UTHERM

HIGH PERFORMANCE PIR INSULATION

EXPORT DELIVERY PROGRAM

FOR RESIDENTIAL, COMMERCIAL, INDUSTRIAL AND AGRICULTURAL BUILDINGS

lambda: up to **0,020** W/m.K

UNILIN
FOR SMART LIVING

UNILIN, DIVISION INSULATION

For over 40 years, we have been specialized in the development and production of innovative, insulated roof or wall panels and PIR insulation products.

UNILIN – for smart living

UNILIN, division insulation is a division of the UNILIN Group, which manufactures and provides PIR and phenolic insulation boards and structural insulated roof or wall panels all over Europe. The UTHERM PIR insulation is produced at 6 production sites in Belgium, the Netherlands, France, the UK and Ireland.

The UNILIN Group is part of the U.S. stock-exchange listed company Mohawk Industries Inc. It is headquartered in western Belgium and is one of the leading manufacturers of laminate and vinyl flooring, wood-based panels, structural insulated roof or wall panels and PIR insulation boards. Over 5000 people are employed by UNILIN across countries including Belgium, the Netherlands, Germany, France, Ireland, America, Malaysia, and Russia.

The Marazzi, Pergo, and Quick-Step brands are all part of the UNILIN Group and Mohawk Company

The UNILIN, division insulation headquarters

UTHERM PIR INSULATION BOARDS

ALSO AVAILABLE IN PREMIUM lambda 0,020 W/m.K

UTHERM PIR insulation boards combine a unique thermal insulation performance with a high compressive strength and dimensional stability and are easy to handle and install due to their low weight. They are resistant to water and to almost all construction chemicals; they also offer excellent protection against heat and energy loss. Therefore, they are suitable for roof, wall and floor constructions in residential, industrial, commercial and agricultural buildings.

UTHERM insulation boards are highly innovative and quality is constantly monitored. They are a vital tool for architects, planners, builders and renovators; particularly in today's environment, which is characterized by the increasing requirements for environmental protection and energy saving.

Besides UTHERM PIR and UTHERM PREMIUM PIR insulation, UNILIN provides also SAFE-R phenolic boards. Please contact your sales contact for further information.

UTHERM UTHERM premium SAFE-R

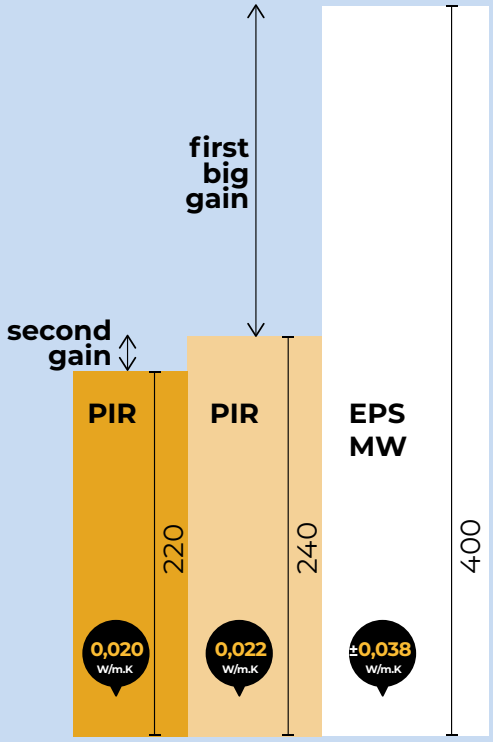
At UNILIN, division insulation, we are always available to provide technical support and advice (i.e. flat roof cut-to-fall designs, wind uplift tests, fire and acoustic behavior analysis...).

UNILIN guarantees high quality standards of the PIR boards and their production process. Several certificates are therefore applicable to our products and production. If you would like more information on these certificates, please contact your sales team.

