

Sound-Absorbent ArtWool

The unique non-directional structure of ArtUSA ArtWool Insulation content is denser than traditional insulations. This effectively reduces airflow and essentially, sound transmissions. Higher air flow resistivity means better sound attenuation. Excellent overall sound control is further achieved with several ArtUSA products as the density of the ArtWool content is increased – such as in our rigid and semi-rigid board products.

What is a good sound environment?

Noise should be dampened to such an extent that it no longer interferes with a given task. Just 40 dB(A) can be disturbing to sleep. Noise with sound levels of 55 dB(A) or more interferes with the intelligibility of speech in smaller rooms.

Even lower background levels are needed for adequate speech intelligibility for vulnerable groups - such as the hearing impaired, the elderly, children in the process of language and reading development, and individuals who are not familiar with the spoken language

Rooms with many hard surfaces may result in disturbing 'echo' which must be avoided. A reverberation time below 1 second is desirable, in a quiet environment.

A 10 dB difference is perceived by the human ear as a doubling (or halving) of the audible sound.

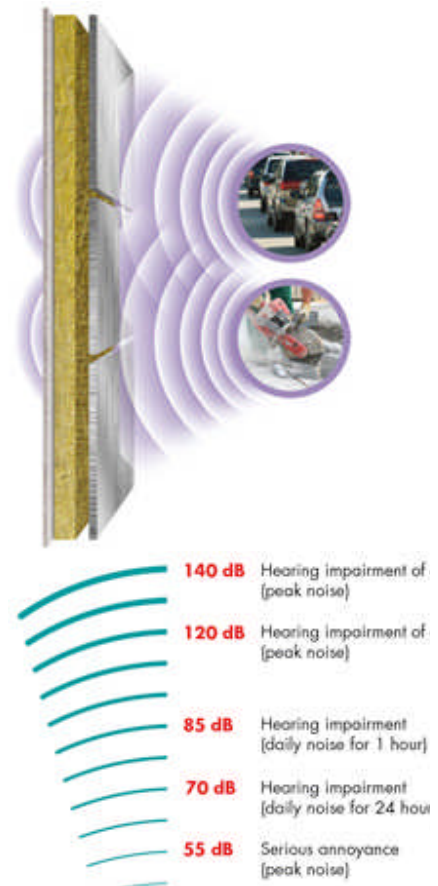
ArtWool 8® is an industrial batt made of stone wool insulation.

Applications

Designed for use where high temperature and fire resistance are concerns:

O.E.M. industries

Drying/oven equipment



Petro-chemical

Power generating plants

Boilers

Furnaces

Towers

Properties

Fire resistance properties, non-combustible

Designed for **high temperature applications**

Melting point of approximately 2150°F (1177°C)

Service temperature of 1200°F (650°C)

Lightweight and flexible

Can be fabricated and laminated

Excellent **thermal resistance**

Water repellent yet vapor permeable material

Technical Data

Compliance and Performance:

ASTM C 553	Stone Fiber Blanket Thermal Insulation	Type VII, Complies
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MEA Approval	New York City Approval	335-97-M
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Fire Performance:

ASTM E 136	Behavior of Materials at 750°C (1382°F)	Non-Combustible
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CAN4 S114	Test for Non-Combustibility	Non-Combustible
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ASTM E 84(UL)	Surface Burning	Flame Spread = 0
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723)	Characteristics	Smoke Developed = 0
CAN/ULC S102	Surface Burning Characteristics	Flame Spread = 0 Smoke Developed = 0

Maximum Service Temperature:

ASTM C 411	Hot Surface Performance	In Compliance with ASTM C612 @ 1200°F(650°C)
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Dimensional Stability:

ASTM C 356	Linear Shrinkage	
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ArtWool 8	0.68% @ 1200°F (650°C)	
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Moisture Resistance:

ASTM C 1104	Moisture Sorption	
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ArtWool 8	0.03%	
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Thermal Resistance:

ASTM C 518 (C 177)	R-value/inch @ 75°F	RSI value/25.4 mm @ 24°C
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ArtWool8	4.3 hr.ft ² .F/Btu** *	0.76 m ² K/W
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Density:

	ASTM C 612-93 – Nominal	ASTM C 553 – Actual
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ArtWool 8 8.0 lbs/ft³ 5.8 lbs/ft³ 93 kg/m³
 128 kg/m³

Corrosive Resistance:

ASTM C 665	Corrosiveness to Steel	Pass
ASTM C 795 ****	Stainless Steel Stress Corrosion Specification as per Test Methods C871 and C692: U.S. Nuclear Regulatory Commission, Reg. Guide #1.36: U.S. Military Specification MIL-I-24244 (all versions including B and C)	Conforms

Dimensions:

24" (width) x 48" (length)
[610 mm (width) x 1219 mm (length)]

Thicknesses:

1", 2", and 4" in 1" increments

How to Install ArtWool

Install ArtWool insulation in just 3 easy steps:

1. Insert

2. Compress

3. Release

ArtWool insulation **cuts quickly and accurately** with a knife for a **fitting around pipes, electrical boxes, wiring, ductwork, and between structural members.**

To do the work:

Wear long sleeved, **loose fitting clothing, gloves, eye protection, knee pads** and a **dust mask.** Tools needed:

- Tape measure
- Long serrated bread knife
- Straight edge
- Staple gun (When acoustical and or vapor barrier/retarder is required)
- Caulking gun/Acoustical sealant
- Acoustical and or vapor barrier/retarder if required