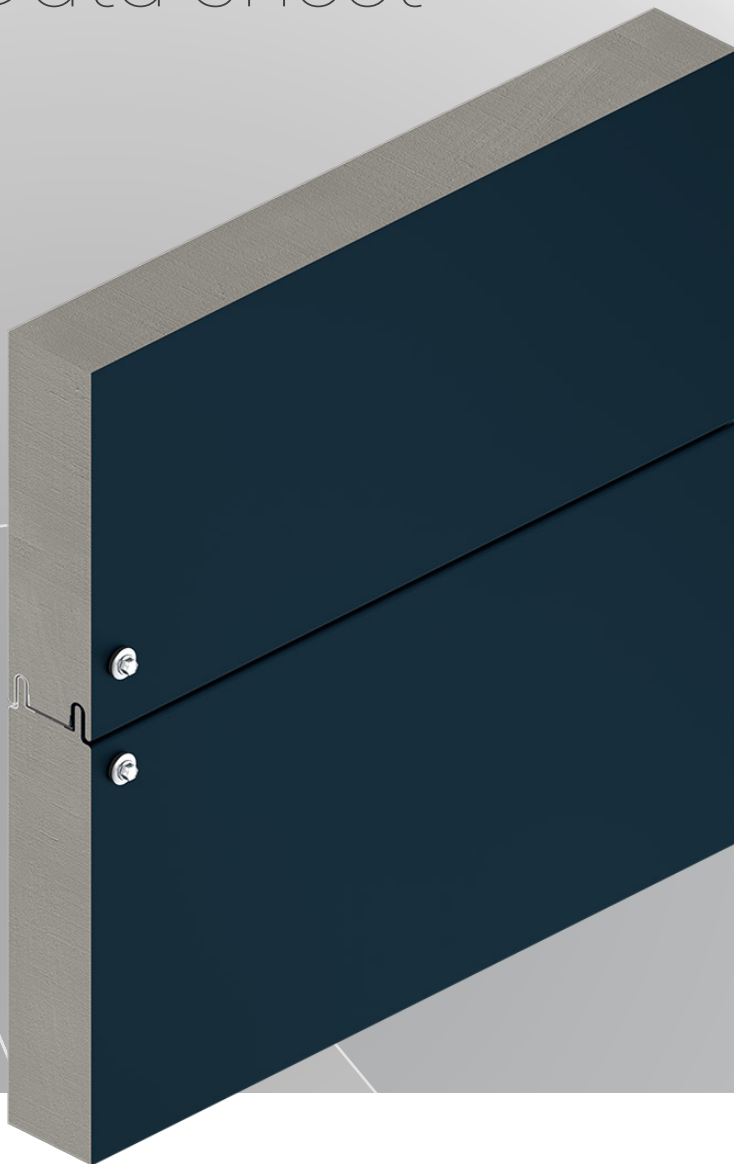


Insulated Panels
CEME Division

ems Thermowand ET QuadCore® Product Data Sheet



POWERED BY
QuadCore®
TECHNOLOGY

ems®
ISOLIERPANEELLE

Product Overview

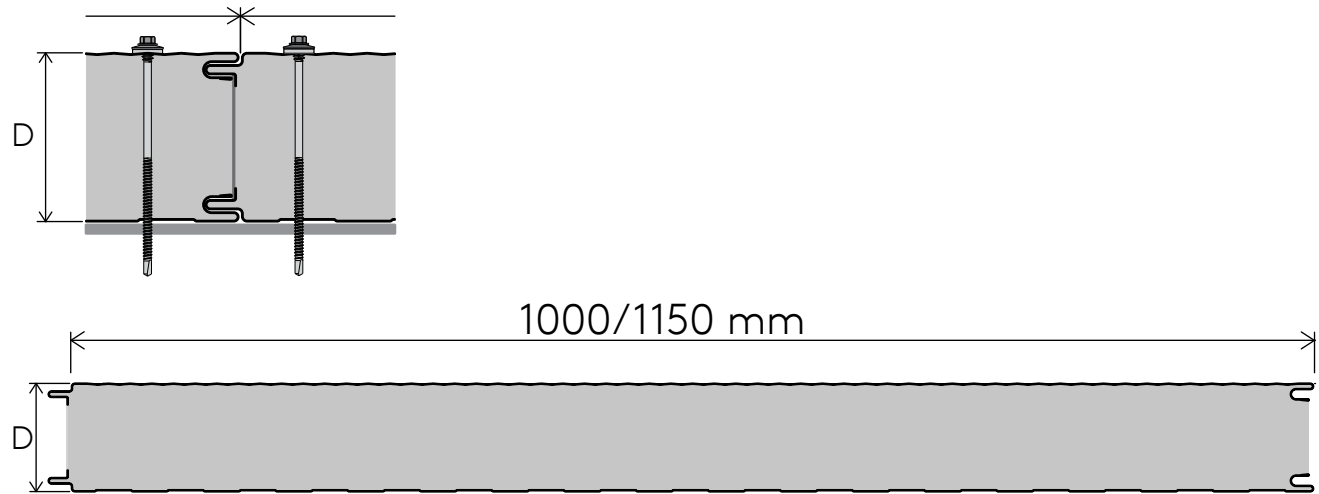
Wall sandwich panel with QuadCore® insulation core and visible fixing. Suitable for all types of buildings as a lightweight cladding for external walls, partitions and ceilings. Can be installed both horizontally and vertically. The QuadCore® insulation core provides very good thermal insulation and the side joints of the panel are additionally equipped with a factory-applied anti-condensation tape. Available in a range of external profiling, colour and coating options. ems Thermowand ET QuadCore® panel is therefore ideal for use in temperature-controlled and hygienically safe environments such as in food processing, cold storage and fresh food logistics, in biotechnology and in the pharmaceutical industry.

Application

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

Each application should be verified against individual project requirements.

Panel Cross Section



Technical Parameters

ems Thermowand ET QuadCore® 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	40	10.86 kg/m²	0.51	0.45	27.1 kg CO2-eq./m²	30.7 kg CO2-eq./m²
	60	11.62 kg/m²	0.33	0.31	28.9 kg CO2-eq./m²	33.7 kg CO2-eq./m²
	80	12.38 kg/m²	0.24	0.23	31.1 kg CO2-eq./m²	37.2 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]	550-3099
Standard lengths [mm]	3100-15000
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.

Product Tolerances

Product tolerances are measured according to the standard EN 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

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 0,60 mm. On request also other steel sheet thicknesses are available. Available coatings: Spectrum®, PVDF, PES25. Optional: Foodsafe (150 µm) and the special coating FS3000 for use 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 for applications with increased hygiene requirements. The FS3000 special coatings for use in food processing are also available as an option.

Seals

Factory applied side joint seals. Side joints have a factory applied seals to automatically seal the longitudinal joint between panels.

Profilings

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

Colours

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

Fire Performance

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

