

Insulated Panels
CEME Division

ems Thermowand EH QuadCore® Product Data Sheet



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QuadCore®
TECHNOLOGY

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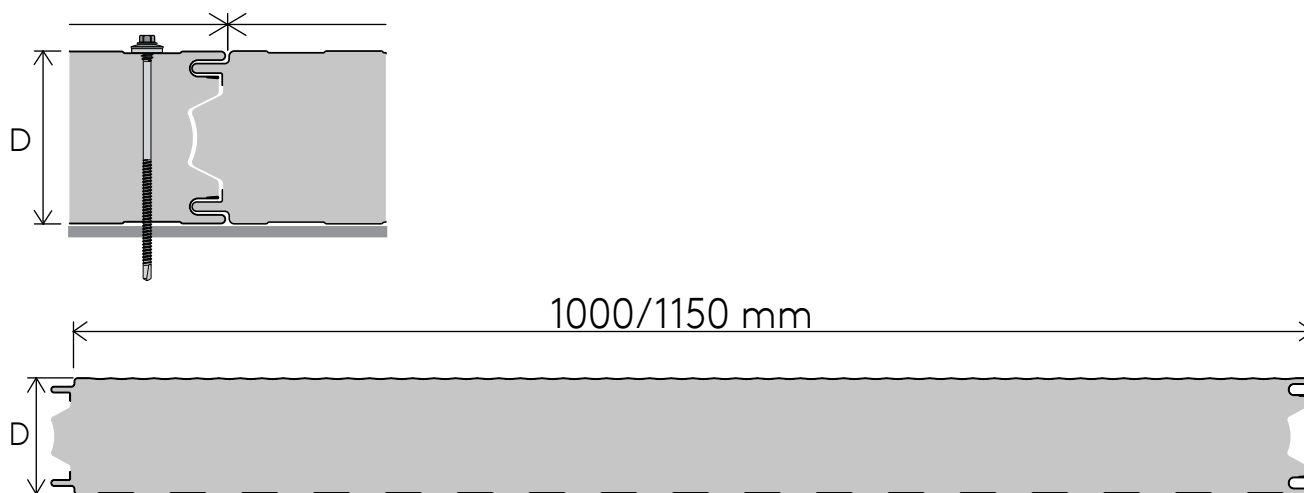
Product Overview

Wall sandwich panel with QuadCore® insulation core and visible fixing. The ems Thermowand EH QuadCore® panel can be installed on both external and internal walls and as a ceiling panel in all types of buildings, especially those with controlled internal temperatures. The QuadCore® insulation core provides very good thermal insulation, high fire performance and low global warming potential.

Application

The ems Thermowand EH QuadCore® Wall Panel with visible fixing can be installed vertically or horizontally as an external or partition wall and also ceiling in all types of buildings, particularly in those buildings where high thermal insulation is required.

Panel Cross Section



Technical Parameters

ems Thermowand EH QuadCore® Wall Panel has been tested and approved to comply with EN 14509:2013.

Module width / Cover width [mm]	Core Thickness [mm]	Mass	Thermal Transmittance (U-value) acc. EN 14509:2013 [W/m²·K]	Thermal Transmittance (U-value) acc. EN ISO 6946:2017 [W/m²·K]	GWP for modules A1-A3	GWP for modules A-C
1,150/1,150	100	13.14 kg/m²	0.19	0.19	35.2 kg CO2-eq./m²	42.8 kg CO2-eq./m²
	120	13.9 kg/m²	0.16	0.16	35.4 kg CO2-eq./m²	44.2 kg CO2-eq./m²
	150	15.04 kg/m²	0.13	0.13	38.7 kg CO2-eq./m²	49.5 kg CO2-eq./m²
	170	15.8 kg/m²	0.11	0.11	40.3 kg CO2-eq./m²	52.3 kg CO2-eq./m²
	200	16.94 kg/m²	0.10	0.09	44.1 kg CO2-eq./m²	58.3 kg CO2-eq./m²

The technical data is valid for a face thickness of Ext / Int. 0.60 / 0.50 mm.

Dimensions

Length

Shorter lengths (non-standard) [mm]	550-2499
Standard lengths [mm]	2500-15000
Longer lengths (non-standard)	

Additional costs and transport restrictions may apply for non-standard lengths.

Width

The standard module width is 1,150 mm and cover width 1,150 mm

14509:2013.

