

Baffle/Flat/Circle/Oval. Loke™ 40 mm

Description

The plate is designed specifically for assembly purposes directly in the ceiling where there is no space to traditional ceiling system. The plate has a traditional structured surface. The plate has a very good sound absorption and is very sound dampening. With high light reflection it is therefore very suitable for office environments, educational environments, day care centers and rooms with much noise.

Color and light reflection

The nearest white color code is NCS S 0502-Y
With light reflection up to 84%, according to ISO 2813:1994 and ISO 7724-1:1984
The plate is also available in other RAL color code.

Installation

The plates are mounted in ceilings with attached suspension which consists of spiral screw, wire and fastening hook. It can also be directly glued to the roof. The plates do not fit into traditional T-systems.

Baffle:



Flat:



*Hanging system use
for Flat:*



*Hanging system use
for Baffle:*



*Tools for Flat directly
glue on the roof:*

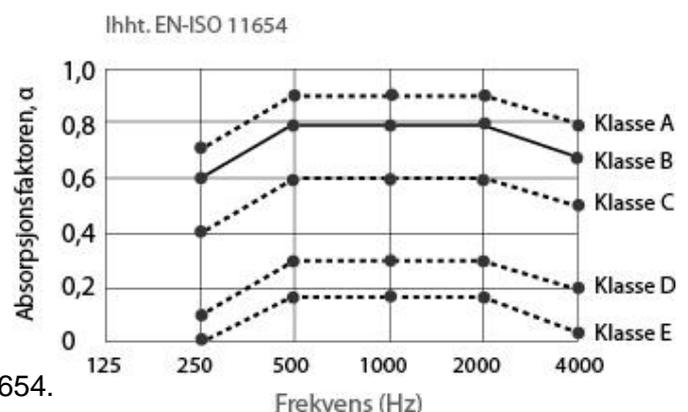


Edge type

Edge A.

Acoustic - absorption

The plates is classified as Class A, The absorption test has been carried out in accordance with ISO 354:2003 with Flat installation method, 200mm air behind the plates $NRC = 1.00$. The absorption function (α_w) is calculated to 1.00 according to ISO 11654. Also the sound absorption of a single product was tested using the installation method of Baffle. The relevant data is shown in the chart below.



The following 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

Rectangular 40x600x1200 mm

Rectangular 40x400x1200 mm

Circle from 600 mm to 1200 mm diameter.

Oval size 1100x2100 mm.

Other sizes and shapes can also be made. The maximum size 1200x2700 mm.

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 klasse 4.10 & EN 12664:2001.

Thermal conductivity = 0.033W/(m·K).

Thermal resistance = 1.191 (m²·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
I hht CE regulativ: EN 13964:2014



The product is M1 certified

This means that the product has been tested according to 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)

