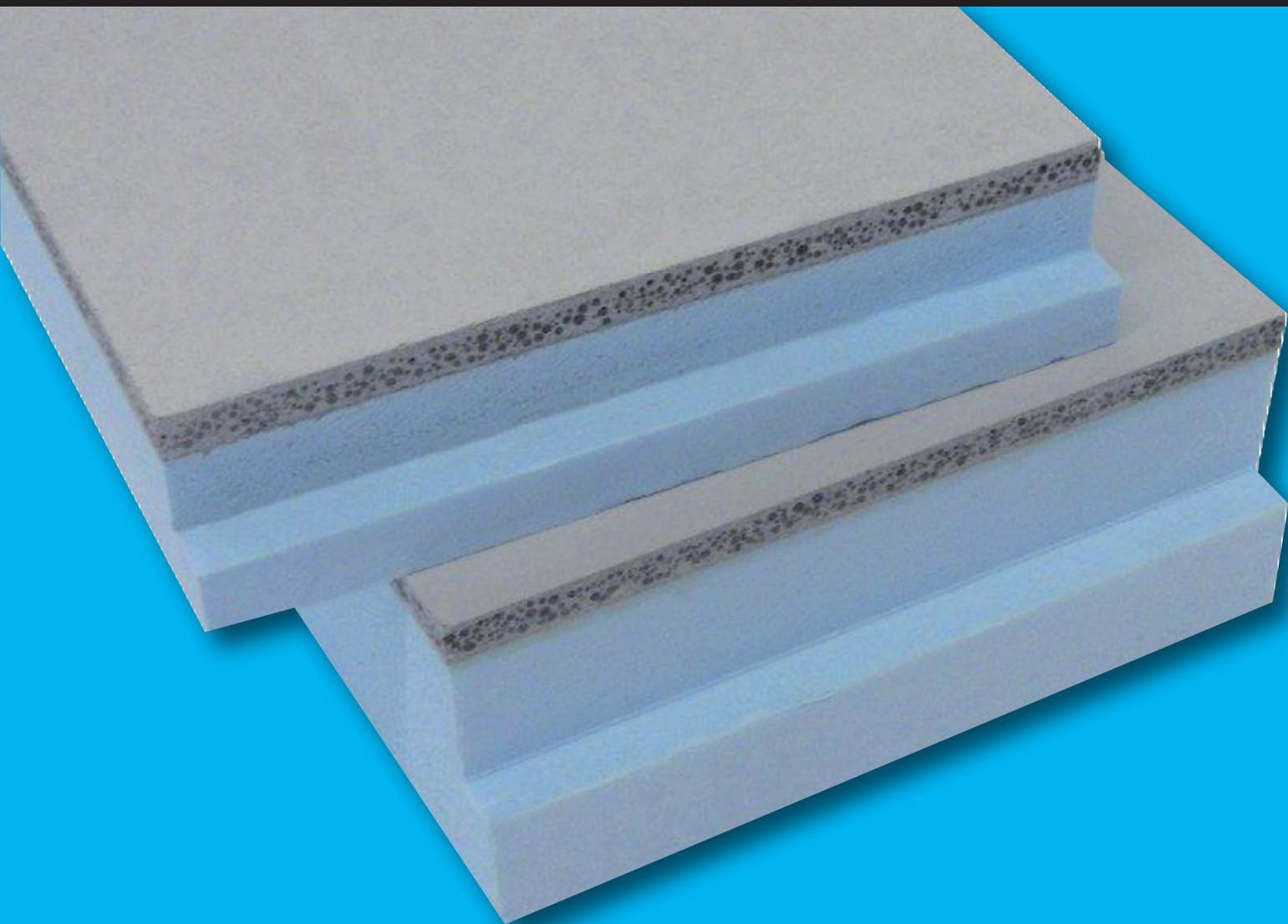


Styrock HR

STYROCK BASE PLINTH



Styrock

Styrock HR

Styrock facade plinth

Styrock parapet

Styrock products

Styrock products stand for an easy-to-install facade cladding at ground level.

Styrock combines top insulating values with the firm looks of concrete. Styrock's thermal properties make it suitable for current and future insulation requirements, even for passive construction. Thanks to the development of new variants by Blauwplaat, Styrock is even more versatile in use.



STYROCK

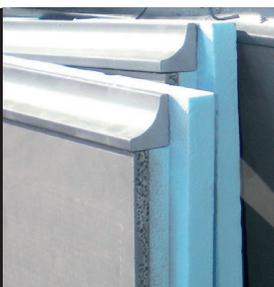
The Styrock base plinth consists of a layer of Styrofoam insulation. This is glued to a 15-mm thick, lightweight concrete board. An R-value of $3.57 \text{ m}^2 \cdot \text{K}/\text{W}$ is achieved already with a base plinth with a thickness of 120 + 15 mm.

