



grenaisol®

Harmless to health
Construction and
insulation boards

grenatherm®

Harmless to health
Construction and heat
radiant boards

grenalight®

Harmless to health
Insulation boards

-  Eco-friendly
-  Easy machinable
-  Recyclable
-  Natural
-  Non-combustible
-  Insulation
-  Heat radiant
-  Dustless
-  Harmless to health
-  Durable
-  Asbestos free
-  Tested and certified



NEW GENERATION
OF STRUCTURAL, INSULATING
AND HEAT RADIANT MATERIALS
FOR FIREPLACE SURROUNDS

grenacoat®
Surface finish system
with easy and fast
application

grenacontrol®
Quick and safe access to the
fireplace surround system with
Grenaisol® and Grenatherm®

grena® a.s.



grenaisol[®]

Harmless to health
Construction and
insulation boards

	Metric	US/British	
Thickness	mm	in	
	30	1.18	
	40	1.57	
	50	2	
Density	kg/m ³	lb/ft ³	
	430	26.84	
Reaction to fire class acc. to EN 13501-1	A1, non combustible		
Classification temperature acc. To EN 1094-6	950 °C	1 742 °F	
Thermal conductivity acc. to ASTM C-201	W/Mk	BTU-in/h-ft²-°F	
	200 °C (392 °F)	0.16	1.11
	400 °C (752 °F)	0.18	1.25
	600 °C (1 112 °F)	0.20	1.39
	800 °C (1 472 °F)	0.21	1.46
Heat capacity acc. to EN 821-3	kJ/kg-K	BTU/lb-°F	
	0.95	0.23	
Linear shrinkage after 12h at 700 °C (1 292 °F) acc. to EN 1094-6	%		
	0.66		

Fireplace surround system with GRENAISOL[®]

- 600 x 800 mm (31.50 x 23.60 in)
- 610 x 1 000 mm (39.40 x 24 in)
- Arcus: 40 x 90 x 600 mm (1.57 x 3.54 x 23.6 in) min. radius 175 mm (1.90 in)



grenaisol[®]
Construction and insulation board



grenalight[®]
Insulation board

grenaisol[®]
Construction and insulation board

grena[®] Klebepaste
Universal fire resistant glue up to 1 150 °C (2 102 °F)

grenaisol[®] Arcus
Construction and insulation component with a lock for rounded shapes

grenacontrol[®]
Inspection door

grenacoat[®]
Heat resistant fabric mesh
Stove mortar
Stove plaster



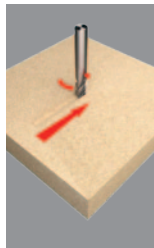
Machinable with common woodworking tools



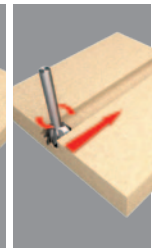
Grooving



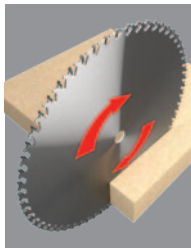
Drilling



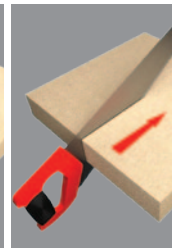
Milling



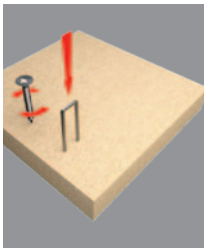
Profile milling



Cutting



Hand cutting



Screwing, coupling

grena[®] a.s.



grenaisol®

Harmless to health
Construction and
insulation boards

With GRENAISOL® you can quickly build a highly efficient fireplace surround with different types of shapes that offer security and reliability. Thanks to high adherence of GRENAISOL® and GRENATHERM® surface you can apply mortar and plaster easily and more quickly. For surface finish Grena, a.s. recommends the GRENACOAT® system which is specially developed to provide the best performance of the GRENAISOL® and GRENATHERM® surround systems.

