

18 EN 14509:2013 AVCP3

Declared performance for

QuadCore IND  
130418

Thickness in mm	60	80	100	120	140	170	200	220	Harmonised Technical Specification
<b>Thermal transmittance (W/m<sup>2</sup>K)</b>									
External wall	0.299	0.224	0.179	0.150	0.128	0.106	0.090	0.082	EN 14509:2013
Partition	0.291	0.220	0.177	0.148	0.127	0.127	0.089	0.081	
Ceiling	0.297	0.223	0.178	0.149	0.128	0.105	0.090	0.081	
Roof	0.302	0.226	0.180	0.150	0.129	0.106	0.090	0.082	
<b>Mass (Kg/m<sup>2</sup>)</b>	10.72	11.52	12.32	13.12	13.92	15.12	16.32	17.12	EN 14509:2013
<b>Wrinkling stress (MPa)</b>									
External span	164	164	164	164	160	154	148	208	EN 14509:2013
External span (High temp)	157	157	157	157	153	148	142	176	
External central support	115	115	115	115	112	108	104	144	
External central support (High temp)	110	110	110	110	108	104	100	128	
Internal span	164	164	164	164	160	154	148	118	
Internal central support	131	131	131	131	128	123	118	115	
<b>Bending moments</b>									
External span	4.49	6.00	7.51	9.02	10.27	12.01	13.58	14.82	EN 14509:2013
External span (High temp)	4.30	5.74	7.19	8.63	9.82	11.54	13.03	12.54	
External central support	3.15	4.21	5.27	6.32	7.19	8.42	9.55	10.26	
External central support (High temp)	3.01	4.02	5.04	6.05	6.93	8.11	9.18	9.12	
Internal span	4.49	6.00	7.51	9.02	10.27	12.01	13.58	8.41	
Internal central support	3.59	4.79	6.00	7.20	8.22	9.59	10.83	8.19	
<b>Fire behaviour</b>									
E (Integrity)	NPD		EI30			EI60		EN 13501-2	
EI (Thermal Insulation)	NPD		EI30			EI60		EN 13501-2	
<b>Reaction to fire</b>	B-s1,d0							EN 13501-1	
<b>Material properties - All thicknesses</b>									
Shear strength ≥ (MPa)	0.08							EN 14509:2013	
Shear Modulus ≥ (MPa)	3.05							EN 14509:2013	
External steel gauge	Min 0.5mm							EN 10326	
Internal Steel gauge	Min 0.5mm							EN 10326	
External coatings (Steel)	Polyester 25µm HDP 25µm and 35µm Polyurethane 35µm and 55µm Plastisol 200µm PVDF 25µm and 35µm							EN 10169	
Internal coatings (Steel)	Polyester 15µm, 25µm HDP 25µm and 35µm PVDF 25µm and 35µm Polyurethane 35µm and 55µm PET 55µm PVC 120µm							EN 10169	
Internal coatings (Stainless steel)	PVDF 55µm Lampre A490PP PVC +PET							EN 14509:2013	
External and Internal steel grade	320							EN 10326	
Density (kg/m <sup>3</sup> )	35 - 45							EN 14509:2013	
Tensile strength ≥ (MPa)	0.07							EN 14509:2013	
Compressive strength ≥ (MPa)	0.11							EN 14509:2013	
Creep coefficient t = 2000hrs	3							EN 14509:2013	
Creep coefficient t = 10000hrs	5							EN 14509:2013	
Water permeability	NPD							EN 14509:2013	
Air permeability (m/h/m <sup>2</sup> @ 50pa)	NPD							EN 14509:2013	
Water vapour permeability	Impermeable								

\* Fire resistance values are for Isocab QuadCore and are subject to method of assembly. Please contact Isocab Technical Department for details

\*\* Thicker steel gauges are available on request