

SORBERWOOL 60/AGC50/GC

rock wool based

Sorberwool 60/AGC50/GC is a premium acoustic sound absorber with special focus on maximizing the acoustic performance, handling and installation.

Unlike other fiber based products, acoustic performance of the panels is enhanced by specially chosen flow resistant cloth rather than increasing the density of the materials, hence keeping the overall weight of the insulation to a minimum. At the same time, permeable cloth provides protective surface to prevent accidental damage to the panels as well as longevity of the insulation components.

Having AGC (aluminium glass cloth) on one side and GC (glass cloth) on the reverse encapsulates all the loose fibers making this material a lot more friendly to handle and install. Furthermore, pre-manufactured panels can be made with edge wrapping resulting in no loose fibers escaping not only during the installation but also over its lifespan.

Rockwool panels often require perforated sheet metal for protection as well as due to its high density, they cannot conform to irregular shapes due to their stiffness. Sorberwool 60/AGC50/GC while being a premium product, does not require often expensive protection with perforated metal hence making it a lot more economic to use. It is also not limited to flat panels due to its flexibility thanks to lower density compared with commonly used rockwool materials.



applications

- Great performance in high temperature and high humidity environments (150 - 350°C)
- Boat engine compartments
- Absorber panels in building and public spaces
- Building and marine partition in-fill
- Wall and ceiling linings for plant equipment rooms
- Compressor and generator set enclosure lining
- Mining industry sound absorbers in tunnels and around break rooms

SPECIFICATIONS

Colour	yellow / beige wool with aluminium one side and black glass cloth on the reverse
Density	60 kg/m ³
Specifications	50 x 1200 x 600 mm or custom size available

features

- Low density
- Highly Flexible
- Excellent thermal resistance
- High sound absorption properties
- Hydrolysis resistant
- Low installation cost - easily cut, shaped, fabricated and installed
- Durable with long service life
- Non corrosive



MATERIAL PROPERTIES

Test method	Testing Standard/Method	Required
Appearance	Visual inspection at 1.0m from the sample under bright light conditions	The resin is evenly distributed and the surface is flat. There must be no scratches, stains or breakages that hinder the use;
Density	GB/T5480 / ASTM C303	40 - 220
Thermal conductivity (at 25 °C)	GB/T10294 / ASTM C518	≤0.04 (W/mK)
Fibre diameter	GB/T5480	≤6µm
Max. Use Temperature	GB/T17430 / ASTM C411	650 °C
Melting point	ASTM E794	>1000°C
Shot content (Particle size >0.25mm)	GB/T5480 / ASTM C612	≤7.0%
Corrosiveness	GB/T11835-2007	Non-corrosive
Wet resistance factor	GB/T30801 GB/T17794-2008	≤10
Moisture absorption rate	GB/T5480 / ASTM C1104	≤5.0%
Moisture resistance rate	GB/T10299 / ASTM E96	≥98.0%
Short-term water absorption	GB/T30805 / ASTM C1104	≤0.5 kg/m ²
Long-term water absorption	GB/T30807 / ASTM C1104	≤1.5 kg/m ²
Fire classification	GB8624-2012 / EN ISO 13501-1	A1
Acidity coefficient	GB/T5480	≥1.6
Fungi Resistance	ASTM C665	Does not encourage Fungi Growth
Compressive strength	GB/T13480	≥40 Kpa
SHear strength	GB/T32382	≥60 Kpa
Point load	GB/T30802	≥200 Kpa
Radioactive nuclide	GB6566	≤1.0
Noise reduction coefficient (NRC)	GB/T18696.1	≥0.45
Formaldehyde emission	GB/T32379	≤1.4 mg/(kg.h)

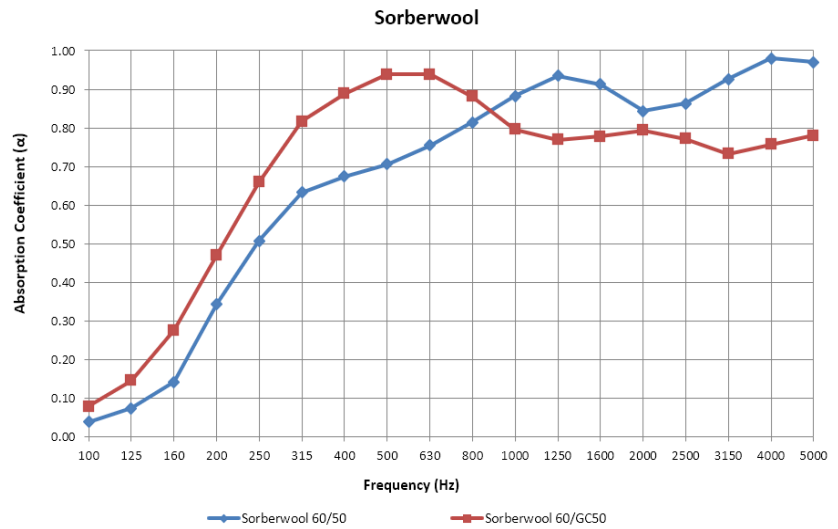
For Sorberwool only

FLAMMABILITY PROPERTIES

Test method	Property	Report No.	Results
EN 45545-2 (EN ISO 5659-2 : 50 kWm ⁻²)	Smoke generation (optical density)	NO. 1892.1IS0040.21	R1 (HL1, HL2, HL3)
EN 45545-2 (EN ISO 5658-2)	Spread of Flame		
EN 45545-2 (EN 17084 (1) : 50 kWm ⁻²)	Gas Toxicity		
EN 45545-2 (EN ISO 5660-1 : 50 kWm ⁻²)	Heat release rate by cone calorimeter		

ACOUSTIC PERFORMANCE

Frequency (Hz)	Sorberwool 60/50	Sorberwool 60/GC50
100	0.04	0.08
125	0.07	0.15
160	0.14	0.28
200	0.34	0.47
250	0.51	0.66
315	0.63	0.82
400	0.67	0.89
500	0.71	0.94
630	0.75	0.94
800	0.81	0.88
1000	0.88	0.80
1250	0.93	0.77
1600	0.91	0.78
2000	0.84	0.79
2500	0.86	0.77
3150	0.93	0.73
4000	0.98	0.76
5000	0.97	0.78
NRC	0.75	0.80
SAA	0.74	0.79
aw	0.75 (H)	0.75



Tested to ISO 10534-2

Report Number: 08321AR

For further information and contact details, please visit our website pyroteknc.com

Caveats: Specifications are subject to change without notice. The data in this document is typical of average values based on tests by independent laboratories or by the manufacturer and are indicative only. Materials must be tested under intended service conditions to determine their suitability for purpose. The conclusions drawn from acoustic test results are as interpreted by qualified independent testing authorities. Nothing here releases the purchaser/user from responsibility to determine the suitability of the product for their project needs. Always seek the opinion of your acoustic, mechanical or fire engineer on data presented by the manufacturer. Due to the wide variety of individual projects, Pyrotek is not responsible for differing outcomes from using their products. Pyrotek disclaims any liability for damages or consequential loss as a result of reliance solely on the information presented. No warranty is made that the use of this information or of the products, processes or equipment to which this Information Page refers will not infringe any third party's patents or rights. DISCLAIMER: This document is covered by Pyrotek standard Disclaimer, Warranty and © Copyright clauses. See pyroteknc.com/disclaimer.

