



**VIZYON INNOVATIVE INSULATION LTD.  
INDUSTRIAL SOLUTIONS  
PRODUCTS CATALOG**

HIGH TEMPERATURE AND FIRE PROTECTION SOLUTIONS

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# Promat<sup>®</sup>

## HIGH TEMPERATURE

### MICROTHERM<sup>®</sup> PANEL



#### High temperature microporous insulation panel

The MICROTHERM<sup>®</sup> PANEL range of products are custom made microporous insulation panels with very good thermal properties. The panels are produced in a glass cloth outer envelope, making them clean & easy to handle. The formulation is an opacified blend of filament reinforced pyrogenic silica (alumina for 1200 grade).

MICROTHERM<sup>®</sup> PANEL-1000R is a lightweight, custom made insulation panel.

MICROTHERM<sup>®</sup> PANEL-1000R HY is a custom made insulation panel with a hydrophobic core treatment to repel water. It is ideal for applications where contact with liquid water or condensation (dew point) is possible.

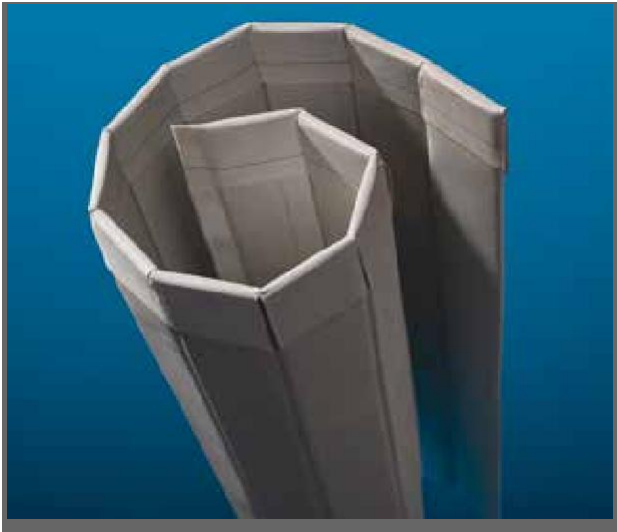
MICROTHERM<sup>®</sup> PANEL-1200 is an alumina based, custom made insulation panel which is capable of withstanding peak temperatures of 1200 °C.

#### Technical data

Grade		-1000R	-1000R HY	-1200
<b>Standard finishing</b>			Glass cloth (E-Glass)*	
<b>Classification temperature</b>	°C	1000	1000	1200
<b>Nominal density</b>	kg/m <sup>3</sup>	240	260	400
<b>Compressive strength</b> (ASTM C165)	MPa = N/mm <sup>2</sup>	0.15	0.12	0.36
<b>Thermal conductivity</b> (ISO 8302, ASTM C177)				
200 °C	W/m K	0.023	0.023	0.029
400 °C	W/m K	0.026	0.026	0.033
600 °C	W/m K	0.031	0.031	0.039
800 °C	W/m K	0.039	0.039	0.044
<b>Specific heat capacity</b>				
200 °C	kJ/kg K	0.92	0.92	0.89
400 °C	kJ/kg K	1.00	1.00	0.99
600 °C	kJ/kg K	1.04	1.04	1.04
800 °C	kJ/kg K	1.08	1.08	1.07
<b>Shrinkage</b>				
1-sided 12h - 1000 °C	%	< 0.5	< 0.5	< 0.05
Full soak 24h -1000 °C	%	< 3	< 3	< 0.1
Full soak 24h -1150 °C	%	-	-	< 3

\* Special coverings and coatings are available on request.

# MICROTHERM® SLATTED



## High temperature flexible microporous insulation panel

The MICROTHERM® SLATTED range of products are custom made, flexible microporous insulation panels with very good thermal properties.

The panels are produced in a glass cloth outer envelope, making them clean & easy to handle. The bending of the panels is one-directional, suitable for 2D applications. The formulation is an opacified blend of filament reinforced pyrogenic silica.

