JACKODUR® LIGNIN

NEW 2025

Bio-based and thermal-insulating – Lightweight panels for industrial applications

JACKODUR® LIGNIN is an innovative biopolymer rigid foam made exclusively from bio-based and recycled raw materials. The lightweight panels are manufactured CO_2-neutral, thanks in part to the use of green electricity. This contributes significantly to reducing CO_2 emissions. **JACKODUR® LIGNIN** has been specifically developed for use as sandwich elements in various applications, such as construction, vehicle manufacturing, door panels, furniture, and exhibition stand construction.

Product properties:

- Milled surface
- Superb thermal insulation
- Outstanding bonding properties
- Can be cut to size
- Dimensionally stable
- Low tolerances

Fields of application:

- Sandwich elements
- Door panels
- Motorhomes and caravans
- Refrigerated and special-purpose vehicles
- Conservatories
- Custom sizes

JACKODUR® LIGNIN FT

JACKODUR® LIGNIN Fine Tolerance Panels (FT) are manufactured using a special process that enables precise widths, lengths, and, most importantly, thicknesses optimised for the respective application. The milled surface creates a completely flat surface – a crucial advantage, particularly in the construction of motorhomes and caravans.

JACKODUR® LIGNIN FTR

JACKODUR® LIGNIN Fine Tolerance Panels with Grooves (FTR) were developed to improve bonding properties. The surface of the material is milled and grooves cut into it.
The grooves run across both the top and bottom surfaces of the panels, with an optimised depth and width of 2 mm and a groove spacing of 40 mm.

Product Overview JACKODUR® LIGNIN 300 FT/FTR

Dimensions ①			Compressive strength at 10% deformation	Tolerances ②				Thermal conductivity
Thickness	Width	Length	LIGNIN 300 FT / FTR	Thickness	Width	Length	Rect-angularity	λ
EN 823 [mm]	EN 822 [mm]	EN 822 [mm]	EN 826 [kPa]	[mm]	[mm]	[mm]	[mm/m]	EN 12667 [W/(m·K)]
> 20 – 30	550 - 900	1200 - 3000	> 200	± 0.15	± 2.5	± 10	≤ 5	0,034
> 30 – 50	550 - 900		> 300					
> 50 – 70	550 - 750		> 300					

① *Depending on the version, longitudinal edges are welded*

② *The specified tolerances can be defined as plus or minus values or as an individual combination*

Values	Property	Standard	Unit	Value
Characteristic values	Application temperature	-	°C	-50 / +75
	Reaction to fire	EN 11925-2	-	E
	Water absorption on long-term immersion	EN 12087	Vol.-%	≤ 5.0
	Vapour diffusion-equivalent air layer thickness	EN 12086	m	3 - 16
	Dimensional stability at 70 °C and 90 % relative humidity	EN 1604	%	≤ 5
	Tensile strength	EN 1607	kPa	≥ 400
	Gross density (typical)	EN 1602	kg / m³	≥ 30
	Thermal expansion coefficient	-	mm/(m·K)	0.07
Chemical resistance	Water / seawater / saline solutions / alcohols / liquefied inorganic gases / bases / weak and diluted acids / bitumen / water-based cold bitumen / lime / cement / gypsum / sand			
Properties of Lignin Polymer Foam	closed cell, highly compression proof, elastic, water repellent, rot-proof, resistant to environmental degradation, non-ageing, non-UV resistant			
Bonding technique	e.g. adhesion with solvent-free hot-melt, epoxy and polyurethane adhesives			
Cutting technique	Lignin polymer foam can be worked with milling cutters, saws, hot wires, blades and cutters			

You can find more information at
www.jackon-insulation.com

- Safety data sheet
- EPD

JACKODUR® LIGNIN offers all the tried and tested properties; the material is compression proof, dimensionally stable, and moisture and rot resistant.

JACKODUR® FREE HBCD CFC HCFC

Free of HBCD flame retardants and chlorofluorocarbons (CFCs), blowing agents containing halogenated chlorofluorocarbons and halogenated fluorocarbons.

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