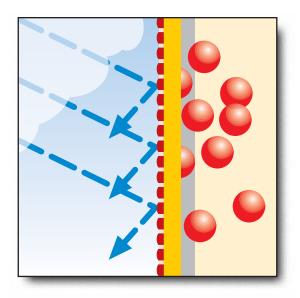


Post-construction, foundation-free insulating clinker Maintenance-free, full thermal insulation for generations to come This characterisation applies equally to both clinker façades and architecture. Clinker façades have been a model of natural beauty and craftsman's skill for hundreds of years. Böger System Clinker unites the benefits of a beautiful look with thermal insulation.



Whether for old or new houses, or even for prefabricated ones. No matter whether you want to modernise or change the look, or just wish to make your house more beautiful. Böger System Clinker is suitable for every type of home.



Böger System Clinker prevents the build-up of dew, condensation and rot. The system is permanently and absolutely maintenance-free, secure against rain and yet still capable of breathing.

During the winter months the heat flowing from inside to outside, and vice-versa in summer, is clearly delayed. The consequently designed combination of real branded clay facing bricks and rigid polyurethane plastic foam insulation makes Böger System Clinker products representative of the ideal physical principle of exterior insulation in construction.

## **Rigid Polyurethane Plastic Foam, the High Performance Insulation Material**

The figure shows a selection of standard construction materials with their heat insulation properties.

	NI SIZ	Construction Material Heat Insulation Properties					
Same Loss of Heat		1.0 cm 1.5 cm 1.7 cm 2.3 cm 2.3 cm 2.3 cm 2.5 cm 4.5 cm	Polystyrol extruder foam Polystyrol extruder foam Mineral wool Polystyrol rigid foam Cellular insulating material Cork Wood-fibre insulation panel Cellular glass Lightweight wood panel				
Same L		6.0 cm 6.5 cm 10.5 cm 24.7 cm 26.5 cm 35.0 cm	Aerated concrete Wood Highly porous brick Vertically perorate clay bricks Strawclay Calcium silicate brick				
		105.3 cm	Concrete				

Following the introduction of the Energy Savings Regulations in Germany (EnEV), applicable from February 1, 2002, the goal is to reduce the consumption of energy used for heating and, as such, the output of CO2 so damaging to the environment even further. Polyurethane rigid plastic foam presently disposes of the lowest thermal conduction capability of any type of insulation material used in construction.

Which is why Böger System Clinker achieves optimum heatinsulation values, even when the thickness of the panel is narrow.

Polyurethane rigid plastic foam has proven itself in practice over decades under extreme climatic conditions and at different locations in the world.

Polyurethane rigid plastic foam is a modern insulating material which fulfils all the required technical and physical standards in construction.

1 cm of Böger polyurethane rigid plastic foam has the same heat-insulation quality as 105.3 cm concrete wall.

#### Heating cost savings of up to 50% with Böger System Clinker.

Compound Construction Material Thickness in kg/m <sup>3</sup>	Wall Thickness in mm	Existing U-Value in W / m² K	U-Value reached with 40 mm Böger System Clinker W / m² K	U-Value reached with 60 mm Böger System Clinker W / m² K	U-Value reached with 80mm Böger System Clinker W / m² K	U-Value reached with 100 mm Böger System Clinker W / m² K
Calcium silicate brick	240	1.44	0.69	0.47	0.36	0.29
1.600	300	1.23	0.64	0.45	0.34	0.28
Porous Concrete Blocks	240	0.58	0.43	0.34	0.27	0.23
PPW 500	300	0.48	0.39	0.31	0.26	0.22
Concrete 2.200	240	3.02	0.92	0.57	0.41	0.32
	300	2.79	0.91	0.56	0.41	0.32
Hollow block brick	240	1.20	0.63	0.44	0.34	0.28
1.400	300	1.02	0.58	0.42	0.33	0.27
Solid Clay Brick	240	1.44	0.69	0.47	0.36	0.29
V-clay brick 1.600	300	1.07	0.59	0.43	0.33	0.27
Poroton brick	240	0.52	0.37	0.30	0.25	0.21
	300	0.42	0.32	0.27	0.23	0.20

Conditions are 2 cm chalk-cement plaster indoor and 2 cm chalk plaster on exterior wall.

