Hugin™ acoustic wall

Textile covered absorbent – sound absorber

Datasheet

Description

The partition wall is made of compressed glass wool and fire-retardant textile. Manufactured in accordance with CE-EN 13964: 2014 and EN 15102:2007/A1:2011.
The plates' core consists of glass wool with a density of 120kgs/M^3. The visible surface is coated with dyed textile. The back is coated with transparent fiber cloth. The edges are under the fabric sealed with water-based lime glue.
Feet and top list consist of powder-coated steel.

Color

The plate is carried in white NCS S 0500-N, black NCS S 9000-N, light grey NCS S 5500-N, charcoal grey NCS S 8500-N. Beige NCS S 3010-Y40R, Green NCS S 3065-G40Y and Red NCS S 2570-Y90R.

Installation

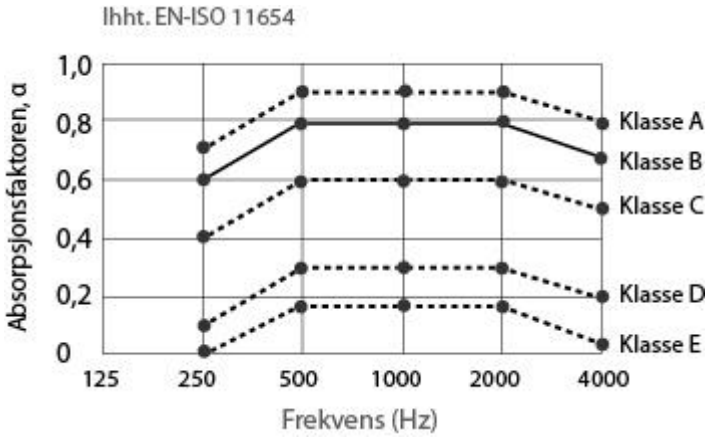
The installation guide is included in the packaging.

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 = 0,95.
The absorption coefficient (α_w) is calculated to 1,0 according to ISO 11654.
See test results on page 4 and 5.



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

Fire class

The glass wool core: A2-s1,d0 ref. EN 13501-1
Surface fabric: C-s2,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 has been treated to eliminate bacteria and fungus/mould.
Resistance to fungus and mold has been tested in accordance with ASTM G 21-15.
Resistance to Escherichia Coli and Staphylococcus has been tested in accordance with ISO 20743:2013.

Dimension and weight
50x1200x1500mm
Other sizes can be produced.
The weight of the plate is 6.00 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·K).

Issure 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-KA5016
According to CE regulation: EN 13964:2014 and EN 15102:2007/A1:2011

CE

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

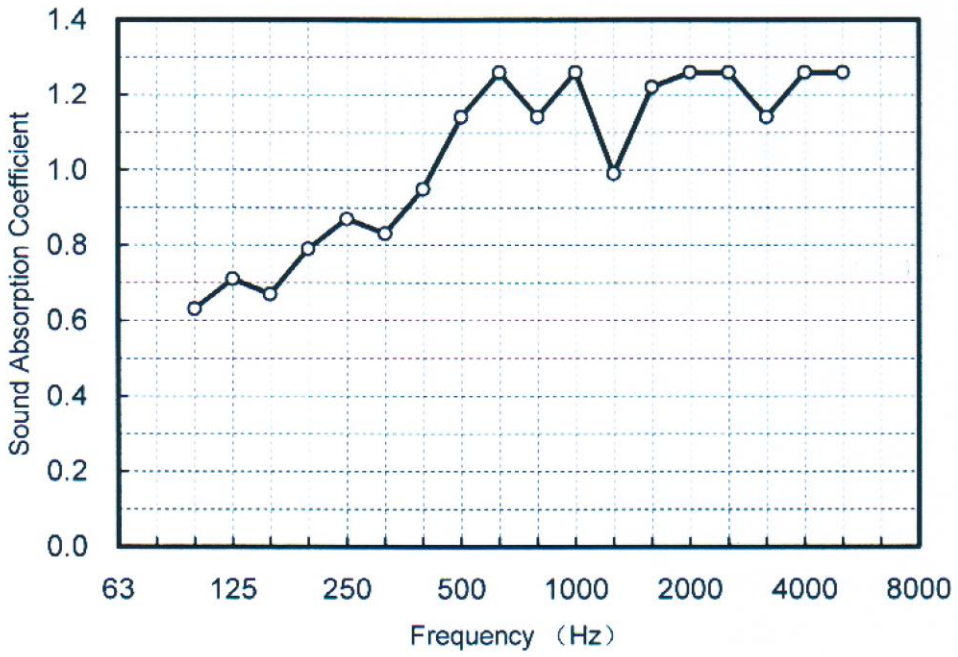
Impact resistant

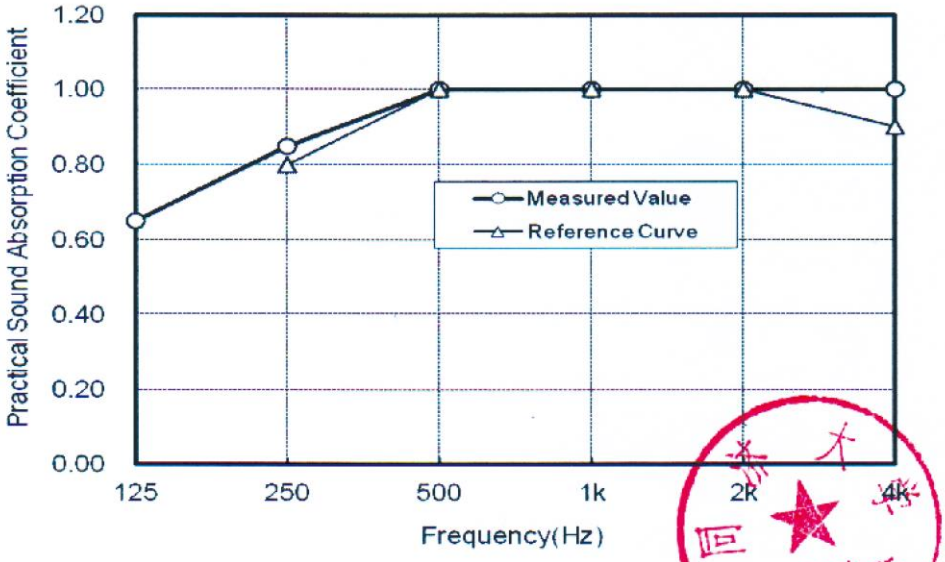
The absorbent has been tested for impact resistance in class **1A** in accordance with EN13964, annex D and DIN 18032:2018-11. This is best possible for this type of product/material.

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 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 1000 mm air behind the plates.





13. Conclusion:

Noise Reduction Coefficient: **NRC = 0.95**

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

In accordance with EN ISO 11654:1997, Weighted Absorption Coefficient. α_w=1.00

Sound absorption class is A.

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

Page 3 of 3

Sound absorption coefficient of 1000 mm air behind the plates. Laboratory measured the sound absorption coefficient at different frequencies.

12. Test Results:

Frequency (Hz)	Absorption Coefficient α_s	Practical Absorption Coefficient α_p	Reference Absorption Coefficient
100	0.63	0.65	
125	0.71		
160	0.67		
200	0.79	0.85	0.80
250	0.87		
315	0.83		
400	0.95	1.00	1.00
500	1.14		
630	1.26		
800	1.14	1.00	1.00
1K	1.26		
1250	0.99		
1600	1.22	1.00	1.00
2K	1.26		
2500	1.26		
3150	1.14	1.00	0.90
4K	1.26		
5000	1.26