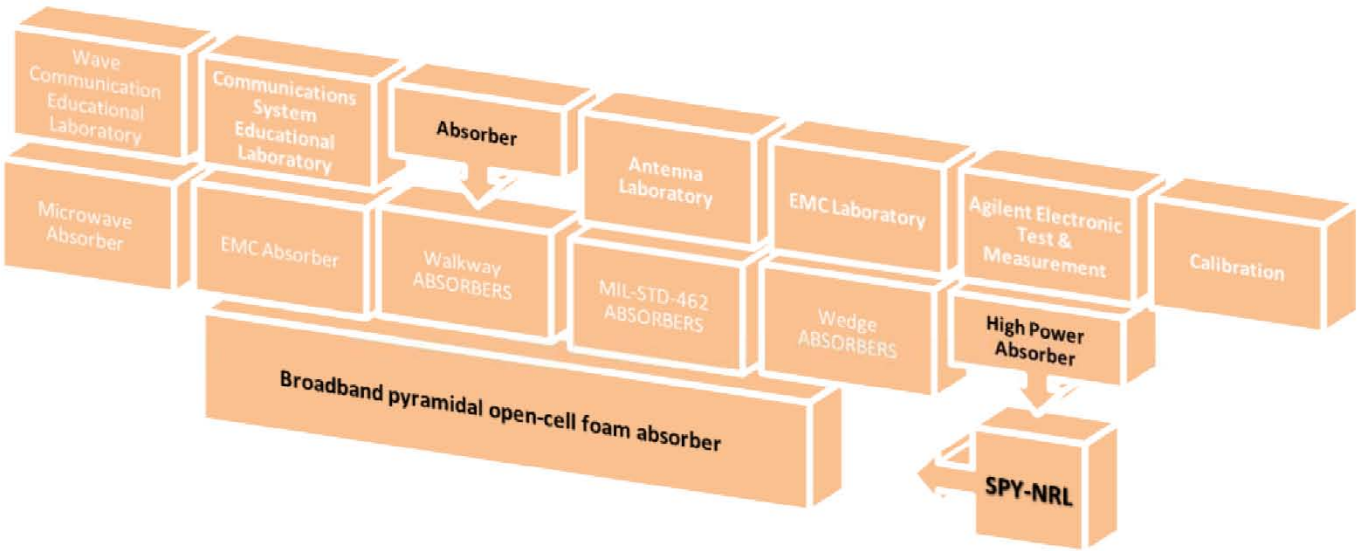


Application :

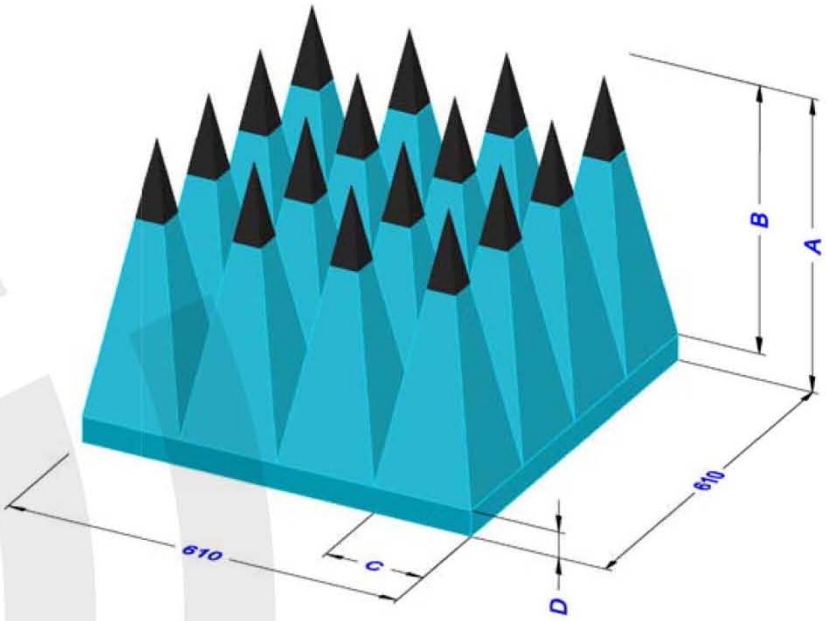
Eccosorb SPY is typically used in medium power density applications.
The foam has a much more open-cell structure compared to Eccosorb VHP, which allows air circulation between cells and maintain a moderate average temperature when illuminated with medium power densities up to 8kW/m².
For higher power densities applications the honeycomb ECCOSORB HFX-HC pyramidal absorber is recommended.