You can also use GRENAISOL® to protect areas from heat sources or combined with accumulation systems, for example:

Behind stoves and fireplaces



Behind heat accumulating systems



- grenalight®**
Insulation board
- grenaisol®**
Construction and
insulation board
- grena® klebepaste**
Universal fire resistant
glue up to 1 150 °C
(2 102 °F)
- grenaisol®**
Construction
and insulation
board



grenaisol® properties

GRENAISOL® is a high quality construction and insulation board to build the fireplace surround in a simple, fast and tested way which guarantees a safe and efficient heating. The board is at the same time, light but stable and it is made of 100 % harmless to health natural materials. GRENAISOL® offers a very low thermal conductivity and the security of using a non-combustible material with resistance to high temperatures and thermal shock. It releases no fumes or smell even at high temperatures.

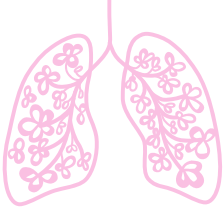
The composition of GRENAISOL® allows clean and dustless work and very easy cutting with common woodworking tools. To reduce the time needed to build a fireplace surround, you can use screws and the fire resistant glue Grena®Klebepaste to significantly save the time and materials needed for the construction. For building the fireplace surround you can combine GRENAISOL® boards with GRENATHERM® and GRENALIGHT® boards to reach direct the insulation and heat where they are needed according to the situation.

Why to use grenaisol® ?

- ✓ **High quality:** exclusive raw materials and high technology
- ✓ **Environmentally friendly:** produced exclusively from natural materials
- ✓ **Cost saving:** reduces drastically time and materials needed to build the fireplace surround
- ✓ **Safety material:** Non – combustibile and extraordinary resistant to high temperature and thermal shock
- ✓ **Lighter and easier to install:** one person can manipulate easily the boards
- ✓ **Flexibility:** very easy to work with and you can combine GRENAISOL®, GRENATHERM®, and GRENACOAT® systems
- ✓ **Harmless to health:** GRENAISOL® is asbestos, mineral and glass fibers FREE

**Cost-effective
fireplace surround
system with one board**

grena® a.s.



grenatherm®

Harmless to health
Construction and heat
radiant boards

	Metric	US/British	
Thickness	mm	in	
	25	1	
Density	kg/m ³	lb/ft ³	
	750	46.82	
Reaction to fire class acc. to EN 13501-1	A1, non combustible		
Classification temperature acc. To EN 1094-6	950 °C	1 742 °F	
Thermal conductivity acc. to EN ISO 8894-1	W/Mk	BTU-in/h-ft ² -°F	
	200 °C (392 °F)	0.321	2.227
	400 °C (752 °F)	0.328	2.275
	600 °C (1 112 °F)	0.350	2.428
	800 °C (1 472 °F)	0.375	2.601
Heat capacity acc. to EN 821-3	kJ/kg-K	BTU/lb-°F	
	0.95	0.23	
Linear shrinkage after 12h at 700 °C (1 292 °F) acc. to EN 1094-6	%		
	0.37		

Fireplace surround system with GRENATHERM®

grenacontrol®
inspection door

grenacoat®
Heat resistant fabric mesh
Stove mortar
Stove plaster



600 x 1 200 mm
(23.60 x 47.20 in)

grenalight®
Insulation board

grenaisol®
Construction and insulation board

grenatherm®
Construction and heat radiant board

grena® Klebepaste
Universal fire resistant glue up to 1 150 °C (2 102 °F)



grenatherm® properties

GRENATHERM® is an innovation developed to work as a construction and heat radiant board to build the fireplace surround providing an easier and faster transference of heat through the whole surface of the board. GRENATHERM® board not only has excellent mechanical properties but it is also made of 100 % harmless to health natural materials and therefore it is a perfect solution to provide a quick and safe radiant heat and comforting warm.

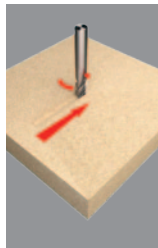
The high quality raw materials and the advanced technology involved in the production of GRENATHERM® provides a very smooth and strong board that is non-combustible and has resistance to high temperatures and thermal shock. It releases no fumes or smell even at high temperatures. The composition of GRENATHERM® allows clean and dustless work and very easy cutting with common woodworking tools. To reduce the time needed to build a fireplace surround, you can use screws and the fire resistant glue Grena®Klebepaste to significantly save the time and materials needed for the construction.