UTHERM premium

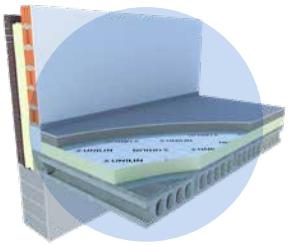
NEW

PIR Insulation boards with improved lambda value

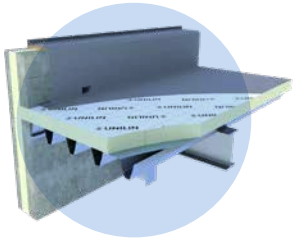


THICKNESS GAINS

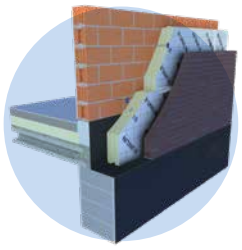
UTHERM Premium is available for several applications



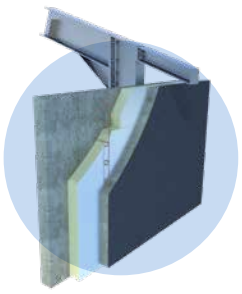
Floor



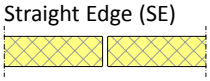
Flat Roof



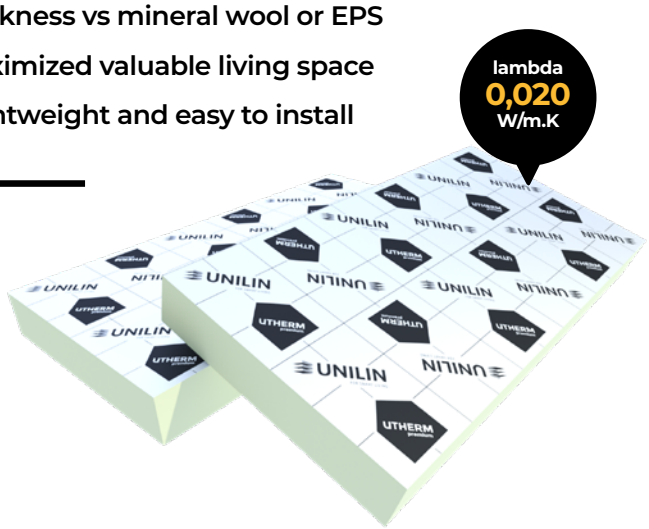
Cavity wall / Ventilated facades



Prefabricated concrete wall panel

Lambda value	0,020 W/m.K
Compressive strength	≥ 150 kPa
Thicknesses	20 mm > 140 mm
Dimension	standard: 600 x 1200 mm
Edge Finish	Straight Edge (SE) 
Certification	CE, EPD, FIW

- Superior thermal performance
- Up to 50% reduced insulation thickness vs mineral wool or EPS
- Maximized valuable living space
- Lightweight and easy to install

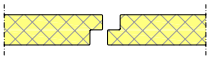


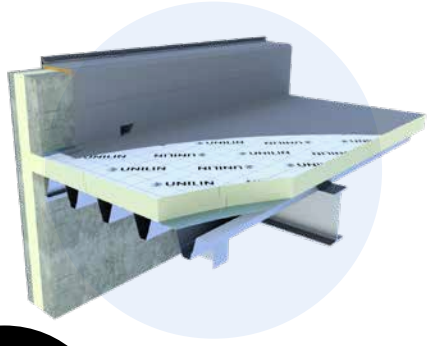
Thickness	R-Value	Packing details	
[mm]	[m²K/W]	[sheets/pack]	[m²K/W]
UTHERM PREMIUM LE 600 x 1200 MM			
20*	1,00	24	17,28
30*	1,50	16	11,52
40*	2,00	12	8,64
50	2,50	10	7,20
60	3,00	8	5,76
70	3,50	7	5,04
80	4,00	6	4,32
100	5,00	5	3,60
120	6,00	4	2,88
140*	7,00	3	2,16

* Minimum order quantities and delivery upon consultation

UTHERM ROOF LE

- Easy to install
- Lightweight
- High thermal performance
- For mechanically fixed, ballasted (including green roofs) and adhered roofing systems
- Suitable for new build and refurbishment

Application Type	Flat and low-pitched roofs
Dimensions	600 x 1200 mm 1200 x 2400 mm
Edge Finish	L-shape (LS)  Straight Edge (SE) 
Compressive Strength	≥ 150 kPa (1,5 kg/cm²)
Thermal Conductivity	0,022 W/m.K
Fire Rating	B-s1-d0 (End-use steel deck) E in accordance with EN 13501-1
Certification	CE, EPD, FIW



ALSO AVAILABLE IN PREMIUM lambda 0,020 W/m.K

lambda 0,022 W/m.K

UTHERM Roof LE is a high performance rigid PIR foam insulation board.

