# Eira™ 40 mm



# Wall and ceiling absorbent - silencer

# **Datasheet**

## **Description**

The plate has been developed especially with direct assembly in mind on the ceiling or on the wall where there is no space for traditional suspension system. The plate has a traditional finely structured surface. The plate has a particularly good sound absorption and is very sound dampening. It is very suitable for sound dampening environments where you want to have a dark surface, e.g. Cinema halls, auditoriums, restaurants, nightclubs etc and other rooms with a lot of noise.



# **Color and light reflection**

The color is black and light reflection 0%.

#### Installation

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

# **Edge type**

Standard is B edge. All edge types can be made.

#### **Acoustic - absorption**

The plate is classified as Class A. NRC = 0,90 by direct mount. The absorption coefficient  $(\alpha_w)$  is calculated to 0,95 according to ISO 11654. The sound absorption test is according to

ISO 354:2003 without air behind the plates.

Sound isolation

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

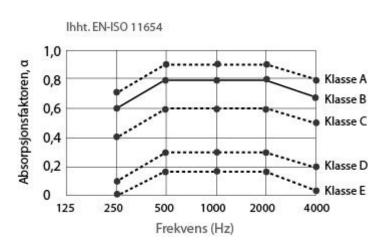
#### Fire class

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

# **Formaldehyde**

Class E1 (Indoor product standard).

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





#### 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**

Standard dimension:

40x200x600mm.

40x300x600mm.

40x400x600mm

40x600x600mm.

40x600x1200mm

Other dimensions can be made, up to 40x1200x2400mm

The weight of the plate is approx 4,20 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 ( $m^2 \cdot K$ )/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: GS228-200037\* 委托编号 Serial Number: GS22-200032 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(Eira 40, 0 mm 空腔 Eira 40 with 0 mm airspace) 1.2 1.1 1.0 吸声系数SoundAbsorptionCoefficient 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1 0.0 63 125 250 500 1000 2000 4000 8000 频率Frequency f(Hz)1.20 Practical sound absorption coeffient 实用吸声系数 1.00 Practical sound absorption coeffien 0.80 实用吸声系数 基准曲线 0.60 Reference Curve 0.40 Class A 0.20 0.00 500 4000 250 频率 Frequency f(Hz)



# **Test Report**