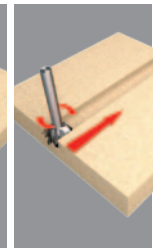
Grooving



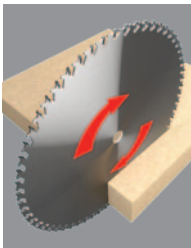
Drilling



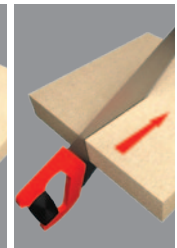
Milling



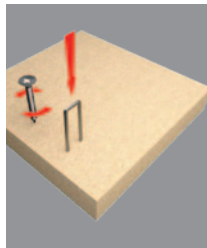
Profile milling



Cutting



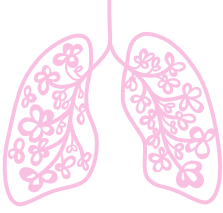
Hand cutting



Screwing, coupling

Machinable
with common
woodworking
tools

grena® a.s.



grenatherm®

Harmless to health
Construction and heat
radiant boards

For building the fireplace surround you can combine GRENATHERM® with GRENAISOL® and GRENALIGHT® boards to direct the insulation and heat where they are needed according to the situation.

Thanks to high adhesion of GRENATHERM® and GRENAISOL® surface you can apply mortar and plaster easily and more quickly. For surface finish Grena, a.s. recommends the GRENACOAT® system which is specially developed to provide the best performance of the GRENAISOL® and GRENATHERM® surround systems.

When to opt for GRENATHERM®?

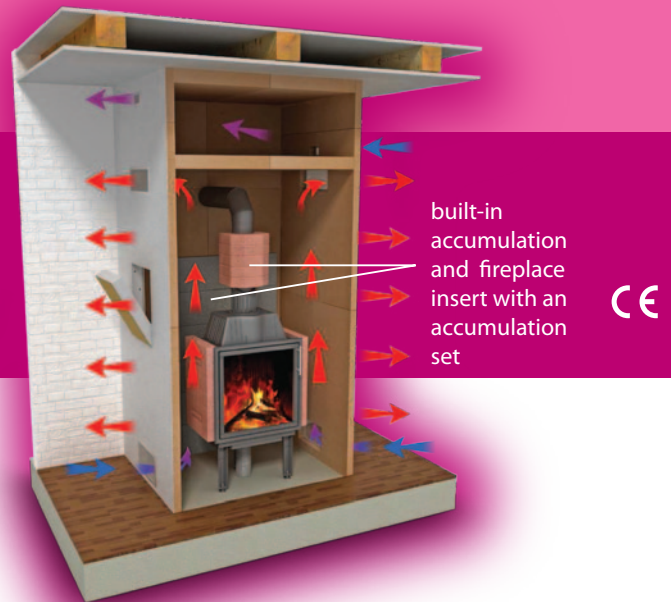
- If fast and radiant heat is required, the GRENATHERM® system is the ideal solution
- If a quick construction for a reasonable price is required
- If the requirement does not allow dustiness and the accumulation system is required

You can also use GRENATHERM® combined with accumulations system, for example:

Fireplace surround with built-in accumulation and fireplace insert



Fireplace surround with a built-in accumulation and fireplace insert with an accumulation set



Why to use radiant heat?

- Radiant heat is healthy, natural, pleasant and comfortable.
- It warms objects, walls, people, but not the air between.
- Radiant heat cannot be blown away.

With grenatherm® you can build:

- Heat radiant fireplace surround without added heat accumulating elements
- Heat radiant fireplace surround with a built-in heat accumulating element
- Heat radiant fireplace surround with built-in heat accumulating element and insert with heat accumulating set

Why to use grenatherm®?

