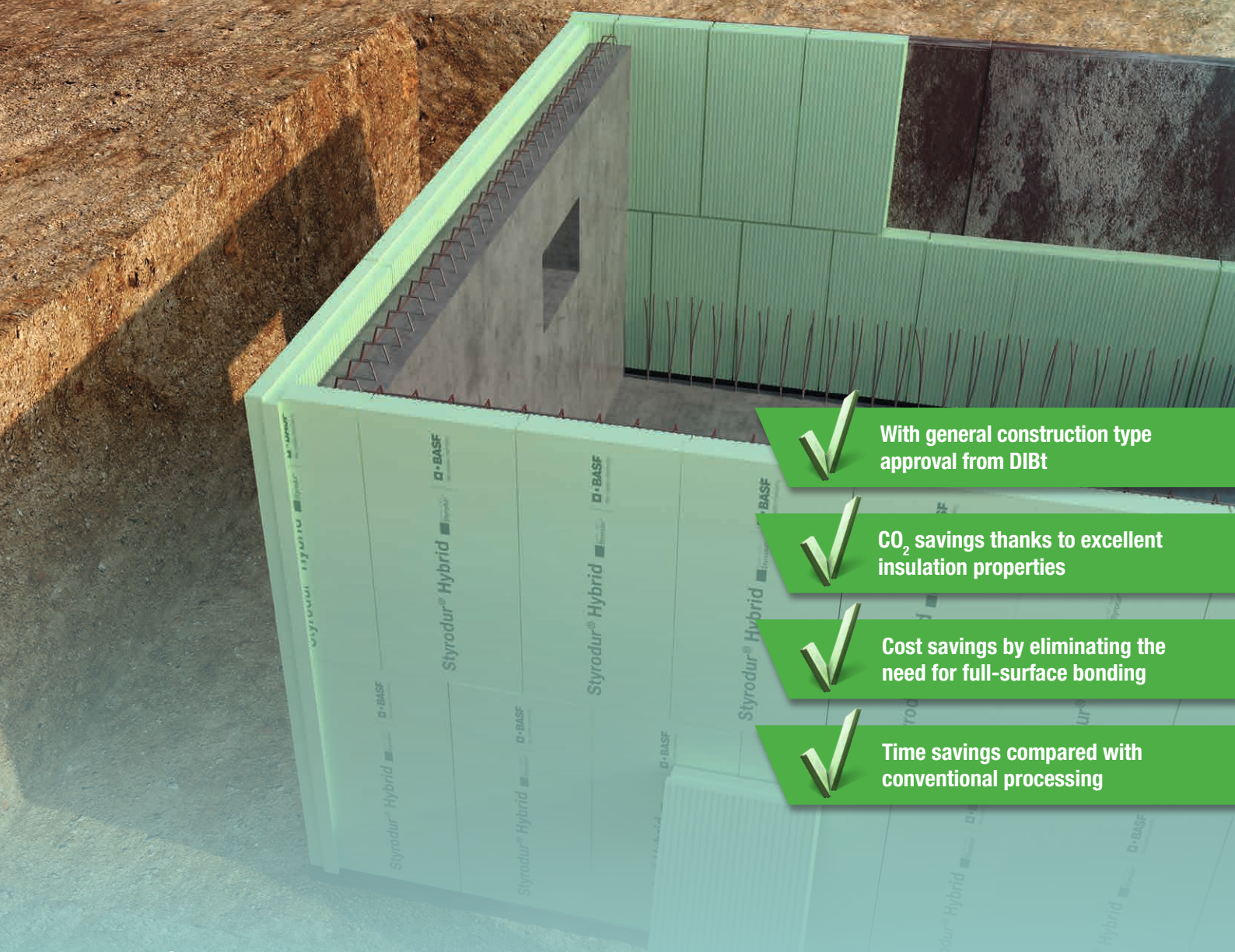
Safe. Strong.
Styrodur®

BASF
We create chemistry

Styrodur® Hybrid

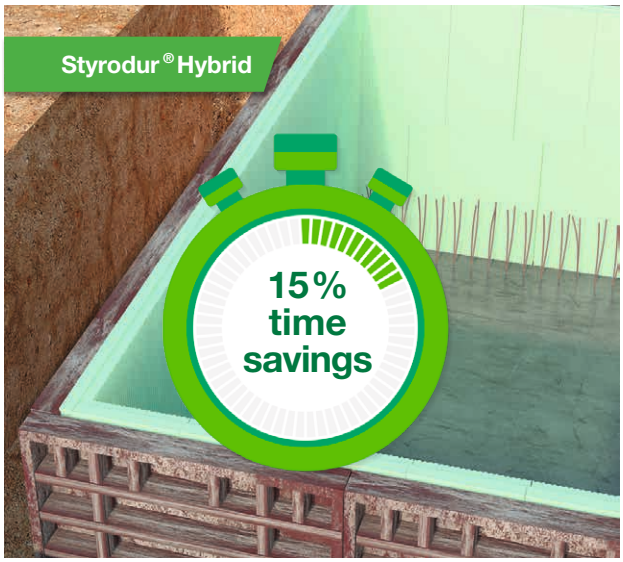
The thermal insulation board with longitudinal grooves on one side and shiplap for simple and clean processing



- With general construction type approval from DIBt
- CO_2 savings thanks to excellent insulation properties
- Cost savings by eliminating the need for full-surface bonding
- Time savings compared with conventional processing

Styrodur® Hybrid is the first XPS board with general construction type approval as a perimeter insulation system for concrete pouring in combination with waterproof concrete exterior basement walls. Styrodur® Hybrid is an advanced version of the green insulation material made of extruded polystyrene foam.

Innovation



Basement with Styrodur® Hybrid insulation boards
40 m + 10 m × 2.5 m basement height = 125 m² wall area
approx. 35 man-hours for installation = approx. 3.5 m² per man-hour

Basement with conventional XPS insulation boards
30 m + 10 m × 2.5 m basement height = 100 m² wall area
approx. 33 man-hours for installation = approx. 3 m² per man-hour

Conclusion:

The use of Styrodur® Hybrid allows time savings of **approx. 15%** and **adhesive savings of more than 90%** compared with the use of conventional XPS insulation boards!*

Tested and approved by the German Institute for Building Technology (DIBt)

Allgemeine Bauartgenehmigung

Deutsches Institut für Bautechnik

Zulassungs- und Genehmigungsstelle für Bauprodukte und Bauarten

Datum: 29.11.2021 Geschäftszeichen: III 11-1.23.33-14/21

