

PARAFON Decibel Mute



Certification Number

0809-CPR-1013 / Eurofins Expert Services Ltd, P.O. Box 1001, FI-02044 VTT, Finland

Short Description

PARAFON Decibel Mute is an acoustic tile developed for optimal sound insulation and sound absorption. It is useful when sound insulation is needed via suspended ceilings of up to $D_{n,f,w}$ 54 dB. The tile has a core of non-combustible stone wool and a sound insulating membrane. It has been tried and tested in a Swedish accredited acoustic lab and is quick and easy to install.

Usage Conditions

May be used continuously in 95 % relative humidity at a temperature of 30 °C, occasionally also at 100 % and 40 °C.

Dimensions

Dimensions		
Thickness	Width x Length	Weight
Edge A:		
55 mm	600 x 600 mm	7,8 kg/m ²
55 mm	600 x 1200 mm	7,8 kg/m ²

Packaging

Package Type

Carton / Pallet

Fire Properties

Reaction to Fire		
Property	Value	According to
Reaction to Fire, Euroclass	A2 - s1, d0	EN 13964:2014 (EN 13501-1)

Other Fire Properties

Property	Value	According to
Combustibility	Base product non-combustible	EN ISO 1182

Sound Properties

Acoustic Absorption Index		
Property	Value	According to
Sound Absorption a_w , Construction Depth 200 mm	0,90	EN 13964:2014 (EN ISO 354 / EN ISO 11654)

Property	Value	According to
Practical Sound Absorption Class	A	EN 13964:2014 (EN ISO 354 / EN ISO 11654)

Sound reduction: R_w 24 dB (SS-EN ISO 10140), $D_{n,f,w}$ 42 dB (SS-EN ISO 10848)

Mechanical Properties

Tensile/Flexural Strength		
Property	Value	According to
Flexural Tensile Strength	NPD	EN 13964:2014

Other Mechanical Properties		
Property	Value	According to
Shatter Properties	NPD	EN 13964:2014

Emissions

Property	Value	According to
Emission Indoor Climate	M1	Finnish Classification

Release of Dangerous Substances to the Indoor Environment		
Property	Value	According to
Release of Formaldehyde	E1	EN 13964:2014
Release of Asbestos	No content of asbestos	EN 13964:2014

Durability

Durability of Reaction to Fire Against Heat, Weathering, The fire performance of mineral wool does not deteriorate with time. The Ageing/Degradation Euroclass classification of product is related to the organic content, which cannot increase with time.

Facings

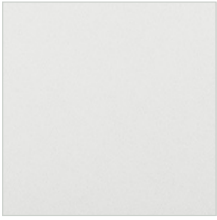
Facing Material Pre painted glass fiber surface layer.
 Backside: Thin glass tissue.

Gloss Factor Exclusive: 2 Classic: 2 Black: 0,5

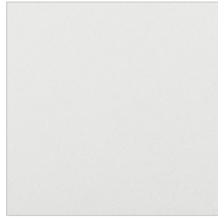
Light Reflectance Exclusive: ~85 % Classic: ~83 %
 Black: ~4 %

Colours

Also possible: Colortone free NCS color



Exclusive nearest NCS S 0500-N



Classic nearest, NCS S 0500-N



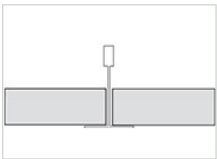
Colortone Black, NCS S 9000-N

Edges

Treatment of Edges

Thin spray painted

Edge Variations

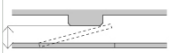


A

Installation

Suspension Height

Installation with exposed suspension system



Tile thickness	Edge A	Edge E
Deckel Light (40 mm)	160 mm	170 mm
Deckel Meta (55 mm)	200 mm	
Deckel Mass (55 mm)	200 mm	210 mm

Minimum suspension height for removal

Maintenance

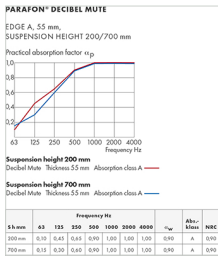
Using a soft brush, by vacuum cleaning or by wiping with a damp cloth or sponge.

Disposal and Recycling

May be used as thermal insulation or taken to a dump. No restrictions.

Sound Absorption Curves

The sound absorption is measured according to ISO 354. The absorption values and classes are calculated according to ISO 11654. NRC according to ASTM C 423. Direct sound insulation (R_w) is measured according to SS-EN ISO 10140 and calculated according to SS-EN ISO 717-1. Sound insulation via suspended ceiling ($D_{n,f,w}$) is measured according to SS-EN ISO 10848 and calculated according to SS-EN ISO 717-1.



SOUND INSULATION		
PRODUCT PARAFON	Direct sound insulation R _e (dB)	Sound insulation via suspended ceiling D _{e,ceiling} (dB)
Decibel Light 40 mm	21	35
Decibel Mute 55 mm	24	42
Decibel Mass 55 mm	31	43

The values are measured and/or calculated with full covering ceilings. Sound insulation values apply to edge A.

SOUND INSULATION VIA SUSPENDED CEILING, D _{e,ceiling} (dB)		
PRODUCT PARAFON	With single Decibel Barrier R _e 21 dB	With double Decibel Barrier R _e 36 dB
Decibel Light 40 mm	48*	53*
Decibel Mute 55 mm	52/52*	54/56*
Decibel Mass 55 mm	59*	64*

The values are measured and/or calculated with full covering ceilings. Sound insulation values apply to edge A. *Calculated values.

SOUND INSULATION VIA SUSPENDED CEILING, D _{e,ceiling} (dB)		
PRODUCT PARAFON	With PARAFON Base along wall 1200 mm	With PARAFON Base whole covering
Decibel Light 40 mm	42	44
Decibel Mute 55 mm	—	—
Decibel Mass 55 mm	46	48

The values are measured and/or calculated with full covering ceilings. Sound insulation values apply to edge A.

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