mathermic®

orimat.

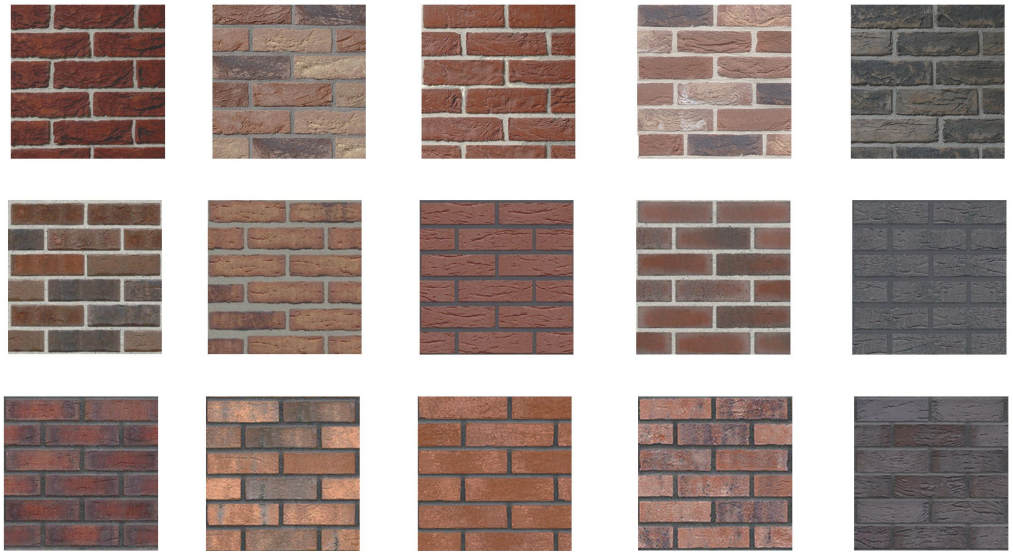
A modern clinker thermal insulation facade system

The adventages of mathermic ®

- Modules are made of clinker tiles, which are resistant to: mechanical demage, absortion, UV radiation, chemical and biological factors (e.g. Mould)
- Easy installation in harsh weather conditions on different surfaces. Can be used on brick, metal and concerete buildings.
- Can be combined with other insulation systems (e.g. Styrofoam)
- Very low absobability of both polyurethane foam and clinker.
- The system doesn't propagate fire (the classification applies to the product installed on a non-flamable substrate of at least B-s1, d0 class accourding to PN-EN 13501-1).
- Dimensional stabillity of mathermic elements. The polyurethane core is rigid and resistant to compression.

A wide colour palette

The mathermic® modules are availible in a wide range of colours and textures of clinker tiles. This system traditional style may resemble a classic brick wall, while elegant whites, greys and blacks perfectlu match the modern architectural trends.



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What is mathermic®?

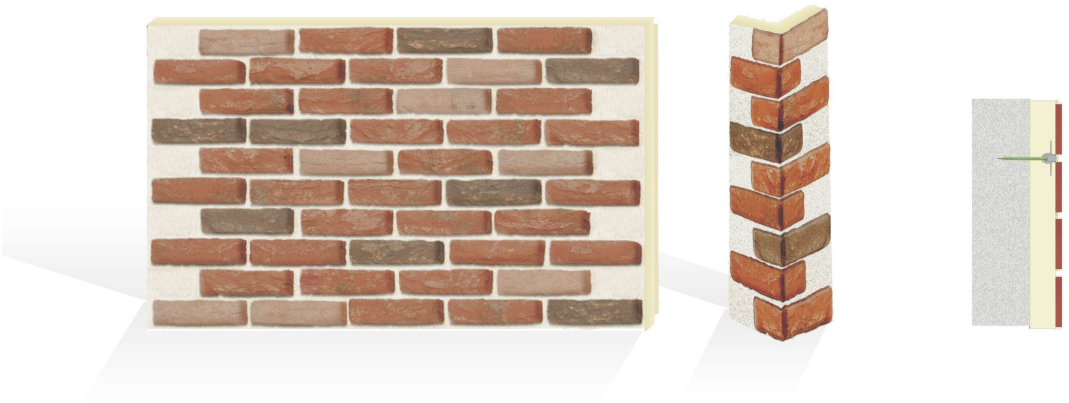
It is a thermal insulation system with clinker composed of two layers:

- Thermmal insulation made of rigid polyurethane foam,
- Decorative facade made of clinker tiles.

The clinker tile is permanantly embeded in the polyurethane foam.

The modules can be used in both newly built constructions and thermal insulation of existing buildings.

The system can be installed on walls made of any material (bricks, breeze blocks, concerete blocks etc.)



Technical specyfication

- Availible thicknesses 40, 50, 60 mm
- Joint weight between clinker tiles: 12 mm
- Thermal conductivity λ=0,023 W/mK for 10^{0}C

Dimensiosns

Clinker tile (mm)	Module (mm)	Corner (mm)
240x71	1260x830	246x830
250x65	1310x770	256x770
215x65	1135x770	221x770
290x52	1208x768	246x640
240x65	1260x770	246x770

By using mathermic®, you save:

Energy

Very good insulating of polyurethane, it means, at least 30% lower energy consumption compared to other insulation materials.

Money

Significantly I ower energy bil Is. Durable elevation - no periodic costs of plaster renovation or painting.

Space

Thinner insulation means thinner walls -> smaller footprint -> smaller roof surface -> shallowes recesses = more sunlight at home

Time

Quick installation.
Shorter building time or renovation.

Installation

The modules can be installed easly and quickly.
More information can be found at www.mathermic.eu.

Energy consumption when using the mathermic®

Type of wall	Heat transfer coefficient of the wall Uk	Heat transfer coefficient of the wall Uk + mathermic 60	Heat transfer coefficient of the wall Uk + mathermic 80	Heat transfer coefficient of the wall Uk + mathermic 100
Full cermamic brick, thickness 250 mm	2,02	0,40	0,30	0,21
Hollow cermamic brick, thickness 250 mm	1,62	0,38	0,29	0,20
Cellular concerete block, density 600 kg/m^3, thickness 240 mm	1,03	0,34	0,26	0,19
Annual energy saving owing to the **mathermic®** system on a full ceramic brick wall with thickness of 250 mm and an area of 100 m^2, with median yearly temperature 9,1 ^{0}C (for Berlin).		15423 kWh	16901 kWh	17238 kWh