

Cold store panels  
ems by Kingspan

# ems-isolier<sup>®</sup> QuadCore EMV Datasheet



POWERED BY  
**QuadCore**<sup>®</sup>  
TECHNOLOGY

**ems**<sup>®</sup>  
ISOLIERPANEEL

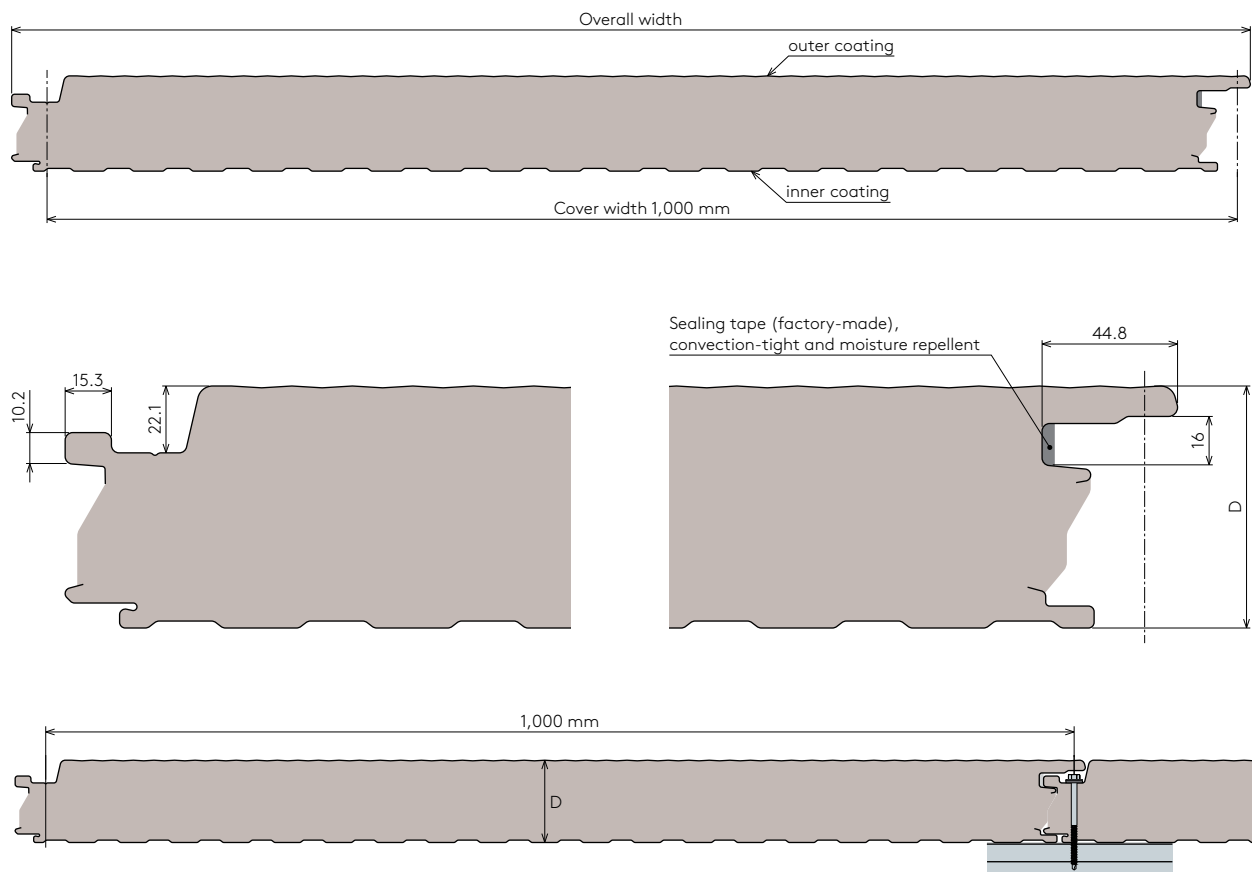
# Technical information

## Description

The architectural wall panel ems-isolier® QuadCore EMV with QuadCore® 1 insulation core is our concealed screwed element from the Oldenburg/Holstein manufacturing plant and specifically designed for the toughest requirements in temperature-controlled buildings.

## Application

Thanks to the good insulation properties of the innovative insulation core, ems-isolier® QuadCore EMV is particularly suitable for energy-saving and future-proof building solutions such as food processing, cold store and fresh food logistics, cleanrooms, and the biotechnology and pharmaceutical industry.



