
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

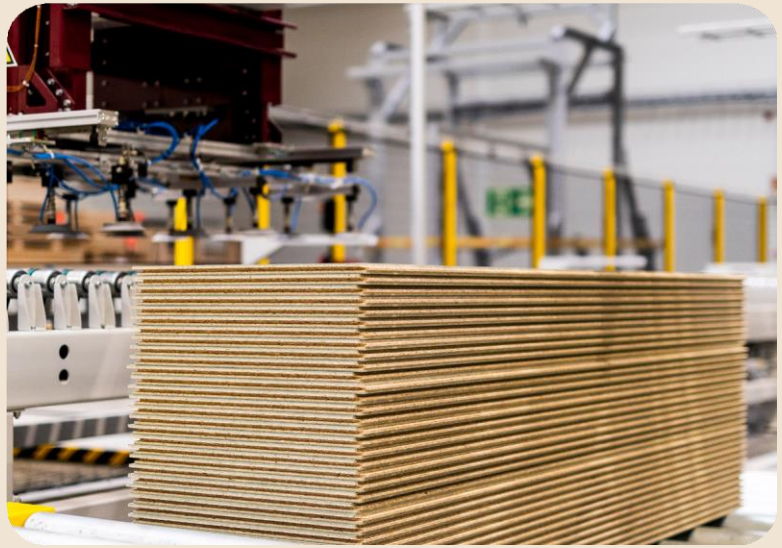
THE TWO LARGEST PORTS OF THE BALTIC STATES ARE NEARBY

To the port of Klaipėda: **160 km**

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

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.

