

## PARAFON Decibel Light



Certification Number

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

Short Description

PARAFON Decibel Light has a core of non-combustible stone wool and an aluminium membrane at the back and satisfies the lower requirements on sound insulation via the suspended ceiling. In combination with PARAFON Decibel Barrier installed vertically in the plenum, or the sound absorbing PARAFON Bass placed on top of the suspended ceiling, the sound insulation with Decibel Light can be reinforced significantly if required.

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:		
40 mm	600 x 600 mm	4,9 kg/m <sup>2</sup>
40 mm	600 x 1200 mm	4,9 kg/m <sup>2</sup>
.		
Edge E24:		
40 mm	600 x 600 mm	5,9 kg/m <sup>2</sup>

### Packaging

Package Type

Carton

### Fire Properties

#### Reaction to Fire

Property	Value	According to
Reaction to Fire, Euroclass	A1 (Classic, Colortone Black)	EN 13964:2014 (EN 13501-1)
Reaction to Fire, Euroclass	A2-s1,d0 (Exclusive, Free NCS color)	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:  $R_w$  21 dB (SS-EN ISO 10140/ SS-EN ISO 717-1),  $D_{n,f,w}$  35 dB (SS-EN ISO 10848 / SS-EN ISO 717-1)

### 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

#### 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: Aluminium foil.

Gloss Factor

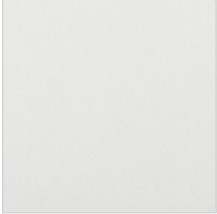
Exclusive: 2 Classic: 2 Black: 0,5

Light Reflectance

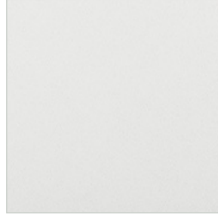
Exclusive: ~85 % Classic: ~83 %  
 Black: ~4 %

## Colours

Also possible: Colortone free NCS color



Exclusive White, NCS S 0500-N



Classic White, NCS S 0500-N



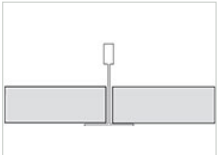
Colortone Black, NCS S 9000-N

## Edges

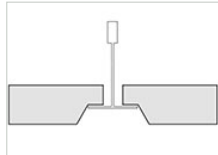
Treatment of Edges

Edge A are thin spray painted, Edge E painted.

## Edge Variations



A



E24

## Installation

Installation with Armstrong Prelude suspension system.

## Suspension Height

Installation with exposed suspension system

Tile thickness	Edge A	Edge E
Deckel Light (40 mm)	160 mm	170 mm
Deckel Nano (55 mm)	200 mm	
Deckel Mass (53 mm)	200 mm	210 mm

Minimum suspension height for removal

## Maintenance

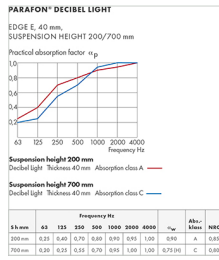
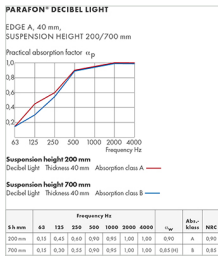
Using a soft brush, by vacuum cleaning or by wiping with a damp cloth or sponge.

## 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 $R_d$ (dB)	Sound insulation via suspended ceiling $D_{s,c}$ (dB)
Decibel Light, 40 mm	21	35
Decibel Mute, 55 mm	24	42
Decibel Mass, 53 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, $D_{s,c}$ (dB)			
PRODUCT PARAFON	With single Decibel Barrier $R_d$ 21 dB	With double Decibel Barrier $R_d$ 36 dB	
		Decibel Light, 40 mm	48*
Decibel Mute, 55 mm	52/52*	54/54*	54*
Decibel Mass, 53 mm	52*	54*	54*

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, $D_{s,c}$ (dB)		
PRODUCT PARAFON	With PARAFON Base along wall 1200 mm	With PARAFON Base vehicle covering
Decibel Light, 40 mm	42	44
Decibel Mute, 55 mm	-	-
Decibel Mass, 53 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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