



BESGRADE PRODUCTS Sdn Bhd

DECLARATION OF PERFORMANCE

No: BG1-DOP-V4.0

Manufacturer Besgrade Products Sdn Bhd, Batu 10, Jalan Pokok Sena, Mukim Jabi, 06400 Alor Setar, Kedah, Malaysia

Assessment and verification of consistency of performance (AVCP) system CE 2+ System

Product description PLYWOOD Glue Melamine Urea Formaldehyde

Product type for the intended use of: Structural plywood for floor and roof decking on joists as well as wall sheathing on studs for internal dry, internal humid, and exterior conditions
Notify Body company BM TRADA
Notify Body Identification number 1224-CPD-0087
Structural plywood in external conditions (EN 636-3 (S))
Structural plywood in internal humid conditions (EN 636-2 (S))
Structural plywood in internal dry conditions (EN636-1 (S))

Declared Performance

Essential characteristics	Unit			Performance					Harmonised technical specification
Thickness range				9mm	12mm	15mm	18mm	25mm	
Bending strength Fm 0	N/mm2			45.40	26.40	27.28	19.7	41.95	EN310:1993
Fm 90	N/mm2			53.62	49.20	57.18	39.2	40.12	
Bending stiffness Em 0	N/mm2			5138	3768	6278	2652	4707	EN310:1993
Em 90	N/mm2			4962	8207	10501	4459	5439	
Bonding quality	Class			3-ext	3-ext	3-ext	3-ext	3-ext	EN314-1 :1993, EN314-2:1993
Durability (swelling in thickness)				NPD	NPD	NPD	NPD	NPD	
Durability (moisture resistance)				NPD	NPD	NPD	NPD	NPD	
Moisture content	%			8.5	8.2	11.4	8	9.5	EN322:1993
Release of formaldehyde				E1	E1	E1	E1	E1	EN13986 annex B
Reaction to fire	Class			D-s2,d0	D-s2,d0	D-s2,d0	D-s2,d0	D-s2,d0	EN13986 : 2004
Water vapour permeability	Wet cup			90u	70u	70u	50u	70u	EN13986 : 2004
Water vapour permeability	Dry cup			200u	200u	200u	150u	200u	EN13986 : 2004
Airborne sound insulation				NPD	NPD	NPD	NPD	NPD	EN13986 : 2004
Sound absorption				NPD	NPD	NPD	NPD	NPD	EN13986 : 2004
Thermal conductivity	W/(m.k)			0.13	0.13	0.13	0.09	0.13	EN13986 : 2004
Strength and stiffness for structural use				NPD	NPD	NPD	NPD	NPD	
Impact resistance for structural use				NPD	NPD	NPD	NPD	NPD	
Strength and stiffness under point Fmax	kN			2.95	3.86	6.35	7.58	8.47	EN 1195 : 1998
load for structural use (Floor) b Ro.5	N/mm2			115	101	123	329	239	EN 1195 : 1998
Strength and stiffness under point Fmax	kN			4.39	5.45	8.84	10.72	11.81	EN 1195 : 1998
load for structural use (Roof) b Ro.5	N/mm2			91	173	210	280	516	EN 1195 : 1998
Mechanically durability				NPD	NPD	NPD	NPD	NPD	
Biological durability				NPD	NPD	NPD	NPD	NPD	
Content of pentachlorophenol				NPD	NPD	NPD	NPD	NPD	

a For end uses in humid conditions only
b For structural floor and roof decking on joists only

Note: Values calculated on the lowest 5th percentile

EN 13986:2004

The performance of the products identified is in accordance with the declared performance above
This declaration of performance is issued under the sole responsibility of the manufacturer identified above

Signed on behalf of the manufacturer by:
(Name and Function)

Eiya
Hidayah (Lab Assasitant)

Date

24/04/2018