MF-500 Urethane
Microwave Absorbing Coating

MF-500 Urethane broadband MagRAM coating is a coated carbonyl iron based paint in a proprietary urethane acrylic resin. It provides broadband RF absorption in a thin format. Its durable abrasion resistant finish is stable in hot and cold environments. The product can be applied with a brush or Sprayer. It has excellent UV Resistance.

A more moisture resistant MF-501 Marine Grade (using iron silicide instead of carbonyl iron) is available.

Also available are MF-510 Epoxy and MF-520 Silicone based formulations.

Applications:

- Minimization of RF crosstalk and RF interference (RFI) in analog and digital applications
- Extraneous reflection reduction of outdoor antenna motion equipment
- Reduction of RF noise & for RF signal suppression of surface & creeping waves
- Reduction of cavity resonance
- Minimization of RF coupling of antennas and microwave components
- Extraneous reflection reduction of RCS test facilities
- Equipment covering and concealment
- Low Observable

Mechanical Data:

- Thickness: 2-8.0 mils per layer nominal (depending upon application technique)
- Color: Charcoal Grey
- Dry Weight: 6.36 gm/mil for an area of 12"x 12" (30cm x 30 cm)
- Resistance: Fire, Abrasion, UV, Salt and Corrosion
- Coverage: Nominally 200 ft²/gal (3.8L)
- Isolation: Nominally -12 dB per mil
- VOC value: 102 g/l, or 5% by weight
- Shelf life: One year from date of manufacture (product is made to order)
- Storage temp: +5 to 40 deg C
**Notes:**

MF-500 Urethane is a resonant absorber

The center frequency is a function of thickness after cure

Typical performance yields a −10 dB bandwidth better than 40%