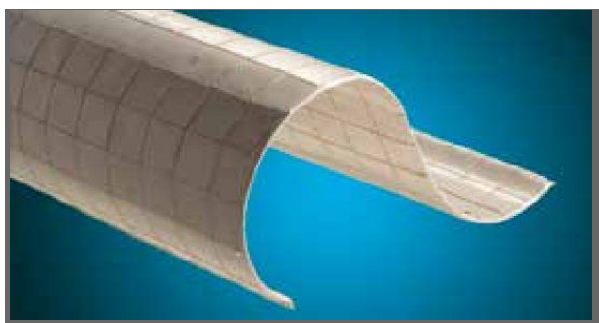
MICROTHERM® SLATTED-1000R is a flexible, custom made insulation panel.

MICROTHERM® SLATTED-1000R HY is a flexible, custom made insulation panel with a hydrophobic core treatment to repel water. Ideal for installation purposes or where condensation (dew point) might be a risk.

### Technical data

Grade		-1000R	-1000R HY
<b>Standard finishing</b>		Glass cloth (E-Glass)	
<b>Classification temperature</b>	°C	1000	1000
<b>Nominal density</b>	kg/m <sup>3</sup>	240	260
<b>Compressive strength</b> (ASTM C165)	MPa = N/mm <sup>2</sup>	0.15	0.12
<b>Thermal conductivity</b> (ISO 8302, ASTM C177)			
200 °C	W/m K	0.025	0.025
400 °C	W/m K	0.029	0.029
600 °C	W/m K	0.035	0.035
800 °C	W/m K	0.044	0.044
<b>Specific heat capacity</b>			
200 °C	kJ/kg K	0.92	0.92
400 °C	kJ/kg K	1.00	1.00
600 °C	kJ/kg K	1.04	1.04
800 °C	kJ/kg K	1.08	1.08
<b>Shrinkage</b>			
1-sided 12h - 1000 °C	%	< 0.5	< 0.5
Full soak 24h - 1000 °C	%	< 3	< 3

# MICROTHERM® OVERSTITCHED



## High temperature flexible microporous insulation panel

The MICROTHERM® OVERSTITCHED and SEMI-OVERSTITCHED range of products are custom made flexible microporous insulation panels with very good thermal properties. The panels are produced in a glass cloth outer envelope, making them clean and easy to handle.

Stitching can be one-directional (2D flexure) for the MICROTHERM® SEMI-OVERSTITCHED panels, or twodirectional (3D flexure) for the MICROTHERM® OVERSTITCHED panels. The formulation is an opacified blend of filament reinforced pyrogenic silica (alumina for 1200 grade).

MICROTHERM® (SEMI-)OVERSTITCHED-1000R is a flexible, custom made insulation panel.

MICROTHERM® (SEMI-)OVERSTITCHED-1000R HY is a flexible, custom made insulation panel with a hydrophobic core treatment to repel water. It is ideal for applications where contact with liquid water or condensation (dew point) is possible.

MICROTHERM® (SEMI-)OVERSTITCHED-1200 is a flexible, alumina based, custom made insulation panel which is capable of withstanding peak temperatures of 1200 °C.

## Technical data

		MICROTHERM® SEMI-OVERSTITCHED			MICROTHERM® OVERSTITCHED		
		-1000R	-1000R HY	-1200	-1000R	-1000R HY	-1200
<b>Grade</b>		-1000R	-1000R HY	-1200	-1000R	-1000R HY	-1200
<b>Standard finishing</b>		Glass cloth (E-Glass)*			Glass cloth (E-Glass)*		
<b>Stitching pitch size</b>	mm	50			50x50		
<b>Classification temperature</b>	°C	1000	1000	1200	1000	1000	1200
<b>Nominal density</b>	kg/m <sup>3</sup>	220	260	350	220	260	350
<b>Compressive strength (ASTM C165)</b>	MPa = N/mm <sup>2</sup>	0.14	0.12	0.22	0.14	0.12	0.22
<b>Thermal conductivity (ISO 8302, ASTM C177)</b>							
200 °C	W/m K	0.026	0.026	0.034	0.026	0.026	0.034
400 °C	W/m K	0.030	0.030	0.040	0.030	0.030	0.040
600 °C	W/m K	0.038	0.038	0.049	0.038	0.038	0.049
800 °C	W/m K	0.049	0.049	0.063	0.049	0.049	0.063
<b>Specific heat capacity</b>							
200 °C	kJ/kg K	0.92	0.92	0.89	0.92	0.92	0.89
400 °C	kJ/kg K	1.00	1.00	0.99	1.00	1.00	0.99
600 °C	kJ/kg K	1.04	1.04	1.04	1.04	1.04	1.04
800 °C	kJ/kg K	1.08	1.08	1.07	1.08	1.08	1.07

