



THIN FLEXIBLE NARROW BAND RESONATING RADAR ABSORBENT MATERIAL

CHARACTERISTICS FEATURES:

- ❖ KV-RA is a Thin, Flexible, Weatherproof, Resonating Rubber based Microwave Absorbers.
- ❖ Consists of Magnetically/Electrically loaded Neoprene (KV-RA-N) and Nitrile rubbers (KV-RA-NL).
- ❖ Design frequency range is of **1 GHz to 18 GHz**.
- ❖ Unlike typical iron-filled rubber absorbers, no oxidation is possible due to the chemical nature of the filler component.
- ❖ Highly reliable and stable as an outdoor RADAR Absorbent Material.
- ❖ Suitable for Narrow Frequency Band Operations.
- ❖ Can be readily cut with a sharp knife and template and conforms to mild curvatures.
- ❖ Highly flexible for easy processing and installation.
- ❖ Available with a metal backing in 300 mm x 300mm size.

REFLECTIVITY PERFORMANCE:

- ❖ 15 dB at $\pm 5\%$ band with around the center frequency (as compared to the flat metal plate of the same size) Tested as Per IEEE Std.1128/1998: IEEE Recommended practice for RF Absorber Evaluation using NRL Arch Method.

AREA OF APPLICATION:

- ❖ Adhered to masts of Ships, walls, bridges etc to reduce false images, reflections and echoes to nearby antennas.
- ❖ Suppressing parabolic antenna side lobes.
- ❖ Suitable for Out-Door Applications.
- ❖ Attaching to vehicles to reduce overall Radar Signature.
- ❖ Suppressing specular reflections inside microwave units e.g. power amplifiers of mobile telephones, low noise blocks of satellite receivers etc

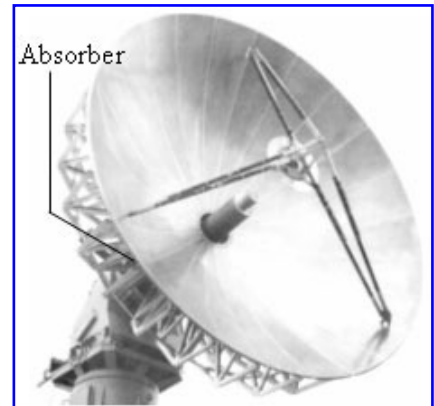


APPLICATION EXAMPLES:

- ❖ **Preventing of False Image from Ship's Mast:** The Photograph shows the installation of KV-RA material on the mast of a naval ship. This prevents false images from occurring by greatly reducing the amount of reflection taking place.



- ❖ **Prevention of Side and Back Lobe Radiation from a Parabolic Antenna:** The photograph shows KV-RA/CFA material installed on the skirt/shroud of a parabolic antenna. This improves side and back lobe performance, thus raising overall antenna performance.



- ❖ **Prevention of Unnecessary Radiation:** The photograph shows the installation of KV-RA material to prevent unnecessary radiation of the airplane guiding radar. It controls the reflection wave interference generated by the reserve radar and steel tower, thus increasing the reliability of the radar.

