

Peace and quiet is a basic need that is highly valued in our time. Effective impact sound insulation increases quality of life; effective vibration insulation creates a pleasant living and working atmosphere. **DAMTEC® sonic** is a special structural protection mat in accordance with DIN 18531 for impact sound protection on roof terraces, balconies and loggias. DAMTEC® sonic is installed in classic constructions with concrete slabs on a gravel bed and thermal insulation by means of PIR, EPS or XPS (warm and inverted roof).

## Material

Material:

Recycling-based rubber granulates bonded with PU elastomer.

## Product design

Colour: Black with blue colour particles

Surface: Granulate structure

## Dimensions / Tolerances / Weight

Length (roll-form mats): as ordered  $\pm 1.5\%$

Width (roll-form mats): 1250 mm  $\pm 1.5\%$

Thickness (roll-form mats): 8 mm  $\pm 0.3$  mm

Density: approx. 780 kg/m<sup>3</sup>

Area weight: approx. 6,24 kg/m<sup>2</sup>

The product data sheet is not subject to any change service! All information is without guarantee.

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## Product Testing

Tensile strength:	approx. 0.3 N/mm <sup>2</sup> (DIN EN ISO 1798)
Elongation at break:	approx. 30% (DIN EN ISO 1798)
Fire resistance:	Efl (B2) (DIN EN 13501-1)
Service temperature range:	-30° to 80°C
Compression under traffic load:	approx. 17 t/m <sup>2</sup> at 10% compressive strain approx. 32 t/m <sup>2</sup> at 15% compressive strain approx. 47 t/m <sup>2</sup> at 20% compressive strain (in accordance with DIN EN ISO 3386-2)
Water permeability:	given by open pores
Water drainage capacity:	at hydraulic gradient $i = 0.01$ : 1.2 t/m <sup>2</sup> load: 0.21 L / (m·s) 8.0 t/m <sup>2</sup> load: 0.16 L / (m·s) at hydraulic gradient $i = 0.02$ : 1.2 t/m <sup>2</sup> load: 0.32 L / (m·s) 8.0 t/m <sup>2</sup> load: 0.24 L / (m·s) (test data in combination with 40mm grit bed (2/8)) (in accordance with DIN EN ISO 12958)
Coefficient of thermal expansion:	approx. $10 \times 10^{-5} / ^\circ\text{C}$ (test method based on DIN EN 13471) = 1 mm length change per 1000 mm for $\Delta T = 10 \text{ K}$
Expansion due to humidity:	min. 2% (depending on humidity and situation of installation)
Water vapour permeability:	$s_d = 0,1\text{m}$ (DIN EN ISO 12572)
UV-Resistance:	resistant to DIN EN 1297 and DIN EN ISO 3386-2
Impact sound insulation:	

# DAMTEC® sonic

Produktdatenblatt Nr. 9215 - R - 07

Issue: January 2021

The measured values have been compiled with the complete specified layer structure in laboratory measurements. (in accordance with ISO 10140)

