

**LINITHERM®**

insulation systems

**LINZMEIER**

building elements

Over-rafter  
insulation system**PAL OSB**

## The insulation system under metal

LINITHERM PAL OSB combines thermal insulation, protection against electrosmog, and a seamless substructure for the roofing in a single element. Faced with an OSB board on one side, the elements are designed for use on old or new boarded roofs.

### Reliable insulation ...

- Without thermal bridges
- Keeps humidity away from the structure
- Protection from electrosmog
- Pressure resistant

### ... in perfect professional quality ...

- Complete with factory-mounted derived wood panel
- For installation on boarding
- Time-saving and economical installation
- Full-surface, uniform thermal insulation

### ... for saving energy PUR TCL 022

- Keeps out the heat in summer, prevents heat loss in winter
- Environmentally friendly building material:
- High-performance insulation material, PUR/PIR rigid foam, free of fibers
- Positive ecobalance

Comprehensive insulation  
without thermal bridges

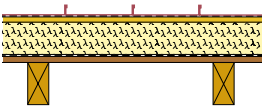
Permanently high insulation value TCL 022

Under metal roofing

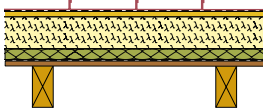
Fully enclosed substructure

No searching for attachment points





LINITHERM PAL OSB  
on wood boarding



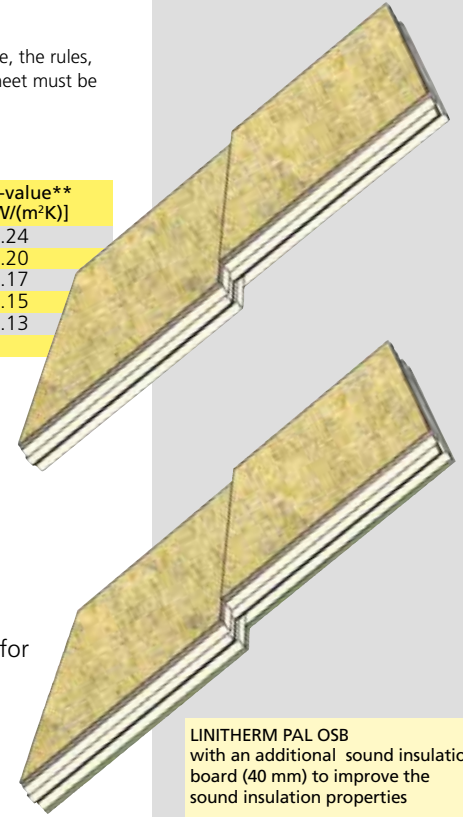
LINITHERM PAL OSB  
with sound insulation board  
(40 mm) to improve the sound  
insulation properties  
on wood boarding

**LINITHERM PAL OSB**

- Insulation core:** PUR/PIR rigid foam acc. to DIN EN 13165, class E, coated with aluminum film on both sides
- Outer facing:** derived wood panel, 22 mm thick, coated, for mounting the metal roofing
- Edge joints:** Tongue & groove pressfit joints on all sides, plus OSB panel with tongue & groove
- Please note:** When constructing the sub-roof and the entire roof structure, the rules, instructions and guidelines in the separate Linzmeier data sheet must be observed.
- Overall dimensions:** 2420 x 580 mm (= calculation measurement)

| Thickness mm total            | Thickness mm PUR/PIR | Thickness mm OSB board | Palette contents Qty. | Palette contents m <sup>2</sup> | TCL PUR/PIR | U-value** [W/(m <sup>2</sup> K)] |
|-------------------------------|----------------------|------------------------|-----------------------|---------------------------------|-------------|----------------------------------|
| 102                           | 80                   | 22                     | 21                    | 29,5                            | 022         | 0.24                             |
| 122                           | 100                  | 22                     | 17                    | 23,9                            | 022         | 0.20                             |
| 142                           | 120                  | 22                     | 15                    | 21,1                            | 022         | 0.17                             |
| 162                           | 140                  | 22                     | 13                    | 18,2                            | 022         | 0.15                             |
| 182                           | 160                  | 22                     | 11                    | 15,4                            | 022         | 0.13                             |
| Other thicknesses on request. |                      |                        |                       |                                 |             |                                  |

\* Thermal conductivity value U takes the thermal resistance (R<sub>si</sub> = 0.1 m<sup>2</sup>K/W and R<sub>se</sub> = 0.1 m<sup>2</sup>K/W) plus 19 mm wooden boarding into account. Object-specific features according to DIN EN ISO 6946 are not taken into account.



LINITHERM PAL OSB  
with an additional sound insulation  
board (40 mm) to improve the  
sound insulation properties

**LINITHERM PAL OSB – thermal insulation and seamless sub-structure in one working step**

In recent years, metal roofs have become increasingly popular with architects, as they permit appealing roof shapes and therefore unusual possibilities of use. Also here, tougher demands for thermal insulation and heat shielding have led to new and improved constructional solutions: For steep roofs, LINITHERM PAL OSB combines thermal insulation, protection against electromog and a seamless substructure for the roofing in a single element. Faced with an OSB panel on one side, the elements are designed for use on old or new boarded roofs.

**Handling advantages for the professional**

The polyurethane rigid foam insulation core provides maximum insulation with minimum panel thickness. Thanks to the robust edge joints, quick and efficient installation on the boarding – that has been covered with a suitable vapour barrier – is possible without thermal bridges. The 22 mm thick facing of derived wood is not susceptible to moisture, is hard-wearing and provides a seamless substructure for roofing with metal or fiber cement. No time-consuming searching for the right attachment points is required. The roofing can be mechanically attached at any point. Roof sections are easily cut with standard woodworking tools. Similarly, any fittings can be attached without problems.

**By far the best**

A suitable separating membrane is fitted over the LINITHERM PAL OSB elements. It ensures fast, reliable drainage of condensate between the metal roof and the membrane. What's more, the additional space reduces structure-borne noise.

LINITHERM PAL OSB under the titanium-zinc roof of the historic stables in Schwerin



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