



VMG LIGNUM

Synergy between
EFFICIENCY & SUSTAINABILITY



VMG LIGNUM



**GLUED STRUCTURAL
PARTICLE BOARDS DIRECTLY
FROM THE EUROPEAN
MANUFACTURER.**



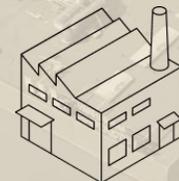
OUR STRUCTURAL PARTICLE BOARD FACTORY IS LOCATED IN EUROPE, IN LITHUANIA.

Total land area where our factory is located:

10 ha

Production and warehouse space:

29 000 m²



Factory:
Ryto g. 4, Menčių km.,
Naujosios Akmenės kaimiškoji sen.,
Akmenės raj., LT-85271, Lithuania

THE TWO LARGEST PORTS OF THE BALTIC STATES ARE NEARBY

To the port of Klaipėda: **160 km**

To the port of Riga: **140 km**

BALTIC SEA



WE DELIVER OUR STRUCTURAL PARTICLE BOARD PRODUCTS TO OUR CLIENTS TO ALL OF EUROPE

The main countries to which we export our structural particle board are: Norway, Finland, Sweden, Estonia, Denmark, United Kingdom, Poland, Germany, France, Spain, and other countries.





**VMG LIGNUM
BOARD**



vmg.eu

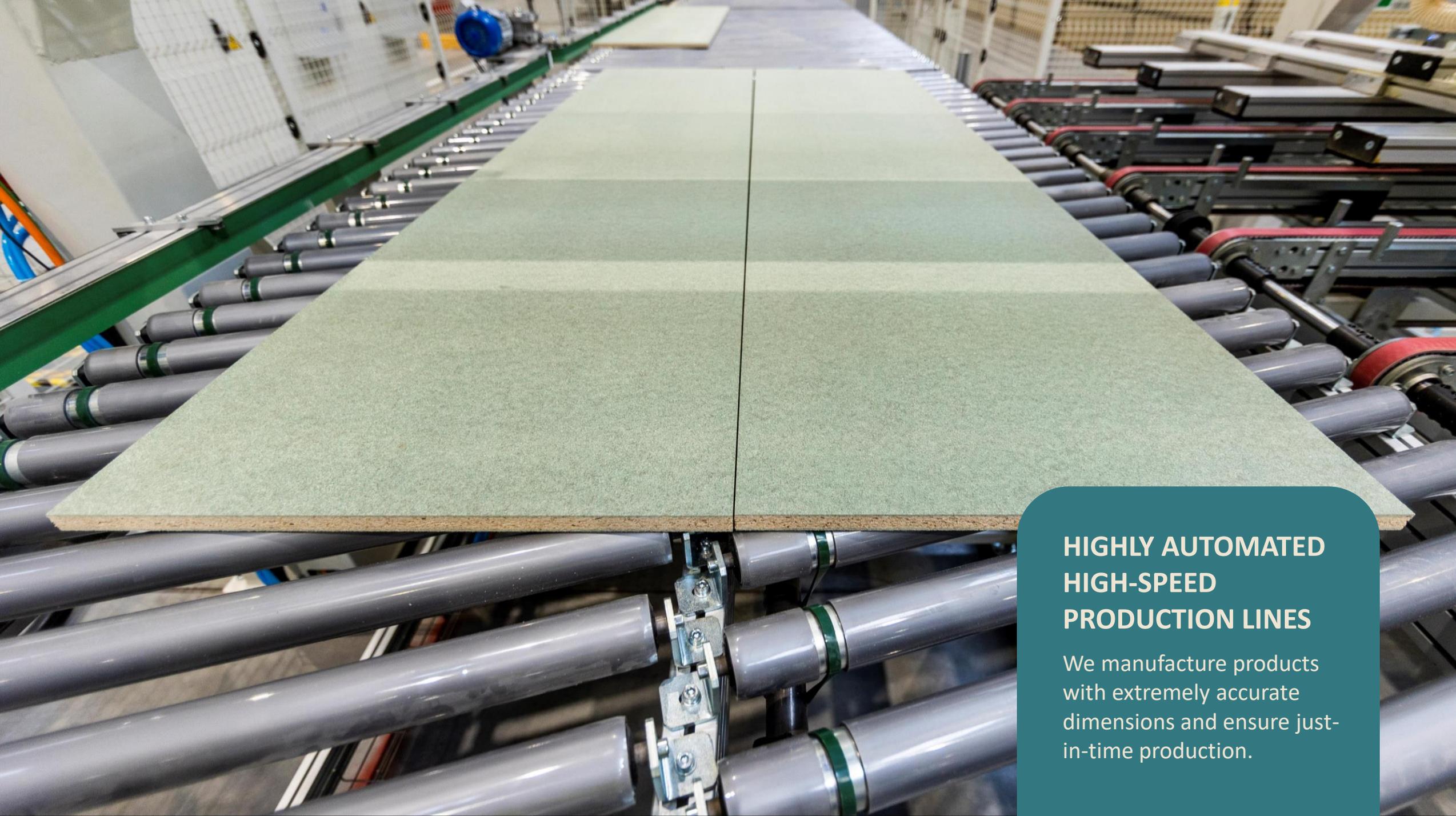
IN-HOUSE MANUFACTURING

We produce extremely large quantities of products quickly.

HIGHEST-QUALITY EQUIPMENT

We use highest-quality equipment from well-known manufacturers.





HIGHLY AUTOMATED HIGH-SPEED PRODUCTION LINES

We manufacture products with extremely accurate dimensions and ensure just-in-time production.



All our VMG LIGNUM BOARD products are certified and made from sustainably sourced wood

The wood we use is purchased only from verified suppliers who meet all FSC® requirements. All our wood base products are FSC® certified.

OUR FACTORY PRODUCTION CAPABILITIES:



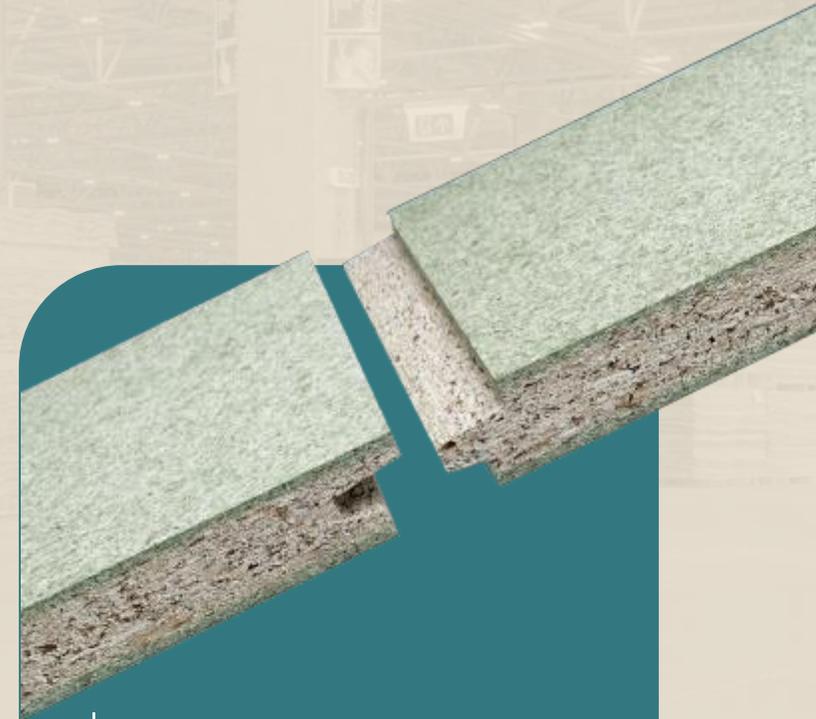
I-JOIST

15 000 000 m/year



LVL

120 000 m³/year



PARTICLE BOARD

200 000 m³/year

WE MANUFACTURE HIGH-QUALITY STRUCTURAL PARTICLE BOARD:



