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ECCOSORB[®] VHP

ECCOSORB VHP-NRL provides the highest broad band performance at both normal incidence and at wide incidence angles of all known absorbers.

While primarily designed for low forward scatter, it offers favorable back scatter properties as well. It is thus well suited for use in all regions of anechoic chambers. Since it is available in a variety of thicknesses, the chamber designer has the opportunity to choose versions appropriate for specific

requirements. The versions indicated in the table (over) are offered. The standard absorber color is light blue. Standard sheet size is 61cm x 61 cm (2 ft. x 2 ft.)

With regard to physical characteristics, ECCOSORB VHP-NRL is in the form of an array of sharp pointed pyramids made of carbon impregnated urethane foam.

As a result it is light weight, flexible and tolerant of physical abuse.

The recommended mounting is chloroprene adhesion. ECCOSORB VHP-NRL is also available at slight additional cost with Velcro zippers for ease of attachment and removal. ECCOSORB VHP-NRL products conform to non-flammability requirements of ASTM D-1692-74. Improved processing procedures make it possible to offer ECCOSORB VHP-NRL to meet all requirements of Test 1, 2, and 3 of NRL Report No.7793. September 13, 1974, and in addition, to meet most of the toxic-gas limits set by this report.

This information is not to be taken as warranty or representation for which we assume legal responsibility, nor as permission or recommendation to practice any patented invention without licenses. It is offered solely for consideration, investigation, and verification.



ECCOSORB VHP

Absorption performance of ECCOSORB VHP in angle near normal incidence

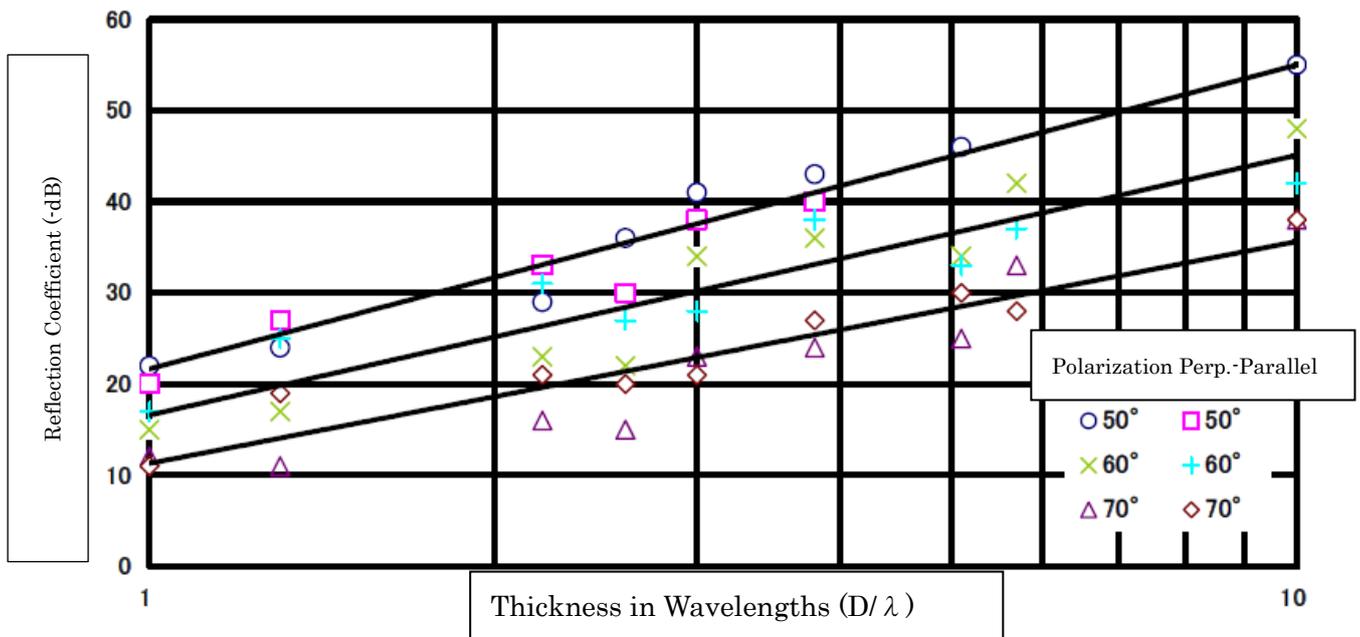
VHP TYPE	Height of Pyramid cm(inch)	Nominal Weight per Piece 0.37 sq. m. kg)	VHF 200 MHz	UHF 300 MHz	UHF 500 MHz	L UHF 1GHz	S SHF 3GHz	C SHF 5GHz	X SHF 10GHz	Ku SHF 15GHz	K SHF 24GHz
VHP-45	114(45)	8.1	30	35	40	45	50	50	50	50	50
VHP-26	66(26)	4.6		30	35	40	50	50	50	50	50
VHP-18	45(18)	3.3			30	40	45	50	50	50	50
VHP-12	30(12)	2.2				35	40	50	50	50	50
VHP-8	20(8)	1.8				30	40	50	50	50	50
VHP-4	11(4)	1.3					30	40	45	50	50

Reflection Coefficient vs angle of incidence of ECCOSORB VHP

D/λ	1.0		1.3		2.2		2.6		3.0		3.8		5.1		5.8		10	
	⊥	//	⊥	//	⊥	//	⊥	//	⊥	//	⊥	//	⊥	//	⊥	//	⊥	//
50°	22	20	24	27	29	33	36	30	41	38	43	40	46	-	-	-	55	-
60°	15	17	17	25	23	31	22	27	34	28	36	38	34	33	42	37	48	42
70°	12	11	11	19	16	21	15	20	23	21	24	27	24	30	33	28	38	38

Reflection Coefficient vs Thickness

Wide Angle Performance



Note: Every piece is measured to establish compliance with the nominal minimum performance given in the table above. Also note this test was performed in the case of metal back.