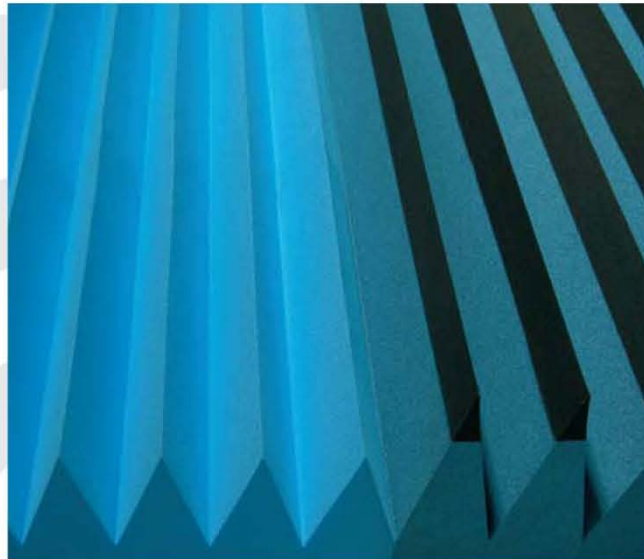


■ Description :

ECCOSORB WG-NRL is a series of absorbing materials made from bulk resistive polyurethane foam. The absorber surface is a wedge configuration. It is thus related closely to ECCOSORB VHP-NRL (Technical Bulletin EB-100), a pyramidal absorber.



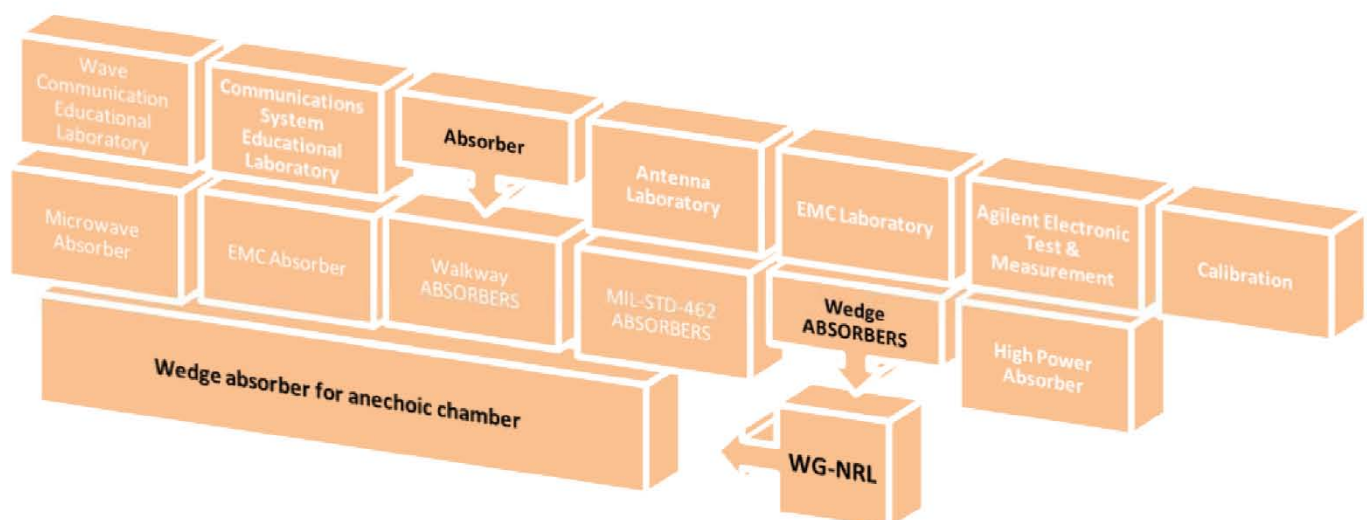
■ Application :

ECCOSORB WG-NRL absorber has been primarily designed to be effective for the special conditions involved with propagation down the taper of a tapered chamber. Here the wave is propagating nearly parallel to the absorber lining the tapered walls. This is quite different from the more common case where energy propagates perpendicular to or at a significant angle to the absorber.

It may be shown that an effective absorber for this condition is one having the front surface comprised of an aggregate of parallel wedge-shaped rows where these rows are aligned parallel to the direction of propagation. If the sides of these wedges are near an angle of 45° with the plane of the absorber, the wave travelling down the taper finds a similar absorber surface for polarizations both perpendicular and parallel to the plane of the absorber. The ECCOSORB WG-NRL absorber has such geometry.

It turns out that the ECCOSORB WG-NRL absorber also provides a reflection coefficient for angles near normal which is generally only 5 to 15 dB below that of the corresponding ECCOSORB VHP-NRL.