<b>Shrinkage</b>								
1-sided 12h - 1000 °C	%	< 0.5	< 0.5	< 0.05	< 0.5	< 0.5	< 0.05	< 0.05
Full-soak 24h -1000 °C	%	< 3	< 3	< 0.1	< 3	< 3	< 0.1	< 0.1
Full-soak 24h -1150 °C	%	-	-	< 3	-	-	< 3	< 3

\* Special coverings and coatings are available on request.

# MICROTHERM® QUILTED



## High temperature flexible microporous insulation panel

The MICROTHERM® QUILTED and SEMI-QUILTED range of products are custom made flexible microporous insulation panels with very good thermal properties. The panels are produced in a glass cloth outer envelope, making them clean and easy to handle.

Stitching can be one-directional (2D flexure) for the MICROTHERM® SEMI-QUILTED panels, or two-directional (3D flexure) for the MICROTHERM® QUILTED panels. The formulation is an opacified blend of filament reinforced pyrogenic silica (alumina for 1200 grade).

MICROTHERM® (SEMI-)QUILTED-1000R is a very flexible, custom made insulation panel.

MICROTHERM® (SEMI-)QUILTED-1000R HY is a very flexible, custom made insulation panel with a hydrophobic core treatment to repel water. It is ideal for applications where contact with liquid water or condensation (dew point) is possible.

MICROTHERM® (SEMI-)QUILTED-1200 is a very flexible, alumina based, custom made insulation panel which is capable of with- standing peak temperatures of 1200 °C.

## Technical data

		MICROTHERM® SEMI-QUILTED			MICROTHERM® QUILTED		
		-1000R	-1000R HY	-1200	-1000R	-1000R HY	-1200
<b>Grade</b>		-1000R	-1000R HY	-1200	-1000R	-1000R HY	-1200
<b>Standard finishing</b>		Glass cloth (E-Glass)*			Glass cloth (E-Glass)*		
<b>Stitching pitch size</b>	mm	25			25 x 25		
<b>Classification temperature</b>	°C	1000	1000	1200	1000	1000	1200
<b>Nominal density</b>	kg/m <sup>3</sup>	220	260	350	220	260	350
<b>Compressive strength (ASTM C165)</b>	MPa = N/mm <sup>2</sup>	0.14	0.12	0.22	0.14	0.12	0.22
<b>Thermal conductivity (ISO 8302, ASTM C177)</b>							
200 °C	W/m K	0.027	0.027	0.035	0.027	0.027	0.035
400 °C	W/m K	0.031	0.031	0.041	0.031	0.031	0.041
600 °C	W/m K	0.039	0.039	0.050	0.039	0.039	0.050
800 °C	W/m K	0.050	0.050	0.065	0.050	0.050	0.065
<b>Specific heat capacity</b>							
200 °C	kJ/kg K	0.92	0.92	0.89	0.92	0.92	0.89
400 °C	kJ/kg K	1.00	1.00	0.99	1.00	1.00	0.99
600 °C	kJ/kg K	1.04	1.04	1.04	1.04	1.04	1.04
800 °C	kJ/kg K	1.08	1.08	1.07	1.08	1.08	1.07

<b>Shrinkage</b>								
1-sided 12h - 1000 °C	%	< 0.5	< 0.5	< 0.05	< 0.5	< 0.5	< 0.05	
Full-soak 24h -1000 °C	%	< 3	< 3	< 0.1	< 3	< 3	< 0.1	
Full-soak 24h -1150 °C	%	-	-	< 3	-	-	< 3	

\* Special coverings and coatings are available on request.