- ✓ **Cost saving:** reduces drastically time and materials needed to build the fireplace surround
- ✓ **High quality:** exclusive raw materials and high technology
- ✓ **Safety material:** Non - combustible and extraordinary resistant to high temperature and thermal shock
- ✓ **Environmentally friendly:** produced from natural materials only
- ✓ **Flexibility:** very easy to work with and you can combine GRENAISOL®, GRENATHERM®, and GRENACOAT® systems
- ✓ **Lighter and easier to install:** one person can manipulate easily the boards
- ✓ **Harmless to health:** GRENATHERM® is asbestos, mineral and glass fibers FREE

High performance heat
radiant fireplace surround
system with one board

grena® a.s.



grenalight®

Harmless to health
insulation boards

	Metric	US/British	
Thickness	mm	in	
	30	1.18	
	40	1.57	
	50	2	
Density	kg/m³	lb/ft³	
	350	21.85	
Reaction to fire class acc. to EN 13501-1	A1, non combustible		
Classification temperature acc. To EN 1094-6	950 °C	1 742 °F	
Thermal conductivity acc. to ASTM C-201	W/Mk	BTU-in/h-ft²·°F	
	200 °C (392 °F)	0.14	0.97
	400 °C (752 °F)	0.16	1.11
	600 °C (1 112 °F)	0.19	1.32
	800 °C (1 472 °F)	0.20	1.39
Heat capacity acc. to EN 821-3	kJ/kg·K	BTU/lb·°F	
	0.95	0.23	
Linear shrinkage after 12h at 700 °C (1 292 °F) acc. to EN 1094-6	%		
	0.66		

Properties of grenalight®

GRENALIGHT® board is very light but firm at the same time. It is made from 100 % natural materials therefore it is completely harmless to health. During cutting a minimum of dust is generated, it has excellent insulation properties and it is entirely non-combustible. There are no fumes even when it is heated up to a high temperature. The board can be combined with GRENAISOL® and GRENATHERM® boards. It can be machined by common woodworking tools.

Use of grenalight®

- **Wall insulation** from heat sources
- **Insulation of a double ceiling** of fireplace surrounds
- **Ceiling insulation** under the soffit or ceiling of the room
- **Foundation insulation layer** for baking areas and furnaces in general
- **Hearth insulation** (behind the refractory board - e. g. GRENAMAT®AS or fireclay)
- **Niche insulation** inside fireplaces and stoves
- **Insulation of chimneys** and chimney penetrations
- **Construction of ventilated insulation walls** of heat storage constructions
- **Tile fillers of thermally stressed places** (e. g. tiles above the hearth or heater door)
- **Barriers and heat distribution** in heaters or hypocausts

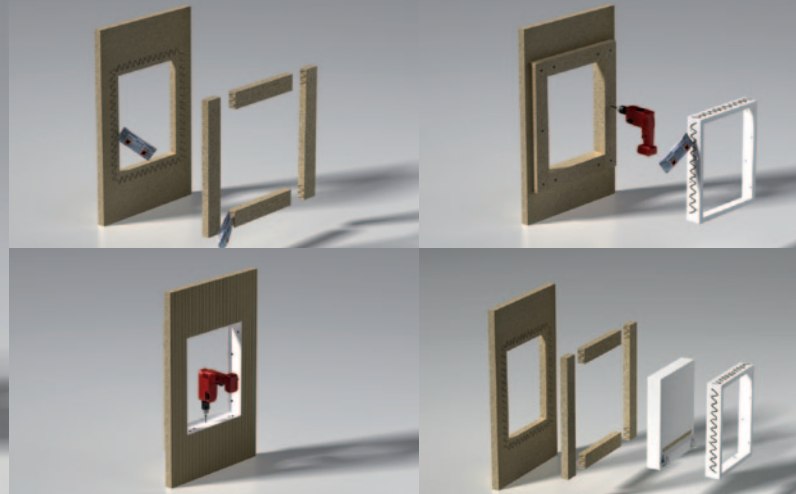
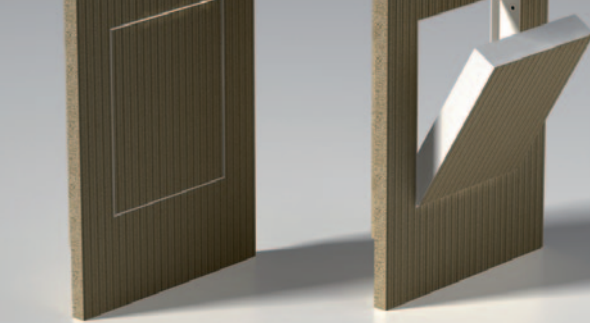
600 x 800 mm
(31.50 x 23.60 in)

