



CUMING MICROWAVE

Technical Bulletin 390-10

C-RAM CFC HIGH PERFORMANCE CLEANROOM RF ABSORBER

RoHS
Compliant

C-RAM CFC is a series of high performance broadbanded RF absorbers designed for electronic and aerospace cleanroom applications. The carbon loaded foam is completely embedded in a clean material, so there is no dusting or release of conductive particles.

C-RAM CFC is made by embedding the corresponding grade of C-RAM SFC Pyramidal absorber in a mating section of low loss foam. The resulting box shaped absorber is then wrapped and sealed with an antistatic polyethylene film that can be wiped clean and requires no special vacuuming to maintain cleanroom conditions.

Because of the low dielectric constant of the foam insert, C-RAM CFC has essentially the same reflectivity as the SFC absorber it is made from, up through X-band. At millimeter frequencies, performance may begin to degrade slightly.

METHOD OF APPLICATION

C-RAM CFC can be bonded to walls using a contact adhesive such as CAMBOND 934. Alternately, blocks can simply be stacked on top of each other. The material is designed so that, when stacked, the bases of the embedded SFC absorber are in close contact with each other.



AVAILABILITY

C-RAM CFC is available in 6 standard grades as shown in the table below. Standard base dimensions are 24 in x 24 in (610 x 610 mm). Other sizes and shapes are possible on special order.

When designing a chamber using C-RAM CFC, exact room dimensions and locations of doors, access panels, lights, etc. must be known. The absorber can be supplied as pre-cut kits, since it is difficult to field cut and repair pieces.

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TYPICAL DIMENSIONS AND REFLECTIVITIES OF C-RAM CFC GRADES

----- REFLECTIVITY AT FREQ., IN dB -----

Grade	Height	0.30 GHz	0.50 GHz	1.0 GHz	3.0 GHz	6.0 GHz	10.0 GHz
CFC-4	4.8" 120mm				30	35	42
CFC-8	8.8" 225mm			30	37	45	50
CFC-12	13" 330mm			35	40	45	50
CFC-18	19" 480mm		30	37	45	50	50
CFC-24	25" 635mm	30	35	40	45	50	50
CFC-36	37" 940mm	35	37	42	50	50	50

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