



# CHOICE SOLUTIONS

SOLUTIONS TO  
INSULATE BY DESIGN

## OVER-RAFTER INSULATION SYSTEM

**OPTIMUM INSULATION WITH ROBUST SARKING MEMBRANE** - PAL Polymer with robust edge joints and highly tear-resistant polymer-bituminous membrane. Simple, fast, and cost-effective method for a seam and perforation-secure sarking membrane.

### MAXIMUM INSULATION WITH MINIMUM PANEL THICKNESS

POLYURETHANE (PUR/PIR) RIGID FOAM PROVIDES MAXIMUM INSULATION (TCL 023) WITH MINIMUM PANEL THICKNESS.

### PUR/PIR IS ROT PROOF,

EXTREMELY PRESSURE-RESISTANT AND THEREFORE UNSUSCEPTIBLE TO THE WEIGHT OF SNOW, WIND FORCE AND AGING.

### FOR PUR(E) ENERGY SAVING...

RAINPROOF SUB-ROOF, FROM 14° PITCH  
HOMOGENOUS, FULL-SURFACE THERMAL INSULATION TCL 023

POSITIVE ECO-BALANCE

WITH INTEGRATED VAPOUR BARRIER

SUITABLE AS A TEMPORARY ROOF COVERING

### PAL POLYMER

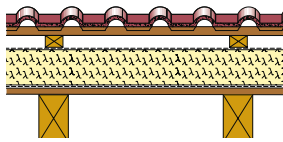


TESTED BY  
CHOICE SOLUTIONS TO  
**AS/NZS 3837**

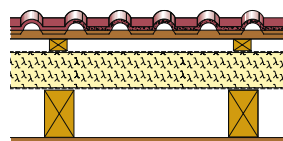


**PUR/PIR**  
for better insulation





LINITHERM PAL Polymer and wood boarding on rafters



LINITHERM PAL Polymer on rafters, wood boarding under rafters

**PAL POLYMER**  
DN  $\geq 14^\circ$

**Insulation core:** PUR/PIR rigid foam acc. to DIN EN 13165, class E, coated with aluminum film on both sides = vapour barrier

**Top coat:** High-grade, tear-resistant polymer sheet, lengthwise and transverse overlapping about 8 cm, with integral sealing edge

**Edge joints:** Tongue-and-groove pressfit joints all sides, additional lengthwise t&g clipped joint with 6 cm overlap

**EN description:** PUR - EN 13165-T2-DS(TH)9-CS(10\Y)100

**Overall dimension:** 3000 x 1000 mm (= calculation measurement)

Thickness mm PUR/PIR	Palette contents	Qty.	m <sup>2</sup>	TCL PUR/PIR	R-value* [W/(m <sup>2</sup> K)] Element
80	30	90,0	023	0.26	
100	24	72,0	023	0.21	
120	20	60,0	023	0.18	
140	17	51,0	023	0.16	
160	15	45,0	023	0.14	
180	13	39,0	023	0.12	
200	12	36,0	023	0.11	

Other thicknesses available on request

\*R-value taking into account the thermal transmission factors R<sub>si</sub> and R<sub>se</sub> and a 19 mm wood boarding.

Object-specific features according to DIN EN ISO 6946 are not taken into account.

**SAFETY IN CASE OF FIRE** Together with a 19 mm tongueand-groove wood boarding (in accordance with DIN 68122-1/2), **CHOICE SOLUTIONS' PAL POLYMER** even meets the requirements of a F30B structure (test certificate P-MPA-E-04-025).

### COMPLETE THERMAL INSULATION IS ONLY POSSIBLE ABOVE RAFTERS

As with the house façade, the best possible insulation is obtained by insulating the roof from the outside above the rafters or wood boarding, because this is the only way to provide full-surface roof insulation without thermal bridges. Moreover, it protects the roof structure from moisture and temperature influences.

### BETTER AND FASTER INSTALLATION

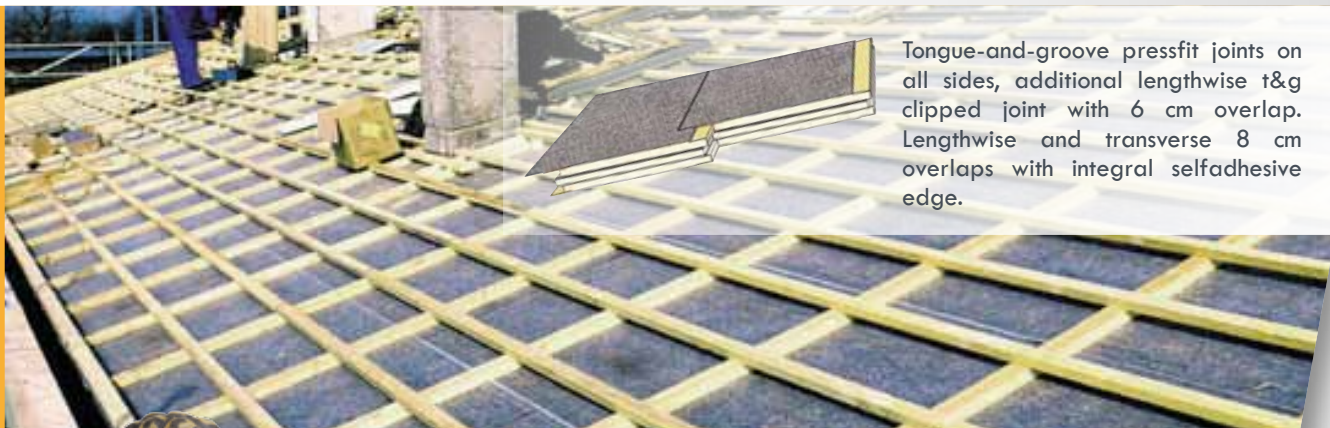
Thanks to the specially developed tongue-and-groove pressfit joints plus the additional lengthwise t&g clipped joint, each installed element immediately provides thermal insulation that is airtight and without thermal bridges.

### TOP QUALITY FOR RELIABLE PROTECTION

The stiff, pressure-resistant insulation core of PUR/PIR rigid foam is coated with aluminum film on both sides, which acts as a vapour barrier on the underside. Simultaneously, it protects the inhabitants from electrosmog. On the upper side, a highly tear-resistant polymer bituminous membrane provides the second water-conducting level. The overlaps on the long and narrow sides (8 cm, with integral sealing edge) with a CHOICE SOLUTIONS' factory-made sealing band guarantee a seam and perforation-secure and airtight sarking membrane.

### SLIMMER INSULATION WITH PUR

Due to the low thermal conductivity (TCL 023) of the high-performance insulation material PUR/PIR rigid foam, the structural height is minimised and uniformly high insulation values are ensured. Comfortable temperatures throughout the year: optimal thermal insulation in winter and protection from heat in the summer.



Tongue-and-groove pressfit joints on all sides, additional lengthwise t&g clipped joint with 6 cm overlap. Lengthwise and transverse 8 cm overlaps with integral selfadhesive edge.