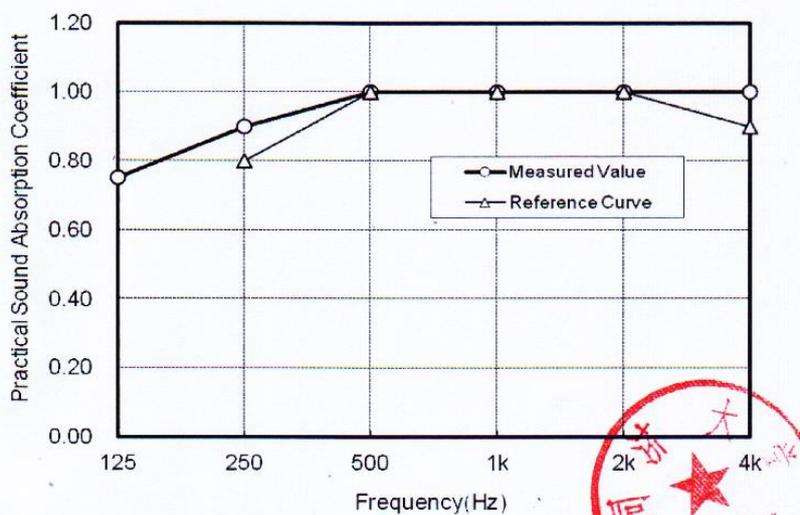
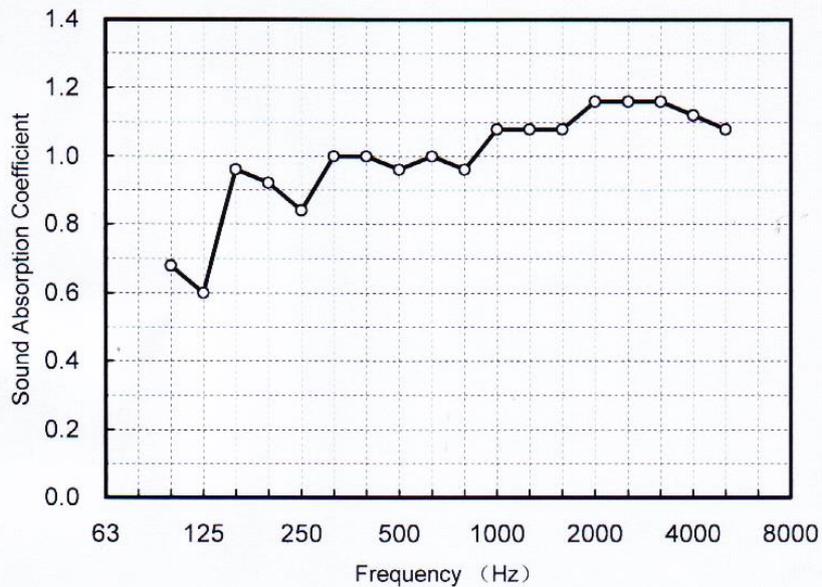
The product has finished the LCA (Life Cycle Assessment) report and received EPD (Environmental Product Declaration):
test program: International EPD® systemet www.environdec.com
Programme operator: EPD internasjonale AB
Box 210 60, 100 31 Stockholm, Sweden
EPD registration number/report/certificate: 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)



Flat installation method with 200mm air space.

Flat installation means that the plates are installed horizontally using a dedicated suspension system to absorb sound. Leave a certain distance between the plates and the roof. The following data is tested according to the standard distance of 200mm. NRC = 1.00 and $\alpha_w = 1.00$. It's classified as Class A.

Report No: A13-14



12. Conclusion:

Noise Reduction Coefficient: **NRC = 1.00**

In accordance with GB/T 16731-1997, Sound absorption class is I.

In accordance with EN ISO 11654:1997, Weighted Absorption Coefficient, $\alpha_w = 1.00$

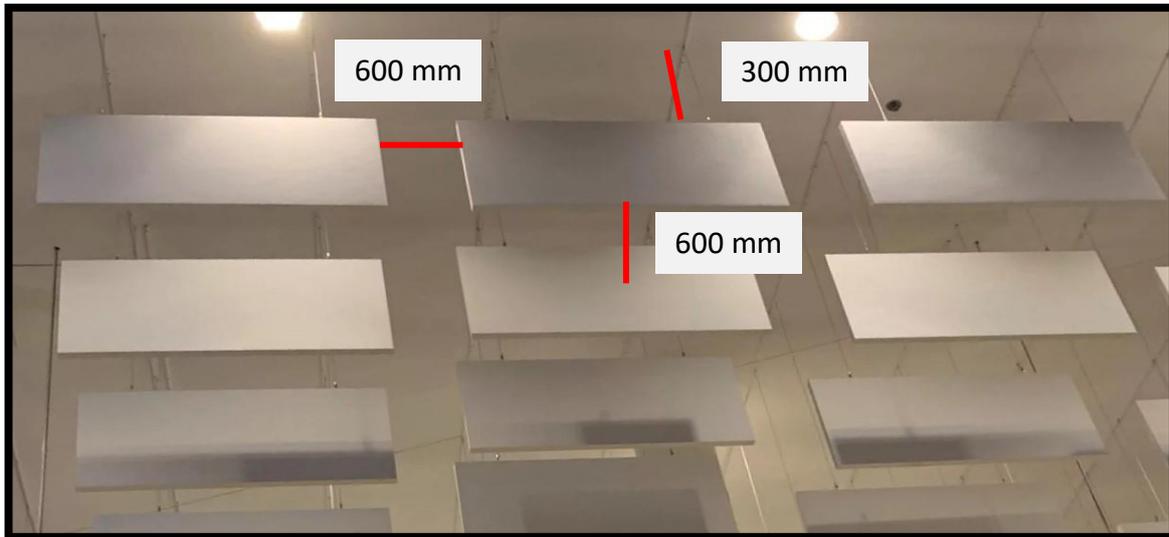
Sound absorption class is A.