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# PROMASIL®-1000, -1000P, -1100



## High performance calcium silicates

PROMASIL®-1000, -1000P and -1100 are lightweight calcium silicate insulating boards.

In combination with dense and light-weight refractory bricks or concrete, they are the ideal back-up lining. Due to the low thermal shock resistance the boards are not suitable for front sided use.

PROMASIL® materials are produced as boards, pipe sections, segments and cut sections.

## Technical data

Grade		-1000	-1000P	-1100
Colour		white	white	white
Classification temperature	°C	1000	1000	1050
Bulk density	kg/m <sup>3</sup>	245	285	285
Cold compressive strength	N/mm <sup>2</sup>	> 1.5	> 2	> 2.5
Linear Shrinkage				
1000 °C - 12h	%	1.3	1.3	-
1050 °C - 12h	%	-	-	< 2
Thermal conductivity				
200 °C	W/m K	0.075	0.085	0.085
400 °C	W/m K	0.105	0.105	0.105
600 °C	W/m K	0.145	0.145	0.145
800 °C	W/m K	0.175	0.185	0.185
Specific heat capacity	kJ/kg K	1.03	1.03	1.05
Reversible thermal expansion	K <sup>-1</sup>	5.4x10 <sup>-6</sup>	5.4x10 <sup>-6</sup>	5.5x10 <sup>-6</sup>
Protective gas-resistance			CO, NH <sub>3</sub> , H <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> atmosphere	
Moisture content (air-dry)	%	ca. 3-8		



# PROMALIGHT® MACHINED PARTS



## Precision machined high temperature components

PROMALIGHT® MACHINED PARTS are very accurately premachined microporous insulation components with very good thermal and mechanical properties. They are available with various coatings and coverings, for incorporation into demanding products and assemblies. The formulation is an opacified blend of filament reinforced pyrogenic silica (alumina for 1200 grade).

PROMALIGHT® MACHINED PARTS are 100% tailor made from selection of material grade right through to product finishing. They are based on the PROMALIGHT® product range.

## Technical data

Grade		-1000X (HD)	-1000R (HD)	-1000R HY	1200
Standard finishing		Customer specific*			
Classification temperature	°C	1000	1000	1000	1200
Nominal density	kg/m <sup>3</sup>	310	350	> 300	> 400
Compressive strength (ASTM C165)	MPa = N/mm <sup>2</sup>	0.41	0.32	0.32	0,54
Thermal conductivity (ISO 8302, ASTM C177)					
200 °C	W/m K	0.023	0.022	0.022	0.029
400 °C	W/m K	0.026	0.024	0.024	0.033
600 °C	W/m K	0.030	0.029	0.029	0.039
800 °C	W/m K	0.036	0.034	0.034	0.044
Specific heat capacity					
200 °C	kJ/kg K	0.86	0.92	0.92	0.89
400 °C	kJ/kg K	0.96	1.00	1.00	0.99
600 °C	kJ/kg K	1.03	1.04	1.04	1.04
800 °C	kJ/kg K	1.07	1.08	1.08	1.07
Shrinkage					
1-sided 12h - 1000 °C	%	< 0.5	< 0.5	< 0.5	< 0.05
Full soak 24h -1000 °C	%	< 3	< 3	< 3	< 0.1
Full soak 24h -1150 °C	%	-	-	-	-

\* Various coatings and coverings are available on request.