The board comprises gastight low emissivity aluminium composite foil facings.

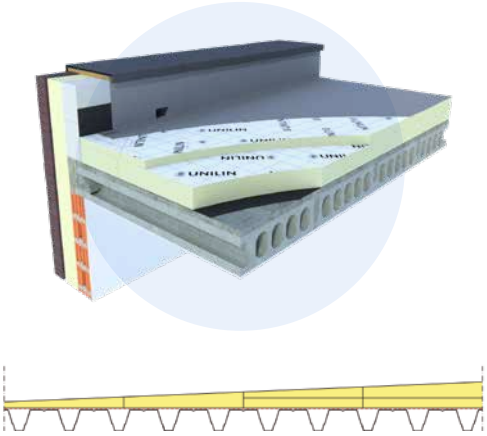
UTHERM Roof LE is manufactured in accordance with EN 13165.

Thickness [mm]		R-Value	Packing details	
L-shape	Straight edge	[m²K/W]	[sheets/pack]	[m²/pack]
UTHERM ROOF LE 600 x 1200 MM				
	20*	0,90	24	17,28
	30	1,35	16	11,52
	40	1,80	12	8,64
	50	2,25	10	7,20
60	60*	2,70	8	5,76
80	80*	3,60	6	4,32
100	100*	4,50	5	3,60
120	120*	5,45	4	2,88
140	140*	6,35	3	2,16
160	160*	7,25	3	2,16
180*	180*	8,15	2	1,44
200*	200*	9,05	2	1,44

Thickness [mm]		R-Value	Packing details	
L-shape	Straight edge	[m²K/W]	[sheets/pack]	[m²/pack]
UTHERM ROOF LE 1200 x 2400 MM				
	20	0,90	24	69,12
	30	1,35	16	46,08
	40	1,80	12	34,56
	50	2,25	10	28,80
60	60	2,70	8	23,04
70*	70	3,15	7	20,16
80	80	3,60	6	17,28
90*	90	4,05	5	14,40
100	100	4,50	5	14,40
110*	110	5,00	4	11,52
120	120	5,45	4	11,52
140	140	6,35	3	8,64
160	160*	7,25	3	8,64
180*		8,15	2	5,76
200*		9,05	2	5,76

(*) Minimum order quantities and delivery upon consultation

UTHERM ROOF L/LE TAPERED



Application Type	Flat and low-pitched roofs
Dimensions	1200 x 1200 mm
Edge Finish	Straight Edge (SE)
Compressive Strength	≥ 150 kPa (1,5 kg/cm²)
Thermal Conductivity	0,022 W/m.K
Fire Rating	F/E in accordance with EN 13501-1
Certification	CE, EPD

- **With falls up to 30 mm (1:40)**
- **Ca. 20% material saving in comparison to conventional tapered roofing systems**
- **High thermal performance**
- **Roof lay-outs provided once order has been placed**
- **Easy to install**
- **Slope of 40 mm (1:30) can be achieved using 2 layers of 20 mm slopes**

UTHERM Roof L/LE Tapered is a high performance rigid PIR foam insulation board, manufactured with falls up to 30 mm.

The board comprises a gastight, low emissivity aluminium composite foil facing.

UTHERM Roof L/LE Tapered is manufactured in accordance with EN 13165.

