# Loke<sup>™</sup> Strong 40 mm

Wall and ceiling absorbent - silencer

# **Description**

The plate has been developed especially with regard to being able to withstand rough treatment and must be mounted directly on the ceiling or on the wall. The absorbent is covered with glass fiber cloth on the visible surfaces. This makes it very resistant to impacts and, for example, ball games. The absorbent has good sound absorption and is very sound dampening. With good light reflection, it is overall very suitable for, for example, gymnasiums, sports halls, kindergartens and other places with a lot of noise and rough handling.

## **Color and light reflection**

The absorbent has standard colors white, light grey and black grey. The closest color code for light grey is RAL 7038, the closest color code for white is RAL 9003 and the closest color code for black gray is RAL 7021. White light reflection up to 81%.

# Installation

The absorbents 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 types**

Edge: small B edge.

#### **Acoustic - absorption**

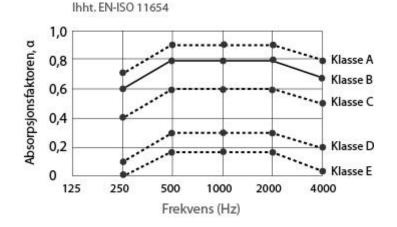
The plate is classified as Class A. The sound absorption test is according to ISO 354:2003 without air behind the plates. NRC = 0.90.The absorption coefficient ( $\alpha_w$ ) is calculated to 0,95 according to ISO 11654.

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.

Datasheet





## **Fire class**

The absorbent complete: **A2-s2**, **d0** in accordance with EN 13501-1. Surface cloth: **A2-s2**, **d0** according to EN 13501-1 Glass wool core: **A2-s1**, **d0** ref. EN 13501-1

#### Formaldehyde

Class E1 (Indoor product standard).

#### Other

The absorbent does not contain toxic materials.

#### **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**

40x600x600mm 40x600x1200mm The weight is approx 4,20 kg/m<sup>2</sup>.

#### **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 =  $1.191 (m^2 \cdot K)/W$ .



#### Issuer of CE certificate for the product (Loke)

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

#### Impact resistant:

The absorbent has been tested for impact resistance in class **1A** in accordance with EN13964, annex D and DIN 18032:2018-11. This is best possible for this type of product/material.

#### **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 <u>www.environdec.com</u> 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)



NORSK





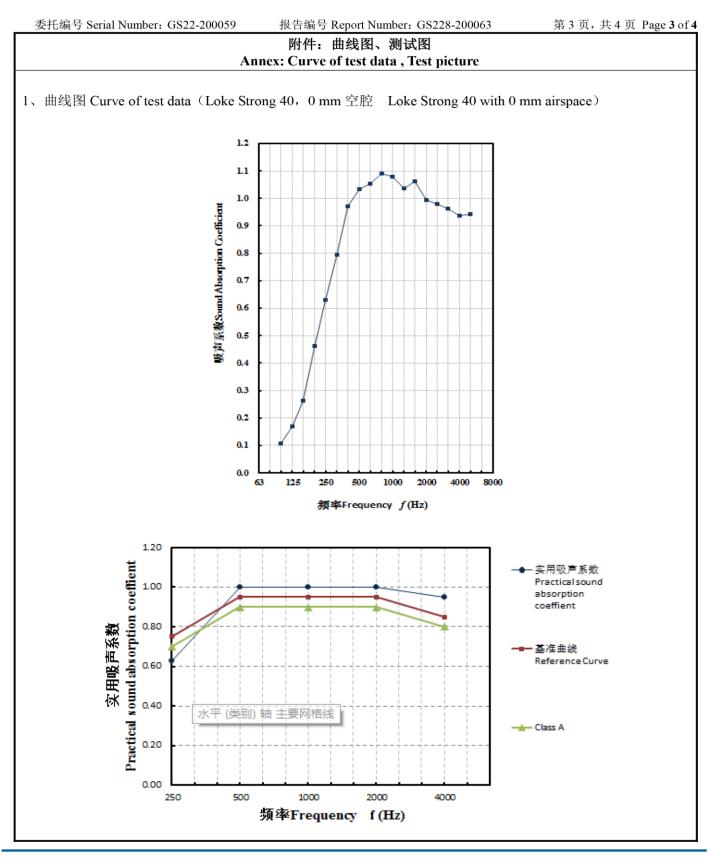


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Sound absorption coefficient of 0 mm air behind the plates.



#### **Test Report**

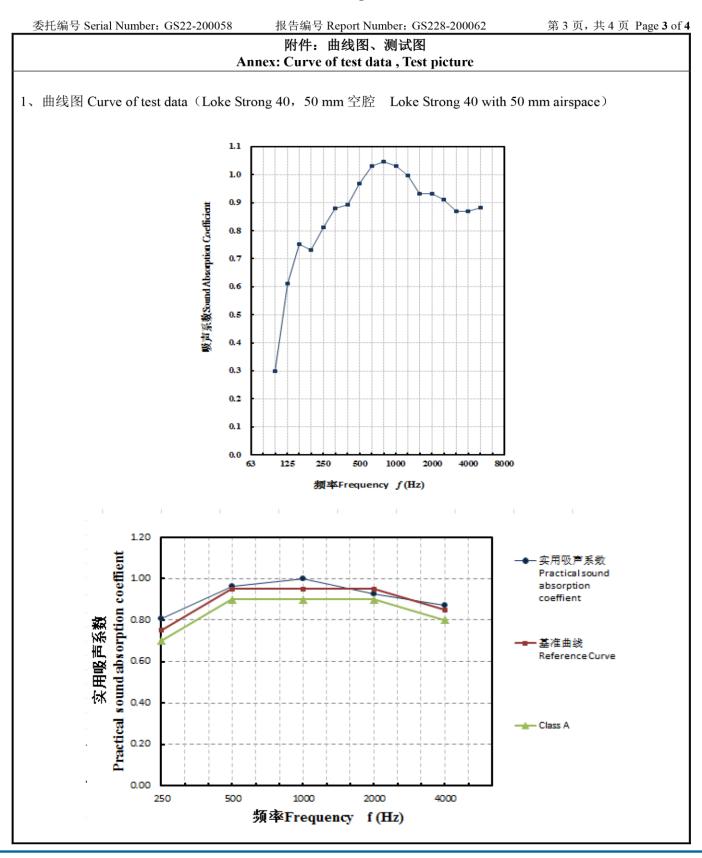


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Sound absorption coefficient of 50 mm air behind the plates.



**Test Report** 



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