

High frequency



- for large-area shielding of high-frequency electromagnetic waves, low-frequency alternating electric fields and static charges

- very good tear resistance with soft quality

- 100 % textile properties

- Topas-ST 140 is a floor pad for all bed canopies offered by Biologa Danell. Topas-ST 140 has a very high tensile strength and is therefore predestined for floor screening under canopies.

One underlay is required for single bed canopies. For double and universal bed canopies, two underlays are required, which can be overlapped and adjusted in width. See next page.

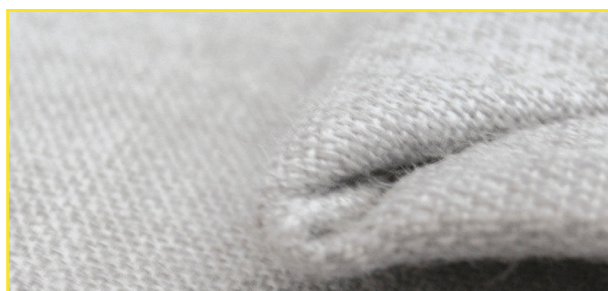
Please note that for non-contactable (groundable) canopies, such as Topas or Swiss Shield canopies, the canopy underlay must not be grounded either, as this can lead to field carry-over.

The woven-in stainless steel filaments protect the textile from mechanical effects and corrosion and increase its resistance to washing.

Due to the incorporated stainless steel fine filaments, this knitted fabric has an antistatic effect.

Order-No.: 101012

Short-Desc.: Topas-ST 140



canopy underlay

Topas-ST 140

Type	MHz	dB	in %
DVB-T2	470 - 690	40	~ 99,99
LTE / 5G wide	700 - 750	40	~ 99,99
GSM, LTE	920 - 960	42	> 99,99
GSM, LTE	1800 - 1880	44	> 99,99
DECT	1880 - 1900	44	> 99,99
LTE, 5G wide	2110 - 2170	44	> 99,99
W-LAN 2400	2400 - 2500	44	> 99,99
5G fast	3400 - 3700	44	> 99,99
W-LAN 5200	5150 - 5350	42	> 99,99

Technical data

length:	240 cm ± 2 %
width:	140 cm ± 2 %
thickness:	ca. 0,5 mm ± 10 %
colour:	dark grey / light grey
area weight:	ca. 190 g/m ²
mesh size:	opaque
composition:	68% cotton 16% polyester 16% stainless steel
properties:	very good tear resistance with soft quality, high screening attenuation, antistatic
washing cycles:	~ 40 x
basis for the audit:	IEEE-Standard 299™-2006
shielding attenuation:	max. ~ 44 dB (> 99,99 %)

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

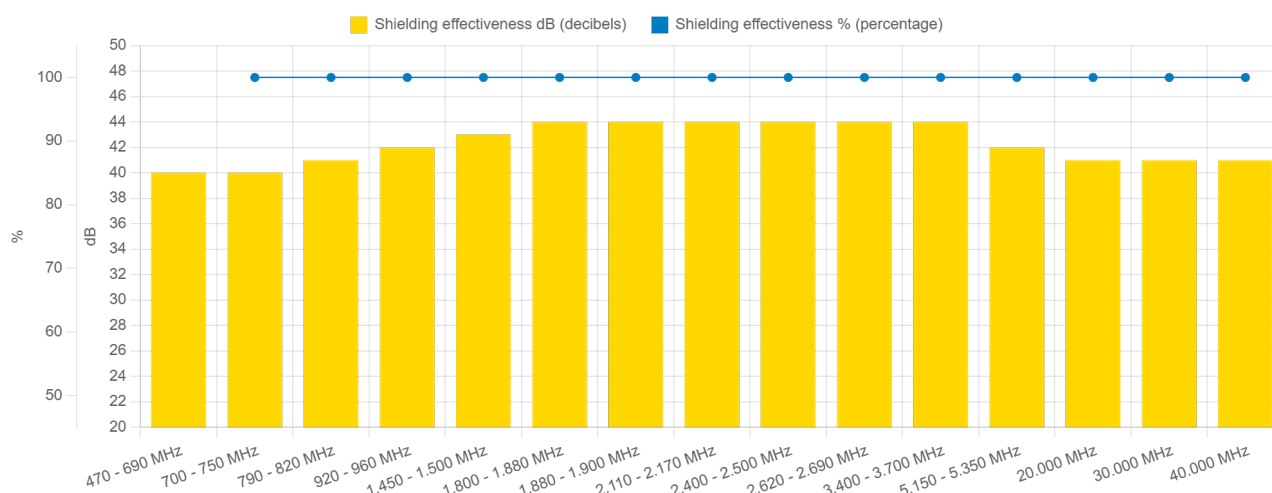
Scope of application

children's, sleeping area (bed canopies)

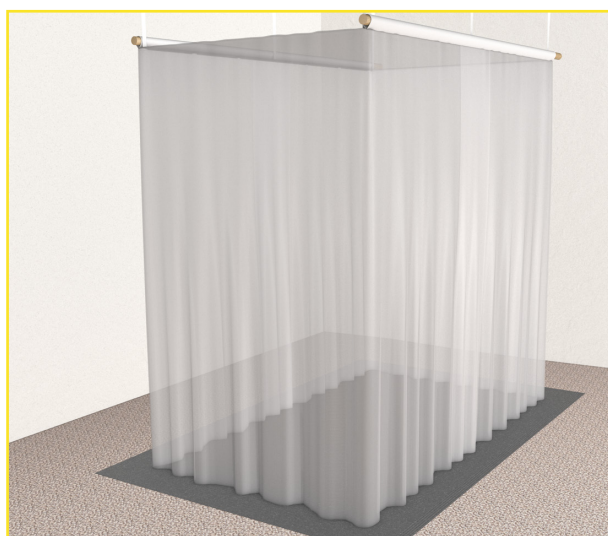
Type	MHz	Description
DVB-T2	470 - 690	digital video broadcasting – terrestrial, 2nd generation, TV via antenna
LTE / 5G wide	700 - 750	from 4G, now 5G NR without beamforming / MIMO
GSM, LTE	920 - 960	from 2G - D1, now 5G NR without beamforming / MIMO
GSM, LTE	1800 - 1880	from 2G - D2, E network, now 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

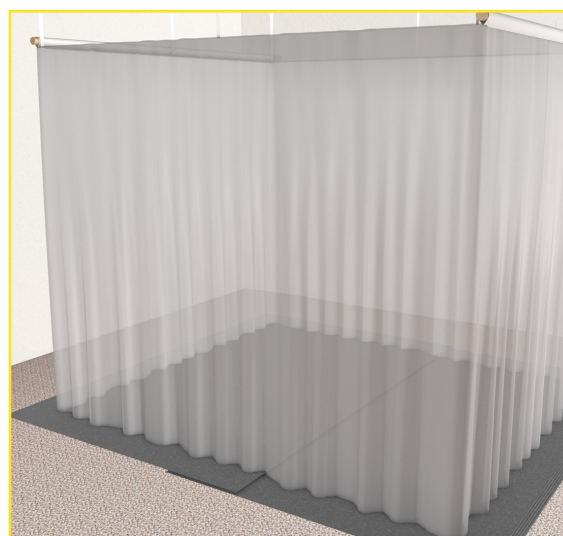
Shielding effectiveness - Topas ST - 470 MHz to 40.000 MHz (40 GHz)



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



Topas-ST 140 under single bed canopy



2x Topas-ST 140 overlapping under double or universal canopy