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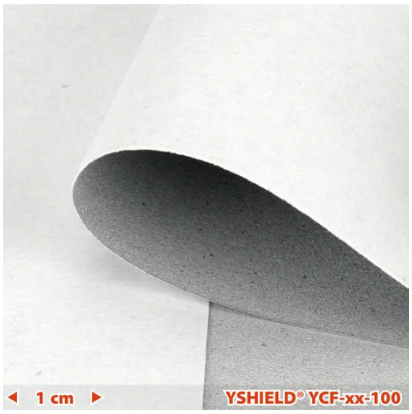
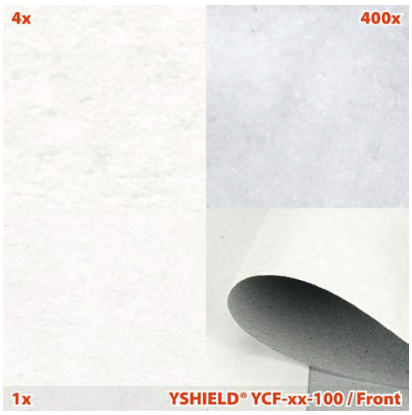
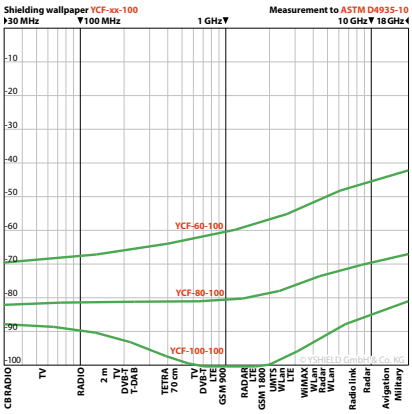
YCF-xx-100 - Wallpaper (HF+LF)

OUR RECOMMENDATION







Characteristics

YCF-xx-100 are **one-side metallized wallpapers** for the shielding of high-frequency radiation (HF) and low-frequency electric fields (LF).

The basis for this products is a **white wallpaper base fleece**, certified to FSC© Mix Credit, from the worldwide biggest manufacturer.

This wallpaper has a very high dimension stability before, while and after processing.

Special feature

Very high ecology: Almost all EMC shielding products become metallized in a "chemical" procedure. A lot of chemicals are needed for the production of copper- and nickel-layers. **Our new coating process allows to completely apply the metal on the base material with the use of air and green electricity only, without chemicals.** The ecological standard for this is very high.

High vapour permeability: Instead of an area-wide application the metal alloy is applied spattered on the base material. This is why all serial Yxx products are highly vapour diffusive.

Application

Only interior on walls and ceilings as **base wallpaper**. Applicaple for loose laying, if the wallpaper is protected against mechanical damage.

Technical data

- **Width: 100 cm**
- Lenght: By the meter, 20 m roll, 50 m roll (YCF-100-100), 100 m roll (YCF-60-100, YCF-80-100)
- **Attenuation 1 GHz:**
  YCF-**60**-100: 60 dB
  YCF-**80**-100: 80 dB
  YCF-**100**-100: 100 dB
- Weight:
  YCF-**60**-100: 190 g/m²
  YCF-**80**-100: 230 g/m²
  YCF-**100**-100: 340 g/m²
- Thickness: 0.20 - 0.22 mm
- Tensile strenght: 2.7 - 4.4 kN/m
- Color: White / Silver
- sD-value: Upcoming
- Surface conductivity: 0.004 - 0.04 Ohm (R☐)

Processing

Loose laying / stapling: Always overlapp the single elements for at least 5 cm. Do consider that there should be no gaps / holes.

Bonding the metallized surface in direction wall: The issue is, that for a proper grounding, the sheets must be electrically connected with each other. Usually this is attained by using the grounding strap EB1, which is connecting the single sheets with each other. When bounding the sheets with the metallized surface in direction wall this is not possible. If you still decide to do though, you will have to apply the grounding strap EB1 to the wall first and then adhere the sheets with standard wallpaper paste onto the wall. This will give a slightly chance that the metallized side will be contacted with EB1. Because this depends on the glue, we recommend to carry out experiments.

Bonding the metallized surface in direction room: This is the best solution, even though the result is not so nice. But in return, all sheets subsequent can easily be connected with EB1 and grounded then.

Edge to edge or overlapping: Ideally the sheets should be glued on **overlapping** to achieve the best attenuation. As a next step the overlapping should be smoothed with a fine filler. However, you wont achieve a perfect even surface. Alternatively you can glue on the sheets **edge to edge** as normal for wallpapers. This will cause a low loss of attenuation.

Grounding

Due to the highly conductive surface this material can be **contacted and grounded easily to shield low frequency (LF) electric fields**.

Screening attenuation

The screening attenuation is **regularly tested in our own EMC laboratory**. We have measurement setups due to the following standards: **ASTM D4935-10, IEEE Std 299-2006, IEEEE Std 1128-1998, ASTM A698/A698M-07**. Please find the test report at our homepage directly on the product page.