Warm roof		
<b>PIR insulation</b> 140 mm	Waterproofing: Bituminous roofing membranes	Waterproofing: PVC roofing membranes
Impact sound insulation improvement	$\Delta L_w = 34$ dB	$\Delta L_w = 37$ dB
Built-up height (approx.)	250 mm	245 mm
Layer structure (top to bottom)	<ul style="list-style-type: none"> <li>- Concrete pavers 50/50/5 cm</li> <li>- Grit bed 2/8 (d = 4 cm)</li> <li>- <b>DAMTEC® sonic</b></li> <li>- 2nd waterproofing layer: PYE PV 200 S 5, slate-coated</li> <li>- 1st waterproofing layer: G 200 S 4, talcum-coated</li> <li>- Insulation: PIR FA WLS 024 (140 mm)</li> <li>- Bitumen vapour barrier: V 60 S 4 + Al</li> </ul>	<ul style="list-style-type: none"> <li>- Concrete pavers 50/50/5 cm</li> <li>- Grit bed 2/8 (d = 4 cm)</li> <li>- <b>DAMTEC® sonic</b></li> <li>- Separating layer: Polyester fleece 300 g/m<sup>2</sup></li> <li>- Waterproofing: Soprema Flagon SR 150</li> <li>- Insulation: PIR FA WLS 024 (140 mm)</li> <li>- Bitumen vapour barrier: V 60 S 4 + Al</li> </ul>
<b>EPS Insulation</b> 200 mm	Waterproofing: Bituminous roofing membranes	Waterproofing: PVC roofing membranes
Impact sound insulation improvement	$\Delta L_w = 32$ dB	$\Delta L_w = 37$ dB
Built-up height (approx.)	310 mm	305 mm
Layer structure (top to bottom)	<ul style="list-style-type: none"> <li>- Concrete pavers 50/50/5 cm</li> <li>- Grit bed 2/8 (d = 4 cm)</li> <li>- <b>DAMTEC® sonic</b></li> <li>- 2nd waterproofing layer: PYE PV 200 S 5, slate-coated</li> <li>- 1st waterproofing layer: G 200 S 4, talcum-coated</li> <li>- Laminated layer: G 200 DD, sanded</li> <li>- Insulation: EPS 035/200 KPA DAA DH (200 mm)</li> <li>- Bitumen vapour barrier: V 60 S 4 + Al</li> </ul>	<ul style="list-style-type: none"> <li>- Concrete pavers 50/50/5 cm</li> <li>- Grit bed 2/8 (d = 4 cm)</li> <li>- <b>DAMTEC® sonic</b></li> <li>- Separating layer: Polyester fleece 300 g/m<sup>2</sup></li> <li>- Waterproofing: Soprema Flagon SR 150</li> <li>- Separating layer: Raw glass fleece 120 g/m<sup>2</sup></li> <li>- Insulation: EPS 035/200 KPA DAA DH (200 mm)</li> <li>- Bitumen vapour barrier: V 60 S 4 + Al</li> </ul>

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Inverted warm roof		
XPS insulation 160 mm	Waterproofing: Bituminous roofing membranes	Waterproofing: PVC roofing membranes
Impact sound insulation improvement	$\Delta L_w = 35$ dB	$\Delta L_w = 30$ dB
Built-up height (approx.)	270 mm	265 mm
Layer structure (top to bottom)	<ul style="list-style-type: none"> <li>- Concrete pavers 50/50/5 cm</li> <li>- Grit bed 2/8 (d = 4 cm)</li> <li>- Filter fleece</li> <li>- Insulation: Roofmate™ SL-X WLG 031 (160 mm)</li> <li>- <b>DAMTEC® sonic</b></li> <li>- 2nd waterproofing layer: PYE PV 200 S 5, slate-coated</li> <li>- 1st waterproofing layer: G 200 S 5, talcum-coated</li> </ul>	<ul style="list-style-type: none"> <li>- Concrete pavers 50/50/5 cm</li> <li>- Grit bed 2/8 (d = 4 cm)</li> <li>- Filter fleece</li> <li>- Insulation: Roofmate™ SL-X WLG 031 (160 mm)</li> <li>- <b>DAMTEC® sonic</b></li> <li>- Separating layer: Polyester fleece 300 g/m<sup>2</sup></li> <li>- Waterproofing: Soprema Flagon SR 150</li> </ul>

## Installation

Installation is executed in accordance with the **DAMTEC® sonic** installation instructions, in this regard the procedure is the same as it is for a usual structural protection mat.

## Other

Disclaimer:

We want to use this information to advise you to the best of our knowledge and belief on the basis of our tests and experience. However, KRAIBURG Relastec GmbH & Co. KG cannot provide a guarantee for KRAITEC® products for the laying results in individual cases due to the wide range of application possibilities and the storage, laying and construction site conditions, which are outside our influence. You should carry out your own tests. Our technical service would be pleased to assist you.

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