

Ideal solution

for hot-air fireplace enclosure system



- » it is utterly natural and wholesome
- » it does not release any fibres or other irritating particles
- » it is not necessary to penetrate it
- » it is stable, Grenaisol properties do not change over time
- » the resistance against thermal shock is excellent
- » it is sufficiently strong and self-supporting
- » work with Grenaisol is clean and simple



**NEW
CONCEPT**

"We have been developing our products constantly. They undergo laboratory tests and we listen to our customers' reactions. The result is a new concept of the board."

PERIMETER FRAME ?

- » The full frame significantly increases the edge strength during the handling with a board.
- » It helps to join boards more accurately.
- » Inside, we have kept grooves that support adhesion of final layers.

Are you planning to build a fireplace enclosure? ... we've got a few good tips for you

- For better air circulation, it is good to place the fireplace opposite a window or a door.
- Keep enough space around the fireplace.
- Check the weight-carrying capacity of the ceiling and the strenght of the floor
- Confirm the suitability of the chimney for the planned fireplace enclosure and also have it yearly revised of by a professional.
- A fireplace needs enough air – consider the air supply from the exterior
- Do you want to distribute heat to other rooms? Consider putting holes in the construction.

Arcus

To create an arc shape of the fireplace enclosure





For installation you will need:

- a spirit level
- a cross-bit drill
- a measuring tape
- a stapler
- a saw – manual or electrical

- **Grena klebepaste glue**
- Grenaisol boards (you can partly use Grenalight)
- self-tapping screws (length 1.75 times the thickness of the used board)
- **an inspection door Grenacontrol UNIVERSAL**
- ventilation grid
- PERLINKA mesh + reinforcing corner profiles
- adhesive mortar WHITE 600
- final plaster, or tiling

Use tested materials from the system
grenacoat

Before you start

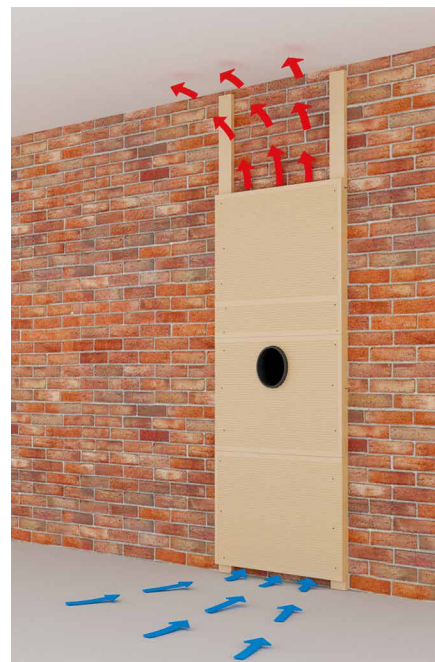
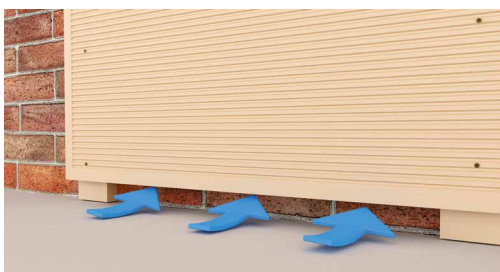
- Leave all materials acclimatize at least 2 days in the environment where they are going to be used.
- When determining the dimensions of the enclosure it is necessary to **keep the minimum distance of the fireplace insert from the insulation**. It is stated by the manufacturer of the fireplace insert. If it is not stated by the manufacturer, we recommend leaving a space of **10 mm (0.4") for each 1 kW power of the fireplace insert between the insert and Grenaisol. However, never less than 70 mm (2.8")!**

1. Wall insulation

The walls adjacent to the heater **must not exceed 85 °C (185 °F)**, therefore, they have to be additionally insulated. The most effective is ventilated insulation. According to the planned width and height of the surround, stick **Grenaisol** (or Grenalight) strips on the wall. Use **Grena klebepaste** glue. After gluing the strips, fasten them with screws in anchors in the wall.

