# shielde<u>x</u>



### Shieldex® Infrared Protection



Shieldex textile solutions provide optimal protection for clothing (such as uniforms), equipment, aircraft, vehicles, and satellites that need to remain invisible to thermal imaging cameras. Developed for the infrared range, Shieldex's textiles have been designed to camouflage exactly what should not be visible. The product Shieldex® Bremen RS UK IR is already being used successfully for camouflage and shielding people and objects in the medium and long-wave infrared radiation range (3.5 - 15  $\mu$ m wavelength).

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#### **General Information**

Shieldex develops textiles for infrared camouflage, ensuring clothing, equipment, and vehicles remain invisible to thermal imaging. The metal-plated materials are designed to hide objects from IR detection (1500-20000 nm). Shieldex offers two textile solutions that effectively shield against infrared radiation for people and assets.

### Technical Specification Shieldex® Bremen UK

Shieldex® Bremen UK MILIR is a pure silver-plated ripstop fabric with a pure silver content of approx. 17%. The shielding fabric is particularly suitable for the targeted shielding of infrared radiation. Shieldex® Bremen UK MILIR has an uncalendared (UK) surface. Due to the nature of the material, the infrared rays are diverted and are therefore no longer visible on infrared cameras.

#### **Description of material**

Ag plated Nylon fabric

#### **Bremen UK average Reflection\***

NIR 46,43% SWIR 57,14% MWIR 69,50% LWIR 69,44% FWIR 66,88%

#### **Bremen UK average Transmission\***

NIR 6,15% SWIR 6,68% MWIR 13,59% LWIR 16,93% FWIR 16,12%

#### **Image Mode**

White hot

#### **Electrical Surface Resistivity**

Average <  $0.5 \Omega/\Box$ 



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Technical Specification Shieldex® Zell RS CR

Extremely conductive fabric metalized with silver, copper, and tin and with a surface electrical resistance of 0.02  $\Omega/\Box$ . The additional CR coating makes the conductive textile Shieldex® Zell RS CR compatible for cleanroom applications and additionally **shields against infrared radiation.** 

#### **Description of material**

Ag/Cu/Sn plated Nylon fabric

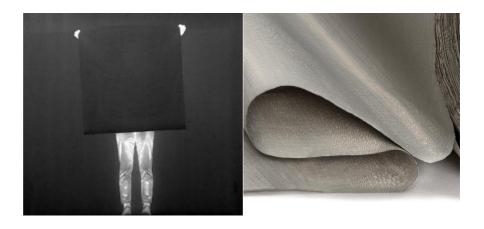
| Zell RS CR average Reflection* | Zell RS CR average Transmission* |
|--------------------------------|----------------------------------|
| NIR 27,24%                     | NIR 3,11%                        |
| SWIR 52,89%                    | SWIR 3,70%                       |
| MWIR 69,46%                    | MWIR 6,68%                       |
| LWIR 69,39%                    | LWIR 7,48%                       |
| FWIR 73,20%                    | FWIR 8,96%                       |
|                                |                                  |

#### Image Mode

White hot

#### **Electrical Surface Resistivity**

Average <  $0.02 \Omega/\Box$ 



<sup>\*</sup> under development

### Did we spark your interest?

More information can be found on our detailed data sheets. Please do not hesitate to contact us at any time.