Nummer: Z-23.33-2098

Geltungsdauer vom: 26. November 2021 bis: 26. November 2026

Antragsteller: BASF SE Carl-Bosch-Straße 38 67056 Ludwigshafen am Rhein

Gegenstand dieses Bescheides: Perimeterdämmsystem im Verbund mit wasserundurchlässigen Beton-Kelleraußenwänden unter Verwendung von extrudergeschäumten Polystyrol-Hartschaumplatten "Styrodur Hybrid"

Der oben genannte Regelungsgegenstand wird hiermit allgemein bauaufsichtlich genehmigt. Dieser Bescheid umfasst sechs Seiten und eine Anlage.

DIBt

Properties	Unit	Designation code according to DIN EN 13164300	Hybrid SL	Hybrid S
Edge profile				
Surface			smooth, grooved	smooth, grooved
Dimensions	mm		2,500 × 615	1,265 × 615
Thickness	mm		120	100, 120, 140
Compressive strength at 10% deformation[2)]	kPa	CS (10\Y)	300	300
Adhesive strength on concrete	kPa	TR 200	-	-
Dimensional stability 70°C; 90% r.h.	%	DS (70,90)	≤5%	≤5%
Deformation behaviour: load 40 kPa; 70°C	%	DLT (2)5	≤5%	≤5%
Linear coefficient of thermal expansion Longitudinal Transverse	mm/(m·K)	- -	0.06 0.06	0.06 0.06
Fire behaviour	Euroclass		E	E
Water absorption with long-term immersion	% by vol.	WL (T)	0.7	0.7
Water absorption in diffusion test	% by vol.	WL (V)	3	3
Water vapour diffusion resistance factor		MU	150–50	150–50
Water absorption after freeze-thaw cycle	% by vol.	FTCD	1	1
Application temperature limit	°C	-	75	75

*Calculation is based on a sample building site. The time savings obtained may differ for other building sites.
Styrodur® is a registered trademark of BASF SE.

E-CPB/FM 2205 BE Styrodur® Hybrid Flyer