

Oryza BGT - Aerogel super insulation



Beerenberg Services AS



+47 55 52 66 00



post@beerenberg.com



Kokstaddalen 33,
5257 Kokstad,
Bergen, Norway

PRODUCT DATA SHEET

Description

Oryza BGT is a high-performance aerogel blanket insulation specifically designed and approved for the building and construction market.

Its unique combination of thermal performance, A1 non-combustibility, super hydrophobicity, breathability, and flexibility makes it the ideal choice for projects where energy efficiency, fire safety, and space optimization are essential.

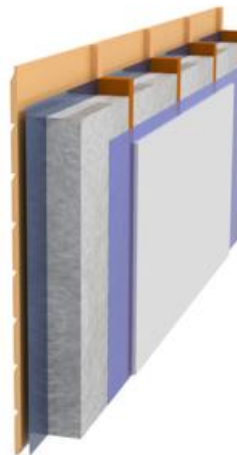
50% reduction of wall thickness, or more

Product advantages

- Superior thermal performance
- Low dust
- Low weight
- Noncombustible A1
- Passive fire performance
- Hydrophobic
– non water absorbent
- Breathable
– non condensation issues
- Fungi resistant
- Space effect – reduce volume for shipping, storage and logistics
- **5-8% more floor space for new building projects**
- **Closing the energy gap for existing buildings**



Mineral wool



Oryza BGT

Applications

- ✓ New buildings and constructions
- ✓ Refurbishment and energy optimization projects
- ✓ HVAC and piping systems
- ✓ Passive fire protection of construction elements
- ✓ Acoustic systems
- ✓ Infrastructure and airspace applications

Oryza BGT - Aerogel super insulation



Photo: Marcus Kirschke, Kahnt & Tietze GmbH

Installation

The soft and flexible Oryza Sil BGT aerogel mat can be installed according to all relevant fixing methods applicable for B&C.



References

LE11, Leipzig DE
Worldwide first carbon-reinforced concrete apartment building 2024

Hasenheide, Berlin DE
Carbon-reinforced concrete apartment building 2024-25

Bruno Taut, Berlin DE
UNESCO-protected Quarter 2024

TECHNICAL DATA AND SPECIFICATIONS

Selected property	Unit	Value
Thermal conductivity (10°C)	W/(m*K)	0.018
Thermal conductivity (200°C)	W/(m*K)	0.024
Thermal conductivity (400°C)	W/(m*K)	0.046
Thermal conductivity (600°C)	W/(m*K)	0.108
Thickness	mm	3 / 5 / 10 / 20
Roll width	m	1.5
Roll size (10 mm thickness)	m ²	30
Density	kg/m ³	160
Operating temperature	°C	-196 to 650
Compressive Strength, 10%	KPa	>20,7
Hydrophobic	---	Yes
Fire class (ASTM E84)	---	FSI <= 5, SDI <= 10
Fire class (EN 13501)	---	A1
Linear shrinkage under soaking heat (ASTM C356)	---	<= 2% @650°C
Water vapor sorption (ASTM C1104/1104M)	---	<= 5 wt.-%



Public-law institution jointly founded by the federal states and the Federation

European Technical Assessment Body for construction products



European Technical Assessment

ETA-24/0209
of 25 April 2024