

# CarboShield

## Shielding Paint

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CarboShield is a highly effective shielding wall paint for protection against electromagnetic radiation with up to 15 % absorption. This carbon based wall paint is applicable in homes & buildings.

In our everyday's live, homes increasingly filled with gadgets, TV's, lightings, wireless devices or infrastructure is close to home supporting these devices. Additionally, so-called electro smog from outside (cell towers, high voltage power lines) increases level of electrical fields and radiation.

### Protection against electromagnetic radiation

CarboShield is a coating that safeguards human being as well as devices against exposure to such radiant energy by reflecting and partially absorbing the radiation.

Optimized for high and constant radiation extinction over a very wide frequency band (30 MHz to approx. 40 GHz), exposure from radio waves up into the microwave range is being eliminated. An effective reflection of electromagnetic radiation with very high shielding attenuation, depending on coating thickness, of more than 46 dB can be achieved.

### Effectiveness of CarboShield

CarboShield combines two effects in one protective layer (see figure 1):

1. Due to excellent shielding efficiency caused by reflection and absorption the transmitted radiation level can be reduced to < 0.01%.
2. The intensity of reflected radiation is lowered, because absorptive properties of used carbon materials turn harmful radiation into (inmeasurable) harmless warmth.

### Application of CarboShield

The coating with CarboShield can be done like application of a paint on the surface.

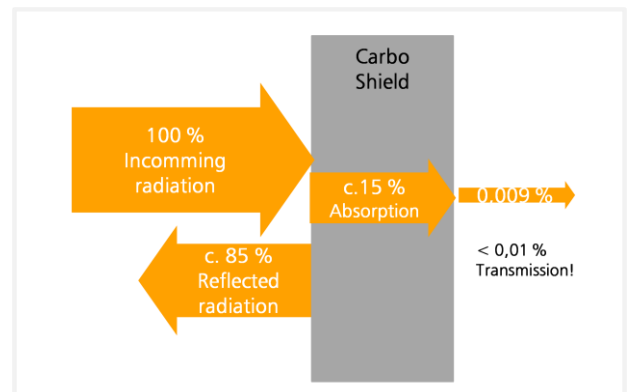


Figure 1: The extreme high effectiveness of CarboShield lead to an electromagnetic radiation level behind the coating of less than 0.01 % of the incoming radiation

Its high water permeability and very low VOC content suits very well for indoor application. Because of its good adhesion CarboShield is also perfect for using it on any type of polymeric system.

### Special features of CarboShield

- Simple processing by common manual and industrial application methods.
- Applicable to very different surfaces and geometries.
- Thin coating of a few micrometers produce excellent results.
- Maximum protection through the combined absorbing and reflecting effect of the layers.
- High water permeability and very low VOC content.