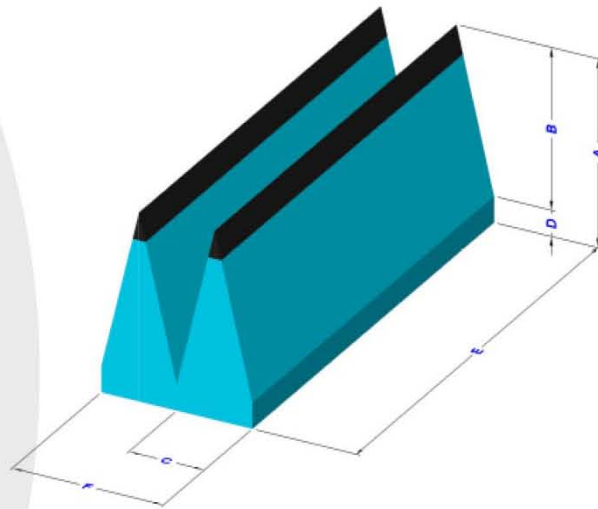
As a consequence this absorber is also well suited for covering regions of rectangular chambers such as the transmit wall and the outer regions of the side walls, floor and ceiling. With regard to mating of material in corners, good engineering practice suggests cutting adjacent pieces at 45° and butting cut faces together.



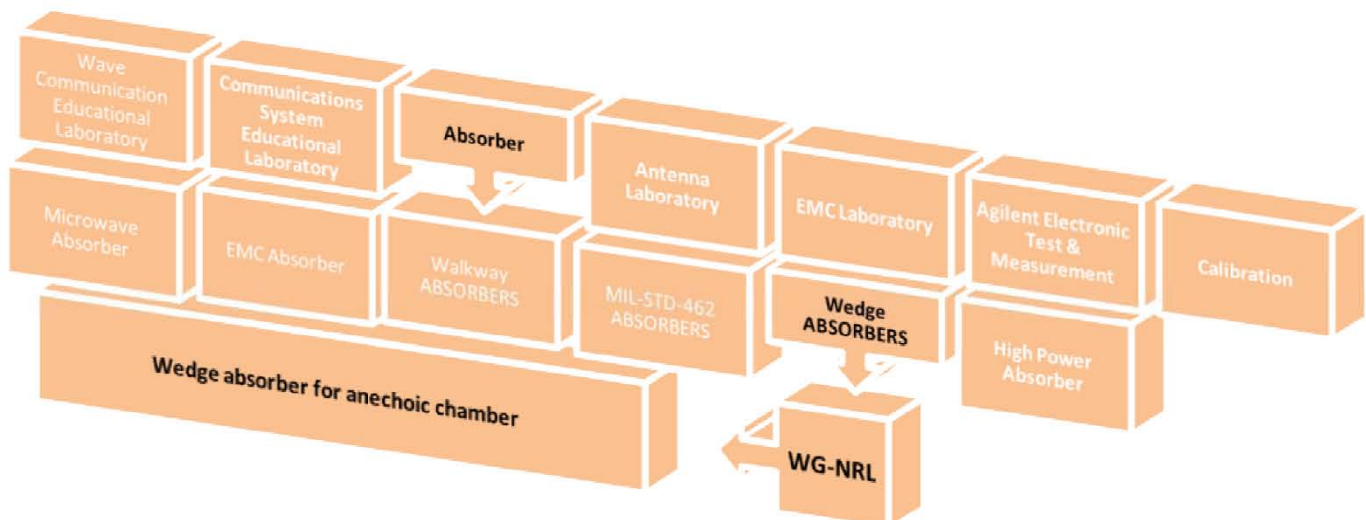
■ **Physical properties :**

	WG-NRL
Standard Colour	Blue
Base size (cm)	61 x 61 / 122 x 20,3
Max Service Temperature	90°C
Power handling	1,5 kW/m ²
Fire retardancy	NRL8093 Tests 1, 2 & 3, DIN 4102 Class B2, ISO 11925-2

■ **Nominal dimensions and weights of Eccosorb WG-NRL**



Eccosorb WG grade	Total height A (cm)	Wedge height, B (cm)	Wedge width, C (cm)	Base height, D (cm)	Total length E (cm)	Total width F (cm)	Number of wedges per piece	Nominal weight (kg)
WG-4-NRL	12,7	8,3	6,8	4,4	61,0	61,0	9,0	1,9
WG-8-NRL	20,3	15,2	10,2	5,1	61,0	61,0	6,0	2,5
WG-12-NRL	30,5	24,1	10,2	6,4	122,0	20,3	2,0	
WG-20-NRL	50,8	43,4	20,3	7,4	122,0	20,3	1,0	3,5
WG-26-NRL	66,0	55,8	20,3	10,2	122,0	20,3	1,0	5,3



■ **Electromagnetic properties :**

