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## ABS-ESF

### Convolute microwave broadband foam absorber

ABS-ESF is an open cell and 3D shaped light weight foam absorber. The front side has a convoluted shape which improves its RF-performance level for the higher frequency range. Due to its specific shape the reflectivity level will not degrade for higher angles of incidence of the signal. We supply 3 different types respectively ESF-3, ESF 4 and ESF-6 with thickness, respectively : 3, 4 and 6 inch. Due its open cell structure the material has good resistance to humidity and excellent for usage at high power levels.

#### Applications :

- ABS-ESF are often mounted on removable walls in test areas
- Covering of metal structures in anechoic test environments
- ABS-ESF are used in anechoic test boxes or to line area's nearby RF-systems to suppress reflections.
- The absorber sheets can be shaped around structures for indoor or semi open anechoic applications

#### Specifications :

Max. service temperature : +90°C

Power handling : 8 Kw/m<sup>2</sup>

Frequency range typically above 3 GHz up to 40 GHz

#### Properties :

ABS-ESF is specified by its reflectivity level for each type of thickness.

Reflectivity levels start at -20dB at lowest frequency and thickest material up to -40dB in the higher frequency range.

#### Availability :

Besides standard outside dimensions 610x610mm also specific or customized sizes and shapes can be supplied. The front side can be painted white, however for mm-wave applications we recommend to apply the material unpainted as the paint will degrade the reflectivity level.

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