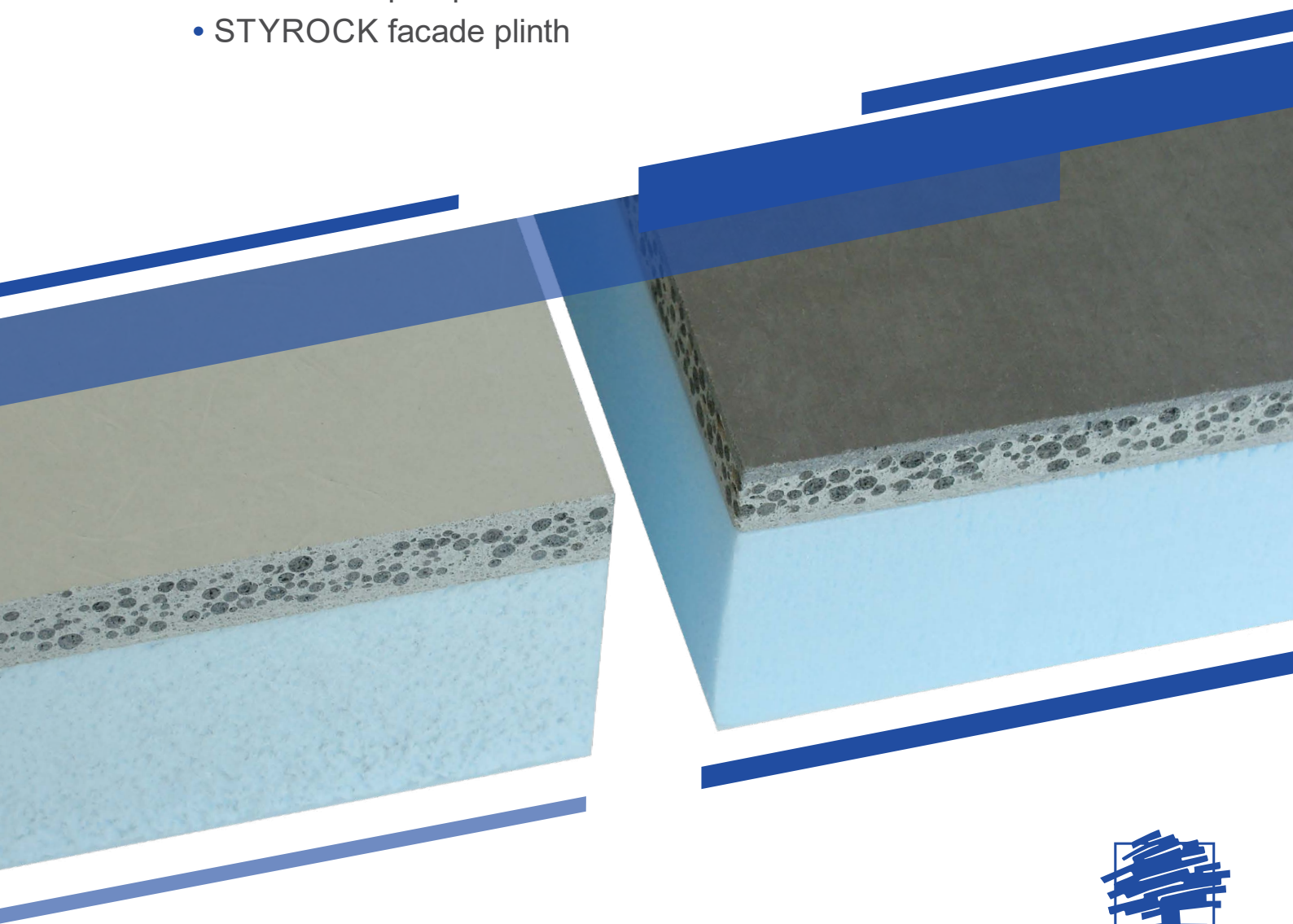


STYROCK™

Lightweight insulated base plinth

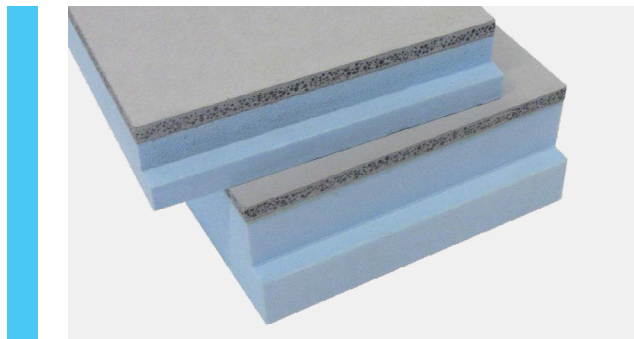
- STYROCK
- STYROCK HR
- STYROCK parapet
- STYROCK facade plinth



STYROCK™ products

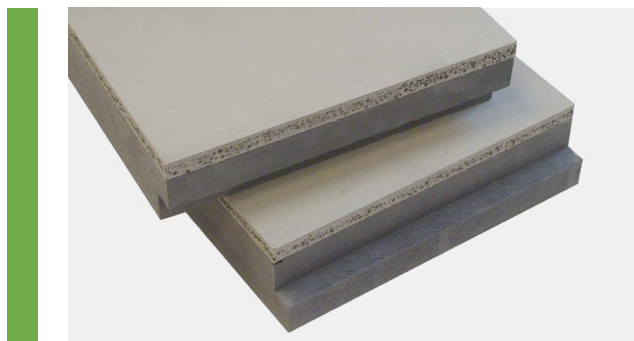
STYROCK products stand for an easy-to-install facade cladding at ground level.