P4

load-bearing boards
for use in dry
conditions



P5

load-bearing boards
for use in humid
conditions



P6

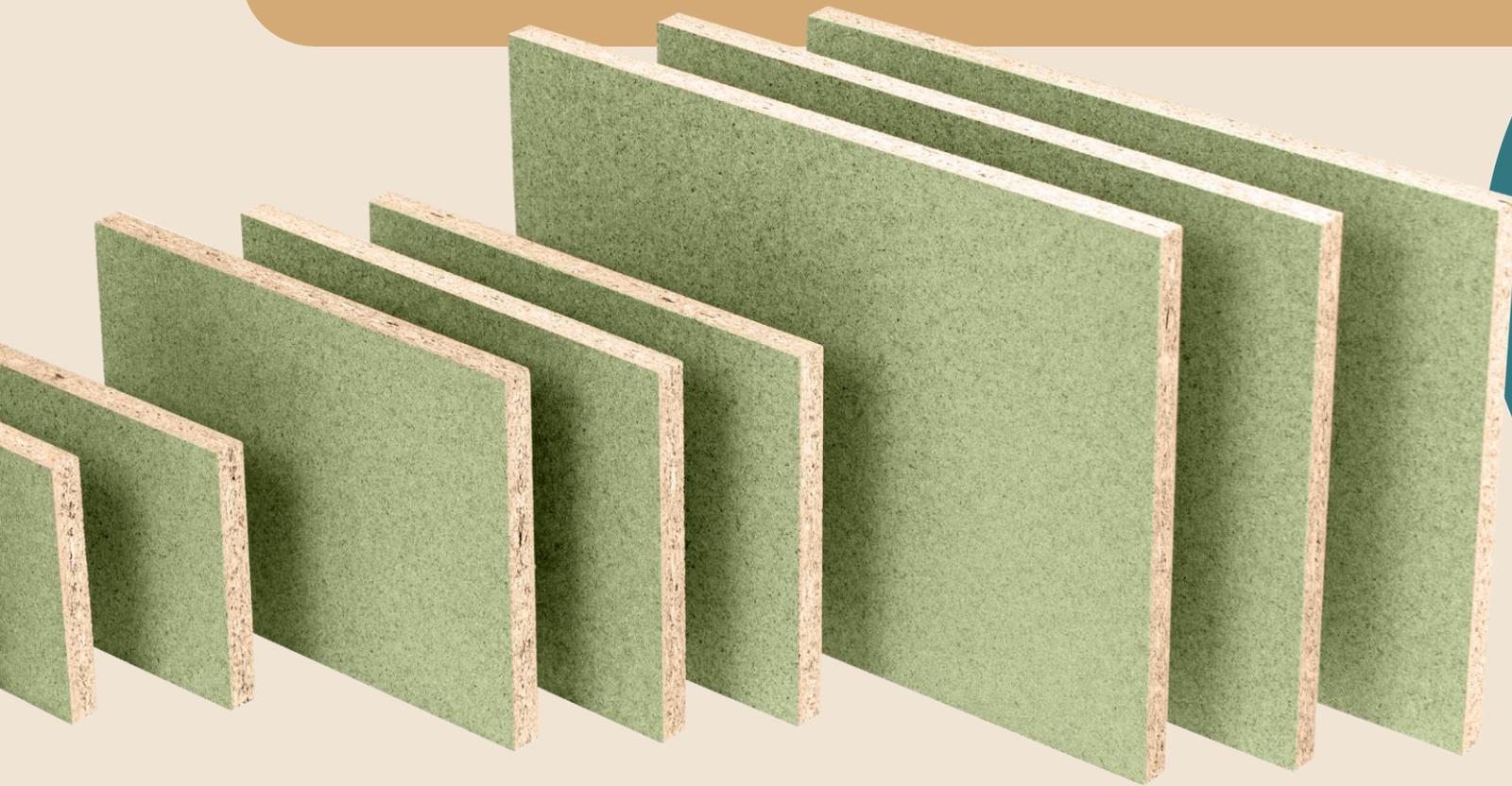
heavy duty load-
bearing boards for use in
dry conditions