## Properties & advantages

- custom made, precisely machined
- extremely low thermal conductivity
- high thermal stability
- available in different grades
- available with various coatings and coverings
- non-combustible
- no harmful respirable fibres
- environmentally friendly, free of organic binders
- resistant to most chemicals

## Working & processing

PROMALIGHT® MACHINED PARTS are 100% custom made. If some additional shaping would be required, this can either be done manually with hand tools, or using stationary wood or metal processing machinery. They can be cut, sawn, drilled and punched. The parts can be fixed in place with glue or by mechanical means such as anchors, pins and clips.

# FREEFLOW®-1000R



## Free pouring granules of high temperature insulation

FREEFLOW® is a pourable microporous powder with very good thermal properties. The formulation is an opacified blend of pyrogenic silica.

FREEFLOW® is suitable for filling complex shapes and cavities with demanding thermal specifications. It offers insulation solutions for applications where no other conventional insulation can be used.

FREEFLOW® has been recently improved by upgrading its formula. It now offers the same thermal performance at a reduced density, resulting in a lower installed cost.

## Technical data

<b>Grade</b>		1000R
<b>Classification temperature</b>	°C	1000
<b>Nominal bulk density</b>	kg/m <sup>3</sup>	220
<b>Nominal tap density</b>	kg/m <sup>3</sup>	240
<b>Thermal conductivity</b> (in-house cylindrical cell test method)		
200 °C	W/m K	0.026
400 °C	W/m K	0.036
600 °C	W/m K	0.049
800 °C	W/m K	0.064
<b>Specific heat capacity</b>		
200 °C	kJ/kg K	0.93
400 °C	kJ/kg K	1.02
600 °C	kJ/kg K	1.06
800 °C	kJ/kg K	1.10
<b>Shrinkage</b>		
Full soak 24h - 800 °C	%	< 0.5
Full soak 24h - 1000 °C	%	< 3

## Properties & advantages

- Low thermal conductivity
  - High thermal stability
  - Non-combustible
  - Easy to install
  - Suitable for automated feeding of complex shapes
  - Environmentally friendly, free of organic binders
- Resistant to most chemicals

## Working & processing

FREEFLOW® is a pourable microporous powder. To obtain the optimal thermal performance it is necessary to achieve the specified “tap density”, for example by filling under vibration.

## Application areas

Microporous insulation offers an extremely low thermal conductivity, close to the lowest theoretically possible at high temperatures. Microporous materials are the preferred choice when a large temperature reduction is required within a limited space, or when strict heat loss or surface temperature requirements are specified.

### ENERGY

- Fuel cells (SOFC) and reformers

### TRANSPORTATION

- Filling of complex cavities



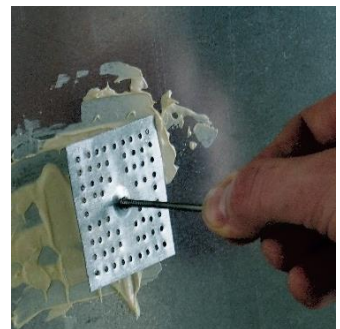
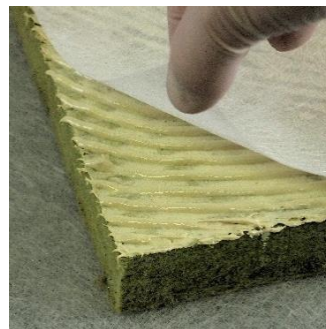
# Vatral® 200

Fire protection adhesive



## Technical Data Sheet

Density	approx. 1.60 g/cm <sup>3</sup>		
Color	Light Ivory		
Fire	A1	after DIN EN 13501-1:2019-05	Classification Report KB- Hoch-141113-5
Adhesive tensile strength	0.4 N/mm <sup>2</sup>	based on DIN EN 1015-12:2016-12	
Fracture pattern	A		
Viscosity	Viscous		
pH	approx. 11 at 23 °C		



## Product

Vatral® 200 Fire Protection Adhesive is a non-combustible, inorganic, one-component, alkali silicate-based adhesive with excellent permanent adhesion, high strength and hydrophobic finish. It can be used for temperatures up to 1250 °C, even with repeated cooling.

