

TECHNICAL BULLETIN 390-14

C-RAM SFC-WALKWAY

HIGH PERFORMANCE BROADBANDED WALKWAY RF ABSORBER

C-RAM SFC-WALKWAY is a series of high performance broadbanded RF absorbers, fabricated from standard C-RAM SFC pyramidal absorber. The SFC absorber is fit with a low density polystyrene foam matching section to square the piece off, and the sides and top of the block are fit with a half inch (13 mm) thick sheeting of fire retardant polyvinyl chloride (PVC) rigid foam.

Walkway absorber provides an effective access path for servicing the transmit and receive areas of an anechoic chamber.

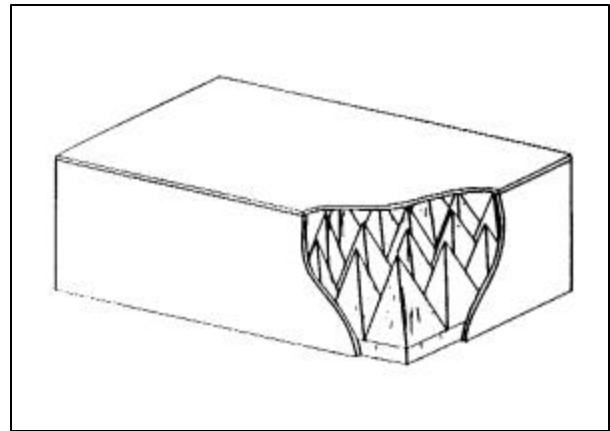
TYPICAL PROPERTIES

Reflectivity performance of a walkway is degraded from that of the SFC absorber comprising it, due to reflections from the PVC skin. The degradation becomes more significant with increasing frequency; below 1 GHz, the degradation is small, at 10 GHz, reflectivity is limited to about 25 dB, in mm-wave applications, other methods of accessing equipment should be considered, such as removing and replacing absorber before beginning testing.

Weight of a walkway piece is approximately 20-25% heavier than the corresponding piece of C-RAM SFC.

Height of a walkway section is 3 inches (75 mm) higher than the height of the C-RAM SFC grade from which it is made.

Color: Top and side surfaces are a textured olive green color. The black base of the SFC absorber is exposed on the bottom.



AVAILABILITY

C-RAM SFC WALKWAY can be made from any grade of the standard SFC absorber, but SFC-24 is the largest standard size.

Pieces are generally 24 in x 48 in (610 x 1220 mm), or 24 in x 24 in (610 x 610 mm). Other custom sizes can be made, as well as steps, ramps, and cutouts for pedestals.

METHOD OF APPLICATION

Walkway absorber is simply laid in place on the floor of the chamber. As its performance is less than that of the corresponding grade of C-RAM SFC, the use of walkway should be minimized. It should be kept near walls, always as far from the transmission path as possible, and never near the specular bounce points. It is better to have two entries with short walkways than a long walkway servicing both the transmit and receive ends of the chamber.

For aesthetic purposes, since the walkway is 3 inches higher than the SFC grade foam which it is made, one may consider using a smaller grade than the surrounding SFC absorber. This will ensure the walkway is flush with or lower than the tips of the floor absorber.

The information in this technical bulletin, although believed to be accurate, is not to be taken as a warranty for which Cuming Corporation assumes legal responsibility, nor as permission or recommendation to practice any patented invention without license; it is offered for verification by the customer, who must make the final judgement of suitability for any application.