

Loke™ dB 49 mm

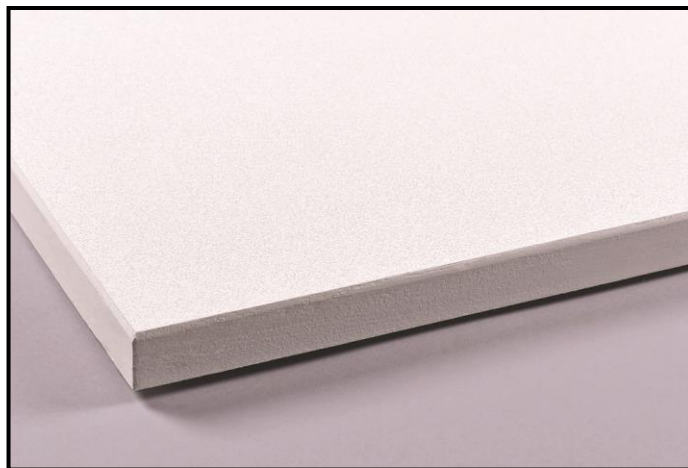
Wall and ceiling absorbent - silencer

Datasheet

Description

The plate has been developed specifically with regard to mounting directly on the ceiling/wall where there is no space for a traditional suspension system. It has external dimensions that fit in standard T system.

The plate has a traditional textured surface with particularly elaborate edge sealing. The plate has an extremely good sound absorption and is very sound dampening in relation to reverberation. The back of the plate consists of 9 mm gypsum board which blocks through sound waves. With high light reflection, the panel 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 %.

The plate is also available in other RAL colors as custom made.

Installation

The panels are mounted directly on the ceiling/wall.

Normally attached with assembly glue, suspension bracket or screws.

The plates also 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 page 3.

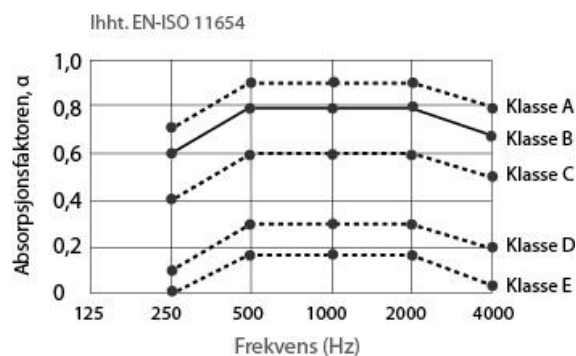
Sound insulation effect between two rooms:

$D_{n,f,w}$ value 42 dB according to BS EN ISO 717-1:1997

Blocks continuous sound with 29 dB R_w (average value of the whole Hz frequency) according to BS EN ISO 717-1:2013

Fire class

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



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

Formaldehyd

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

49x592x592mm

49x592x1192mm

The weight of the plate is approx 5,00 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 (Loke™ 40):

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·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

According to CE regulation: EN 13964:2014



The product is M1 certified (Loke™ 40):

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)



Sound absorption coefficient of 0 mm air behind the plates.