## Scope

Vatral® 200 Fire protection adhesive can be used for fireproof fixation of steel pins, anchors and mineralinsulating materials and in particular their lamination.

## Processing

The glue is ready to use. Mix the bucket containers thoroughly before processing. The adhesive can be applied over a large area or selectively with a spatula or from a tubular bag. Combing through

with a notched putty ensures an even layer thickness and extends the time for joining the materials to be joined. Processing can also be carried out using the doctor blade or rolling process. Vutral® 200 does not tend to flow and forms a superficial film after only 4 minutes.(recommended application time up to 15 minutes when using notched trowels). Sufficient contact with the ambient air must be ensured for the adhesive to harden. The surfaces to be bonded must be clean, dry, free of dust and grease.The room temperature must not be below 10 °C during processing. We recommend a primer with Vutral® L 200B/30 for sandy or highly absorbent substrates. The tools must be cleaned with water immediately after use.



# Promat<sup>®</sup>

## FIRE PROTECTION

### PROMATECT<sup>®</sup>-H



### Structural calcium silicates

PROMATECT<sup>®</sup>-H is a cement bonded calcium silicate based insulation board and is asbestos free. This large-sized multi-purpose board is easy to handle and offers a superior combination of enhanced mechanical properties for self-supporting constructions.

PROMATECT<sup>®</sup>-H is hygroscopic and vapour- permeable. Moisture content is therefore automatically regulated by the application environment.

Technical data		
Colour		grey
Building material class	DIN 4102 EN 13501	A1, non-combustible
Classification temperature	°C	400
Bulk density	kg/m <sup>3</sup>	870
Shrinkage 400 °C - 12h	%	0.25
Thermal conductivity		
20 °C	W/m K	0.17
100 °C	W/m K	0.19
200 °C	W/m K	0.21
Specific heat capacity 400 °C	kJ/kg K	0.92
Linear change in length 20-600 °C	K <sup>-1</sup>	6.4x10 <sup>-6</sup>
Alkalinity	pH value	approx. 12
Water vapour diffusion value	μ	20
Humidity contents (air dry)	%	5-10
Modulus of elasticity E Long./Lat.	MPa	4200 / 2900
Bending strength Long./Lat.	N/mm <sup>2</sup>	7.6 / 4.8
Tensile strength Long./Lat.	N/mm <sup>2</sup>	4.8 / 2.6
Cold compressive strength	N/mm <sup>2</sup>	9.3



### Properties & advantages

- Large-sized, self-supporting
- High mechanical strength
- Good thermal insulation
- Good noise-proofing
- A1, non-combustible according to DIN 4102 and EN 13501
- Easy to shape and work
- Good chemical resistance
- Hygroscopic and vapour-permeable
- Unaffected by humidity
- Retains shape stability and load capacity in humid conditions

### Application areas

#### HEAVY INDUSTRY

- Dryers
- Apparatus construction
- Wet and damp rooms
- Industrial furnaces
- Heat and moisture protection in industrial plants
- Replacement for asbestos containing boards

### Working & processing

Woodworking machinery with hard metal-tipped tools can be used for producing and shaping cut sections.

When cutting to size, the maximum workplace concentration values for inhalable dust must be observed. Dust extraction is recommended. See product safety information sheet.

### Surface treatment

The physical properties and the surface structure of PROMATECT®-H boards make them ideally suited to the application of decorative finishes.

The boards are alkaline, therefore they must be treated using alkali-resistant paints, bonding agents and decorative systems.

To avoid water absorption and to protect against aggressive atmospheres, Promat®-Impregnations are available.

### Heat transmission



# Promat FENDOLITE®-MII

## Cementitious fire protection spray system



### General description

Promat FENDOLITE®-MII is an easy to apply, extremely effective and durable cementitious fireproofing spray. It is designed specifically for steel and concrete structures in the oil and gas and petrochemical industry. All thin and lightweight Promat FENDOLITE®-MII solutions are fully weatherproof, can withstand thermal shocks and will not crack or spall under impact.

