

Particleboard

Technical specifications

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Properties (Nu Green)	ANSI - A208.1-99 Grade M-2		ANSI - A208.1-99 Grade MS	
	Metric	Imperial	Metric	Imperial
Moisture content	n/a		n/a	
Density	n/a	n/a	n/a	n/a
Thickness tolerance :				
Between panels	± 0.200 mm	± 0.008 in	± 0.250 mm	± 0.010 in
Within panels	± 0.100 mm	± 0.004 in	± 0.125 mm	± 0.005 in
Modulus of rupture	14.5 N/mm ²	2 103 psi	12.5 N/mm ²	1 813 psi
Modulus of elasticity	2 250 N/mm ²	326 300 psi	1 900 N/mm ²	275 600 psi
Internal bond	0.45 N/mm ²	65 psi	0.40 N/mm ²	58 psi
Hardness	2 225 N	500 lb	2 225 N	500 lb
Linear expansion	< 0.35%		< 0.35%	
Screw holding :				
Face	1 000 N	225 lb	900 N	202 lb
Core	900 N	202 lb	800 N	180 lb
FORMALDEHYDE EMISSION:	< 0.10 ppm		< 0.10 ppm	
E1	< 0.01 ppm		< 0.01 ppm	
EPP	< 0.01 ppm		< 0.01 ppm	
Standard production				
Length / Width	± 2.0 mm	± 0.08 in	± 2.0 mm	± 0.08 in

Properties	Sayabec - Typical Values, M-2 Specifications		Sayabec - Typical Values, MS Specifications	
	Metric	Imperial	Metric	Imperial
Moisture content	5.5%		5.5%	
Density	640 kg/m ³	41.5 lb/ft ³	625 kg/m ³	39 lb/ft ³
Thickness tolerance :				
Between panels	± 0.200 mm	± 0.008 in	± 0.250 mm	± 0.010 in
Within panels	± 0.100 mm	± 0.004 in	± 0.125 mm	± 0.005 in
Modulus of rupture	14.5 N/mm ²	2 103 psi	13.0 N/mm ²	1 885 psi
Modulus of elasticity	2 900 N/mm ²	420 609 psi	2 700 N/mm ²	391 602 psi
Internal bond	0.480 N/mm ²	69.6 psi	0.435 N/mm ²	63.2 psi
Hardness	3 000 N	675 lb	2 900 N	652 lb
Linear expansion	< 0.35%		< 0.35%	
Screw holding :				
Face	1 060 N	238 lb	1 000 N	225 lb
Core	900 N	202 lb	800 N	180 lb
FORMALDEHYDE EMISSION:	< 0.10 ppm		< 0.10 ppm	
E1	< 0.18 ppm (CARB PHASE 1)		< 0.18 ppm (CARB PHASE 1)	
	< 0.18 ppm (CARB PHASE 1)		< 0.18 ppm (CARB PHASE 1)	

EPP				
Standard production				
Length / Width	± 2.0 mm	± 0.08 in	± 2.0 mm	± 0.08 in

Nu Green - Typical values M-2 Specifications		
Properties	Metric	Imperial
Moisture content		6%
Density	635 kg/m ³ average	39.6 lb/ft ³ average
Thickness :		
Between panels	± 0.200 mm	± 0.008 in
Within panels	± 0.100 mm	± 0.004 in
Modulus of rupture	14.5 N/mm ²	2 103 psi
Modulus of elasticity	2 250 N/mm ²	326 300 psi
Internal bond	0.45 N/mm ²	65 psi
Hardness	2 225 N	500 lb
Linear expansion		< 0.35%
Screw holding :		
Face	1 000 N	225 lb
Core	900 N	202 lb
Formaldehyde emission	0.00 - 0.01 ppm (Comply CARB Phase I and II)	
Length / Width	± 2.0 mm	± 0.08 in

Typical results of tests conducted on average product board using procedures outlined in ASTM D-1037. Sanded to 120 grit. Nu Green meets or exceeds the requirements of ANSI A208.1-99/Grade M-2.

Properties	Val-d'Or - Typical Values, M-2 Specifications		Val-d'Or - Typical Values, MS Specifications	
	Metric	Imperial	Metric	Imperial
Moisture content	5.5%		6%	
Density	660 kg/m ³	41.2 lb/ft ³	632 kg/m ³	39.4 lb/ft ³
Thickness tolerance :				
Between panels	± 0.200 mm	± 0.008 in	± 0.200 mm	± 0.010 in
Within panels	± 0.100 mm	± 0.004 in	± 0.100 mm	± 0.005 in
Modulus of rupture	15.0 N/mm ²	2 170 psi	12.9 N/mm ²	1 870 psi
Modulus of elasticity	2 760 N/mm ²	400 000 psi	2 379 N/mm ²	345 000 psi
Internal bond	0.45 N/mm ²	65 psi	0.43 N/mm ²	62 psi
Hardness	2 800 N	629 lb	2 444 N	550 lb
Linear expansion	n/a		< 0.35%	
Screw holding :				
Face	1 000 N	225 lb	897 N	202 lb
Core	900 N	202 lb	800 N	180 lb
FORMALDEHYDE EMISSION:	< 0.10 ppm		< 0.10 ppm	
E1	< 0.18 ppm (CARB PHASE 1)		< 0.18 ppm (CARB PHASE 1)	
EPP	< 0.18 ppm (CARB PHASE 1)		< 0.18 ppm (CARB PHASE 1)	
Standard production				