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

FM Approved product specifications are available in the FM

Approval Guide and from Kingspan Technical Support.

Module width/ Cover width [mm]/[mm]	Core Thickness [mm]	Reaction to Fire
1,150/1,150	40	B-s2, d0
	60	B-s2, d0
	80	B-s2, d0

Mechanical Resistance

For load / span tables, please contact our Technical Support.

Environmental Performance

Our on-site production facilities generate renewable energy on site, contributing to the site's energy mix. Kingspan Insulated Panels procures steel made from 15-25% recycled material. Kingspan Insulated Panels contribute directly to DGNB, BREEAM® and LEED® points. ems Thermowand ET QuadCore® panel has product specific EPD (Environmental Product Declaration) 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 systems standards, ensuring long term reliability and durability.

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

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

Packing

Standard Packing - Road Transportation

ems Thermowand ET QuadCore® 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]	40	60	80
Number of Panels	18	12	14

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 Kingspan Technical Support.

Guarantee

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 (0) 281-95 250-0

F: +49 281 95 25 0-50

E: info@ems-bau.com

www.ems-bau.com



For the latest product details, please always refer to the latest version of this data sheet by scanning the QR code or by clicking on this [Link](#).

The information provided in this datasheet is accurate as of its date of publication and represents our commitment to quality and transparency. However, Kingspan Insulated Panels reserve the right to modify product specifications without prior notice to reflect advancements or improvements. For applications not explicitly covered within this datasheet, consultation with our Technical Advisory Service is strongly advised to ensure the product meets your specific requirements. Customer are responsible for verifying the product's suitability for their particular needs and for ensuring compliance with all applicable laws and regulations. We reserve the right to update this datasheet, and any other informational materials, at our discretion and without notice. For the latest information, please visit: www.ems-bau.com
QuadCore®, Hoesch® and ems® are all Registered trademarks of Kingspan Group plc in United Kingdom, Ireland, and other Countries. All rights reserved.

