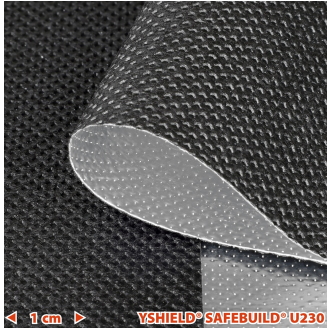


# YSHIELD® SAFEBUILD® U230 | Shielding membrane | Width 90 cm | 1 meter

Shielding four-layer underlay membrane for roofs, facades and drywall construction. Highly permeable to water vapor. 111 dB. For exterior and interior use. Width 90 cm.



## Properties

Our SAFEBUILD® U230 shielding underlay membrane is a **four-layer membrane with a microneedled aluminum foil**. The micro-needling with 200,000 tiny holes per square meter makes the material **highly permeable to water vapor**. This electromagnetic radiation shielding underlay membrane has with **111 dB the highest shielding attenuation we have ever had** in a series product. The micro-holes are so small that they have no effect on the shielding attenuation. Instead of the established 150 cm, we have limited ourselves to a width of 90 cm so that we can send your parcels worldwide faster and more cheaply without bulky goods costs. We are happy to realize special orders with a width of 150 cm or jumbo rolls for corporate customers. **Produced in-house at YSHIELD in Germany.**

## Application

The four-layer SAFEBUILD® U230 underlay membrane can be used **universally in exterior and interior areas for roofs, façades and drywall construction**. The membrane optimizes the wind tightness of the construction and stops rain. The aluminium foil protects against the penetration of warm air in summer and cold air in winter.

## Processing

**The professional application of a 1) water vapor diffusable, 2) waterproof, 3) reflective membrane for roofs, facades and drywall construction is sufficiently described in the literature and is well known to your craftsman, planner and architect.** For the best shielding result, the membranes must always be applied overlapping, without a gap, and holes for fastening must be kept as small as possible.

## Technical data

- **Width: 90 cm**
- **Length: by the meter / 50 m roll**
- **Shielding attenuation: 111 dB** / surface conductivity: 0.0018 Ohm (square resistance)
- **sd value: 0.034 m** = very high water vapor permeability
- Grammage: 230 g/m<sup>2</sup> / Thickness: 0.45 mm
- Color: Black / Silver
- Material layers: PP fleece / diffusion-open PL film / PP fleece / micro-needled aluminum foil

## Declaration of performance according to EN 13859-1:2010; EN 13859-2:2010

- Fire behavior: E
- Water resistance: W1
- Tensile strength: 210-270 N/50 mm
- Tear strength: 150-160 N
- Temperature resistance: -40°C to 80°C
- Hazardous ingredients: Not included
- sd value: 0.034 m
- VOC emissions: 0 (class A+)

## 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". **With this product, the aluminum side must be grounded, GSX50 must be bonded on the silver side!**

## 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.

This product with an electrically conductive surface **shields low-frequency alternating electric fields (LF)**.

## Laboratory & expert report of shielding attenuation up to 40 GHz

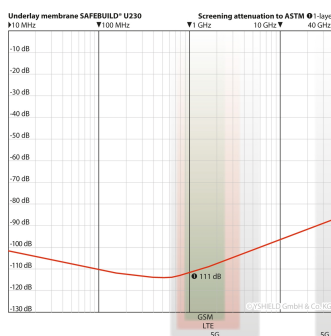
We have already invested in our **own professional EMV laboratory** years ago. We not only use it to create our laboratory screening reports but also to check each batch daily. Additionally, we have all our products checked by an **independent, well-respected expert**. Double checked for twice the safety.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



1 cm YSHIELD® SAFEBUILD® U230



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