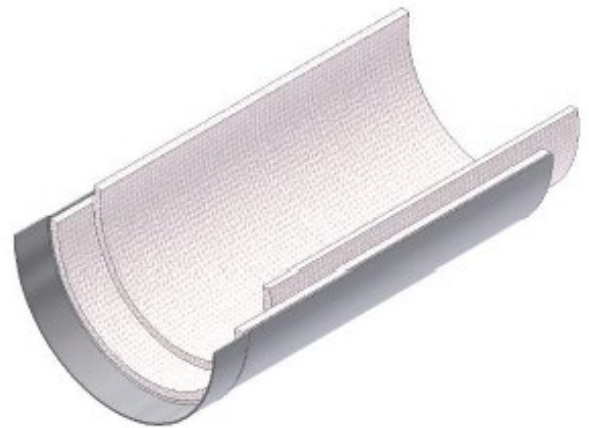


All In One

Benarx All In One is built up as sections of cured GRP cladding with integrated Aerogel insulation. The product is light-weight, extremely durable and the whole system is installed in one step. The integrated Aerogel insulation offers the markets lowest thermal conductivity combined with the lowest thickness compared to other insulation systems. The product can be used for most insulation classes acc to NORSOK M-004.

Specific advantages:

- Low dust emittance
- Low thickness
- CUI friendly
- Excellent thermal insulation performance
- Hydrophobic - able to repel water
- Low life cycle cost
- NON-metallic – No sharp edges
- Easy to install – saves time and tools
- Durable and longevity
- Safe and environmentally friendly
- Smoother and more streamlined logistics process
- Noise reduction properties



STD fitting configuration:

- Straight
- Elbow 90 / 45 / Knee
- T-piece 90 / 45
- Reducer eccentric / centric
- Blind end termination
- Starter
- Custom (drawing)

Provides superior thermal insulation
for applications from
20°C to 230°C

Std color: Grey RAL 9002
Other colors upon request



THERMAL SERIES



ACOUSTIC
INSULATION



NON
METALLIC



Off-site prefabricated
solution that reduces on-site
installation time by up to

60%

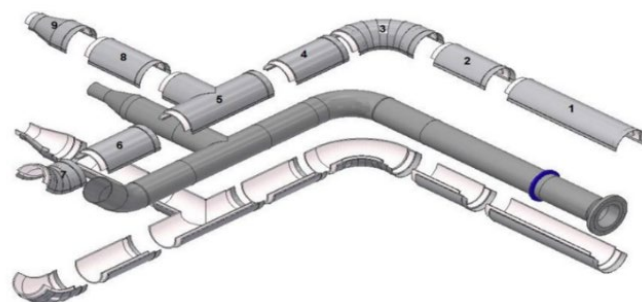


Tested according to ASTM C1728 – Standard Specification for Aerogel Insulation

- ASTM C177 Thermal Conductivity
- ASTM E84 Surface Burning Characteristics
- ASTM C1763-B Water Absorption
- ASTM C1104 Water Vapor Sorption
- ASTM C411 Hot Surface Stability
- ASTM C447 Estimated Max Use Temperature
- ASTM C356 Linear Shrinkage Under Soaking Heat
- ASTM C165 Compressive Strength Properties
- ASTM C1101 Flexibility at Ambient / Cryogenic Temperature
- ASTM C871 and ASTM C795 Leachable Ions and pH
- ASTM C692 Corrosion Drip Test

Typical Physical Properties (GRP)

Typical Physical Properties (GRP)	Method
Tensile strength	ASTM D3039
Tensile elongation at break	ASTM D3039
Flexural strength	ASTM D790-03
Compressive strength	ASTM D695
Impact resistance (Izod)	ASTM D256-06
Barcol hardness	ASTM D2583
Heat distortion temp	ASTM D648
Water vapour permeability	ASTM E96
Flame spread ASTM E84	ASTM E84



Other tests

- Aging / cycle tested acc to ISO 14944
- Respirable dust exposure test – by Stamina AS
- Measurements of acoustic insertion loss acc to ISO 15665 (Class 6,7,8)



Thermal Conductivity (ASTM C177)

Mean Temp. [°C]	Thermal Conductivity [W/m·K]
-129	0.014
-73.3	0.015
-17.8	0.016
23.9	0.017
37.8	0.017
93.3	0.019

