RF@REEN

SM-10YF | HNV100 - TECHNICAL DATA

2025/04



PROPERTIES

SM-10YF (HNV100) is a thermally bonded fine metalized polyester fleece for the shielding of high-frequency radiation (HF) and low-frequency electric fields (LF). Our highest shielding professional product for walls, ceilings and floors. Commercial product for data centers, laboratories, TEMPEST rooms, ... now available for private use.

APPLICATION

Interior for walls, ceilings and floors. As intermediate wallpaper, for drywall constructions, loosely laid, to shield devices, etc.

PROCESSING

In case of processing as an intermediate wallpaper, for **glueing** we recommend a commercially available dispersion glue. The wall and the backside of the material are coated with a paint roller. Insert the material wet on wet, fix it manually (with disposable gloves) and use a gummed roller to get a crease-free surface. Work quickly and strip by strip only, so that the dispersion glue does not dry. A crease-free bonding is only possible on perfectly plane surfaces. Further the material can be **laid loosely**, e.g. under floor coverings or can be **stapled**, e.g. in drywall constructions. Always **overlap the single strips**, so that they connect electrically for grounding.

TECHNICAL DATA

Width: 35.43 in (90 cm)

Length: By the yard / 328.08 ft in roll / 109.36 yards per roll

Attenuation: 103 dB Weight: 70 g/m2 Material thickness: 0.16 mm

Color: Gray / Brown
Tensile strength: 50 lbf

Materials: Polyester, copper, nickel

Surface conductivity: 0.01 ohm (square resistance)

GROUNDING

This product with an electrically conductive surface has to be integrated into the functional-equipotential bonding (FEB). Please find suitable grounding accessories under "Grounding".

SHIELDING ATTENUATION HF & LF

This product shields high frequency electromagnetic fields (HF). Unless otherwise stated, the indicated dB-values apply to 1 GHz. Measurement from 600 MHz to 40 GHz according to standards ASTM D4935-10 or IEEE Std 299-2006.

LABORATORY & EXPERT REPORT OF SHIELDING ATTENUATION UP TO 40 GHZ

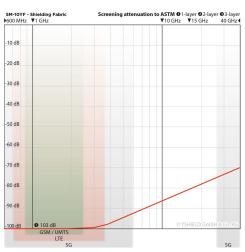
We have already invested in our own professional EMV laboratory years ago. We not only use it to create our laboratory screening reports but also to check each batch daily. Additionally, we have all our products checked by an independent, well-respected expert. Double checked for twice the safety. Please find the reports above at the downloads.

READY FOR 5G

Some companies offer "special" 5G-products. This products shields all 5G-frequencies, even without advertising this! Find two gray bars in all shielding diagrams with the 5G frequency spectrum FR1 (600 MHz - 6GHz) and FR2 (24 GHz - 40 GHz).







SM-10YF RF Shielding Fabric