Tested by: Fangying ZHU, Huiming QIAN Reviewed by: Guorong JIANG

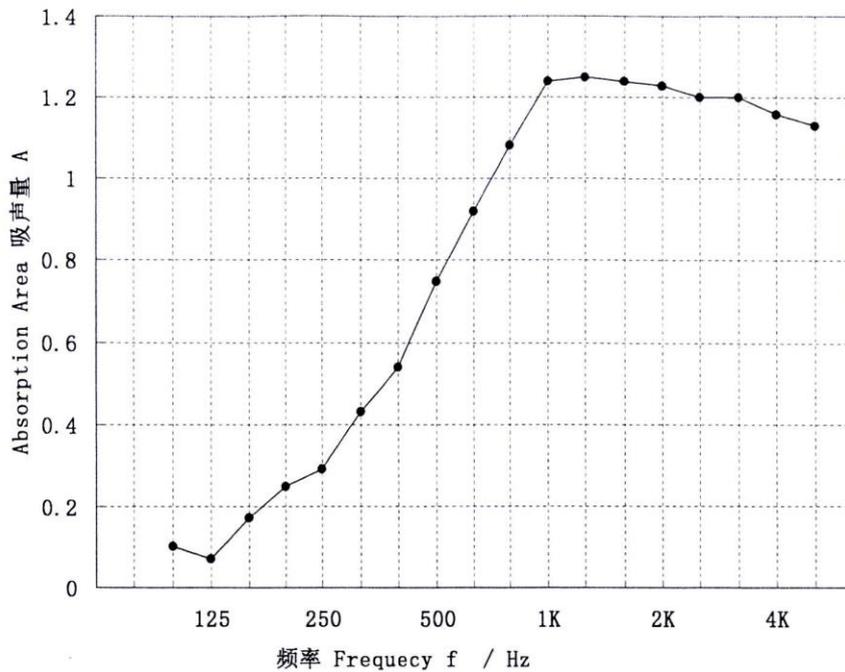
Handwritten signature of Guorong JIANG

Baffle installation method with 300mm air space and the distance between boards 600x600 mm.

Baffle installation means that the plates are installed vertically using a dedicated suspension system to plates. Leave a certain distance between the plates and the roof, and also maintain a certain distance between the plates. The following data is tested based on the distance between the plates and the roof of 300mm and the distance between the plates of 600x600mm.