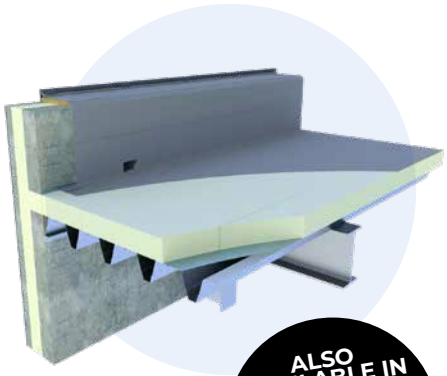
Thickness [mm]	R-Value [m²K/W]	Packing details [sheets/pack]	[m²/pack]	[m²/m³]
UTHERM ROOF LE TAPERED 30 MM (2,50% - 1:40)				
30/60	2,00	10	14,40	22,22
60/90	3,40	6	8,64	13,33
90/120	4,75	4	5,76	9,52
UTHERM ROOF LE TAPERED 25 MM (2,08% - 1:48)				
30/55	1,90	10	14,40	23,53
55/80	3,05	6	8,64	14,81
80/105	4,20	4	5,76	10,81
105/130	5,30	4	5,76	8,51
UTHERM ROOF L TAPERED 20 MM (1,67% - 1:60)				
30/50	1,80	6	8,64	25,00
50/70	2,70	4	5,76	16,67
70/90	3,60	6	8,64	12,50
90/110	4,50	4	5,76	10,00
110/130	5,45	4	5,76	8,33

Thickness [mm]	R-Value [m²K/W]	Packing details [sheets/pack]	[m²/pack]	[m²/m³]
UTHERM ROOF LE TAPERED 15 MM (1,25% - 1:80)				
30/45	1,70	8	11,52	26,67
45/60	2,35	6	8,64	19,05
60/75	3,05	4	5,76	14,81
75/90	3,75	6	8,64	12,12
90/105	4,40	4	5,76	10,26
105/120	5,10	4	5,76	8,89
UTHERM ROOF L TAPERED 10 MM (0,83% - 1:120)				
30/40	1,55	8	11,52	28,57
40/50	2,00	6	8,64	22,22
50/60	2,50	6	8,64	18,18
60/70	2,95	4	5,76	15,38
70/80	3,40	4	5,76	13,33
80/90	3,85	4	5,76	11,76
90/100	4,30	4	5,76	10,53
100/110	4,75	4	5,76	9,52
110/120	5,20	4	5,76	8,70

UTHERM ROOF M

- For mechanically fixed, ballasted (including green roofs) and bonded/adhered roofing systems
- Easy to install
- Lightweight
- High thermal performance
- Suitable for new build and refurbishment

Application Type	Flat and low-pitched roofs
Dimensions	standard: 600 x 1200 mm also available in 1200 x 2400 mm upon request
Edge Finish	standard: Straight Edge (SE) 
Compressive Strength	≥ 150 kPa (1,5 kg/cm²)
Thermal Conductivity	0,025-0,027 W/m.K (depending on thickness)
Fire Rating	B-s2-d0 (End-use steeldeck) F in accordance with EN 13501-1
Certification	CE, EPD, FIW



ALSO AVAILABLE IN Utherm Roof ME

with E-class fire rating
and L-shaped edges

Thickness [mm]	R-Value [m²K/W]	Packing details [sheets/pack]	[m²/pack]
UTHERM ROOF M 600 x 1200 MM			
30*	1,10	16	11,52
40*	1,45	12	8,64
50*	1,85	10	7,20
60	2,20	8	5,76
70*	2,55	7	5,04
81	3,10	6	4,32
90*	3,45	5	3,60
100	3,80	5	3,60
110*	4,20	4	2,88
120	4,80	4	2,88
140*	5,60	3	2,16
160*	6,40	3	2,16

(*) Minimum order quantities and delivery upon consultation

UTHERM Roof M is a high performance rigid PIR foam insulation board.

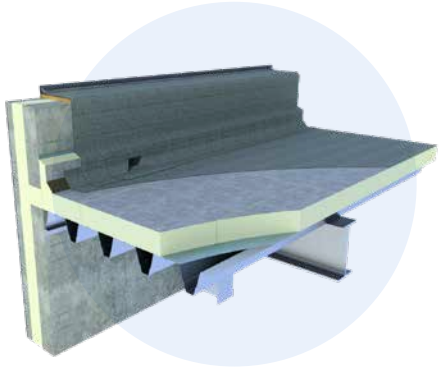
The board comprises a mineral glass tissue facing.

UTHERM Roof M is manufactured in accordance with EN 13165.