Test Report

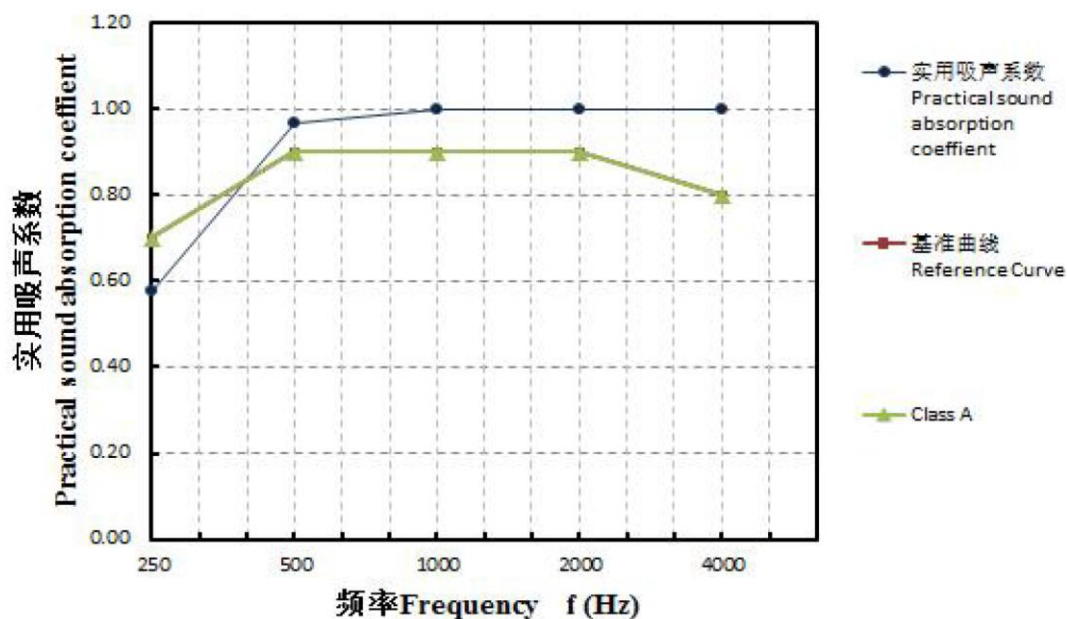
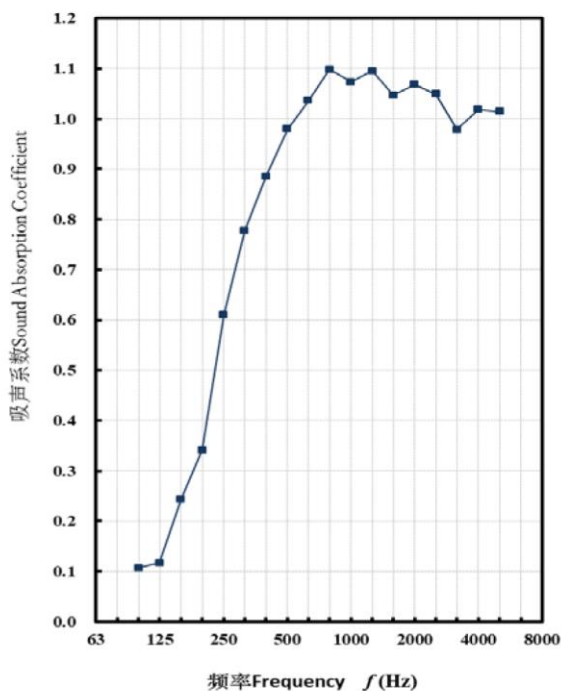
委托编号 Serial Number: GS22-200030

报告编号 Report Number: GS228-200035*

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)



注: 基准曲线与 A 级曲线重合
NOTE: Reference Curve coincides with the Curve of Class A

Sound attenuation in relation to continuous sound



Sound Research Laboratories

Holbrook House, Little Waldingfield
Sudbury, Suffolk CO10 0TH
Tel: +44(0)1787 247595 Fax: +44(0)1787 248420
e-mail: srl@srltsl.com



Test Certificate No: 7138

Contract: C/21946

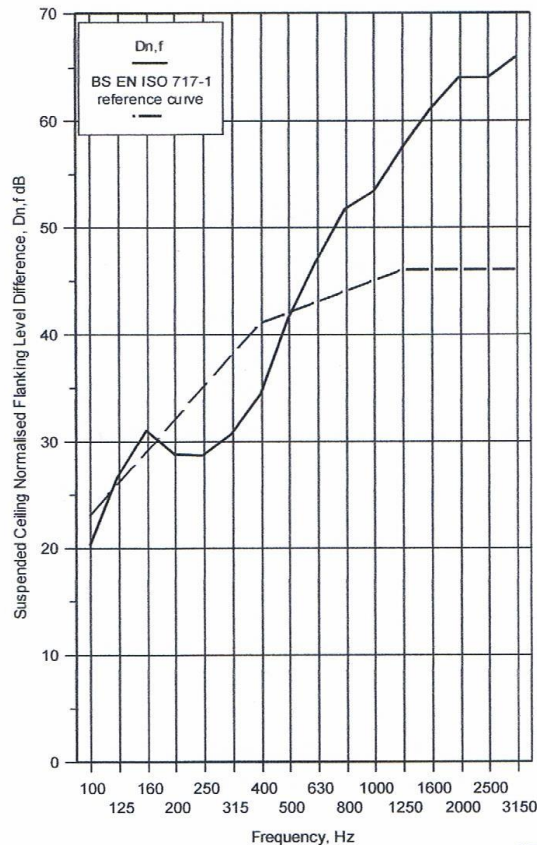
Page 1 of 1

Date: 15 March 2012

See SRL Report C/21946/R03 for full details
Laboratory Measurement of the Flanking Transmission of Airborne Sound between Adjoining Rooms
of a Suspended Ceiling to BS EN ISO 10848-2:2006

Test Numbers: 25 & 26
Air Temperature: 12.3 °C
Manufacturer: Air Humidity: 63 %
Client: Test Date: 09/03/2012
Sample mounted by:
Product identification: Sequence dB 50mm, 600x600mm

Freq f Hz	Suspended Ceiling Normalised Flanking Level Difference - dB	
	1/3 Oct	1/1 Oct
50+	14.2	17.3
63+	21.1	
80+	19.9	
100	20.3	23.9
125	26.7	
160	31.0	
200	28.8	29.3
250	28.7	
315	30.7	
400	34.3	38.1
500	41.5	
630	46.8	
800	51.6	53.5
1000	53.3	
1250	57.4	
1600	61.0	62.7
2000	63.9	
2500	64.0	
3150	66.0	67.5
4000+	67.7	
5000+	69.5	
6300+	72.0	66.6
8000+	68.6	
10000+	63.4	
Average 100-3150	44.1	



