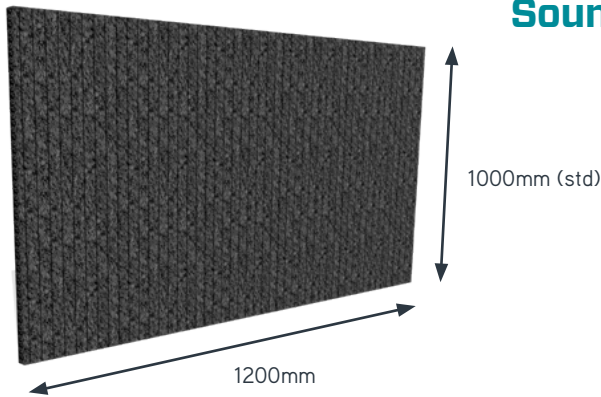


### Sound Absorption Material for Noise Barriers NBO-40-A3

#### APPLICATION DATA SHEET



Physical Properties	Test Method	Unit	Typical Physical Properties
System series	-	-	WHISPER® Absorber Series
Mode of operation	-	-	Highly absorbent
Dimensions	-	cm	100 x 120 x 4 (standard) 200 x 120 x 4
Area of application (sound absorbent)	-	-	Surface mounted cladding for noise barriers and outdoor walls
Absorber material	-	-	WHISPER® polyethylene foam (PE) with grooved texture
Dry weight	-	kg/m <sup>2</sup>	1,0
<b>Acoustic Properties</b>			
Sound absorption street DL <sub>α</sub>	EN 1793-1	dB	9 dB without steel post cladding; 9 dB with steel post cladding
Sound absorption rail DL <sub>α</sub>	EN 16272-1	dB	11 dB without steel post cladding; 12 dB with steel post cladding
Sound reflection DL <sub>RI</sub> in-situ street	EN 1793-5	dB	5
Sound reflection DL <sub>RI</sub> in-situ rail	EN 16272-3-2	dB	6
<b>Mechanical Properties</b>			
Resistance to frost and de-icing salt	EN 14389-2	-	Fulfilled
Fire resistance	EN 1794-2	-	Class 1
Pendulum impact	EN 1794-2	-	Class 2
Impact of stones	EN 1794-1	-	Fulfilled
Evidence of water absorption / release	-	-	Checked
Long-term performance	EN 14389-1-2	-	Acoustic and non-acoustic properties 50 years
<b>Other Properties</b>			
Sound insulation	EN 1793-2(6) EN 16272-3-2	-	Effect not through absorber, but through carrier material (e.g. carrier plate)
Structural analysis	-	-	Evidence for each application through corresponding statics (e.g. panel statics)
<b>Material and Surface Characteristics</b>			
Material properties	Sound absorbent, extremely light, UV-resistant, hydrolysis resistant		
Other material properties	Water absorption up to 300% of its own weight; Up to 90% evaporation within 14 days; Simple adaptation of shape to the ground		
Dimensional tolerances	Product thickness up to +5 mm		
Surface structure	Honeycomb-like structure, with flat parallel grooves		
Colours	Black		
UV resistance	Category A: highest UV resistance, suitable for direct fixing to vertical outdoor surfaces		
Installation and cutting	Depending on the application e. g. glue / screw on carrier materials, cut to size using a stanley knife, circular saw or hand-held circular saw		
Recycling	Classification in low density polyethylene (LDPE); fully recyclable in LDPE recycling systems		