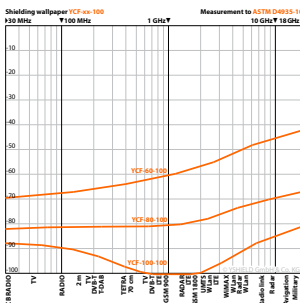
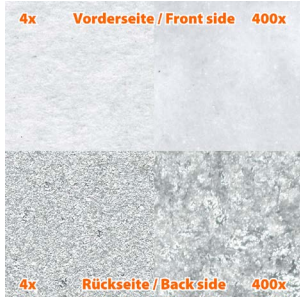


YCF-xx-100 - Fleece wallpaper (HF+LF)

OUR RECOMMENDATION



Characteristics

YCF-xx-100 are **one-side metallized fleece 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 fleece wallpaper has a very high dimension stability before, while and after processing. **Compared to our wallpaper YCP**, this fleece wallpaper has the advantage of a higher tensile strength, so its easier to process.

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. The ecological awareness 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**. Applicable for loose laying, if the wallpaper is protected against mechanical damage.

Technical data

- **Width: 100 cm**
- Length: 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 strength: 2.7 - 4.4 kN/m
- Color: White / Gray
- sD-value: Upcoming
- Surface conductivity: 0.004 - 0.04 Ohm (R□)

Processing

Loose laying / stapling: Always overlap 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 bonding 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:




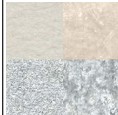
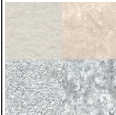



Ideally the sheets should be glued on **overlapping** to achieve the best attenuation. As a next step the overlapping should be smoothed with a fine filler. However, you wont achieve a perfect even surface. Alternatively you can glue on the sheets **edge to edge** as normal for wallpapers. This will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

Grounding

Due to the highly conductive surface this material can be **contacted and grounded easy 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, IEEE Std 1128-1998, ASTM A698/A698M-07.** Please find the test report at our homepage directly on the product page.

	YCF-60-100 Wallpaper Fleece	YCF-80-100 Wallpaper Fleece	YCF-100-100 Wallpaper Fleece	YCP-60-100 Wallpaper	YCP-80-100 Wallpaper	YCP-100-100 Wallpaper	YTS-60-100 Tyvek Soft	YFH-80-100 Fleece Polyester
Picture								
Shielding HF/LF/MF	HF / LF / -			HF / LF / -			HF / LF / -	HF / LF / -
Shielding attenuation	60 dB	80 dB	100 dB	60 dB	80 dB	100 dB	60 dB	80 dB
Ecology	Very high			Very high			High	High
Base material	Wallpaper base fleece certified to FSC® Mix Credit			Wallpaper base paper certified to PEFC™ und FSC®			Tyvek Softstructure	Polyester fleece
Coating	Zinc			Zinc			Zinc	Zinc
Width	100 cm			100 cm			100 cm	100 cm
Grammage	190 g/m ²	230 g/m ²	340 g/m ²	190 g/m ²	230 g/m ²	340 g/m ²	190 g/m ²	260 g/m ²
Thickness	0.20 mm	0.21 mm	0.22 mm	0.20 mm	0.21 mm	0.22 mm	0.25 mm	0.15 mm
Tensile strength	Low: 2.7 - 4.4 kN/m			Very low: 2.1 - 3.9 kN/m			High: 200 N / 2.54 cm	High: 190-230 N / 5 cm
Color	White / gray			Beige / gray			White / gray	Gray
sD-value	Follows	Follows	Follows	Follows	Follows	Follows	Follows	Follows
Electr. resistance	40 mΩ/□	8 mΩ/□	4 mΩ/□	40 mΩ/□	8 mΩ/□	4 mΩ/□	40 mΩ/□	8 mΩ/□
Moisture resistance	Limited			Limited			Very good	Good
Corrosion resistance	Typically good for zinc			Typically good for zinc			Typically good for zinc	Typically good for zinc
Windproof	No			No			Yes	No
Waterproof	No			No			Yes	No
Application area (examples)	Interior zone: Base wallpaper for wall, ceiling			Interior zone: Base wallpaper for wall, ceiling			Interior/exterior: Drywall installations, ventilated facades, roof areas	Interior/exterior: Drywall installations, ventilated facades, loose laying
Processing (examples)	Glueing with wallpaper paste for heavy wallpapers (e.g. Metylan Spezial / Direct)			Glueing with wallpaper paste for heavy wallpapers (e.g. Metylan Spezial / Direct)			Stapling, glueing, laying	Laying, stapling, glueing
Rework ability (examples)	Wall paints, glueing of sheet materials			Wall paints, glueing of sheet materials			Glueing of sheet materials	Wall paints, glueing of sheet materials
Price / m ² (20-25 m ²)	EUR 12.00	EUR 13.99	EUR 18.99	EUR 12.00	EUR 13.99	EUR 18.99	EUR 18.99	EUR 18.99