

Product Data

Insulation Core

QuadCore™ KS1000RW LEC Wall Panels are manufactured with an HCFC, CFC and HFC free QuadCore™ insulation core.



Certification and Testing

Reaction to Fire

QuadCore™ KS1000RW LEC Wall Panels are classified B-s1,d0, when tested on the internal face of the product, according to the European Reaction to Fire classification system (Euroclasses) BS EN 13501-1: 2007+A1: 2009, under the certified name KS1000/2000 RW QuadCore® and BS EN 13501-1:2018 under the certified name KS1000RW when using the following internal liner:

- CLEANsafe 15.

Please contact Kingspan Tech-eXchange for information relating to the external face.

Fire Resistance

Fire resistance classifications are subject to panel thickness, orientation, method of assembly, and steel coating. Please contact Kingspan Tech-eXchange for project specific details.

Insurer Approvals

QuadCore™ KS1000RW LEC Wall Panels are tested to:

- FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials under the certified name KS1000RW for thicknesses 40 – 150mm.
- FM 4881 approval standard for class 1 exterior wall systems under the certified name KS1000RW for thicknesses 40 – 150mm.
- FM 4882 approval standard for class 1 interior wall and ceiling materials or systems for smoke sensitive occupancies under the certified name KS1000RW for thicknesses 40 – 150mm.

Insurer approvals are large scale testing regimes that provide objective third-party testing, which is underpinned by quarterly, bi-annual and annual factory surveillance audits (depending on the region) to verify compliance. Insurer approvals are subject to panel thickness, cover width, orientation, method of assembly, steel coating and manufacturing facility. Please contact Kingspan Tech-eXchange for further information.



Environmental

The reductions achieved by QuadCore™ KS1000RW LEC Wall Panels are demonstrated through third party, verified life cycle assessment, with reduction percentages calculated by comparing standard QuadCore® KS1000RW Wall Panels with QuadCore™ KS1000RW LEC Wall Panels to EN 15804-A2 standard. Environmental Profile Declarations (EPDs) for standard and LEC variants of QuadCore® products are available [here](#).

Air Leakage

An air leakage rate of 3m³/hr/m² at 50Pa or less can be achieved when using Kingspan insulated roof and wall panels.

For information on detailing required to achieve lower air leakage rates please contact Kingspan Tech-eXchange.

Acoustic

Sound Reduction Index (SRI)

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
SRI (dB)	20	18	20	24	20	29	39	47

QuadCore™ KS1000RW LEC Wall Panels have a single figure weighted sound reduction $R_W = 25\text{dB}$. Results are based on panels of similar profile and core material.

Materials

Substrate

Metallic protected steel to BS EN 10346: 2015.

Please contact Kingspan Tech-eXchange for information on other substrates.

Coatings – External Weather Sheet

- Kingspan Spectrum: Consists of a coated semi-gloss finish with slight granular effect.

For Reaction to Fire performance of external weather sheets please contact Kingspan Tech-eXchange.

Coatings – Internal Liner Sheet

- Kingspan CLEANsafe 15: The coating has been developed for use as the internal lining of insulated panels. Standard colour is “bright white” with an easily cleaned surface.

For Reaction to Fire performance of panels with above internal liners please see Certification and Testing section.