

Loke™ 40 mm

Wall and ceiling absorbent - silencer

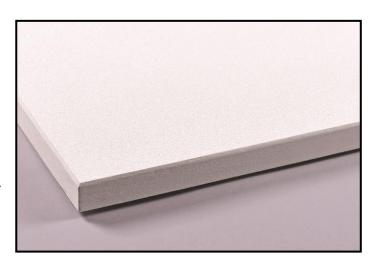
Datasheet

Description

The plate has been developed especially with regard to mounting directly on the ceiling or on the wall where there is no space for a traditional suspension system.

The plate has a traditional textured surface with particularly elaborate edge sealing.

The board has a particularly good sound absorption and is very sound dampening. With high light reflection, it is therefore very suitable for office and teaching environments, nurseries and rooms with a lot of noise.



Color and light reflection

The nearest white color code is NCS 0502-Y and light reflection up to 84 %. Also available in grey (RAL 7037) The plate is also available in other RAL colors as custom made.

Installation

The plates are mounted directly on the ceiling or on the wall. Normally attached with assembly glue, suspension bracket or screws. The plates do not fit into the traditional T-system.

Edge type

Edge: small B.

Acoustic - absorption

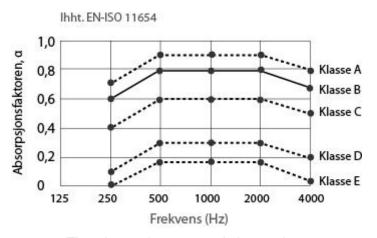
The plate is classified as Class A. The sound absorption test is according to ISO 354:2003 without air behind the plates. NRC = 0,90.

The absorption coefficient (α_w) is calculated to 0,90 according to ISO 11654.

See test results on 4 and 5.

Sound isolation

Rw = 12 dB according to ISO 717-1:2003.



The above shows sound classes in relation to the absorption coefficient.



Fire class

A2-s1,d0, according to EN 13501-1.

Formaldehyde

Class E1 (Indoor product standard).

Moisture resistance

The plate is form stable at a relative humidity up to 90% and the temperature of 40°C.

Cleaning and maintenance

The surface of the plate can be cleaned of daily dust and can be wiped with a light damp cloth.

However excessive wiping should not cause surface damage, otherwise the plate will lose its performance.

Antibacterial

The plate has a surface that is treated to eliminate bacteria and fungus/mold.

Resistance to fungus has been tested according to ASTM G 21-15.

Resistance to bacterial has been tested according to ISO 22196:2011.

Dimension and weight

40x200x600mm. 40x300x600mm. 40x600x600mm. 40x600x1200mm. 40x1000x1200mm 40x1200x1200mm. 40x1200x2400mm. The weight of the plate is approx 4,00 kg/m2.

Environment and availability

The raw material of the plate is fiberglass that made of recyclable glass. Packaging can be recycled. Garbage from the plates can be delivered to municipal landfills after the end of their life.

Transport information

The product is not classified as dangerous property.

Thermal insulation

The absorbents have very good thermal insulation.

Laboratory tested according to EN 13964:2014 class 4.10 & EN 12664:2001.

Thermal conductivity = $0.033W/(m \cdot K)$.

Thermal resistance = $1.191 \text{ (m}^2 \cdot \text{K)/W}$.

Issuer of CE certificate for the product

Element Materials Technology Rotterdam B.V.

Zekeringstraat 33, 1014 BV, Amsterdam

Netherlands

Notified body No. 2812

Date: 08/06/2020

Certificate No: 2812-CPR-BC5005

According to CE regulation: EN 13964:2014





The product is M1 certified

This means that the product has been tested according the strongest international requirements for exposure to and non use of toxic ingredients.

There are separate requirements for acoustic products and building materials that must be met in order to obtain an M1 certificate.



Issuer of M1 certificate for the product

The Building Information Foundation RTS sr P.O.B 1004, FI-00101 Helsinki Finland

EPD (Environmental Product Declaration)

The product has finished the LCA (Life Cycle Assessment) report and received EPD (Environmental Product Declaration):

test program: International EPD® systemet www.environdec.com

Programme operator: EPD internasjonale AB Box 210 60, 100 31 Stockholm, Sweden

EPD registration number/report/certificate: S-P-08557

Date of publication: 06/03/2023

According to: EN 15804+A2 & ISO 14025 / ISO21930

System limit of A1-D (Cradle to Grave)





Test Report

报告编号 Report Number: GS228-200035* 委托编号 Serial Number: GS22-200030 第3页, 共4页 Page 3 of 4 附件: 曲线图、测试图 Annex: Curve of test data, Test picture 1、曲线图 Curve of test data(Loke 40, 0 mm 空腔 Loke 40 with 0 mm airspace) 1.2 1.1 1.0 吸声系数Sound Absorption Coefficient 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1 0.0 125 250 500 1000 2000 4000 频率Frequency f(Hz) 1.20 Practical sound absorption coeffient 实用吸声系数 Practicalsound 1.00 absorption coeffient 0.80 实用吸声系数 基准曲线 Reference Curve 0.60 0.40 - Class A 0.20 0.00 1000 500 250 频率Frequency f(Hz) 注: 基准曲线与 A 级曲线重合 NOTE: Reference Curve coincides with the Curve of Class A



Test Report

报告编号 Report Number: GS228-200036* 委托编号 Serial Number: GS22-200031 第3页, 共4页 Page 3 of 4 附件: 曲线图、测试图 Annex: Curve of test data, Test picture 1、曲线图 Curve of test data(Loke 40, 50 mm 空腔 Loke 40 with 50 mm airspace) 1.2 1.1 吸声系数Sound Absorption Coefficient 1.0 0.9 0.8 0.7 0.6 0.5 0.3 0.2 0.1 0.0 125 500 1000 2000 4000 8000 频率Frequency f(Hz)1.20 Lactical sound absorption coefficient 实用吸声系数 Practical sound absorption coeffient 实用吸声系数 基准曲线 Reference Curve - Class A 0.00 1000 250 500 2000 4000 频率 Frequency f (Hz)