JACKODUR® LIGNIN 300 Standard

Thermal insulation made with bio-based lignin and recycled polystyrene (rGPPS)

Insulation reimagined – using renewable and recycled raw materials.

JACKODUR® LIGNIN insulation materials combine **bio-based lignin** with **recycled polystyrene (rGPPS)**, providing an innovative solution for load-bearing thermal insulation in building construction.

Applications

- **Thermal insulation beneath screed**
- **Perimeter and core insulation**
- **On-rafter insulation**
- **Internal insulation**
- **External wall insulation behind cladding (e.g. timber cladding)**

Benefits

- **Use of bio-based lignin and rGPPS**
- **Excellent thermal performance: λ_D = 0,032 W/(m·K)**
- **Verified Environmental Product Declaration (EPD) in accordance with ISO 14025 and EN 15804+A2**
- **Fully recyclable when collected separately by material type**

Item no.	EAN code	Thickness mm	Boards per pack	m²/pack	Packs per pallet
4530407	40 25345 18271 2	50	8	6.00	12
4530408	40 25345 18272 9	60	7	5.25	12
4530409	40 25345 18273 6	80	5	3.75	12
4530413	40 25345 18274 3	100	4	3.00	12
4530414	40 25345 18275 0	120	3	2.25	14
4530470	40 25345 18305 4	140	3	2.25	12
4530471	40 25345 18306 1	160	3	2.25	10
4530472	40 25345 18307 8	180	2	1.50	14
4530473	40 25345 18308 5	200	2	1.50	12

Technical data JACKODUR® LIGNIN 300 Standard

Properties	Spec / unit	Standard	JACKODUR® LIGNIN 300 Standard								
Thickness	mm		50	60	80	100	120	140	160	180	200
Nominal value, thermal conductivity λ_D	W/(m·K)	EN 13164	0,032								
Thermal resistance R_D	m²·K/W	EN 13164	1.55	1.95	2.50	3.10	3.75	4.35	5.00	5.60	6.25
Water vapour diffusion resistance factor		EN 12086	50 - 300								
Long term water absorption by diffusion	vol.-%	EN 12088	≤ 4								
Compressive stress at 10% deformation or compressive strength	kPa	EN 826	300								
Reaction to fire	Euro-class	EN 13501-1	E								
Long term water absorption by total immersion	vol.-%	EN 12087	≤ 3								
Freeze-thaw resistance	vol.-%	EN 12091	≤ 5								
Dimensional stability at 70°C and 90% relative humidity	%	EN 1604	≤ 5								
Deformation under 40 kPa load and 70°C	%	EN 1605	≤ 5								
Maximum working temperature	°C		+75								
Surface			skin								
Possible edge profiles			shiplap								

The product is free from HBCD flame retardants and does not contain CFCs, HCFCs or HFCs as blowing agents.

JACKODUR® LIGNIN *is an insulation material made from a combination of* ***recycled polystyrene (rGPPS)*** and ***bio-based lignin.***

For use as perimeter insulation or in inverted roof constructions, we recommend our approved alternatives: JACKODUR® KF / EVO / Plus.

Stainless steel or plastic is recommended for screws, anchors, rails and other fixing elements, as galvanized components may be adversely affected by corrosion when used in contact with the lignin foam.

Environmental information

The environmental performance values, including the Global Warming Potential (GWP), are specified in the Environmental Product Declaration (EPD) in accordance with ISO 14025 and EN 15804+A2 for the respective life cycle stages.

These data are based on a standardised Life Cycle Assessment (LCA) and enable transparent comparison in the context of building life cycle assessments.

EPD

Recycling and material cycle

JACKODUR® LIGNIN products can generally be recycled, provided that they are collected separately by material type and suitable recycling or take-back systems are available.

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