Do not forget to glue strips around the hole of the smoke flue.

On the prepared strips glue **Grenaisol** (Grenalight). Glue the first board min. 5 cm (2") above the floor, the last one up to max. 50 cm (20") below the ceiling. Subsequently, fasten them with self-tapping screws.



2. Fireplace insert installation

Place the fireplace insert and adjust it to the correct position using the spirit level.

Affix the insert to the chimney and request a revision from a chimney company.

Carry out a test fire for about 1 hour, increase the temperature slowly and gradually. Check that all the joints are well sealed and if it is necessary fix them. Odour and smoke caused by burning paint and mastic can be ventilated well at this point.



3. Construction of the hot-air enclosure

By using **Grenaisol** boards and **Grena klebepaste** glue, build the walls in an appropriate distance from the insert. **Grenaisol** boards must not be in direct contact with the fireplace insert anywhere as it expands after being exposed to heat.

Do not forget to make holes in the lower part of the insert for the cold air supply. Try if the frame of the grid can be easily inserted. In the wall, on the level of the fireplace insert it is necessary to place an inspection hole. It is a norm regulation and it is the only way how to check the inside of the finished surround, clean it, maintain it or repair it. We recommend that you use an inspection door **Grenacontrol UNIVERSAL**.

The warm part of the surround must be closed by a firewall from **Grenaisol** boards. The bottom edge of the board must not be higher than 50 cm (20") from the ceiling. Under the firewall, place holes for ventilation grids so their upper part will match the lower edge of the firewall. Above the firewall there is a ventilation duct of the adjacent wall insulation.

By building a firewall, we can finish the external sheathing. However, it is usually done up to the ceiling.

4. Finish of the sheathing

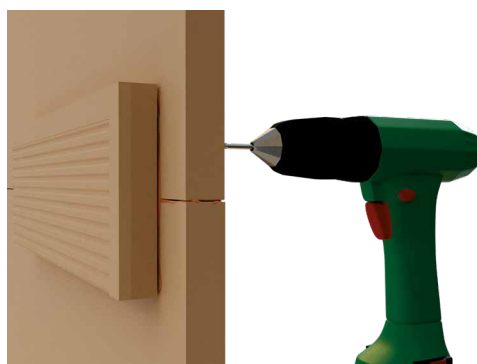
If you continue with the construction above the firewall, you will create a shielding (insulating) chamber. The temperature there is significantly lower than in the space below the firewall. The air is only heated by the heat from the ventilated gap at the back wall and by the one that has penetrated through the firewall.

In this part of the surround, insulate the ceiling. You don't have to insulate the adjacent back wall. The air must be able to leave the insulation chamber, therefore, prepare gaps for 1 – 2 ventilation grids in the upper part.



How to stick the boards correctly?

Apply glue **Grena klebepaste** on the joint as you can see in the picture below. Attach the boards to each other, secure them by accouplements and screws.



WHITE 600

White flexible adhesive mortar mainly for fixing PERLINKA mesh, but also for adhering tiling on fireplaces

HAFŤÁK

fire-resistant mortar also suitable for places in the direct contact with flames

MODEL

fine stove plaster suitable for modelling ledges and other variously structured surfaces

ST-H

white stove plaster for surface finishing with a rougher texture – can also be applied in the exterior

FINISH

fine white plaster for smooth surface finishing of fireplaces and stoves

5. Final adjustments

So the whole work just needs a well-fitting coat. The best option is to use tried-and-tested materials from the system **Grenacoat**.

If you want to prevent from cracks in the surface layers, consolidate the construction by PERLINKA mesh. Thanks to the grooves of **Grenaisol** boards it is enough to pin the stretched mesh. On such a foundation it is very easy to apply **WHITE 600** glue.

It is advisable to reinforce the edges by corner profiles. Once the glue has dried, you can finish the surface according to the customer's request with plaster or tiling. In the **Grenacoat** system we have three kinds of plaster for you – **MODEL, ST-H, FINISH..**