P7

heavy duty load-
bearing boards for
use in humid
conditions

**WE ARE FLEXIBLE IN STRUCTURAL PARTICLE
BOARDS MEASUREMENTS AND
QUANTITIES.**



**OUR PARTICLE BOARDS
CAN BE PRODUCED IN
DIFFERENT SIZES
DEPENDING ON WHERE
AND HOW IT WILL BE USED.**

ADVANTAGES OF THE VMG LIGNUM BOARD:



Smooth surface, easy to process and clean, universal application



Good thermal and sound insulation



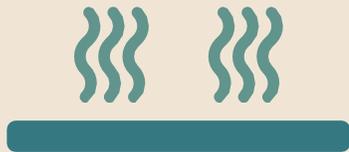
Our particle boards have a much finer fibre structure, and even more so on the surface, which, in contrast to OSB, prevents fibre protrusions to the surface even when the particle board is exposed to moisture



Resistant to loads and moisture (can be used in wet rooms P5 and P7)



Lower thickness swelling when soaking in H₂O – TS: 9-10% (compared to OSB-3: TS up to 15%);



Lower vapour permeability compared to OSB (P5 and P7);



The mechanical resistance of the boards are equal both transversely and longitudinally, as, unlike in OSB, the chips face all directions;



The particle boards for construction are attributable to formaldehyde emission class E1;



A sustainable product: 100% wood biomass is used during production, as well as the boards can be recycled to produce new ones;



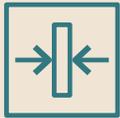
The wood for obtaining the biomass for production of the boards is purchased solely from responsibly managed forests, where the sustainable forestry principles are applied.

STANDARD VMG LIGNUM BOARDS DIMENSIONS:

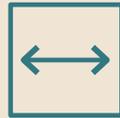
VMG LIGNUM BOARD FOR FLOORS



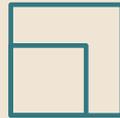
Thickness:
18, 22, 25, 38 mm



Width:
300 – 1200 mm



Length:
1200 – 3000 mm

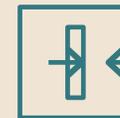


Available edges:
T&G 4, T&G 2, Regular

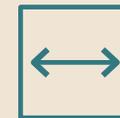
VMG LIGNUM BOARD FOR WALLS



Thickness:
8, 10, 12 mm



Width:
300 – 1200 mm



Length:
1200 – 3000 mm

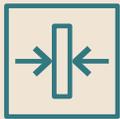


Available edges:
T&G 4, T&G 2, Regular

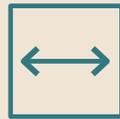
VMG LIGNUM BOARD | READY TO PAINT*



Thickness:
8, 10, 12 mm



Width:
300 – 1200 mm



Length:
1200 – 3000 mm

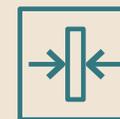


Available edge:
T&G 4, T&G 2, Regular

VMG LIGNUM BOARD | DECOR WALL*



Thickness:
8, 10, 12 mm



Width:
300 – 1200 mm



Length:
1200 – 3000 mm



Available edge:
T&G 4, T&G 2, Regular

**Product development process is currently underway*

GLUED STRUCTURAL PARTICLE BOARDS

EXPLOITATION CLASSES:

TECHNICAL CLASS	REQUIREMENT		FIELD OF USE
P4 (equivalent: OSB2)	Resistant to loads		1
P5 (equivalent: OSB3)	Resistant to loads	Resistant to moisture	1, 2
P6 (there is no OSB equivalent)	Resistant to heavy loads		1
P7 (equivalent: OSB4)	Resistant to heavy loads	Resistant to moisture	1, 2

SERVICE CLASS	FIELD OF USE (EN 1995-1-1)
1	For roof, wall and partition structures of heated buildings.
2	For protected from direct wetting roof, wall, ceiling and partition structures of unheated buildings. For well ventilated and protected from direct wetting roof, wall, ceiling and partition structures in wet rooms of heated buildings. For floors installed above ground.

VMG LIGNUM BOARDS FOR DIFFERENT PURPOSES:



VMG Lignum Board | Floor Regular



VMG Lignum Board | Floor T&G



VMG Lignum Board | Floor



VMG Lignum Board | Wall Regular



VMG Lignum Board | Wall T&G



VMG Lignum Board | Wall



VMG Lignum Board | Ready to Paint*



VMG Lignum Board | Decor Wall*

**Product development process is currently underway*

VMG LIGNUM BOARD | FLOOR:

VMG Lignum Board | Floor is a glued particle board for floors. Its edges can be even or profiled with a groove

ADVANTAGES



Easy to work and use



Low swelling in thickness (up to 10%) (P5 and P7)



Designed to withstand loads



Good thermal insulation



Good sound insulation



Board has the same mechanical strength in both the transverse and longitudinal directions because particles are distributed in all directions

TYPES

VMG Lignum Board | Floor can be installed on:



Wooden beams



Metal beams

VMG LIGNUM BOARD | WALL:

VMG Lignum Board | Wall is a glued particle board for walls. Its edges can be even or profiled with a groove. Particle boards may be used inside the walls or on both sides of internal particles.

ADVANTAGES



Good sound insulation



Good thermal insulation



Seamless connection system



Convenient and fast installation



Easy to clean



UV-resistant

TYPES

VMG Lignum Board | Wall can be installed on:



Wooden beams



Metal beams

P4 || P6

TECHNICAL SPECIFICATION

	Unit	P4				P6			
		10-12	15-20	>20-22	38	10-12	15-20	>20-22	38
Thickness	mm								
Bending strength (strong axis)	N/mm ²	≥16	≥15	≥13	≥9	≥20	≥18	≥16	≥14
Bending strength (weak axis)	N/mm ²	≥16	≥15	≥13	≥9	≥20	≥18	≥16	≥14
Modulus of elasticity in bending (strong axis)	N/mm ²	≥2300	≥2300	≥2050	≥1050	≥3150	≥3000	≥2550	≥2200
Modulus of elasticity in bending (weak axis)	N/mm ²	≥2300	≥2300	≥2050	≥1050	≥3150	≥3000	≥2550	≥2200
Internal bond	N/mm ²	≥0,40	≥0,35	≥0,30	≥0,20	≥0,60	≥0,50	≥0,40	≥0,30
Swelling in thickness, 24h	%	16	15	15	14	16	16	15	14
Formaldehyde class	Class	E1				E1			
Water vapour permeability S _d	m	15/50				15/50			
Sound absorption coefficient α		0,1/0,25				0,1/0,25			
Thermal conductivity λ	W/(m·K)	0,12				0,12			
Fire resistance	Class	D-s2, d0**				D-s2, d0**			
Biological durability	Class	1				1			
Content of pentachlorophenol	ppm	<5				<5			