Length / Width	± 2.0 mm	± 0.08 in	± 2.0 mm	± 0.08 in
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Properties (Door Core)	ANSI - A208.1-99 Grade LD1		ANSI - A208.1-99 Grade LD2	
	Metric	Imperial	Metric	Imperial
Moisture content	n/a		n/a	
Density	n/a	n/a	n/a	n/a
Thickness tolerance : Panel average from specified Variance from panel average	+0,125 mm to – 0,375 mm +/- 0,125 mm	+0,005 in to – 0,015 in +/-0,005 in	+0,125 mm to – 0,375 mm +/- 0,125 mm	+0,005 in to – 0,015 in +/-0,005 in
Modulus of rupture	3.0 N/mm ²	435 psi	5 N/mm ²	525 psi
Modulus of elasticity	550 N/mm ²	79 800 psi	1 025 N/mm ²	148 700 psi
Internal bond	0.10 N/mm ²	15 psi	0.15 N/mm ²	22 psi
Hardness	n/a	n/a	n/a	n/a
Linear expansion	< 0.35%		< 0.35%	
Screw holding : Face Core	400 N n/a	90 lb n/a	550 N n/a	124 lb n/a
FORMALDEHYDE EMISSION:	< 0.18 ppm		< 0.18 ppm	
E1	< 0.18 ppm		< 0.18 ppm	
EPP				
Standard production				
Length / Width	± 2.0 mm	± 0.08 in	± 2.0 mm	± 0.08 in

Properties (Door Core)	Sayabec - Typical Values, LD1 Specifications		Sayabec - Typical Values, LD2 Specifications	
	Metric	Imperial	Metric	Imperial
Moisture content	n/a		n/a	
Density	n/a	n/a	n/a	n/a
Thickness tolerance : Panel average from specified Variance from panel average	+0,125 mm to – 0,375 mm +/- 0,125 mm	+0,005 in to – 0,015 in +/-0,005 in	+0,125 mm to – 0,375 mm +/- 0,125 mm	+0,005 in to – 0,015 in +/-0,005 in
Modulus of rupture	3.0 N/mm ²	435 psi	5 N/mm ²	525 psi
Modulus of elasticity	550 N/mm ²	79 800 psi	1 025 N/mm ²	148 700 psi
Internal bond	0.10 N/mm ²	15 psi	0.15 N/mm ²	22 psi
Hardness	n/a	n/a	n/a	n/a
Linear expansion	< 0.35%		< 0.35%	
Screw holding : Face Core	400 N n/a	90 lb n/a	550 N n/a	124 lb n/a
FORMALDEHYDE EMISSION:	< 0.18 ppm		< 0.18 ppm	
E1	< 0.18 ppm		< 0.18 ppm	
EPP				

Standard production			
Length / Width	± 2.0 mm	± 0.08 in	± 2.0 mm ± 0.08 in

Moncure Particleboard

Properties	Grade MS		Grade M2		Grade M3	
	Metric	Imperial	Metric	Imperial	Metric	Imperial
Internal Bond	0.40 N/mm ²	58 psi	0.45 N/mm ²	65 psi	0.55 N/mm ²	58 psi
Modulus of rupture	12.5 N/mm ²	1 813 psi	14.5 N/mm ²	2 103 psi	16.5 N/mm ²	2 393 psi
Modulus of elasticity	1 900 N/mm ²	276 600 psi	2 250 N/mm ²	326 300 psi	2 750 N/mm ²	398 900 psi
Face Screw Holding	900 N	202 lbs	1 000 N	225 lbs	1 100 N	247 lbs
Edge Screw Holding	800 N	180 lbs	900 N	202 lbs	1 000 N	225 lbs
Hardness	2 225 N	500 lbs	2 225 N	500 lbs	2 225 N	500 lbs
Thickness Tolerance:						
- Between panel	± 0.25 mm	± 0.010	± 0.2 mm	± 0.008	± 0.2 mm	± 0.008
- Within panel	± 0.125 mm	± 0.004	± 0.1 mm	± 0.004	± 0.1 mm	± 0.004
Length and width	±2.0 mm	±0.080"	±2.0 mm	±0.080"	±2.0 mm	±0.080"
Linear Expansion	0.35%		0.35%		0.35%	
Formaldehyde Emissions	0.18 ppm		0.18 ppm		0.18 ppm	
Thickness Range	1/2 - 1 1/8"		1/2 - 1 1/8"		3/4 - 1 1/8"	

Typical results of tests conducted on average product board using procedures outlined in ASTM D-1037. Properties in accordance with ANSI A208.1-1999. Sanded to 100 grit finish.

Moncure Particleboard is available in all Uniboard melamine colors

Available Widths (inches)	49, 55, 61 and selected others
Available Lengths (inches)	72, 97, 109, 145 and selected others

Forpan and Nu Green particleboard panels are available in the following dimensions:

	Width	Length	Thickness
Sayabec	49" & 61" (1.24 & 1.55 m)	97" to 145" (2.46 to 3.69 m)	1/4" to 1 3/4" (6.00 to 44.45 mm)
Val-d'Or	49" & 61" (1.24 & 1.55 m)	97" to 121" (2.46 to 3.07 m)	1/2" to 1 1/8" (12.7 to 28.68 mm)
NuGreen	49, 49½, 61 in	97, 97½ in	7/16, ½, 9/16, 19/32, 5/8, 11/16, ¾, 1, 1 1/8 in

Forpan and Nu Green particleboard panels meet the following flame index:

	Test Method	Class
Raw panels	ASTM-E84	III or C
Laminated (decorative surfaced) panels	ASTM-E84	III or C