UTHERM ROOF BGM

- **Suitable for mechanically fixed, ballasted (including green roofs) and (hot*) bonded roofing systems**
- **Easy to install**
- **Lightweight**
- **High thermal performance**

(*) According to manufacturer's instructions.



UTHERM Roof BGM is a high performance rigid PIR foam insulation board.

The board comprises a bituminous glass tissue facing on one side and a mineral glass tissue facing on the other.

UTHERM Roof BGM is manufactured in accordance with EN 13165.

Application Type	Flat and low-pitched roofs
Dimensions	600 x 1200 mm
Edge Finish	Straight Edge (SE) 
Compressive Strength	≥ 150 kPa (1,5 kg/cm²)
Thermal Conductivity	0,025-0,027 W/m.K (depending on thickness)
Fire Rating	F in accordance with EN 13501-1
Certification	CE, EPD, FIW

Thickness [mm]	**R-Value** [m²K/W]	**Packing details** [sheets/pack]	[m²/pack]
UTHERM ROOF BGM 600 x 1200 MM			
20*	0,70	24	17,28
30*	1,10	16	11,52
40*	1,45	12	8,64
50*	1,85	10	7,20
60	2,20	8	5,76
70*	2,55	7	5,04
81	3,10	6	4,32
100	3,80	5	3,60
110*	4,20	4	2,88
120	4,80	4	2,88
140*	5,60	3	2,16
160*	6,40	3	2,16

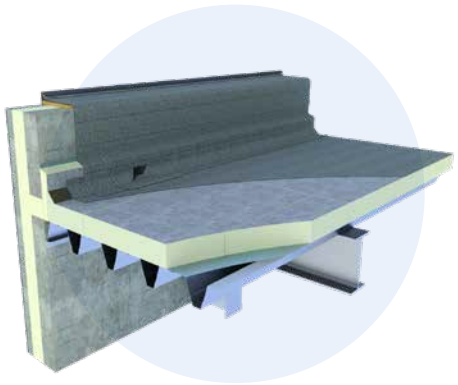
(*) Minimum order quantities and delivery upon consultation

UTHERM ROOF BG

- **Suitable for mechanically fixed, ballasted (including green roofs) and (hot*) bonded roofing systems**
- **Easy to install**
- **Lightweight**
- **High thermal performance**

(*) According to manufacturer's instructions.

Application Type	Flat and low-pitched roofs
Dimensions	600 x 1200 mm
Edge Finish	Straight Edge (SE) 
Compressive Strength	≥ 150 kPa (1,5 kg/cm²)
Thermal Conductivity	0,025-0,027 W/m.K (depending on thickness)
Fire Rating	F in accordance with EN 13501-1
Certification	CE, EPD, FIW



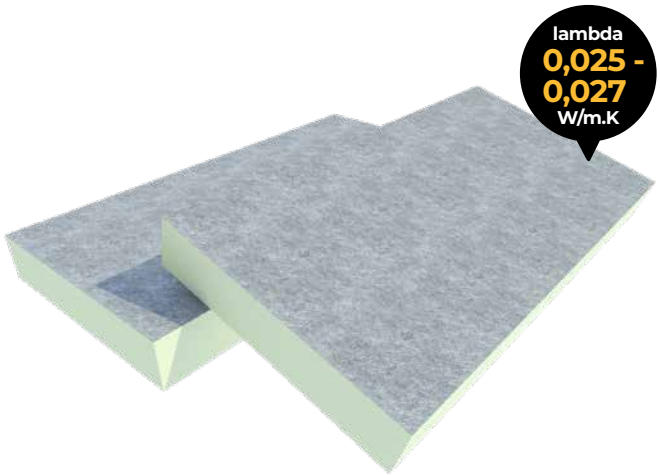
UTHERM Roof BG is a high performance rigid PIR foam insulation board.

The board comprises a bituminous glass tissue facing.

UTHERM Roof BG is manufactured in accordance with EN 13165.