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 STYROCK is even more versatile in use.



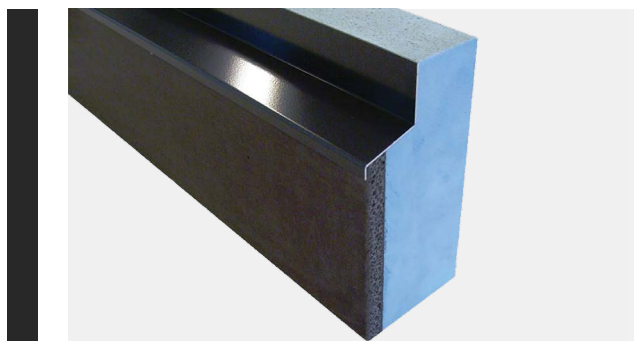
STYROCK

The Styrock base plinth consists of a layer of **RAVATHERM XPS** insulation. This is glued to a 15 mm thick, lightweight concrete board. An R-value of 3.98 m².K/W is achieved already with a base plinth with a thickness of 130 + 15 mm. In addition to the top layer in cement grey, **STYROCK** is also available in an anthracite colour.



STYROCK HR

Ravago Building Solutions has developed the high-performance **STYROCK HR** base plinth in order to meet the increasing demands in energy saving regulations. The basis of this plinth is formed by the silver-grey **RAVATHERM 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 4.87 m². K/W with a thickness of 140 + 15 mm.



STYROCK FACADE PLINTH

In this version the top side of the base plinth is provided with a drip moulding of aluminium or 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 plinth 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 **RAVATHERM XPS** 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 transfer of moisture between the threshold and the base plinth. The base plinth is subsequently wedged on and underpinned with mortar.



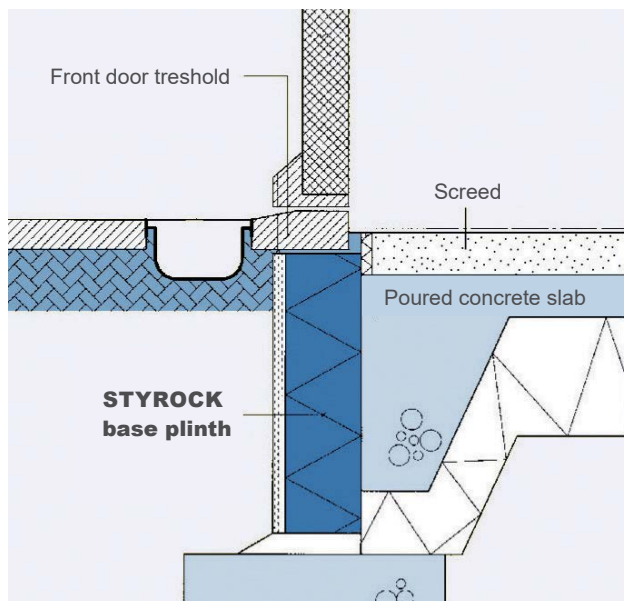
FACADE

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 aligned with the facade cladding above it.

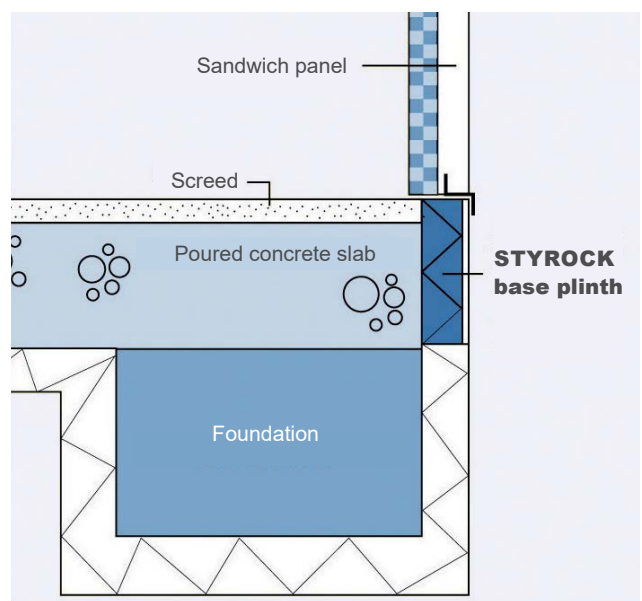


PERMANENT FORMWORK

STYROCK is a perfect solution for permanent formwork. In this application it is important to accurately install the **STYROCK** elements in one line and to properly support all elements. The **STYROCK** parapet with two-sided finishing is designed for special applications, f.e. when the formwork is higher than the floor.



