



POLYURETHANE FOAM BASED MULTI-LAYER FLAT MICROWAVE ABSORBERS

(Microwave Absorbent Material – Flat Multilayer Type)

FU-ML MICROWAVE ABSORBERS:

- ❖ Lightweight, flexible, broadband, Multilayer PU foam based microwave absorber.
- ❖ Fabricated using six layers of carbon impregnated foam.
- ❖ FU-ML is an electrically graded flat PU foam based microwave absorber.
- ❖ Carbon loaded laminate polyurethane sheets.
- ❖ Can be readily cut on a band saw, with scissors, or a sharp knife.
- ❖ Available in various thicknesses from 18 mm to 120 mm and beyond.
- ❖ FU-ML is not waterproof and will not operate correctly when wet, since there is not washout, FU-ML will function as expected after being allowed to dry.

TYPICAL REFLECTIVITY PERFORMANCE:

Absorber Type	Thickness	Reflectivity (dB) at Near Normal Incidence with respect to Metal at frequency.			
		800MHz	900MHz	2 GHz	40 GHz
FU-ML-120	120 mm	15 dB	15 dB	17 dB	17 dB

AREAS OF APPLICATION:

- ❖ FU-ML has been used in reducing cross talk between adjacent antennas, shrouding antennas to improve the antenna patterns and undesired back lobes, as well as selective shadowing of parts of a target for RCS measurements.
- ❖ Shadowing of posts and supports in anechoic chambers, and as absorbing blankets for testing radar systems without harm to personnel.
- ❖ FU-ML is also effective in reducing surface current waves on metal shapes.



MATERIAL PROPERTIES:

- ❖ Color: As Desired, generally available in blue color.
- ❖ Dimensions: 60 cm X 60 cm.
- ❖ Typical Weight of 60 cm X 60 cm X 12 cm sheet: 2.5 kg.
- ❖ Chemical Composition: Carbon ferrite impregnated polyurethane foam.
- ❖ Maximum service temperature: 90 degree Centigrade.
- ❖ Fire Retardency: Passes NRL-8093, USA test 1, 2 & 3 With **Zero Halogen Means**.

FEATURES:

- ❖ Our foam absorbers are fire retardant with zero halogen means thereby avoid formation of toxic gases like HCl /HBr and poisonous gases like phosgene.
- ❖ **RoHS** Compliant.