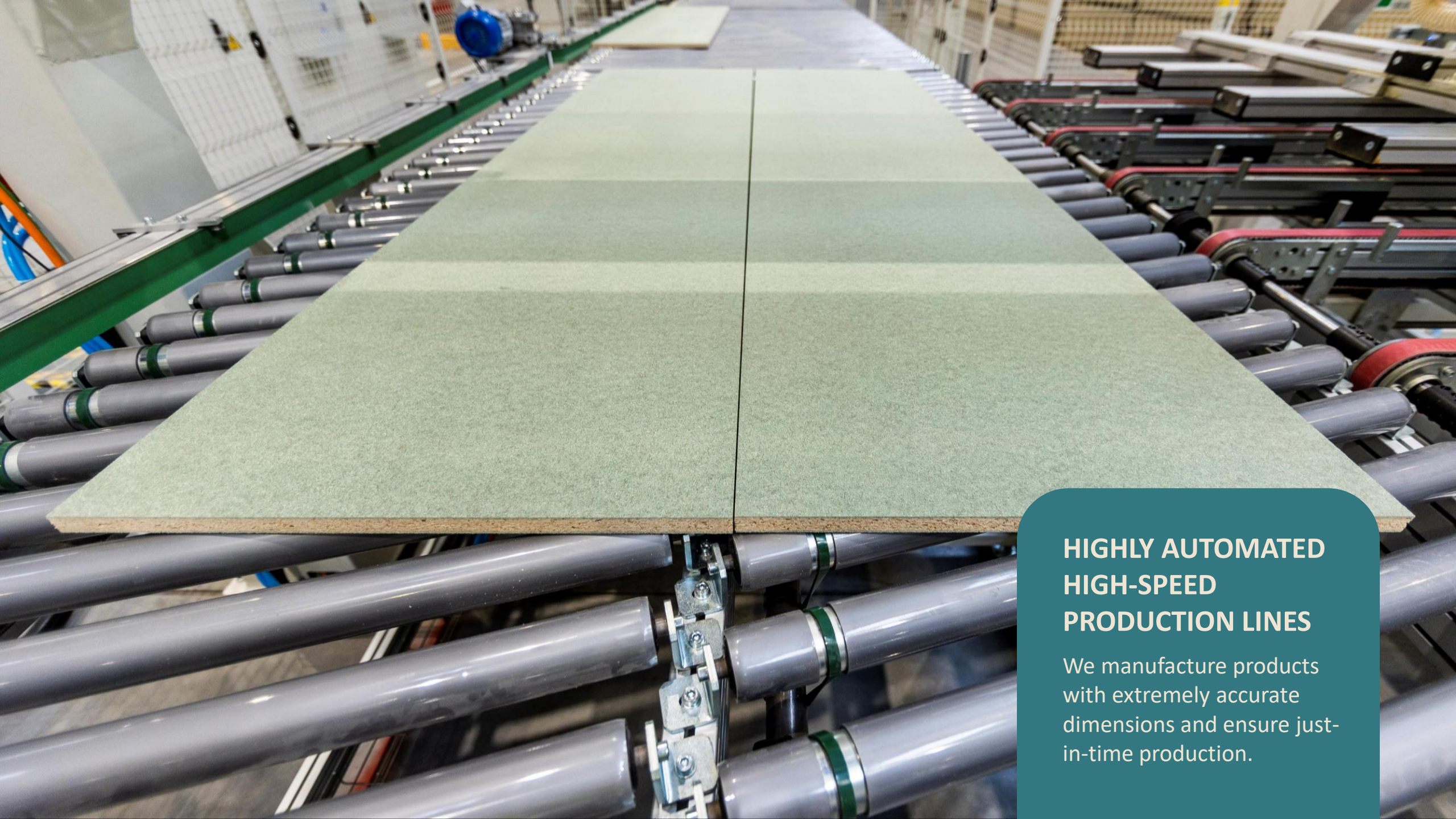


IN-HOUSE MANUFACTURING

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 m^3/year

PARTICLE BOARD

200 000 m^3/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

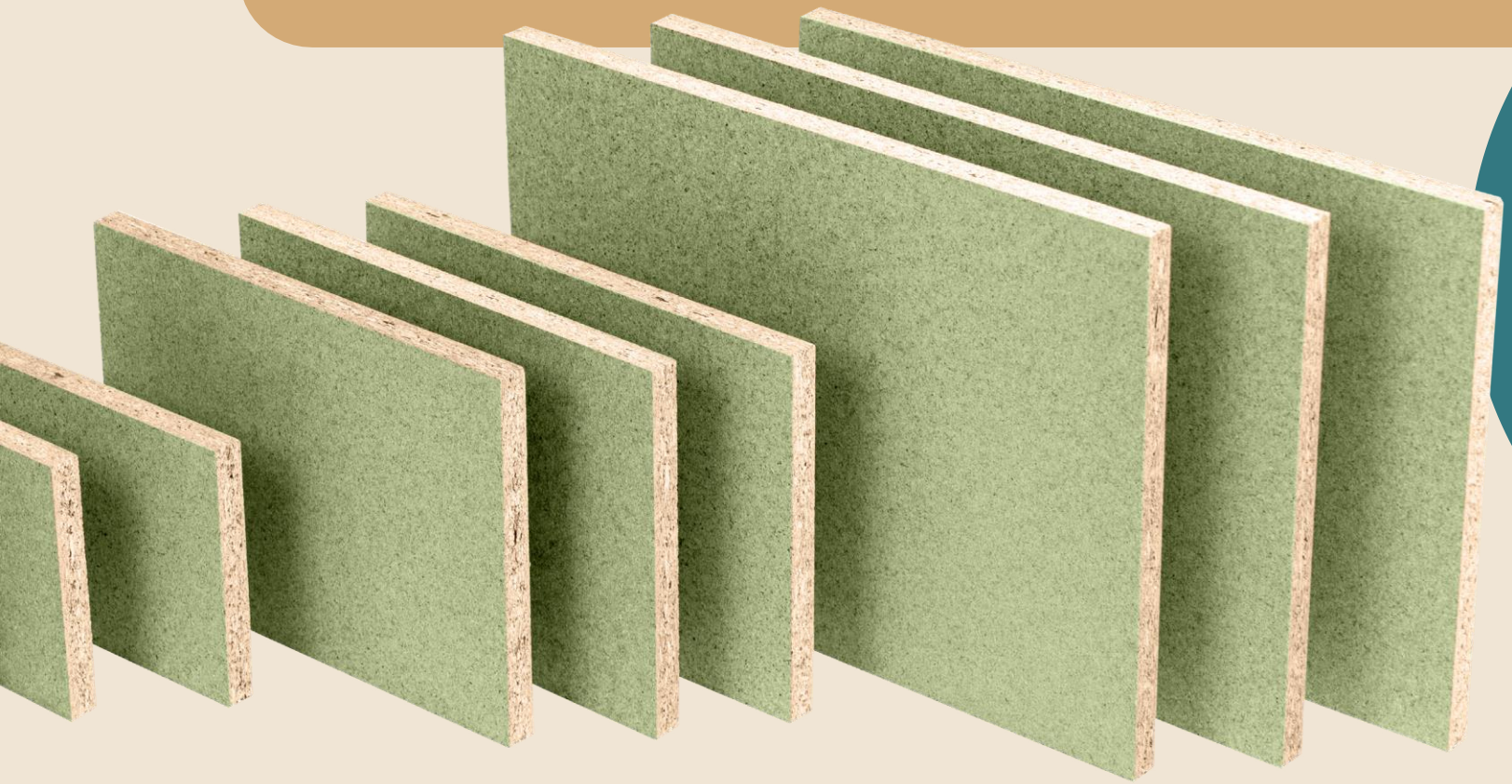
P6

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

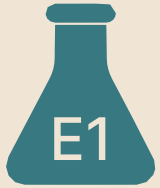
Our particle boards have a much finer fibre structure, and even more so on the surface, which, in contrast to OSB, prevents fibre protrusions to the surface even when the particle board is exposed to moisture