Physical properties :

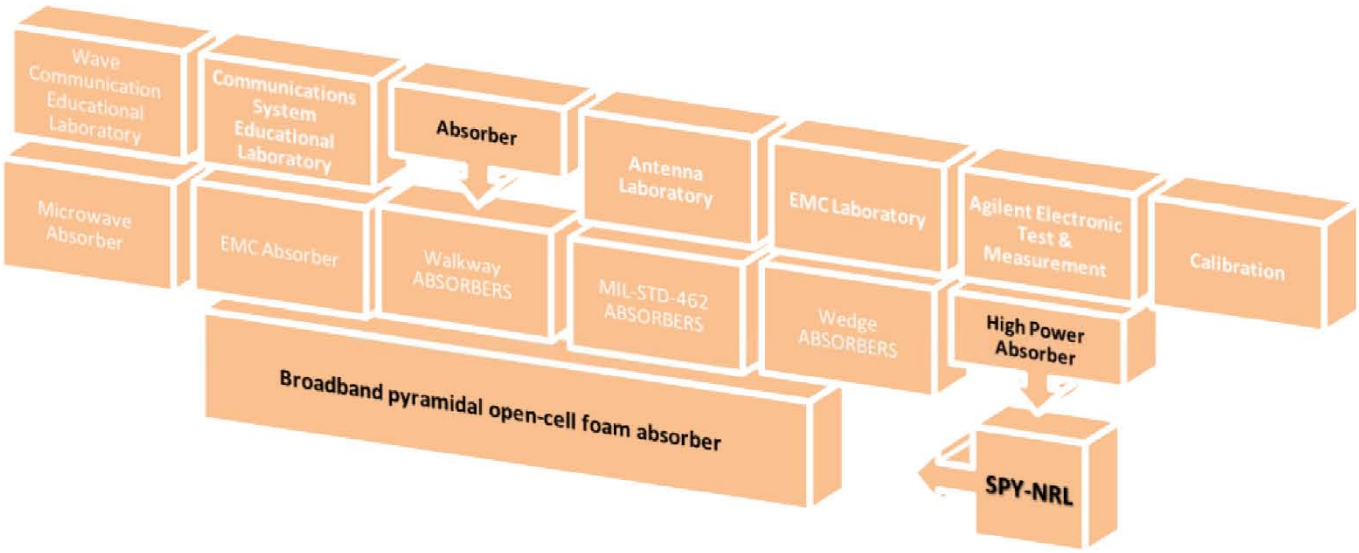
	SPY-NRL
Standard Colour	Blue
Base size (cm)	61 x 61
Max Service Temperature	90°C
Power handling with unimpeded airflow	8 kW/m²
Fire retardancy	NRL8093 Tests 1, 2 & 3



Nominal dimensions and weights of Eccosorb SPY-NRL



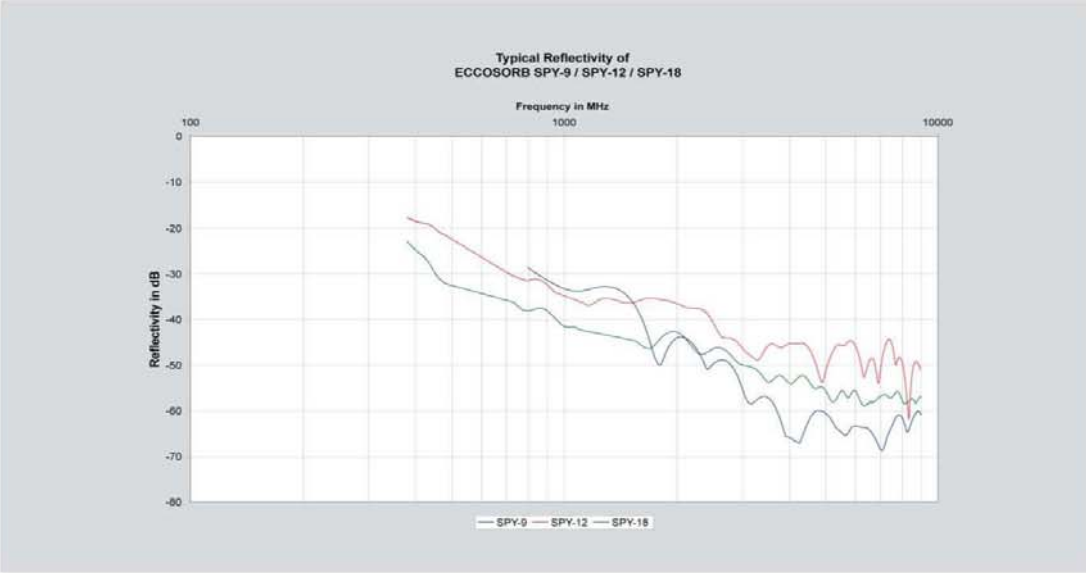
Eccosorb SPY grade	Total height A (cm)	Pyramid height B (cm)	Pyramid width C (cm)	Base height D (cm)	Number of pyramids per piece	Nominal weight (kg)
SPY-9	23,0	20,5	6,8	2,5	9	2,2
SPY-12	30,5	24,5	10,2	6,0	6	2,7
SPY-18	45,7	38,2	15,2	7,5	4	3,5