Promat FENDOLITE®-MII offers a reliable protection during and even after a fire, blast or explosion. It creates an efficient barrier that will last up to 240 minutes in the event of hydrocarbon pool fire and up to 120 minutes in the event of a jet fire.

Our global team of experts can offer you dedicated technical and commercial support at each stage of your project.

**Promat FENDOLITE®-MII has been rigorously tested and certified for a variety of fire performance protocols.**

USA - UL 1709 (Design No. XR719),  
UL 263 and ASTM E119  
UK - BS 476 (Parts 20-21: 1987  
Appendix D) Hydrocarbon  
Ratings  
International Standards  
ISO 834  
Germany - DIN 4102  
France - Hydrocarbon  
Modified HCM  
Italy - UNI 11076

#### MATERIAL PROPERTIES

<b>Colour and finish</b>	Off-white, monolithic, spray texture
<b>Alkalinity</b>	12.0 - 12.5 pH
<b>Sound absorption</b>	0.35 Noise reduction coefficient (NRC)
<b>Cure</b>	By hydrolic set
<b>Initial set</b>	2 to 6 hours at 20°C (68°F) and 50% RH
<b>Minimal practical thickness</b>	8mm (5/16") unreinforced, 15mm (5/8") Reinforced
<b>Theoretical coverage</b>	62m <sup>2</sup> /tonne (15 Bd. Ft/Bag) at 25mm (1") thickness

#### PHYSICAL TESTING PERFORMANCE

Physical property	Test method	Test results
Density	ASTM E605	775 kg/m <sup>3</sup> (48.4pcf) ± 15%
Durometer hardness	ASTM D2240	40 (Shore D)
Compressive strength	ASTM E761	3778 kPa (548 psi)
Combustibility	ASTM E136 BS476	Non-combustible
Surface burning	ASTM E84	0 flame spread, 0 smoke development
Deflection	ASTM E759	No cracking, delamination or spalling
Impact resistance	ASTM E760	No cracking, delamination or spalling
Thermal conductivity	ASTM C518	1.5 BTU in/hr ft <sup>2</sup> (0.216 W/mK) at 75°F (24°C)
Corrosion resistance	ASTM E937	Does not promote corrosion of steel
Fungal resistance	ASTM G21	0 Rating - No fungus growth

UL Environmental Testing  
Blast from Gas Explosion Test  
(more than 3 bar  
overpressure)  
ISO 22899-1: 2007 -  
Resistance to Jet Fires  
ISO 22899-1: 2007 -  
Resistance to Jet Fires  
Following Gas Explosion

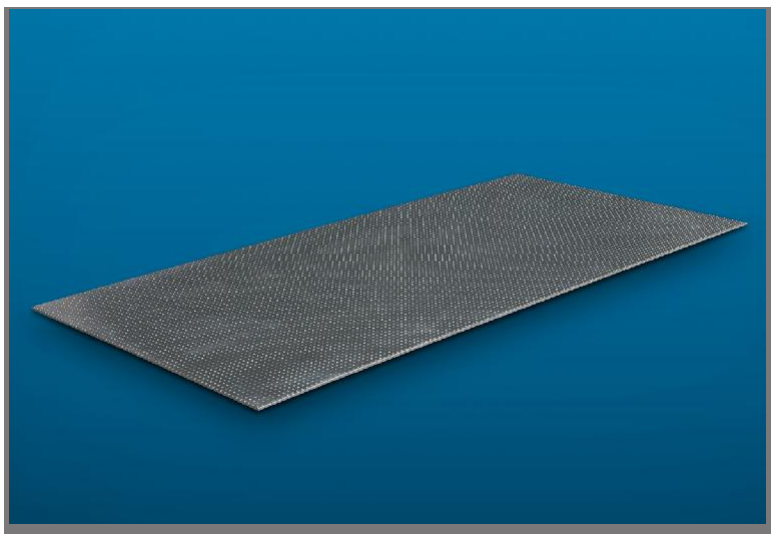
Promat has tested Promat FENDOLITE®-MII according to a wide range of standards and regulations, such as UL1709, UL2431, EN 13381-4, ISO 22899-1 and ISO 20088-1.