## Dimensions, weight, and insulation performance

Overall width [mm]	1,000			
Thickness of insulation core [mm]	80	100	120	150
Weight [kg/m <sup>2</sup> ] (for $t_{nom1} = 0.60$ mm and $t_{nom2} = 0.50$ mm)	12.9	13.6	14.4	15.5
U [W/m <sup>2</sup> K] as per EN 14509 (2013-12) with effect of joint	0.26	0.20	0.16	0.13
R <sub>w</sub> [dB]	25			
Standard/max. delivery length [m]	13.5/20.0 on request			

## Insulation core

The ems-isolier® QuadCore EMV is equipped with the QuadCore® 1 high-performance insulation core. The insulation core is harmless in terms of health, has zero ozone depletion potential, and is free of CFCs/HFCs.

## Fire protection

ems-isolier® QuadCore EMV was tested for fire behaviour and fire resistance as per the national and European technical provisions and standards.

### Fire behaviour:

The product is classified as having fire behaviour B-s2,d0 as per EN 13501-1.

The insulation cores do not contribute to the spread of fire, and are self-extinguishing.

### Fire resistance:

Depends on element thickness and cover layer thickness. You will find the current fire resistance classes on the Internet at: <http://www.ems-bau.com/downloads/>

## Tolerances

The tolerances of ems-isolier® QuadCore EMV fulfil the requirements of the European Sandwich standard EN 14509:2013.

## Technical determination

ems-isolier® QuadCore EMV fulfils the requirements of the European Sandwich standard EN 14509:2013 Self-supporting double skin metal faced insulating panels – factory made products – specifications.

## Material and quality

Cover layers: Quality flat sheet metal with metallic corrosion protection coating, steel quality S280GD – various surface finishes on request.

Kingspan ems brand sales panels are manufactured from high-quality primary materials subject to permanent quality control in state-of-the art production facilities. They fulfil the requirements of ISO 9001:2015 and of EN ISO 14001:2015.

## Guarantee

Kingspan ems brand sales provide a guarantee of up to 25 years on the thermal performance and a project-related guarantee on the organic coating of the external steel top layer, depending on the actual application.

## Environmental compatibility

Sandwich elements with a QuadCore® insulation core react chemically neutrally and provide no growth medium whatsoever for mould and rot.

Manufacture in Oldenburg uses 100% renewable energy.

Kingspan ems brand sales in Oldenburg in Holstein, Germany, are certified to BES 6001 for social, financial, and ecological aspects of conscientious company management.

## Packaging & transport

Standard packaging to works specifications, special packaging on request.

Insulation core thickness [mm]	80	100	120	150
Number of elements per package	13	11	9	7

## Delivery

Delivery of elements is made by truck directly to the construction site, unless agreed otherwise. The client or layer is responsible for the unloading; it must be ensured on site.

## Installation

When laying the elements, the "Guideline for the planning and implementation of roof, wall & ceiling constructions made from profiled metal panels" of the IFBS must be complied with.

## Coating

### Coatings – External steel sheets

- Standard Polyester (25 µm) – PES
- Spectrum™ (50 µm)

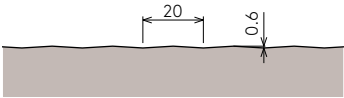

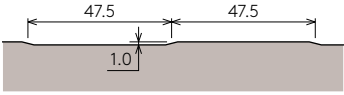

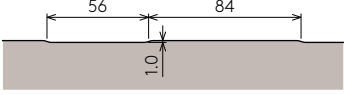
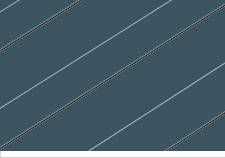
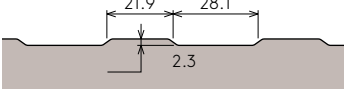



### Coatings – Internal steel sheets

- Thin film coating (15 µm) – DU (KID)
- Standard Polyester (25 µm) – PES

Other coating systems for the outer and inner top coat are available on request. Further information can be found in our brochure on Colors & Coatings brochure.

For details, please also contact the Hoesch contact person.

## Profiles

	Cover layer profile		Outer layer	Inner layer
M (micro)			✓	
H (ruled)			✓	✓
G (ruled)			✓	✓
D (deep Profile)				✓
F* (flat)			✓	

\* on request

## Standard colours

PEI (DU)	R9002			
PES (SP)	R9002	R9006	R9007	R7016

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# Contact

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## Sales and customer service

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## Production facilities

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For the latest product information, please visit our website: [www.ems-bau.com](http://www.ems-bau.com)