*Data from EN312 and EN 13986

**D-s2,d0 :

- D – ignition;
- s2 – smoke production;
- d0 – flaming droplets production

P5 || P7

TECHNICAL SPECIFICATION

	Unit	P5				P7			
Thickness	mm	10-12	15-20	>20-22	38	10-12	15-20	>20-22	38
Bending strength (strong axis)	N/mm ²	≥18	≥16	≥14	≥10	≥22	≥20	≥18,5	≥16
Bending strength (weak axis)	N/mm ²	≥18	≥16	≥14	≥10	≥22	≥20	≥18,5	≥16
Modulus of elasticity in bending (strong axis)	N/mm ²	≥2550	≥2400	≥2150	≥1700	≥3350	≥3100	≥2900	≥2600
Modulus of elasticity in bending (weak axis)	N/mm ²	≥2550	≥2400	≥2150	≥1700	≥3350	≥3100	≥2900	≥2600
Internal bond	N/mm ²	≥0,45	≥0,45	≥0,40	≥0,30	≥0,75	≥0,70	≥0,65	≥0,55
Swelling in thickness, 24h	%	11	10	10	9	10	10	10	9
Formaldehyde class	Class	E1				E1			
Water vapor permeability μ , wet / dry cup	m	15/50				15/50			
Sound absorption coefficient α		0,1/0,25				0,1/0,25			
Thermal conductivity λ	W/(m·K)	0,12				0,12			
Fire resistance	Class	D-s2, d0**				D-s2, d0**			
Biological durability	Class	1 and 2				1 and 2			
Content of pentachlorophenol	ppm	<5				<5			

*Data from EN312 and EN 13986

**D-s2,d0 :

- D – ignition;
- s2 – smoke production;
- d0 – flaming droplets production.