Length tolerance	L≤3m, -	5 mm
Length tolerance	L≤3m, +	5 mm
Length tolerance	L>3m, -	10 mm
Length tolerance	L>3m, +	10 mm
Cover width tolerance	-	2 mm
Cover width tolerance	+	2 mm
Thickness tolerance	-	2 mm
Thickness tolerance	+	2 mm
Thickness tolerance	D>100mm, -	2 %
Thickness tolerance	D>100mm, +	2 %
Deviation from squareness		0.006 x w
Deviation from straightness (on length)		1mm/m, maximum 5 mm/m

Product Tolerances

Product tolerances are measured according to the standard EN

Materials

Insulation Core

QuadCore® Technology insulation core with a Thermal Conductivity (λ) of 0.019 W/m·K according to EN 14509:2013.

External facing

The standard thicknesses of the coil coated steel sheet is 0,6 mm. On request also other steel sheet thicknesses are available. Available coatings: Spectrum®, PVDF, PES25. Optional: Foodsafe (150 μ m) and the special coating FS3000 and FS4000 for internal wall applications in food processing.

Internal facing

The standard thicknesses of the coil coated steel sheet is 0.5 mm. On request also other steel sheet thicknesses are available. Available coatings: PEI15, PES25, Foodsafe. Optional: Foodsafe (150 μ m) and the special coating FS3000 and FS4000 for use in food processing.

Seals

The ems Thermowand EH QuadCore® coldstore panel is not supplied with sealing tape in the longitudinal joint as standard

Profilings

The available profilings can be found in the corresponding profiling table further back in the document.

Colours

The available colours can be found in the "Colour Guide" brochure.

Fire Performance

ems Thermowand EH QuadCore® Wall Panel has been tested and approved to comply with EN 14509:2013.

Product technical specifications relating to fire classification are available from our Technical Support.

FM Approved product specifications are available in the FM Approval Guide and from our Technical Support.

Module width/ Cover width [mm] / [mm]	Core Thickness [mm]	Reaction to Fire
1,150/1,150	100	B-s1, d0
	120	B-s1, d0
	150	B-s1, d0
	170	B-s1, d0
	200	B-s1, d0

Mechanical Resistance

For span load tables, please contact our Technical Support.

Environmental Performance

Facilities located in Lipsko generate renewable energy onsite which contributes to that sites energy mix. Ems by Kingspan Insulated Panels source steel with 15-25% recycled content. Kingspan Insulated Panels directly contribute to BREEAM® and

LEED® credits.

ems Thermowand EH QuadCore® Wall Panel has Environmental Product Declarations in accordance with the requirements of EN 15804:2012+A2:2019/AC:2021.

Production Standard

ems by Kingspan Insulated Panels apply to the European Standard EN 14509:2013 Self-supporting double skin metal faced insulating panels.

Quality

ems by Kingspan Insulated Panels are manufactured to rigorous quality control standards, complying with ISO 9001:2015 Quality management system standards, ensuring long-term reliability and durability.

The panels are also manufactured under Environmental management system EN ISO 14001:2015, Energy management system EN ISO 50001:2018, and Occupational health and safety certification EN ISO 45001:2018.

ems Thermowand EH QuadCore® Wall Panel is CE marked to EN 14509:2013.

Packing

Standard Packing - Road Transportation

ems Thermowand EH QuadCore® Wall Panel is stacked weather side to internal side. The top, bottom, sides and ends are protected with foam and timber packing and the entire palette is wrapped with protection film.

The number of panels in a pack depends on panel thickness and length. Quantities are reduced for exceptionally long panels.

Core Thickness [mm]	100	120	150	170	200
Number of Panels	11	9	7	6	5

Delivery

All deliveries are by road transport to a project site unless otherwise indicated. Unloading is the responsibility of the customer.

Sea Freight

Full timber crate packs are available at extra cost for projects requiring sea freight delivery. Alternatively steel containers can be used. Special loading charges apply.

Site Storage & Installation

For site storage and installation instructions please refer to the respective brochure or contact our Technical Support.

Guarantee

ems by Kingspan guarantees are assessed individually for each project, depending in particular on the aggressiveness of the environment and the type of surface treatment chosen.

Profiles

Profile	External	Internal
F - Flat		
M - Micro		
Q - Minibox		
D - Deep		

Contact Details

ems®

Kingspan GmbH

Am Schornacker 2 | 46485 Wesel | Germany

T: +49 281 95 25 0-78 (Germany)

T: +49 (0) 4361 5112-31, -33 (Export)

F: +49 281 95 25 0-50

E: info@ems-bau.com

www.ems-bau.com (Export)



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