Thickness [mm]	R-Value [m²K/W]	Packing details [sheets/pack]	[m²/pack]
UTHERM ROOF BG 600 x 1200 MM			
30	1,10	14	10,08
40*	1,45	12	8,64
50	1,85	10	7,20
60	2,20	8	5,76
70	2,55	7	5,04
81	3,10	6	4,32
90	3,45	5	3,60
100	3,80	5	3,60
110*	4,20	4	2,88
120	4,80	4	2,88
140*	5,60	3	2,16
160*	6,40	3	2,16

(*) Minimum order quantity and delivery upon consulation



UTHERM ROOF BG TAPERED

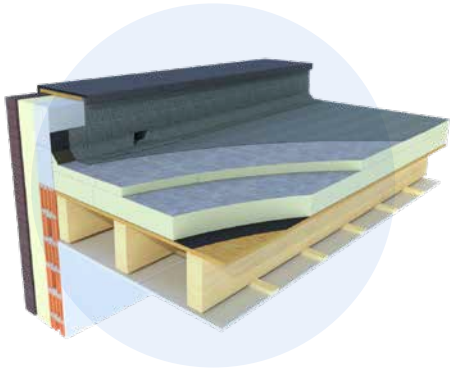
- Slope of 10 and 20 mm
- Huge material, height and weight savings in comparison to conventional tapered roofing systems (i.e. EPS, mineral wool)
- High thermal performance
- Technical service available for optimized flat roof panel calculations and lay-outs
- Easy to install

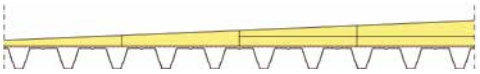
Application Type	Flat and low-pitched roofs
Dimensions	1200 x 1200 mm
Edge Finish	Straight Edge (SE) 
Compressive Strength	≥ 150 kPa (1,5 kg/cm²)
Thermal Conductivity	0,025-0,027 W/m.K (depending on thickness)
Fire Rating	F in accordance with EN 13501-1
Certification	CE, EPD, FIW

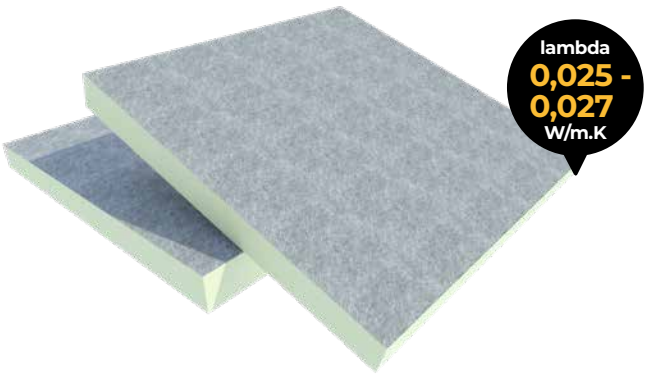
UTHERM Roof BG Tapered is a high performance rigid PIR foam insulation board, manufactured with a slope of 10 and 20 mm.

The board comprises a bituminous glass tissue facing.

UTHERM Roof BG Tapered is manufactured in accordance with EN 13165.







Thickness [mm]	R-Value [m²K/W]	Packing details [sheets/pack]	[m²/pack]	[m²/m³]
UTHERM FLAT ROOF PIR BG TAPERED 20 MM (1,67% - 1:60)				
30/50	1,45	6	8,64	25,00
50/70	2,20	4	5,76	16,67
70/90	3,00	6	8,64	12,50
90/110	3,80	4	5,76	10,00
UTHERM FLAT ROOF PIR BG TAPERED 10 MM (0,83% - 1:120)				
30/40	1,25	8	11,52	28,57
40/50	1,65	6	8,64	22,22
50/60	2,00	6	8,64	18,18
60/70	2,40	4	5,76	15,38
70/80	2,75	4	5,76	13,33
80/90	3,25	4	5,76	11,76
90/100	3,50	4	5,76	10,53

Slopes of 30 mm (1:40) and 40 mm (1:30) can be achieved using two layers of 10 and/or 20mm slopes on top of each other.

UTHERM INSTALLATION GUIDELINES

FLAT AND LOW-PITCHED ROOFS

UTHERM flat and low sloped roof insulation systems provide high thermal performance for exposed and ballasted roofs. Depending on the application system and roof structure, you can choose the appropriate UTHERM Roof PIR insulation board. UTHERM boards are also available with integrated slope, tapered up to 30 mm per board.