In addition to the top layer in cement grey, Styrock is also available in an anthracite colour.



STYROCK HR

Blauwplaat has developed the high-performance Styrock HR base plinth in order to meet the increasing demands in saving energy regulations. The basis of this plinth is formed by the silver-grey Xenergy XPS insulation. This is glued to a 15-mm thick, lightweight concrete board. Thanks to the very low Lambda value, this base plinth can even be used in passive construction. Styrock HR already attains an R-value of $5.04 \text{ m}^2 \cdot \text{K}/\text{W}$ with a thickness of 160 + 15 mm.



STYROCK FACADE PLINTH

In this version the top side of the base plinth is provided with a drip moulding of artificial stone. The Styrock facade plinth thus combines insulation, base plinth and drip moulding in a single element. This element offers the possibility to use an even thicker base plinth, allowing higher insulating values to be achieved without having to make further adjustments to the design details. The Styrock facade strip is also available in an HR version.



STYROCK PARAPET

The base plinth has a 15-mm thick, fixed, lightweight concrete board on two sides. In between there is a layer of Styrofoam insulation. In applications where it remains visible, neither the inner side nor the outer side requires any further finishing. The Styrock parapet also has an HR variant.

Application and use



Door frames

Styrock can be installed directly after the installation of the door frame. This makes the conventional supporting wooden ledge on the underside of the threshold redundant. First apply a double bead of sealant or water-repellant, solvent-free filling adhesive to the base plinth. This prevents the transport of moisture between the threshold and the base plinth. The base plinth is subsequently wedged on and underpinned with mortar.

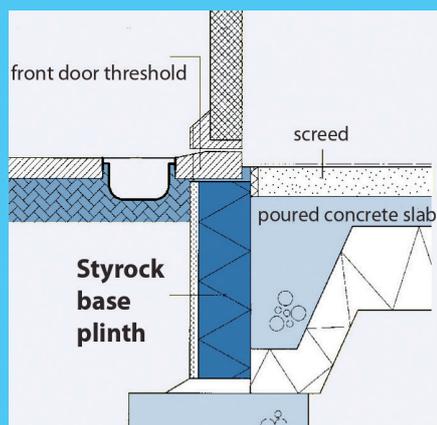


Facade

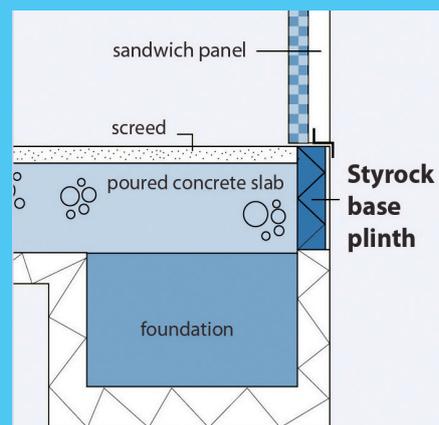
Styrock can be glued under the facade cladding to the construction located behind it using Insta-Stik PU adhesive. Install the Styrock facade plinth in such a way that it lies flush with the facade cladding above it.

Shuttering

Styrock is ideally suited to use as permanent shuttering. It is important here to position Styrock so that it is absolutely flush, and that all elements are well supported. In order to shutter a floor surface where the shuttering is higher than the floor, a Styrock parapet element clad on both sides is the ideal solution.



Styrock in residential buildings



Styrock in industrial buildings

Technical data

Styrock, Styrock HR, Styrock facade strip and Styrock parapet

Styrock consists of a layer of Styrofoam (blue) or Xenergy (sliver-grey) and a 15 mm thick lightweight concrete slab.

