

TREMENDOUS PARTICLEBOARD



Timber Products Company
THE TREMENDOUS RESOURCE



INDUSTRIAL
COMMERCIAL
UNDERLAYMENT
DOOR CORE
PINE
GREEN T™

TREMENDOUS VERSATILITY

The Timber Products Company Particleboard Division is one of our most versatile divisions, manufacturing both fir and pine particleboard substrates in all grades: underlayment, door core, commercial, industrial, and specialty. It's just one more way we at Timber Products Company are dedicated to providing our customers with precise, timely solutions.

TIMBER PRODUCTS COMPANY PARTICLEBOARD

Specially engineered and formulated to provide excellent machinability and screw-holding power, our particleboard panels are the ideal choice for a wide range of applications. Additionally, all particleboard panels are available in GreenT™ versions, manufactured with no-added-urea formaldehyde. After all, it's what's on the inside that counts.

TREMENDOUS PARTICLEBOARD

TIMBER PRODUCTS COMPANY GREENT™ PARTICLEBOARD



Our innovative GreenT™ line of particleboard features no-added-urea formaldehyde, efficiently combining performance and environmental friendliness. In fact, GreenT™ particleboard carries the Sustainable Forestry Initiative® label and Composite Panel Association Environmentally Preferred Product certification. This certification requires 100% of fiber waste to be either recycled or recovered fiber, or a combination of both, and meets the same strict emission levels as required by California Air Resources Board Phase One.

LD-2 DOOR CORE PHYSICAL PROPERTIES

	Door Core
Thickness Range	28mm – 43mm (1.100"–1.550")
Density (lbs./cubic ft.)	530 kg/m ³ (33 pcf)
Width & Length (Max. inch)	±2.0mm (±.080")
Thickness Tolerance (Panel Avg. from Nominal) (Variance from Average)	±0.125 – .375mm (±.005" – .015") ±0.125mm (±.005")
Squareness	3.0mm/m width (0.036"/ft.)
Straightness	1.0mm/1.5m (0.016"/2ft.)
Moisture Content (%)	10% Max.
MOR (Min. Average psi)	5.0N/mm ² (725 psi)
MOE (Min. Average psi)	1025N/mm ² (148,700 psi)
Internal Bond (Min. Average psi)	0.15N/mm ² (22 psi)
Linear Expansion (Max. Avg. % –Humidity Cabinet Method)	0.35% Max.
Screw holding (Face)	550N (124 lbs.)
Grade (ANSI 208.1 – 1993)	LD-2
Formaldehyde Release (ASTM E 1333-90)	<0.18 ppm

LD-1 DOOR CORE PHYSICAL PROPERTIES

	Door Core
Thickness Range	28mm – 43mm (1.100"–1.700")
Density (lbs./cubic ft.)	480 kg/m ³ (30 pcf)
Width & Length (Max. inch)	±2.0mm (±.080")
Thickness Tolerance (Panel Avg. from Nominal) (Variance from Average)	±0.125 – .375mm (±.005" – .015") ±0.125mm (±.005")
Squareness	3.0mm/m width (0.036"/ft.)
Straightness	1.0mm/1.5m (0.016"/2ft.)
Moisture Content (%)	10% Max.
MOR (Min. Average psi)	3.0N/mm ² (435 psi)
MOE (Min. Average psi)	555N/mm ² (79,800 psi)
Internal Bond (Min. Average psi)	0.10N/mm ² (15 psi)
Linear Expansion (Max. Avg. % –Humidity Cabinet Method)	0.35% Max.
Screw holding (Face)	400N (90 psi)
Grade (ANSI 208.1 – 1993)	LD-1
Formaldehyde Release (ASTM E 1333-90)	<0.18 ppm