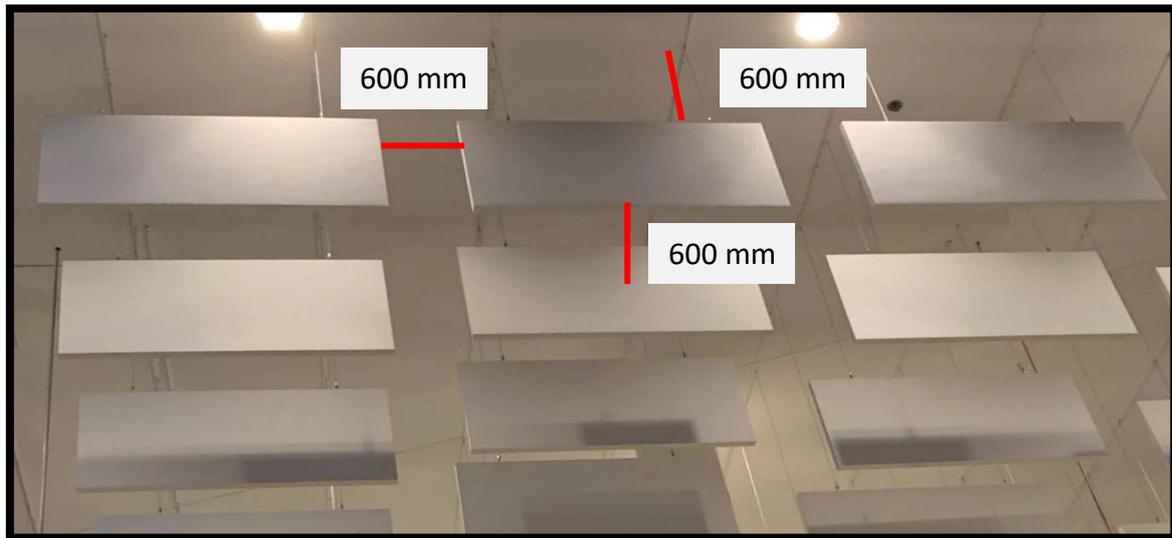
Client No. Z-QT190133 委托编号: Z-QT190133
Report No. ZQT190106-1 报告编号: ZQT190106-1



Frequency f/Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
Equivalent sound absorption area PC/M2	0.10	0.07	0.17	0.25	0.29	0.43	0.54	0.75	0.92	1.08	1.24	1.25	1.24	1.23	1.20	1.20	1.16	1.13

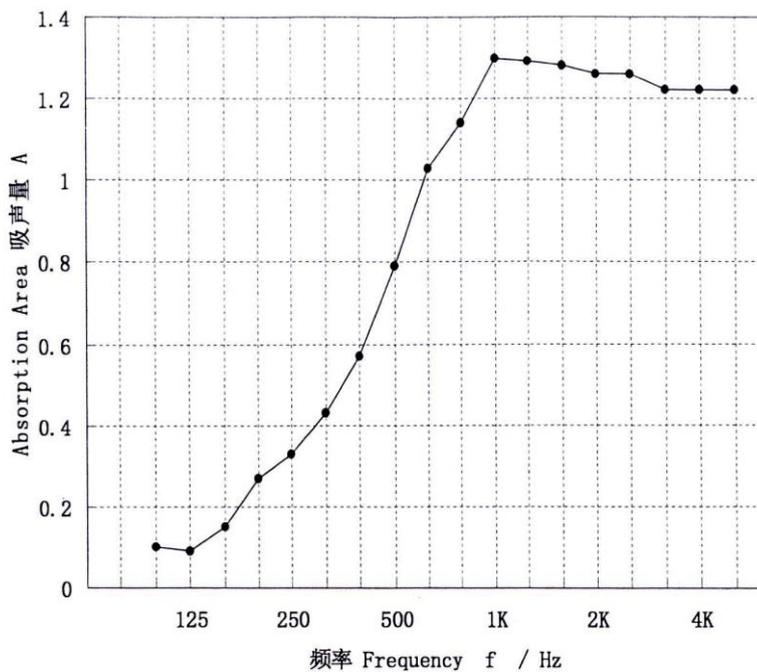
Baffle installation method with 600mm air space and the distance between boards 600x600 mm.

Baffle installation means that the plates are installed vertically using a dedicated suspension system to plates. Leave a certain distance between the plates and the roof, and also maintain a certain distance between the plates. The following data is tested based on the distance between the plates and the roof of 600mm and the distance between the plates of 600x600mm.



