Building Biology Products
and services

High frequency



- for extensive shielding against high-frequency, electromagnetic waves
- 1/2-transparent cotton fabric with silvered copper threads spun in
- 100 % textile characteristics, easy to fit
- natural, high-quality cotton decor in accordance with Oeko-Tex standard 100
- Swiss Shield Naturell is a decorative, unbleached, high-frequency, shielding cotton fabric with an absolute textile character.

The fabric displays the usual textile features of cotton.

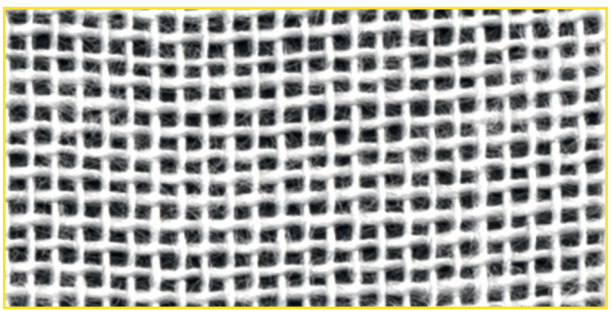
Discoloration due to lengthy solar radiation is a characteristic of pure cotton and does not have an influence on the technical qualities (shielding) of the textile.

Swiss Shield Naturell is used preferably as curtain material in front of windows or walls and is easy to fit or sew.

A wafer-thin incorporated and seven-fold insulated silver-copper fine filament lends Swiss Shield Naturell its natural shielding effect.

We, Biologa Danell GmbH, as Swiss Shield partners from the first hour, understand the high quality of Swiss Shield products and are happy to recommend these to our customers.

Order-No.: 3
Short-Desc.: SWSH-N - 250 cm



Shielding fabric (curtains, canopy)

Swiss Shield Naturell

Type	MHz	dB	in %
DVB-T2	470 - 690	**42**	**> 99,99**
LTE / 5G wide	700 - 750	**42**	**> 99,99**
GSM, LTE	920 - 960	**40**	**~ 99,99**
GSM, LTE	1800 - 1880	**36**	**> 99,9**
DECT	1880 - 1900	**36**	**> 99,9**
LTE, 5G wide	2110 - 2170	**34**	**> 99,9**
W-LAN 2400	2400 - 2500	**33**	**> 99,9**
5G fast	3400 - 3700	**28**	**> 99,0**
W-LAN 5200	5150 - 5350	**24**	**> 99,0**

Technical data

length:	by the meter
width:	250 cm ± 2 %
thickness:	0.17 mm ± 10 %
colour:	ecru (light beige)
grammage:	about 68 g/m²
mesh gauge:	1/2 - transparency
composition:	82% Cotton 18% Copper / Silver
features:	good washability, anti-static
wash cycles:	> 25 x
basis for inspection:	Oeko-Tex 100 Class 1 (baby underwear) IEEE Standard 299™-2006
Oeko-Tex 100:	**ZH015 208475** - Label Check
shield attenuation: Single layer Double Layer:	 max. 42 dB (> 99,99 %) max. 73 dB (> 99,99999 %)

Care instructions

	wash very gently (delicate or wool wash cycle at 30°)
	gentle ironing at level 1 (ironing at a low temperature)
	bleaching not permitted No detergent with bleach
	do not tumble dry
	do not dryclean

Scope of application

window area inside (curtain, double curtain, canopy)

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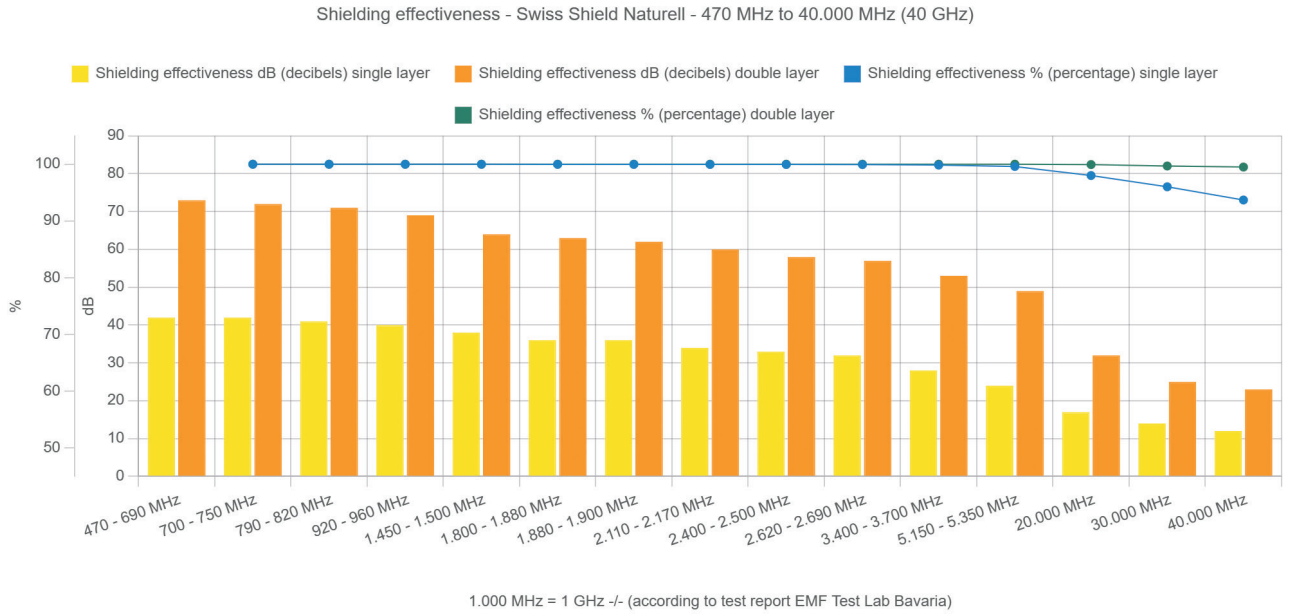
Type	MHz	Description
DVB-T2	470 - 690	digital video broadcasting – terrestrial, 2nd generation, TV via antenna
LTE / 5G wide	700 - 750	from 4G, now 5G NR without beamforming / MIMO
GSM, LTE	920 - 960	from 2G - D1, now 5G NR without beamforming / MIMO
GSM, LTE	1800 - 1880	from 2G - D2, E network, now 5G NR without beamforming / MIMO
DECT	1880 - 1900	wireless phone
LTE, 5G wide	2110 - 2170	from 3G, formerly UTMS, now 5G NR without beamforming / MIMO
W-LAN / WiFi 2400	2400 - 2500	wireless LAN
5G fast	3400 - 3700	5G NR - New frequency band with beamforming / MIMO
W-LAN / WiFi 5200	5150 - 5350	wireless LAN

Shielding values: According to test report: EMF Test Lab Bavaria



1.000 MHz = 1 GHz -/- (according to test report EMF Test Lab Bavaria)

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