SORBERWOOL 60/AGC50/GC

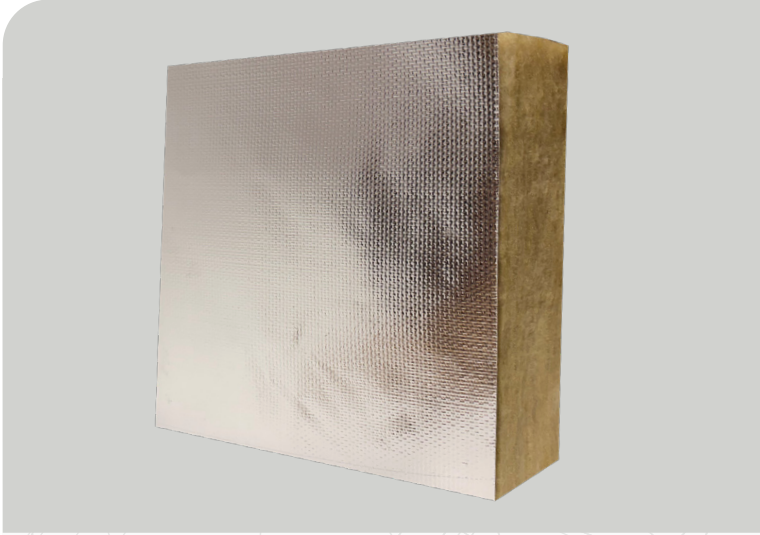
rock wool based

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 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 lose 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 it's 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 1300 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 ºC)	GB/T10294 / ASTM C518	≤0.04 (W/mK)
Fibre diameter	GB/T5480	≤6µm
Max. Use Temperature	GB/T17430 / ASTM C411	650 ºC
Melting point	ASTM E794	>1000ºC
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
Formaldehde emission	GB/T32379	≤1.4 mg/(kg.h)

For Sorberwool only

FLAMMABILITY PROPERTIES

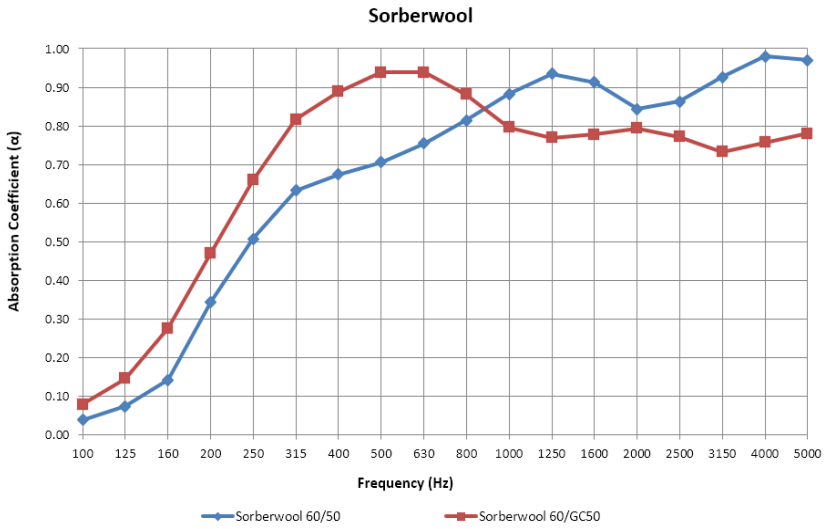
Test method	Property	Report No.	Results
EN 45545-2 (EN ISO 5659-2 : 50 kWm^{-2})	Smoke generation (optical density)	NO. 1892.1IS0040.21	R1 (HL1, HL2, HL3)
EN 45545-2 (EN ISO 5658-2)	Spread of Flame		
EN 45545 -2 (EN 17084 (1) : 50 kWm^{-2})	Gas Toxicity		
EN 45545-2 (EN ISO 5660-1 : 50 kWm^{-2})	Heat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