Client No. Z-QT190133 委托编号: Z-QT190133

Report No. ZQT190106-2 报告编号: ZQT190106-2



Frequency f/Hz	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
Equivalent sound absorption area PC/M ²	0.10	0.09	0.15	0.27	0.33	0.43	0.57	0.79	1.03	1.14	1.30	1.29	1.28	1.26	1.26	1.22	1.22	1.22

Flat directly glued on the roof with 0mm air space.

Flat directly glued on the roof means that the plates are glued directly onto the roof using a specialized glue applied to the back of the plates. The following data is tested based on the plates directly glued on the roof. NRC = 0.90 and $\alpha_w = 0.90$. It's classified as Class A.

Test Report

委托编号 Serial Number: GS22-200030

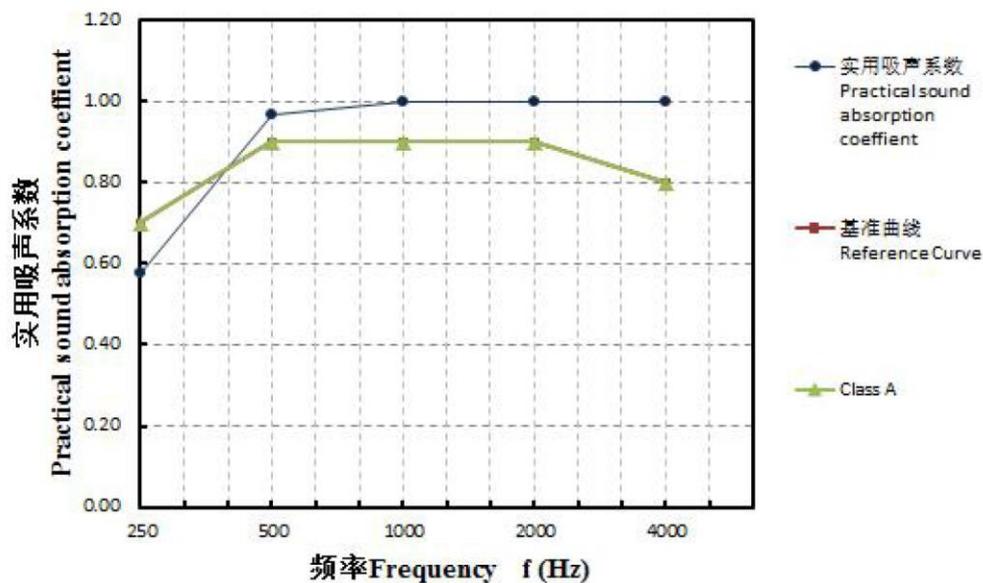
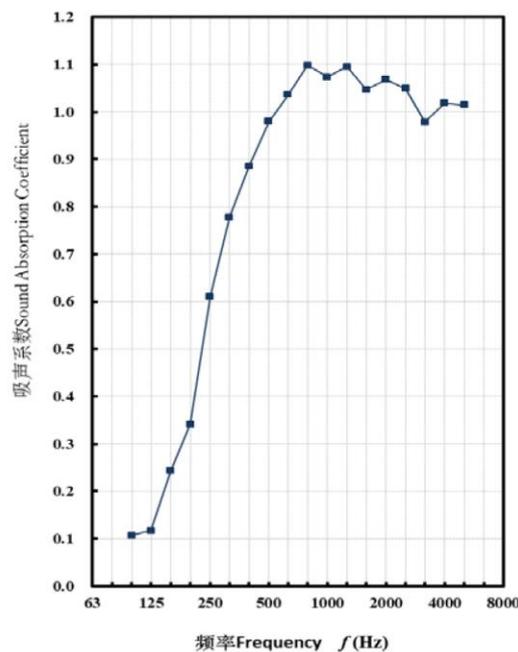
报告编号 Report Number: GS228-200035*

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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)



注: 基准曲线与 A 级曲线重合

NOTE: Reference Curve coincides with the Curve of Class A