610 x 1 000 mm
(39.40 x 24 in)

**Light
insulation
board**



grenacontrol®
inspection doors



Access to the fireplace surround system with GRENAISOL® and GRENATHERM®

- ✓ For easy inspection and control of the interior of the fireplace
- ✓ Quick and simple but safety access to the fireplace surround
- ✓ For simple replacement of parts
- ✓ For cleaning the interior of the fireplace surround

Description

- Dimension: 500 x 400 mm, 400 x 300 mm, 444 x 220 mm
- Invisible system of opening
- Only 1 mm gap around the door, invisible door
- Same surface as the fireplace surround
- Easy and quick installation for the enclosure
- Tested to work with the GRENAISOL® and GRENATHERM® systems and to work at high temperatures

New universal dimension
444 x 444 mm (17.50 x 17.50 in)

grena® a.s.

grena® klebepaste



Universal glue for high temperatures up to 1 200 °C (2 192 °F)

GRENA®KLEBEPASTE is inorganic glue which can be used in high temperatures and does not release any fumes. GRENA®KLEBEPASTE has been specially developed to glue the GRENAISOL®, GRENATHERM® and GRENALIGHT® boards to build the fireplace surround systems. GRENA®KLEBEPASTE is water soluble, soiled tools can be washed with water.

grenacoat®

The new and improved GRENACOAT® program provides stability, durability and prevents from formation of cracks.

PERLINKA, special heat resistant fabric mesh for stove makers

It resist repetitive temperature fluctuations up to 550°C and prevent cracking. Combined with the WHITE 600 mortar, it forms the ideal base layer for further modifications of fireplace surrounds and thermal insulations where GRENAISOL® and GRENATHERM® boards are used.

Packaging: Roll 50 x 1 m (164 x 3.30 ft)



MODEL stove plaster

Fine white plaster which has no influence on heat circulation and can withstand temperatures up to 190 °C (372 °F). The plaster can be applied in layers up to 50 mm (2 in) and is ideal for modelling cornices, flattening surfaces and creating variously surfaces style to the fireplace surround. It is recommended to use WHITE 600 mortar together with the heat resistant fabric mesh PERLINKA as a base layer.

Packaging: 20 kg/5 kg (44.1 lb / 11 lb)



WHITE 600 stove mortar

White adhesive mortar designed mainly as a support layer for the heat resistant fabric mesh PERLINKA. It can also be used for bonding tiles onto fireplaces and stoves surround constructions. This mortar is flexible, resistant to thermal shocks and sticks well to most of stove materials. It is applied in layers up to 20 mm (0.80 in) and it hardens in approximately 40 minutes. WHITE 600 is the best money-saving and reliable solution for areas up to 600 °C (1 112 °F).

Packaging: 20 kg (44.1 lb)



FINISH smooth stove plaster

Fine white plaster for creating a smooth final layer of plastered parts of fireplaces and stoves. It has no influence on heat circulation and can withstand temperatures up to 190 °C (372 °F). The FINISH plaster is applied in one layer from 2 to 6 mm (0.08 to 0.24 in). It is recommended to use the FINISH plaster together with the WHITE 600 mortar and with the special heat resistant fabric mesh PERLINKA as a base layer.

Packaging: 20 kg/5 kg (44.1 lb / 11 lb)



ST-H coarse stove plaster

White plaster for surface finishing with a rougher texture (grain up to 1.5 mm / 0.06 in). It has no influence on heat circulation and can withstand temperatures up to 190 °C (372 °F). The ST-H plaster is applied in a layer from 5 up to 15 mm (0.20 to 0.60 in) and it is suitable for exterior use too (outdoor fireplaces and grills). It is recommended to use the ST-H plaster together with the WHITE 600 mortar and with the special heat resistant fabric mesh PERLINKA as a base layer.

Packaging: 20 kg/5 kg (44.1 lb / 11 lb)



HAFTAK refractory mortar

Mortar designed especially for spaces that are in the direct contact with flames. It resists temperatures up to 1 100 °C (2 012 °F). The HAFTAK Mortar is suitable for fixing stove tiles and fireclay plates, for filling of the fireclay linings or repairing their surface.