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 RAVATHERM XPS insulation and a 15 mm thick lightweight concrete slab.

| Insulation | Ravatherm XPS |
|---|------------------------|
| Thermal conductivity (ld) ATG/H 96/697 | 0,029 - 0,035 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 or anthracite |

STYROCK dimensions on stock

| Type | Cement grey |
|----------|--------------------------|
| SR 1505 | 1200 × 150 × 50 + 15 mm |
| SR 1510 | 1200 × 150 × 100 + 15 mm |
| SR 2005 | 1200 × 200 × 50 + 15 mm |
| SR 2010 | 1200 × 200 × 100 + 15 mm |
| SR 3005 | 1200 × 300 × 50 + 15 mm |
| SR 3010 | 1200 × 300 × 100 + 15mm |
| SR 4005 | 1220 × 400 × 50 + 15 mm |
| SR 4010 | 1220 × 400 × 100 + 15 mm |
| SR 5005 | 1220 × 500 × 50 + 15 mm |
| SR 5010 | 1220 × 500 × 100 + 15 mm |
| Type | Anthracite |
| SRA 3005 | 1220 × 300 × 50 + 15 mm |
| SRA 3010 | 1220 × 300 × 100 + 15 mm |
| SRA 4005 | 1220 × 400 × 50 + 15 mm |
| SRA 4010 | 1220 × 400 × 100 + 15 mm |
| SRA 5005 | 1220 × 500 × 50 + 15 mm |
| SRA 5010 | 1220 × 500 × 100 + 15 mm |

Made-to-measure STYROCK dimensions

| Thickness (mm) | R-values Styrock | R-values Styrock HR |
|----------------|--------------------------|---------------------------|
| 20 + 15 mm | 0,64 m ² .K/W | - |
| 30 + 15 mm | 0,95 m ² .K/W | - |
| 40 + 15 mm | 1,25 m ² .K/W | 1,42 m ² .K/W |
| 50 + 15 mm | 1,55 m ² .K/W | - |
| 60 + 15 mm | 1,86 m ² .K/W | 2,11 m ² .K/W |
| 70 + 15 mm | 2,16 m ² .K/W | - |
| 80 + 15 mm | 2,46 m ² .K/W | 2,80 m ² .K/W |
| 90 + 15 mm | 2,76 m ² .K/W | - |
| 100 + 15 mm | 2,98 m ² .K/W | 3,49 m ² .K/W |
| 110 + 15 mm | 3,37 m ² .K/W | - |
| 120 + 15 mm | 3,57 m ² .K/W | 4,18 m ² .K/W |
| 130 + 15 mm | 3,98 m ² .K/W | - |
| 140 + 15 mm | 4,28 m ² .K/W | 4,87 m ² .K/W |
| 150 + 15 mm | 4,46 m ² .K/W | - |
| 160 + 15 mm | 4,89 m ² .K/W | 5,55 m ² .K/W |
| | | |
| 300 + 15 mm | 8,64 m ² .K/W | 10,38 m ² .K/W |

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).

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



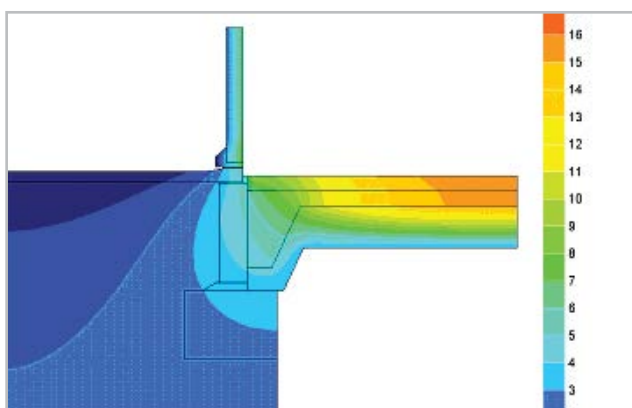
STYROCK PARAPET

- + 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

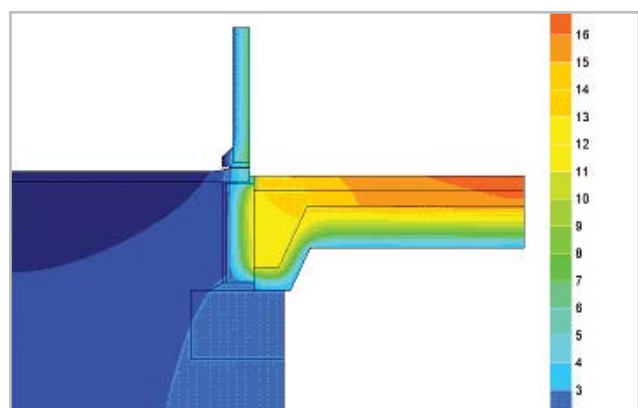
Quality and environment

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.
- Semi-finished products and end products are manufactured in accordance with ISO 14001.



Construction with non-insulated base plinth



Construction with STYROCK (insulated base plinth)



Production and distribution:

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