**Extract from our Full Clinker Range** 



Böger System Clinker offers a multitude of colours, formats and structures...



**3721 Pear White** (thin format, stretcher bond)



**2240 Scarred Yellow** (thin format, stretcher bond)



2140 New White (thin format, stretcher bond)



**2217 Rustic Yellow** (thin format, stretcher bond)



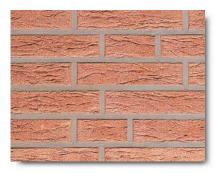
**2116 Rustic New White** (thin format, stretcher bond)



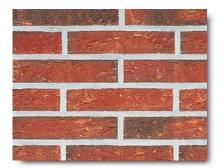
**6287 Old-German, Rustic Yellow** (reich format, stretcher bond)



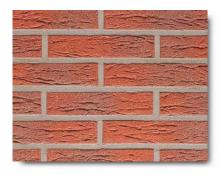
... and completely naturally matching the look of every building style.



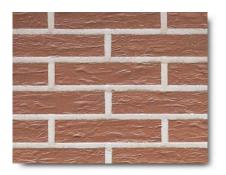
2215 Antique Bronze (thin format, irregular bond)



2337 Antique Red Copped Flame (thin format, stretcher bond)



2335 Colourfully Flamed Red (thin format, stretcher bond)



2540 Scarred Brown (thin format, stretcher bond)



2436 Flamed Antique Red (thin format, stretcher bond)

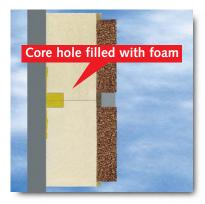


6228 Light Old-German Red (reich format, irregular bond)

### **Quality and Variety**

Special plastic attachments for strong and permanent fitting.

Weight: approx 18 kg Connection elements according to DIN 18164 T1 Thermal conduction capacity group 030 according to DIN 4108 Fire performance B1 according to DIN 4102



A groove for the foam prevents heat bridges forming in the areas where the elements connect. An homogenous and perfectly formed link between all the components is assured by filling the groove with foam.

### We produce Böger System Clinker in:

- more than 30 different clinker colours
- 3 different panel formats: Thin format 112.5 x 69.2 cm Reich format 112.5 x 68.3 cm Normal format 112.5 x 73.7 cm
- 2 masonry bonds: stretcher bond irregular bond

60 mm

40 mm

300

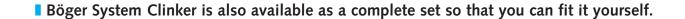
25kg

# And not forgetting our insulation material thicknesses:

100 mm

Produktions GmbH 16259 Bad Freienwalde Z-33.5-625 MPA Bau Hannover

80 mm



## Fitting System Clinker is so Safe and Easy

Building customers and home owners who choose Böger System Clinker are surprised by the mass of economical benefits. For instance: the fact that no foundation is required. Nor a time-consuming and costly substructure. Rents or damage to the plaster are covered up and attachment using the special fitting elements is sure and permanent even when the house walls are of extremely poor quality.



Attaching the aluminium finishing strip



The recessed bricks are glued into the connection points for the individual elements to complete the connection.



Final pointing with mortar is carried out by hand.



After aligning the house corner, attachment is carried out using 4 - 6 system clinker frame dowels. Attaching the panels takes place using approx. 8 bolts and through dowels in the moulded attachment sleeves designed for this purpose, which allow for the constant anchoring of the elements without placing any pressure on the thermal insulation material. Due to the stability of the complete system, screw coupling can be carried out anywhere on the joints.



The prefabricated foam chamber ensures a uniform area coverage, free of thermal stress, through even distribution of the PU foam over all connection surfaces, transitions and irregularities on the panel longitudinal an face sides.



...this is how your house could look.

## Beautiful Living with Böger System Clinker



Afterwards



Before



or a Cle

### SYSTEM CLINKER Specialist Dealer:

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