

Declaration of Performance

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| 1 Unique identification code of the product type: | QuadCore KS1000RW Roof and Wall Panel
0724 |
| 2 Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification, as foreseen by the manufacturer: | Insulated sandwich panels for walls and roofs according to EN14509:2013 |
| 3 Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article: | See product label and marking on panel |
| 4 Name registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5): | Kingspan Limited,
Greenfield Business Park No 2,
Holywell, Flintshire, CH8 7GJ, UK |
| 5 Where applicable, name and contact address of the authorised representative whose mandate covers the tasks specified in Article 12(2): | Not relevant |
| 6 Systems of assessment and verification of constancy of performance of the construction product as set out in Annex V: | System 1
(CoC No: 1812-CPR-2085) |
| 7 Notified bodies: | EFFECTIS, France(No.1812)
WFRGENT N.V, Belgium (No. 1173) |
| 8 In case of the declaration of performance concerning a construction product covered by a harmonised standard: | EN 14509:2013 |
| 9 The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 10 | |

This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of Kingspan Ltd.
Signed on behalf of Kingspan Insulated Panels by:

Name: Phil Smith

Position: Managing Director

Place and date:

Holywell, 15/07/2024


10 Declared performance for QuadCore KS1000RW Roof and Wall Panel 0724

Thickness in mm	40	53	60	73	80	91	100	115	120	137	150	167	Technical Specification	
Thermal transmittance (W/m ² K)	0.46	0.35	0.30	0.25	0.23	0.20	0.18	0.16	0.15	0.13	0.12	0.11	EN 14509:2013	
Mass (kg/m ²)	8.6	9.1	9.3	9.8	10.1	10.5	10.8	11.4	11.6	12.2	12.7	13.4		
Mass (kg/m ²) (stainless liner)	10.1	10.6	10.8	11.3	11.6	12.0	12.3	12.9	13.1	13.7	14.2	14.9		
Wrinkling Strength (MPa)														
External span	280	280	280	280	278	273	269	261	259	250	244	236		
External span (high temp)	280	280	280	280	278	273	269	261	259	250	244	236		
External central support	280	280	280	280	280	280	280	280	280	280	280	280		
External central support (high temp)	280	280	280	280	280	280	280	280	280	280	280	280		
S220GD Ribbed Liner														
Internal span (S220 Liner)	163	163	163	163	163	161	158	155	154	150	147	143		
Internal central support (S220 Liner)	106	106	105	105	104	109	113	120	122	130	136	136		
Stainless Steel Liner														
Internal span	55	57	58	60	61	61	62	63	63	64	65	65		
Internal central support	36	37	37	38	39	42	45	50	52	58	62	60		
S220GD Flat Liner (0.595mm)														
Internal span	56	58	59	60	62	62	63	64	64	65	66	66		
Internal central support	36	37	38	39	39	43	46	51	53	59	63	63		
Fire resistance	NPD													EN13501-2
Reaction to fire (internal face)	B-s1,d0													EN 13501-1 (NB: 1812)
External Fire Performance (roof)	B _{ROOF} (1,12,13) CWFT & B _{ROOF} (14)													EN 13501-5 (NB: 1173)
Material properties - All thicknesses														
External steel gauge	0.42mm												EN 10346	
Internal steel gauge (S220)	0.32mm													
Internal steel gauge (stainless liner)	0.50mm												EN ISO 9445	
External steel grade	S280GD												EN 10346	
Internal steel grade (S220)	S220GD													
Internal steel grade (stainless liner)	304 (1.4301) or 316 (1.4401)												EN 10088-1	
External coatings	Kingspan XL Forté, Kingspan Spectrum, Granite HD												EN 10169	
	Kingspan Altaris, Kingspan Destral, Polyester													
Internal coating (S220 Liner)	Kingspan CLEANsafe 15, Kingspan CLEANsafe 25													
	Kingspan CLEANsafe 55, Kingspan CLEANsafe 120													
	Kingspan AQUAsafe 55, Colorfarm 20													
Density (Kg/m ³)	38												EN 14509:2013	

Thermal conductivity (W/mK)	0.018	EN 14509:2013
Tensile strength (MPa)	≥0.06	
Compressive strength (MPa)	≥0.115	
Shear strength (MPa)	≥0.085	
Shear modulus (MPa)	≥2.80	
Long term shear strength (Mpa)	≥0.034	
Creep coefficient t = 2000hrs	1.64 (roof application)	EN 14509:2013
Creep coefficient t = 10000hrs	2.33 (roof application)	
Water permeability	Class A (roof application)	
Air permeability (m ³ /h/m ² @ 50pa)	<5	
Water vapour permeability	Impermeable	

* Fire classifications are subject to method of assembly, orientation and steel coating. Please consult Kingspan Technical Department for details

** Thicker steel gauges are available on request

*** Flat liner only available in 0.595mm Gauge

**** This DoP is also applicable for the Lower Embodied Carbon version of the product, QuadCore KS1000RW LEC. The lower embodied carbon versus the standard product is based on a comparison of equivalent EPDs, or validation of assumptions by a third party expert in instances where EPDs are not yet available.