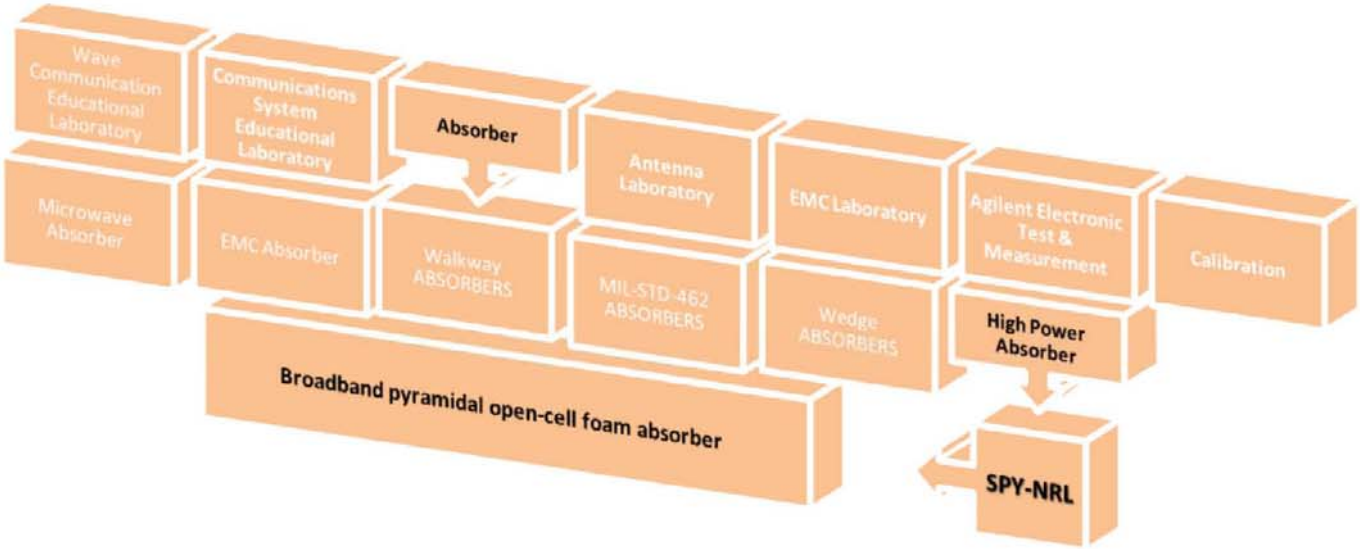


Electromagnetic properties :

The microwave absorbing properties of ECCOSORB SPY are similar to those of ECCOSORB VHP. The table below gives the specified reflectivity values, showing the frequency at which a particular reflectivity can be expected for each grade.

FREQUENCY LIMIT (IN GHZ) FOR A GIVEN REFLECTIVITY				
Grade	-20 dB	-30 dB	-40 dB	-50 dB
ECCOSORB SPY-9	1,0	1,5	3	9
ECCOSORB SPY-12	0,5	1,0	3	9
ECCOSORB SPY-18	0,4	0,5	1	9



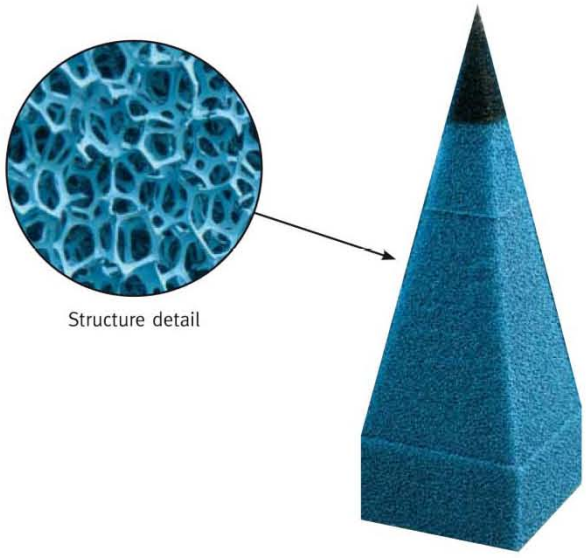


Availability :

ECCOSORB SPY is adapted in thickness, geometry and reflectivity performance to the corresponding grades of ECCOSORB VHP.
3 standard grades are available : SPY-9, SPY-12, SPY-18.

Instructions for use :

ECCOSORB SPY can be bonded to structures using a contact adhesive such as ECCOSTOCK Adhesive 13111. In this case, several coatings of the adhesive should be applied to the back surface of the absorber and be allowed to dry, to create a solid back surface. It is preferred to use mechanical means to supplement the adhesive. Impaling the piece on plastic pins or hooks is particularly effective to allow air circulation inside the absorber.



Structure detail