The Promat FENDOLITE®-MII system is assessed and certified by the following institutes and notified bodies for the performance of blast, cryogenic and fire resistance with ISO, hydrocarbon and RWS fire curves: UL, Lloyds, Efectis, Warrington

- Fully waterproof
- Thin and lightweight
- Resistant to thermal shock
- Does not crack or spall under impact
- Maintains its integrity during and after a fire, blast or explosion
- Service life exceeding 30 years
- Applied by Promat licensed installers
- Expert technical and commercial advice

## The application areas of Promat FENDOLITE®-MII

- Refineries and petrochemical facilities → Steel and concrete structures
- Spheres, tanks and barrels → Vessels and vessel skirts



## Composite insulation board

DURASTEEL® consists of a calcium silicate core reinforced on both sides with perforated galvanised steel covering sheets.

The punched lugs in the steel sheets are pressed into the core board giving the DURASTEEL® composite board a very high mechanical strength once the drying process is finished.

DURASTEEL® comes in two thicknesses and the material is classified as class A1, non-combustible.

Technical data			
Thickness	mm	6	9.5
Building material class	DIN 4102	A1, non-combustible	
Classification temperature			
Permanent stress	°C	400	400
Short term up to	°C	1000	1000
Bulk density	kg/m <sup>3</sup>	2800	2210
Cold compressive strength	N/mm <sup>2</sup>	60	60
Bending strength	N/mm <sup>2</sup>	109	84
Tensile strength	N/mm <sup>2</sup>	32	30
Modulus of elasticity E	N/mm <sup>2</sup>	55000	40000
Thermal conductivity 20 °C	W/m K	0.55	0.55
Sound insulation	dB	28	30
Board weight	kg/m <sup>2</sup>	16.8	21
Moisture content (air-dry)	%	6	6
Water absorption	%	14	14

## Properties & advantages

- High mechanical strength
- Impact and shock proof
- Resistant to water and frost, suited for outdoor use
- Good chemical resistance
- Large-size and thin boards
- Load-bearing
- Non-combustible
- Non-scratch surface

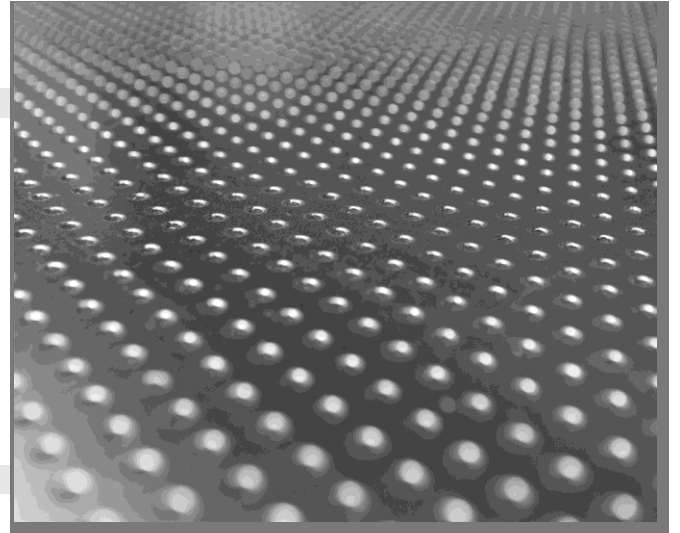
## Application areas

### HEAVY INDUSTRY

- DURASTEEL® boards are mainly used in the steel and non-ferrous industry as:
  - Heat shield against cyclic or permanent heat radiation
  - Heat shield against metal splashes or sparks
  - Mobile heat shields
  - Office walls close to heat sources
- Flue gas ducts
- Inner wall lining of fire stations

### OIL AND GAS

- Heat shields
- Blast and fire walls
- Heavy duty enclosures



# VIZYON®

## ENDÜSTRİYEL



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