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

Lower thickness swelling when soaking in H_2O – 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

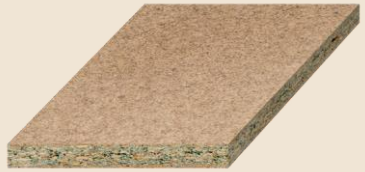
**Product development process is currently underway*

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			
Thickness	mm	10-12	15-20	>20-22	38	10-12	15-20	>20-22	38
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	$W/(m \cdot K)$	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 vapour permeability S_d	m	15/50				15/50			
Sound absorption coefficient α		0,1/0,25				0,1/0,25			
Thermal conductivity λ	$W/(m \cdot K)$	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

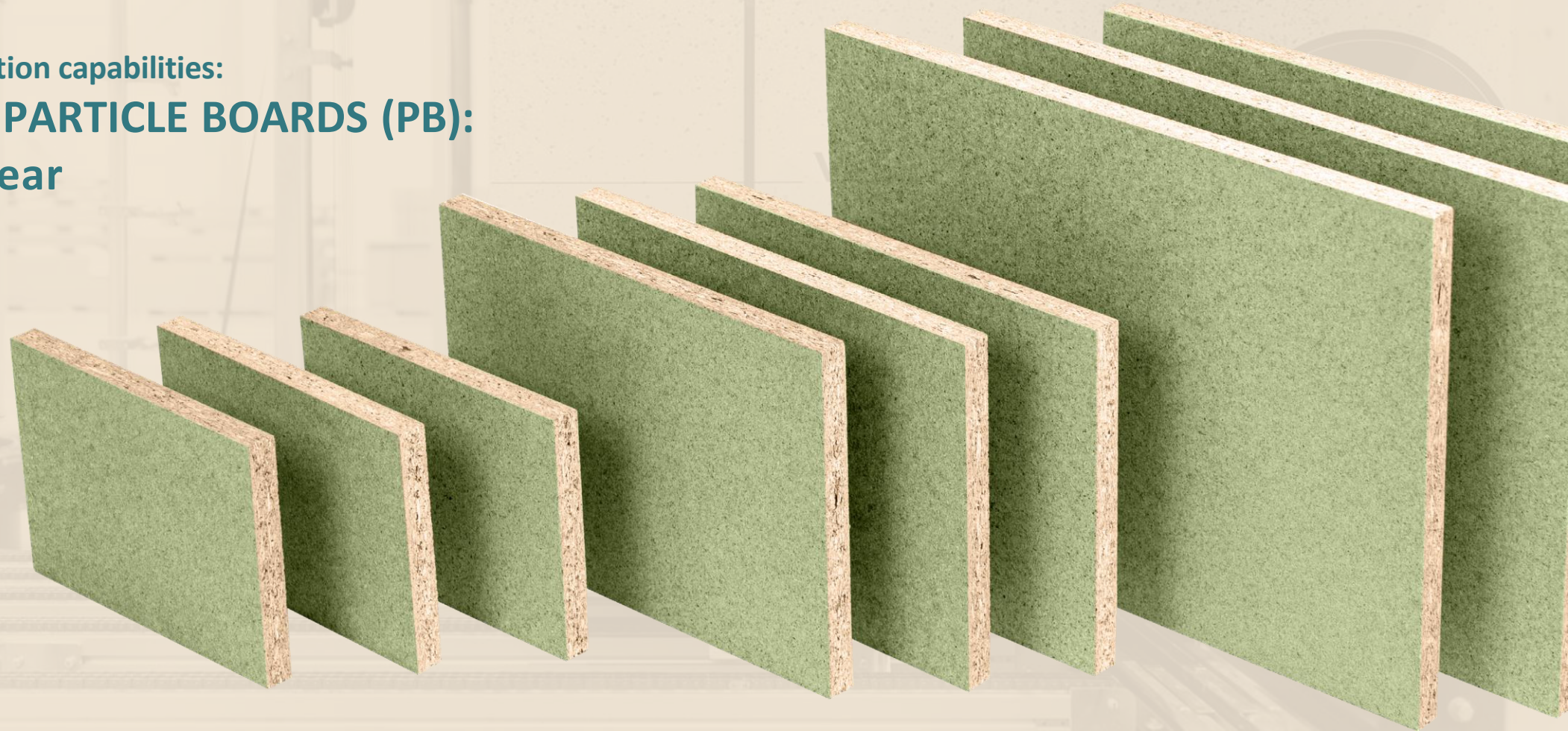
CLASS	DESCRIPTION
s1	Hardly any smoke production
s2	Moderate smoke production
s3	Unlimited smoke production
d0	No flaming droplets production
d1	Some flaming droplets
d2	Quite a lot of flaming droplets