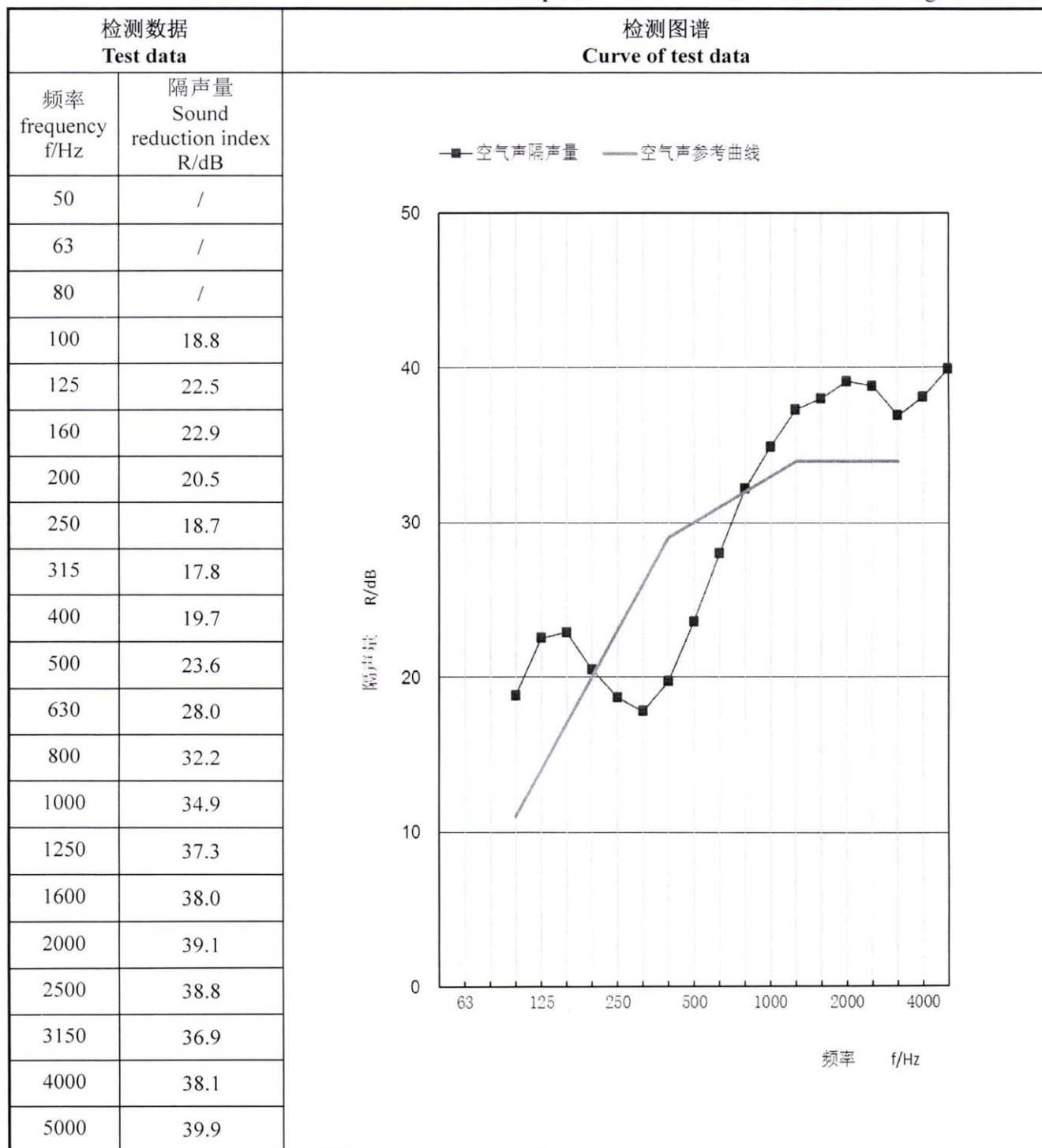
Rating according to BS EN ISO 717-1:1997
Dn,f,w (C;Ctr) = 42 (-1;-6)

Notes : * shows measurement corrected for background
+ shows frequency beyond standard and not UKAS accredited

v1.4

Allen Smalls
Quality Manager

Trevor Hickman
Deputy Technical Manager



按照 ISO717-1: 2013 的评价结果: $R_w(C,C_{tr})=30(-2;-4)$ dB
 Result accorded to ISO717-1: 2013: $R_w(C,C_{tr})=30(-2;-4)$ dB
 本报告的评价结果是根据实验室测量结果得到的。
 This report's result is base on laboratory measurements.