


Declaration of Performance

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| 1 Unique identification code of the product type: | QuadCore KS1000RW Roof and Wall Panel
0323 |
| 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: | AVCP3 |
| 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, 10/03/2023



23 EN 14509:2013 AVCP3

10 Declared performance for QuadCore KS1000RW Roof and Wall Panel 0323

Thickness in mm	40	53	60	73	80	91	100	115	120	137	150	Harmonised Technical Specification	
Thermal transmittance (W/m²K)	0.46	0.35	0.30	0.25	0.23	0.20	0.18	0.16	0.15	0.13	0.12	EN 14509:2013	
Mass (kg/m²)	9.0	9.5	9.7	10.2	10.5	10.9	11.3	11.8	12.0	12.7	13.2		
Mass (kg/m²) (stainless liner)	10.5	11.0	11.3	11.8	12.0	12.5	12.8	13.4	13.6	14.2	14.7		
Wrinkling Strength (MPa)													
External span	280	280	280	280	278	273	269	261	259	250	244		
External span (high temp)	280	280	280	280	278	273	269	261	259	250	244		
External central support	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		
Internal span (S220 Liner)	163	163	163	163	163	161	158	155	154	150	147		
Internal central support (S220 Liner)	106	106	105	105	104	109	113	120	122	130	136		
Internal span (stainless liner)	55	57	58	60	61	61	62	63	63	64	65		
Internal central support (stainless liner)	36	37	37	38	39	42	45	50	51	56	60		
* Fire resistance	NPD												EN13501-2
* Reaction to fire (internal face)	B-s1,d0												EN 13501-1 (NB: 1812)
* External Fire Performance (roof)	B _{ROOF(t1,t2,t3)} CWFT & B _{ROOF(t4)}												EN 13501-5 (NB: 1173)
Material properties - All thicknesses													
** External steel gauge	0.465mm											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											EN 14509:2013	
Density (Kg/m³)	38±10%												
Thermal conductivity (W/mK)	0.018												
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 = 100000hrs	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
- *** 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.