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

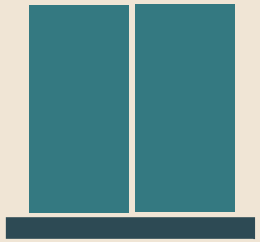
Our factory production capabilities:

STRUCTURAL PARTICLE BOARDS (PB):

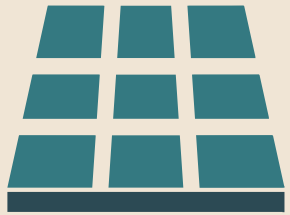
200 000 m³/year



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 ≥16°)

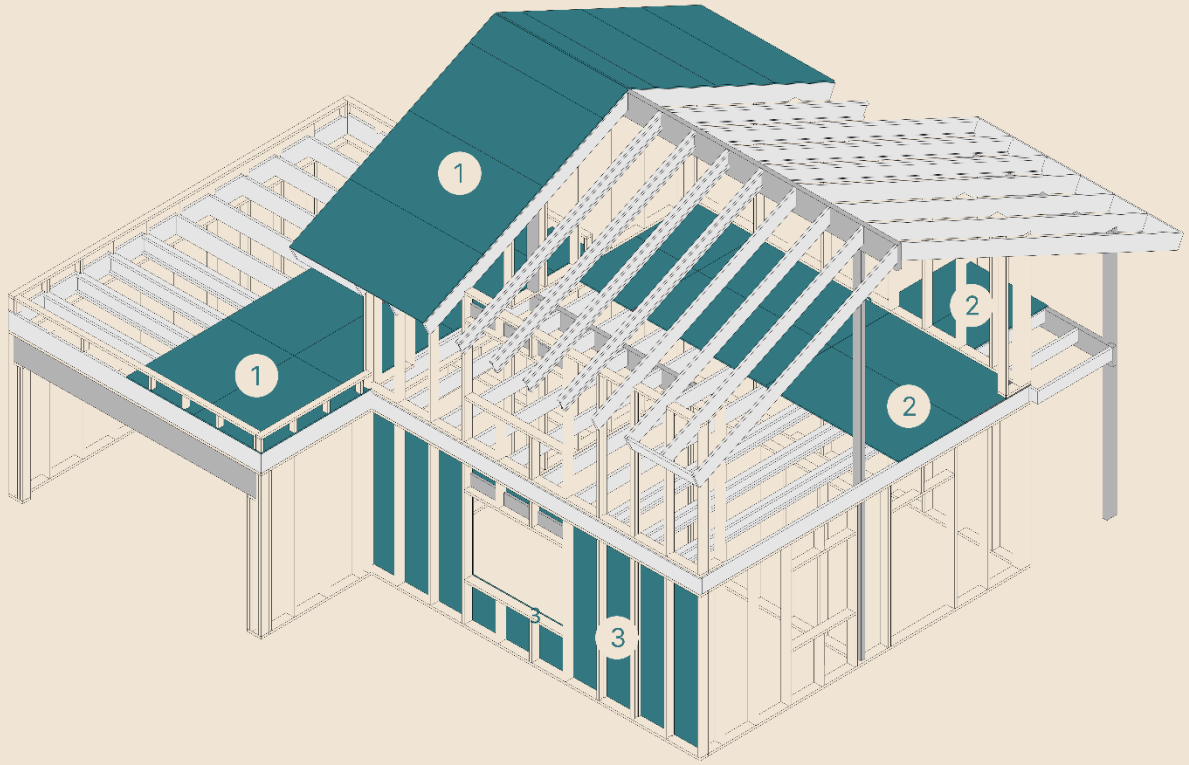
Concrete formworks

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

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