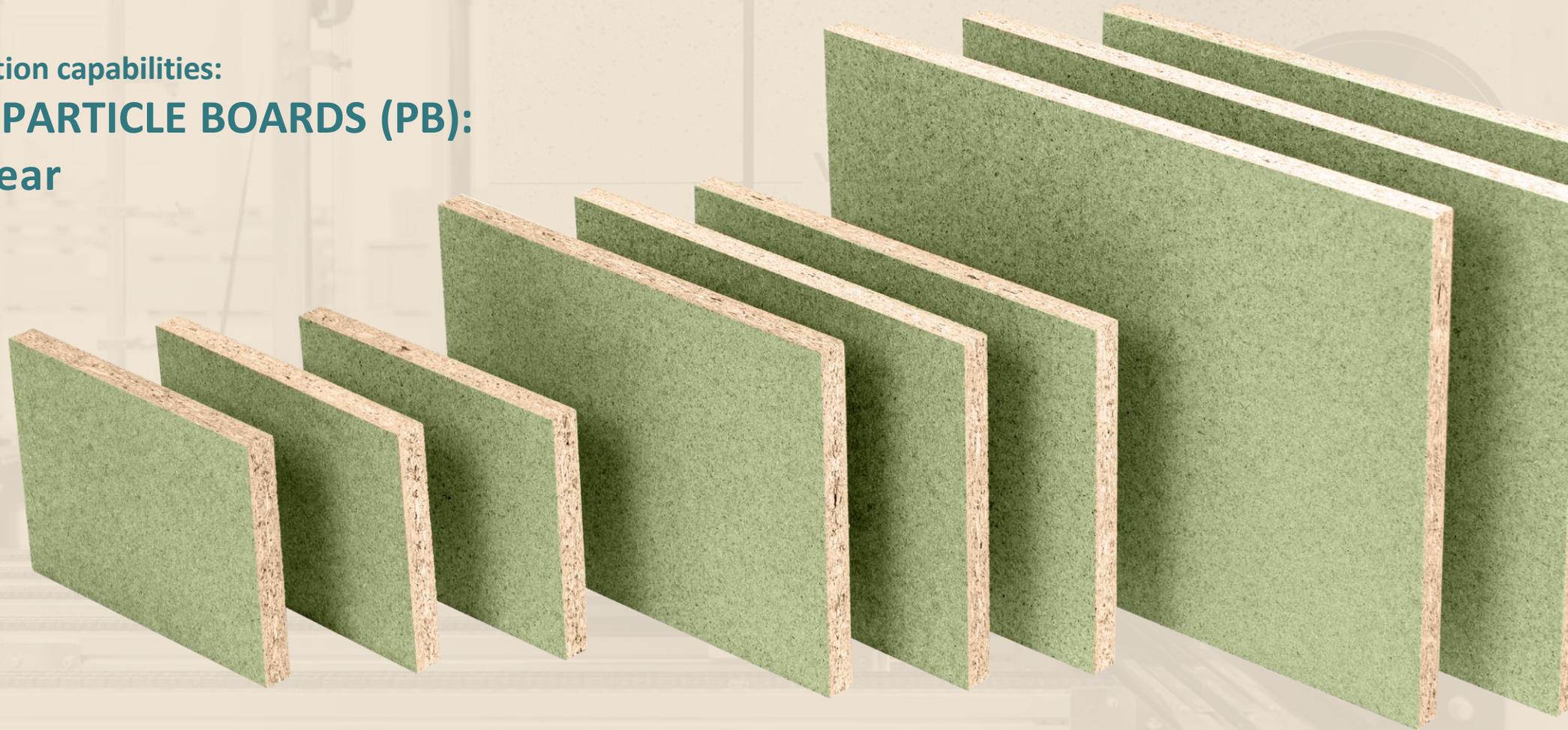
REACTION TO FIRE

Euroclass	Description	Contribution to fire	Product behaviour during the test
A1	Non-combustible	No contribution to fire	Does not ignite
A2	Non-combustible	Very limited contribution to fire	Does not ignite
B	Limited combustibility	Minor contribution to fire	Does not ignite
C	Limited combustibility	Medium contribution to fire	Ignites after 10 minutes
D	Combustible, not easily flammable	High contribution to fire	Ignites after 2 to 10 minutes
E	Combustible, moderately flammable	Promotes combustion	Ignites in less than 2 minutes
F	Combustible, easily flammable	Promotes combustion or no data available	Ignites faster than E class or no data available

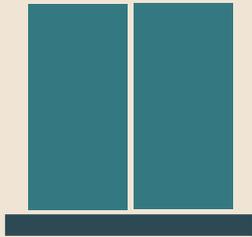
CLASS	DESCRIPTION
s1	Hardly any smoke production
s2	Moderate smoke production
s3	Unlimited smoke production
d0	No flaming droplets production
d1	Some flaming droplets
d2	Quite a lot of flaming droplets

WE ARE SUITABLE FOR LOW, MEDIUM AND LARGE-SCALE PRODUCTION PROJECTS

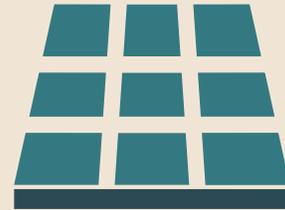
Our factory production capabilities:
STRUCTURAL PARTICLE BOARDS (PB):
200 000 m³/year



WE ARE MANUFACTURER OF FLEXIBLE AND LONG-LASTING STRUCTURAL PARTICLE BOARDS FOR:



Walls (with tongue and groove connection)



Floors (with tongue and groove connection)



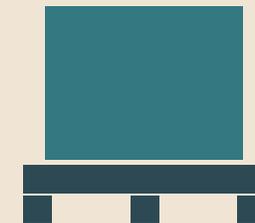
Roofs
(pitch $\geq 16^\circ$)



