

# Everything IN THE RIGHT PLACE

Introducing QuadCore™ Technology

#### Paroc Panel System – over 30 years experience

The whole construction process, from the first customer contact to installation, has to be fast, flexible and simple. Our extensive experience in this field helps us to understand construction requirements and solve customer challenges at every stage of a project. Our team is up to date with developments in the construction Industry and can offer customers expertise hot on the trail.

#### **Our Products**

Paroc Panel System is known in the industry as a leading manufacturer of high-class sandwich panel systems with AST<sup>®</sup> technology and a stone wool insulation core. AST<sup>®</sup> quality (Advanced Structural Technology) results in secure strength properties, reliable long-term durability and fire safety in sandwich panels.

Now our offer has been extended by QuadCore <sup>™</sup> Technology that takes insulated panels to a superior level of thermal performance, enhances fire protection and improves environmental credentials. This means that our customers receive complete building envelope solutions depending on their needs and can be sure "everything is in the right place".

#### **Our Teams**

Behind our high-quality products we have skilled and committed staff offering customer-oriented solutions. We give our business partners added value by being a successful and inspiring workplace, where we continuously develop and improve our skills.

Our unique service package together with reliable and flexible operations facilitate the management of building projects from project planning throughout the installation.





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### **QuadCore™ Envelope Performance Promise**



QuadCore<sup>™</sup> insulation technology is now available across the Paroc Panel System's architectural, wall and ceiling ranges, offering the complete QuadCore™ envelope solution.

QuadCore<sup>™</sup> envelope brings you all the advantages of a factory engineered system (significantly faster build speed, lifetime insulation continuity and consistent build quality) plus the additional performance of QuadCore™ Technology.







## Why Choose QuadCore<sup>™</sup>?

Insulated panels are single-component, factory-engineered systems that, when compared with traditional built-up systems, deliver very fast buildspeed while minimising risks associated with installation quality issues. QuadCore<sup>™</sup> takes insulated panel technology to a superior level of performance.



#### Warranty for Thermal & Structural Performance

QuadCore<sup>™</sup> is guaranteed to retain its specified thermal performance for the stated period, even if exposed to water during construction.



#### **Enhanced Environmental Performance**

QuadCore™ is a core in an insulated panel with Low Global Warming Potential, with third-party verified EN 15804 EPDs on EcoPlatform and Greenbooklive.



#### **Superior Fire Performance**

QuadCore<sup>™</sup> is insurer approved to FM and LPCB standards and protects against fire spread.



#### 100% renewable energy

QuadCore<sup>™</sup> is manufactured in factories with 100% renewable energy.

### **The Highest Performing Closed-cell Insulation Core in the World**



#### **Fire Protection**

Reaction to fire EN 13501-1: **B-s1, d0;** FM approved; 4 hours fire integrity and 30 mins insulation\* when tested to EN 1364-1



#### **Environmental**

Lighter, FCKW free, EPD available





#### Thermal

Lambda 0,018 W/mK, more than twice as thermally-efficient as mineral fibre, which means it is lighter to construct, handle and transport

Lifetime Guarantee

Unrivalled 40 year thermal

performance guarantee

### Lighter & Thinner



### How Can QuadCore™ **Deliver More Value to Buildings?**



- Potential savings in steel structure & accessories
- Fewer truck deliveries = lower CO, emissions
- Lighter & safer to handle and easier to transport
- Thinner walls = reduced overall building footprint and/or more internal space



### More Thermally-efficient & Airtight

• More energy savings over the building's life, backed up by a 40 year thermal performance guarantee





#### More Sustainable

• 6 more BREEAM credits in Ene 01 than a typical retail or distribution warehouse

- Recognised within German DGNB & LEED certifying system
- Zero ODP and very low Global Warming Potential

## **Potential Estimated Benefits from QuadCore™ Façade**

up to **20-30%** 

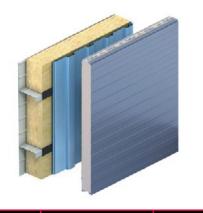
savings in accessories



savings in installation costs

### **Up to 2.5 times**

less truck deliveries to site



### up to **100%**

savings in installation time with associated faster build programme

	Built-up	QuadCore™
Lambda	0.045 W/mk	0.018 W/mk
Insulation thickness*	250mm	100mm
Weight / m <sup>2</sup>	37kg	13kg

### 24kg

saving in weight per 1 m<sup>2</sup> for easier & safer handling

### up to **3.0 times**

lighter facade with savings in structure & foundation

### up to **0.2m**

thinner wall structure leading to savings in overall footprint and associated development costs

#### The superior thermal efficiency of QuadCore<sup>™</sup> leads to more lifetime energy savings plus a thinner and lighter wall solution with multiple benefits in terms of efficiency and sustainability.

\* These are estimates for facade using traditional built-up system with mineral fibre, compared with a 100mm QuadCore<sup>™</sup> insulated panel. Accurate calculations could be achieved with more detailed project information.







Additional performance benefits to the QuadCore<sup>™</sup> M system including: Complementary accessories • Wide range of profile and colour options

### **Our QuadCore<sup>™</sup> Systems**

### QuadCore<sup>™</sup> M

Architectural secret-fix wall panel systems with profiles suitable for either vertical or horizontal applications.

### QuadCore<sup>™</sup> R

Through-fix wall panel systems for exterior and internal walls and ceilings, suitable either for vertical or horizontal applications.

Additional performance benefits to the QuadCore<sup>™</sup> R wall system including:

- Wide range of applications
- Savings in installation costs

### QuadCore<sup>™</sup> C

Coldstore wall and ceiling panels designed specifically for use within the temperature and environmental control industry, such as food manufacturing and temperature controlled storage.

Additional performance benefits to the QuadCore<sup>™</sup> C system including:

- Same U-value at a reduced panel thickness
- Savings in building structure & foundation







### Take Architectural Design to the Next Level

#### QuadCore<sup>™</sup> Fabrications

QuadCore

Paroc Panel System offers also prefabricated corners and wide range of complementary accessories like fasteners, flashings, profiles, and sealants.

They give architects and building planners more aesthetic possibilities as well as challenge them to explore and express themselves freely.

Our team will support with bespoke details and specialist fabrications.

### We're Here to Help!

Our services help save you time and ensure an optimised design with potential savings in HVAC sizing, structural steel and installation times.





















### **Service and Support**

### **Contact Us for Planning and Specification Support**





**Detailed specification** of accessories





Individual design of non-standard construction details



Technical design optimisa-

tion of your project



Specialist installation training

**Contact Us for Fast** Technical Advice about:

- Wind and snow load calculations
- U-Value / condensation risk
- Acoustic performance
- Fire protection
- Project fastener requirements





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