Insulation	Styrofoam or Xenergy
Thermal conductivity (ld) ATG/H 96/697	0.032-0.034 W/mK
Compressive strength (EN 826):	250 kPa
Long-term compressive strength (max. 2% deformation, EN 1606)	> 80 kN/m ²
Water absorption (28 days for a whole plate EN 12087)	0.5 % by vol
Capillarity	none
μ-value (in relation to the thickness, EN12086)	120-240
Coefficient of linear expansion	0.07 mm/mK
Temperature resistance	-50/+75°C
Fire behaviour (NEN 6065)	Class 2
Frost resistance (approval) after 300 cycles	no damage

Top layer	Lightweight concrete board
Aggregate (expanded clay)	1-3 mm
Building code (NEN 6064)	Incombustible
Fire behaviour (DIN 4102)	A1 (incombustible)
Density	approx. 990 kg/m ³
Coefficient of linear expansion	0.011 mm/mK
Water absorption	approx. 18%
Bending strength at fracture	approx. 200 Nm/m
Thickness and length tolerances	± 1 mm
Colour	cement grey, anthracite, other colours on enquiry

Standard Styrock dimensions

Type	Standard dimensions	R-values
SR 1505	1200 x 150 x 50 + 15 mm	1.55 m ² .K/W
SR 1510	1200 x 150 x 100 + 15 mm	2.98 m ² .K/W
SR 2005	1200 x 200 x 50 + 15 mm	1.55 m ² .K/W
SR 2010	1200 x 200 x 100 + 15 mm	2.98 m ² .K/W
SR 3005	1200 x 300 x 50 + 15 mm	1.55 m ² .K/W
SR 3010	1200 x 300 x 100 + 15 mm	2.98 m ² .K/W

Further dimensions

Optionally with a max. length of 3,000 mm and a max. width of 1,220 mm. Minimum thickness = 20 + 15 mm (can be increased in steps of 10 mm).

Thickness (mm)	R-values
20 + 15 mm	0.64 m ² .K/W
40 + 15 mm	1.24 m ² .K/W
60 + 15 mm	1.86 m ² .K/W
80 + 15 mm	2.46 m ² .K/W
120 + 15 mm	3.57 m ² .K/W
160 + 15 mm	5.04 m ² .K/W
320 + 15 mm	10.04 m ² .K/W

Advantages

Styrock, the best solution for energy savings at ground level

STYROCK

- Top insulating values
- High compressive strength
- Simple installation thanks to easy, simple and fast cutting to size with hand saw or circular saw/jig saw
- Saves costs
- Solid concrete look and colour of the top layer makes processing unnecessary
- Insensitive to moisture and resistant to frost
- 2-year guarantee



STYROCK HR

- + HR: Huge saving of space due to thinner base plinth
- + HR: Up to 20% higher performance due to better insulation values



STYROCK FACADE PLINTH

- + Front side is not recessed, but is flush with the facade cladding
- + Due to the tapering on the top side, a thicker base plinth fits in the existing planning. A higher insulation value is thus achieved.



STYROCK PARAPET

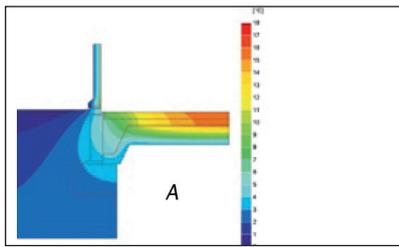
- + Both the inner side and the outer side are directly insulated and clad.
- + The floor can be laid directly against the parapet and power-trowelled.



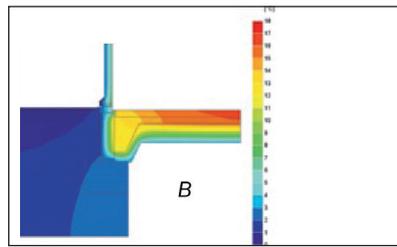
Quality and environment

Styrock (thickness 100 + 15 mm) leads to an 86% reduction in heat loss from the structure. The engineering office Physibel has calculated the thermal effect of Styrock and has come to the conclusion that Styrock achieves much better performances than a non-insulated base plinth. These performances make Styrock an outstanding solution in the construction of energy-saving, energy-neutral and passive houses.

- Styrock contains neither CFCs nor HCFCs.
- The top layer has an Ecolabel.
- Styrofoam is certified with the evaluation 'silver' Cradle-to-Cradle.
- Semi-finished products and end products are manufactured in accordance with ISO 14001.



Construction with non-insulated base plinth



Construction with Styrock (base plinth insulated)



ABOUT BLAUWPLAAT

Blauwplaat is an experienced specialist supplier of top insulating solutions that effectively contribute to the saving of energy. Blauwplaat has a vision of a better, cleaner and more sustainable future for coming generations.

Consulting, bespoke manufacturing and contact

Would you like advice on the use of Styrock or a bespoke solution, or would you like to learn more about the technical data? Then just contact us. Application guidelines and building specifications can be downloaded on our website www.styrock.eu.

Blauwplaat

Munsterstraat 12 | 7418 EV Deventer

Phone: +31 (0) 570 63 44 74 | Fax: +31 (0) 570 63 31 35

info@blauwplaat.nl