M-3 INDUSTRIAL PHYSICAL PROPERTIES

	Standard Industrial	Thick Industrial
Thickness Range	9.5mm – 19mm (3/8"–3/4")	23mm – 30mm (1"– 1 3/16")
Density (lbs./cubic ft.)	737 kg/m ³ (46 pcf)	721 kg/m ³ (45 pcf)
Width & Length (Max. inch)	±2.0mm (±.080")	±2.0mm (±.080")
Thickness Tolerance		
(Panel Avg. from Nominal)	±0.200mm (±.008")	±0.200mm (±.008")
(Variance from Average)	±0.100mm (±.004")	±0.100mm (±.004")
Squareness	3.0mm/m width (0.036"/ft.)	3.0mm/m width (0.036"/ft.)
Straightness	1.0mm/1.5m (0.016"/2ft.)	1.0mm/1.5m (0.016"/2ft.)
Moisture Content (%)	10% Max.	10% Max.
Hardness (Min. lbs.)	2225N (500 lbs.)	2225N (500 lbs.)
MOR (Min. Average psi)	16.5N/mm ² (2393 psi)	16.5N/mm ² (2393 psi)
MOE (Min. Average psi)	2750N/mm ² (398,900 psi)	2750N/mm ² (398,900 psi)
Internal Bond (Min. Average psi)	0.55N/mm ² (80 psi)	0.55N/mm ² (80 psi)
Linear Expansion		
(Max. Avg. % –Humidity Cabinet Method)	0.35% Max.	0.35% Max.
Screw holding		
(Face)	1100N (247 lbs.)	1100N (247 lbs.)
(Edge)	1000N (225 lbs.)	1000N (225 lbs.)
Finish Sand (Grit Size)	100	100
Grade (ANSI 208.1 – 1993)	M-3	M-3
Formaldehyde Release (ASTM E 1333-90)	0.18 ppm	0.18 ppm

M-2 INDUSTRIAL PHYSICAL PROPERTIES

	Industrial
Thickness Range	9.5mm – 32mm (3/8"–1 1/4")
Density (lbs./cubic ft.)	689 kg/m ³ (43 pcf)
Width & Length (Max. inch)	±2.0mm (±.080")
Thickness Tolerance	
(Panel Avg. from Nominal)	±0.200mm (±.008")
(Variance from Average)	±0.100mm (±.004")
Squareness	3.0mm/m width (0.036"/ft.)
Straightness	1.0mm/1.5m (0.016"/2ft.)
Moisture Content (%)	10% Max.
Hardness (Min. lbs.)	2225N (500 lbs.)
MOR (Min. Average psi)	14.5N/mm ² (2103 psi)
MOE (Min. Average psi)	2250N/mm ² (326,300 psi)
Internal Bond (Min. Average psi)	0.45N/mm ² (65psi)
Linear Expansion	
(Max. Avg. % –Humidity Cabinet Method)	0.35% Max.
Screw holding	
(Face)	1000N (225 lbs.)
(Edge)	900N (202 lbs.)
Finish Sand (Grit Size)	100
Grade (ANSI 208.1 – 1993)	M-2
Formaldehyde Release (ASTM E 1333-90)	0.18 ppm

M-1 COMMERCIAL PHYSICAL PROPERTIES

	Commercial
Thickness Range	9.5mm – 33mm (3/8"– 1 5/16")
Density (lbs./cubic ft.)	673 kg/m ³ (42 pcf)
Width & Length (Max. inch)	±2.0mm (±.080")
Thickness Tolerance	
(Panel Avg. from Nominal)	±0.250mm (±.010")
(Variance from Average)	±0.125mm (±.005")
Squareness	3.0mm/m width (0.036"/ft.)
Straightness	1.0mm/1.5m (0.016"/2ft.)
Moisture Content (%)	10% Max.
Hardness (Min. lbs.)	2225N (500 lbs.)
MOR (Min. Average psi)	11.0N/mm ² (1595 psi)
MOE (Min. Average psi)	1725N/mm ² (250,200 psi)
Internal Bond (Min. Average psi)	0.40N/mm ² (58 psi)
Linear Expansion	
(Max. Avg. % –Humidity Cabinet Method)	0.35% Max.
Finish Sand (Grit Size)	100
Grade (ANSI 208.1 – 1993)	M-1
Formaldehyde Release (ASTM E 1333-90)	0.18 ppm

UNDERLAYMENT PHYSICAL PROPERTIES

	Underlayment
Thickness Range	9.5mm – 25mm (3/8"– 1")
Density (lbs./cubic ft.)	673 kg/m ³ (42 pcf)
Width & Length (Max. inch)	+0 –4.0mm (+0 –.160")
Thickness Tolerance	
(Panel Avg. from Nominal)	±0.375mm (±.015")
(Variance from Average)	±0.250mm (±.010")
Squareness	3.0mm/m width (0.036"/ft.)
Straightness	1.0mm/1.5m (0.016"/2ft.)
Moisture Content (%)	6 – 9%
Hardness (Min. lbs.)	2225N (500 lbs.)
MOR (Min. Average psi)	11.0N/mm ² (1595 psi)
MOE (Min. Average psi)	1725N/mm ² (250,200 psi)
Internal Bond (Min. Average psi)	0.40N/mm ² (58psi)
Linear Expansion	
(Max. Avg. % –Humidity Cabinet Method)	0.35% Max.
Thickness Swell	1.6mm (0.036") Max.
Finish Sand (Grit Size)	80
Grade (ANSI 208.1 – 1993)	PBU
Formaldehyde Release (ASTM E 1333-90)	0.18 ppm