Packaging: 20 kg/5 kg (44.1 lb / 11 lb)

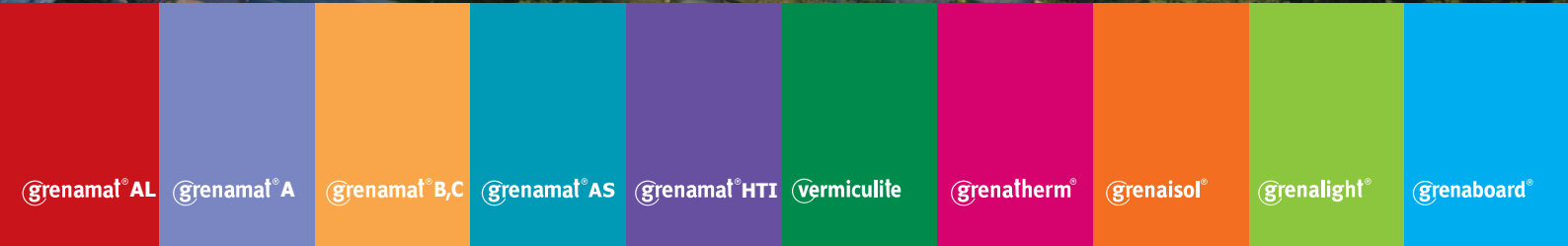
Complete verified system

grena® a.s.



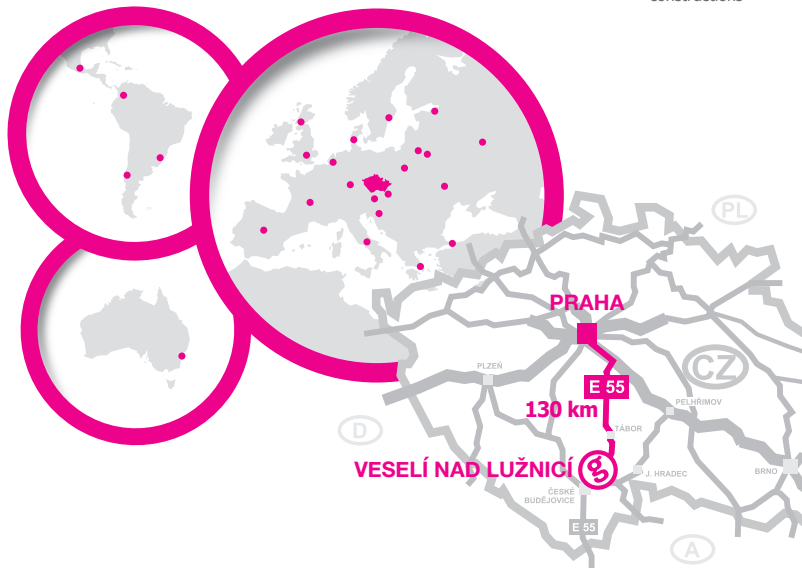
Grena, a.s. is a well experienced manufacturer of vermiculite boards for different industries around the world with more than 20 years of experience.

Plánek od 1. února 2018.
 Grafický design: Ing. Aleš Obkráčil, kontroloval: Ing. Petr Novotný



Grenamat® AL	Grenamat® A	Grenamat® B,C	Grenamat® AS	Grenamat® HTI	vermiculite	Grenatherm®	Grenaisol®	Grenalight®	Grenaboard®
Self-supporting air-condition pipeline	Certified boards for wall and ceiling used for ship construction	Boards suitable for fillings of fire-resistant safety doors	Refractory insulation boards and components for fireplaces and stoves	Insulation boards for high-temperature applications	Exfoliated vermiculite Exfoliated vermiculite available in five fractions	Radiant structural board for fireplace surrounds	Structural insulation boards for fireplace surrounds	Light insulation board for fireplace surrounds	Non-combustible boards for the protection of ceiling constructions
Self-supporting smoke and heat extraction duct									
Fire protection of carbon lamellas (CFRP)									
Fire-resistant panels with a surface finish HPL, CPL, veneer or paper									
Fire-resistant acoustic panels									

WE'RE ON FIRE
FOR NON-COMBUSTIBILITY



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