



CHOICE SOLUTIONS

energy conservation products
for domestic & industry

CONCRETE CEILING INSULATION SYSTEM

THE THIN CEILING INSULATION ROBUST AND HIGHLY EFFECTIVE. With **Choice Solutions' PAL KD series** you get a warm floor in the living area and significantly reduce your energy consumption.

THE SAFE INSULATION...

The easy way to separate the cold bridge between heated and non-heated rooms.
Complete solution for all concrete ceilings.

...IN PERFECT PROFESSIONAL QUALITY...

With a special edge connection
Integrated vapour barrier
Inherently stable and pressure resistant
Insulates extensively and continuously

...FOR PUR(e) ENERGY SAVING...

Noticeably reduced energy consumption
Insulation core made of PUR/PIR rigid foam TCL 024
Low construction height – little height loss
Environmentally friendly: free of CFC, HCFC and fibres
Positive eco-balance

PAL KD



PAL KD White



PAL KD Top



tested by
CHOICE SOLUTIONS TO AS/NZS 3837

UNIQUE CONCEALED FIXING SYSTEM



PUR/PIR
for better insulation





PAL KD

Insulation core: PUR/PIR rigid foam according to DIN EN 13165, building material class B2, Application type PUR 024 DI, with natural aluminum foil on both sides

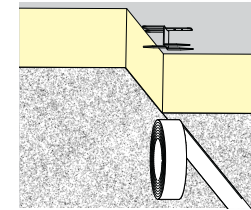
Edge connection: round about edgeless

Identification according to EN: Composite board is made of: PUR-EN 13165-T2-DS(TH)9-CS(10\Y)100-TR40

Overall dimension: 1200 x 600 mm (= calculation measurement)

Thickness mm PUR/PIR	R-value [W/(m ² K)] Element	Thickness mm PUR/PIR	R-value [W/(m ² K)] Element
30 universal	1,30	80	3,48
40	1,74	100	4,34
50	2,17		
60	2,61		

The insulation elements are attached to the concrete ceiling via double-sided attachment hooks from below. The hook is pushed into the edge of the already fixed insulation element and then dowelled to the ceiling. The next element is pushed into the sticking out hook. The joint area of the insulation elements is stuck down with tape.



PAL KD White

Insulation core: PUR/PIR rigid foam according to DIN EN 13165, building material class B2, Application type PUR 024 DI, with aluminium foil on both sides

Outer facing: Visible side = aluminium foil, coated in white

Edge connection: grooved all around for H-joint profile

Identification according to EN: PUR-EN 13165-T2-DS(TH)9-CS(10\Y)100-TR40

Overall dimension: 1200 x 600 mm (= calculation measurement)

Thickness mm PUR/PIR	R-value [W/(m ² K)] Element	Thickness mm PUR/PIR	R-value [W/(m ² K)] Element
40	1,74	100	4,34
50	2,17		
60	2,61		
80	3,48		



PAL KD Top

Insulation core: PUR/PIR rigid foam according to DIN EN 13165, building material class B2, Application type PUR 024 DI, with aluminium foil on both sides

Outer facing: Visible side = laminated chipboard panel, 3mm thick, white coating

Edge connection: grooved all around for H-joint profile

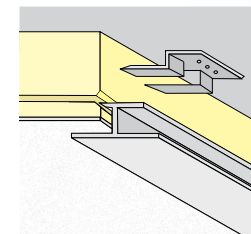
Identification according to EN: PUR-EN 13165-T2-DS(TH)9-CS(10\Y)100-TR40

Overall dimension: 1500 x 1200 mm (= calculation measurement)

Thickness mm PUR/PIR	R-value [W/(m ² K)] Element
43	1,74
63	2,61
83	3,48

Other thicknesses on request!

The elements are attached directly to the concrete ceiling with attachment hooks. Push the clamp into the edge of the already fixed elements and dowel to the ceiling. The peculiarity here is that the insulation boards are grooved all the way round. The colour-coordinated grey-white H-joint profile is now stuck in the grooved joint of the board edges. Push the next element into the profile. After each row insert a continuous H-joint profile into the long edge and assemble the next board row. The elements are laid in formation. Foam the joint on the wall and create the wall connection with L wall connection profiles.



Maximum insulation performance with the lowest construction heights

In some rooms the height is a point of relevance and the insulation should only reduce it minimally. The thin PUR/PIR insulation elements provide maximal insulation performance with the lowest construction heights. The proof: According to the German Energy Saving Ordinance (EnEV 2009) the U-value of a retrospectively insulated concrete ceiling must be less than 0.30 W/(m²K). At just 80 mm thick, **Choice Solutions' PAL KD** elements have a thermal conductivity level of 0.24 and can therefore achieve an U-value of 0.29 W/(m²K) without any further construction.

The insulation boards with aluminium cladding on both sides are extremely moisture-resistant, robust and inherently stable.

Warm ceilings – more light

The PUR/PIR rigid foam insulation elements from Linzmeier don't just save energy. The room-side, white surface of the **Choice Solutions' PAL KD White** and **Choice Solutions' PAL KD Top** elements looks good and reflects the light back into the room. **Choice Solutions' PAL KD Top** creates a stable, impact resistant surface.



contact us quick for more information

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