

## Cisilent® Type E

Flexible mobile or permanent noise protection system

#### Product information

CHARACTERISTICS		STANDARD						
Material	High-strength, triple-layer polyester fabric. Filled with non-flammable insulation wool.							
Length	Up to 4 m		III As or Breed III It					
Weight per unit area	$\approx 5.5 \text{ kg/m}^2$							
Element thickness	≈ 7 cm							
Weighted sound reduction index	$R_w(C; C_{tr}) = 21(-1; -4) dB$	DIN ISO 10140-2						
Weighted sound absorption coefficient	α <sub>w</sub> = 1,00	DIN ISO 11654						
Sound absorption class	A	DIN ISO 11654						
Fire rating	Fabric: B1 Outer layer: B1 B-s2-d0 Mineral wool filling: A1, non-combustible	DIN 4102-1 DIN 4201-1 EN 13501-1 DIN 4102-1						
Moisture behaviour mineral wool filling	Water-repellent	DIN 53354						

#### General Information

Cisilent® Type E is used to insulate and absorb air-borne sound. The elements are suitable for outdoor use as temporary or permanent noise protection walls or indoors in enclosed spaces.

Their light weight and flexibility unite usage of space and sound insulation to an optimum extent to form a curtain system. Fastened to reflective surfaces, Cisilent suppresses the reflection of acoustic waves. The customer provides the supporting structure. Cisilent® can be fitted by screwing through the fastening edge but can also be attached through eyelets or using special stud key fasteners.

Cisilent® Type E is also used as a dust protection wall and screening. Two fixture versions are available for installation. The first version features eyelets 16 mm in diameter. The second version is fastened to scaffolding poles using buckle belts. Both fastening systems can bear about 1 kN per support point.

#### Components

#### Sound-absorbent surfaces

The fabric layers are coated on both sides with a UV-resistant plastic that remains stable when subjected to heat. The lattice structure in the fabric creates open pores which allows the sound energy to penetrate the filling, thus producing high absorptive capacity in the product.

#### Closed outer layer

The closed outer layer consists of a sturdy polyester fabric coated with plastic, which delivers a high mechanical load-bearing capacity. A coating on both sides protects it against mechanical damage. The material contains a fungicide to provide protection outdoors for the long term. The outer side is sealed with a weldable fluorinated coating.

#### Sound-absorbent filling

The highly absorbing insulation material has optimum strength and fire protection properties. The excellent shape stability and strength are achieved thanks to the high fibre resilience specifically incorporated into the product.



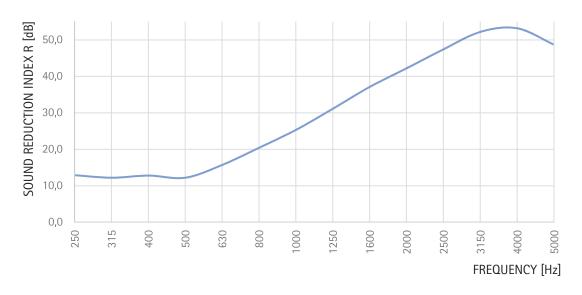
## Cisilent® Type E

Flexible mobile or permanent noise protection system

### Sound insulation (as per ISO 10140-2)

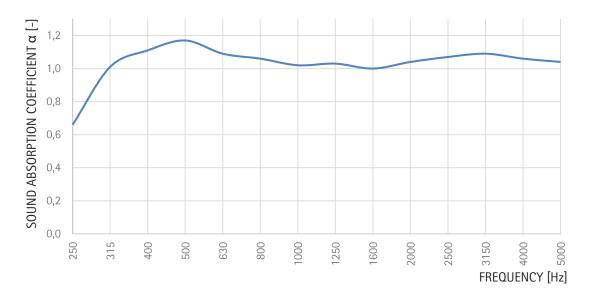
(Extract from TÜV NORD test report SEII/0049/17)

Frequency [Hz]	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
R Terz [dB]	12.7	12.0	12.6	12.0	15.5	20.2	25.1	30.9	36.9	42.0	47.2	52.0	53.0	48.5



# Sound absorption (as per ISO 11654) (Extract from TÜV NORD test report SEII/0049/17)

Freque	ncy [Hz]	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
$\alpha_s$	[-]	0.66	1.01	1.11	1.17	1.09	1.06	1.02	1.03	1.00	1.04	1.07	1.09	1.06	1.04



The contents of this publication are the result of many years' research and experience gained in application technology. All information is given in good faith; it does not represent a guarantee with respect to characteristics and does not exempt the user from testing the suitability of products and from ascertaining that the industrial property rights of third parties are not violated. No liability whatsoever will be accepted for damage arising from advice given in this publication, regardless of its nature and its legal basis. We reserve the right to make technical modifications in the course of product development.

<sup>©</sup> Copyright - Calenberg Ingenieure GmbH - 2019