Concrete formworks



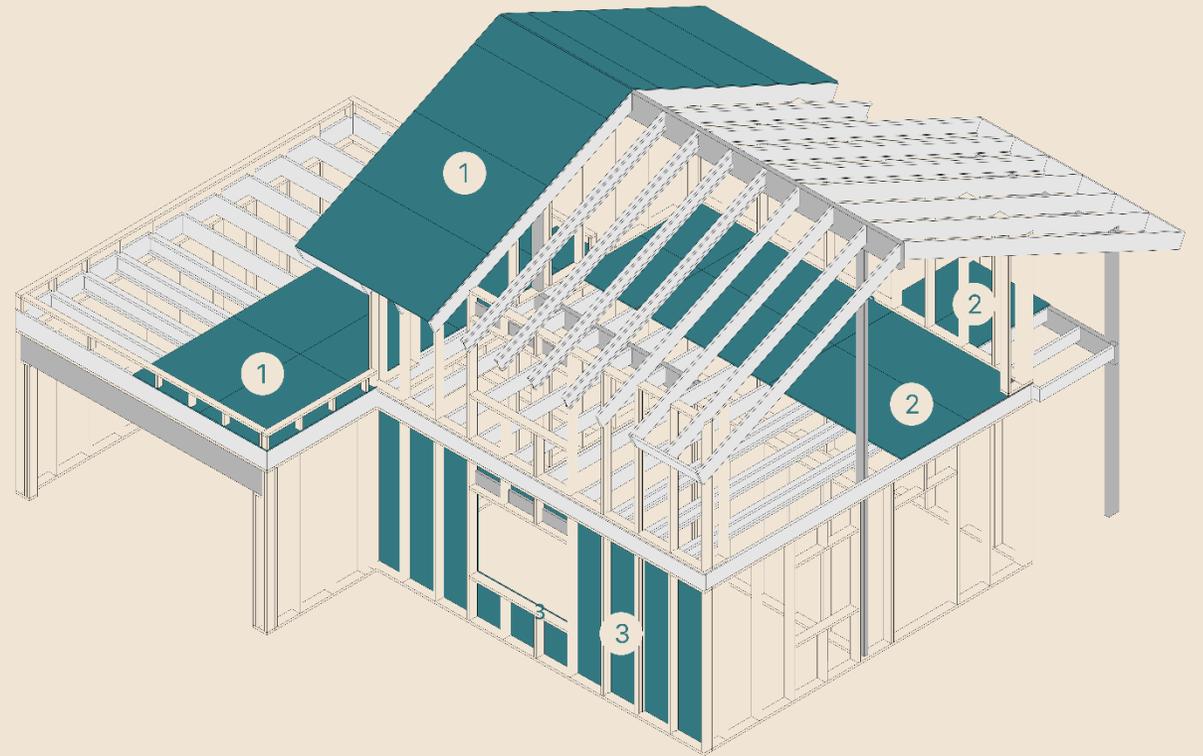
Areas that need to be protected from moisture or for wet rooms (P5 and P7)



Various construction and transport support components

IN A SINGLE-FAMILY BUILDING, VMG LIGNUM BOARD IS USED FOR:

- ① roof decking
- ② floor decking/panel
- ③ wall bracing panels and interior decoration panels.



Application of VMG LIGNUM BOARD in an single-family buildings.

WHAT YOU CAN EXPECT FROM WORKING WITH US:

↳ Quick response
to your inquiries

Technical support and guidance
across all project phases ← ↵

↳ Focus on meeting the very
toughest your requirements

Manufacturing speed
and flexibility ← ↵

↳ On-time product
delivery

Support throughout the
entire project lifecycle ← ↵

WE ALWAYS READY TO WALK THE EXTRA MILE!

**WE KINDLY INVITE YOU TO
CONTACT US WITH ANY
QUESTIONS REGARDING
OUR PRODUCTS OR NEW
PROJECTS.**



STRUCTURAL PARTICLE BOARD factory:

Ryto g. 4, Menčių km.,
Naujosios Akmenės kaimiškoji sen., Akmenės raj.,
LT-85271, Lithuania



LVL and I-JOIST factory:

Ryto g. 6, Menčių km.,
Naujosios Akmenės kaimiškoji sen., Akmenės raj.,
LT-85271, Lithuania

**INGA
BANIENĖ**

Sales manager

+370 615 74398

inga.baniene@vmg.eu

www.vmg-lignum.eu