1. ROOF INSULATION PRODUCTS

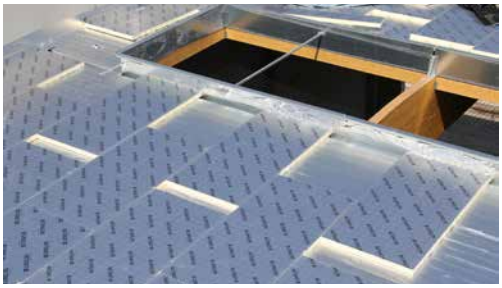
UTHERM Roof LE / Roof LE Tapered
PIR insulation board Euroclass E finished on both sides with a multilayer gastight laminate facer.

UTHERM Roof ME
PIR insulation board Euroclass E finished on both sides with a gas open mineralised glass fleece.

UTHERM Roof BGM
PIR insulation board finished on one side with a gas open bituminous glass fleece and on the other side with a gas open mineralised glass fleece.

UTHERM Roof BG / Roof BG Tapered
PIR insulation board finished on both sides with a gas open bituminous glass fleece.

UTHERM CoverPlus
High density insulation board Euroclass E finished on both sides with a gas open mineralised glass fleece.



2. SYSTEM ADVANTAGES

- → HIGH THERMAL PERFORMANCE
- → EASY TO HANDLE
- → WIDE RANGE OF THICKNESSES
- → HIGH COMPRESSIVE STRENGTH
- → LOWER THICKNESS
- → TAPERED UP TO 2,5%

3. END USE

UTHERM Roof insulation systems for flat and low pitched roofs are suitable for roofs with (cellular) concrete, wood or steel deck as structural support
.

4. OVERVIEW OF APPLICATION METHODS FOR UTHERM FLAT ROOF BOARDS ON DIFFERENT ROOF SUBSTRATES

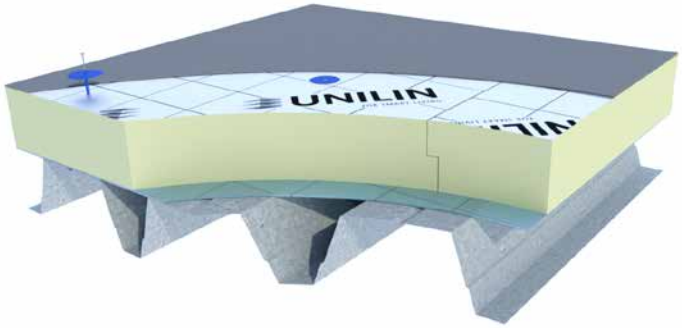
	Substrate Wood / Concrete / Steel					
	LE	LE Tapered	ME, CoverPlus	BGM	BG	BG Tapered
Hot bitumen bonding	●	●	●	●[1]	●	●
Cold bitumen bonding	●	●	●	●	●	●
Adhesion with synthetic glue	●	●	●	●	●	●
Loose laid (ballast)	●	●	●	●	●	●
Mechanically fixed	●	●	●	●	●	●

1. Hot bonding possible on the BG sides as well as the M side of BGM

● Preferred application by Unilin

● Application allowed under specified conditions, contact UNILIN

● Application not allowed



Steel structure

Concrete structure

Wood structure

5. APPLICATION METHODS FOR FLAT ROOF

	Substrate Wood / Concrete / Steel					
BITUMINOUS ROOFING	**LE**	**LE Tapered**	**ME, CoverPlus**	**BGM**	**BG**	**BG Tapered**
Partial hot bitumen bonding	●	●	○	● 1	●	●
Fully bonded with bitumen cold adhesive	●	●	○	○	○	○
Selfadhering membrane	○ 4	○ 4	○ 4	○ 3, 4	●	●
Torch-on membrane	●	●	○ 5	● 1	●	●
Loose laid and ballasted	●	●	○	○	○	○
Mechanically fixed	●	●	○	○	○	○
PVC	**LE**	**LE Tapered**	**ME, CoverPlus**	**BGM**	**BG**	**BG Tapered**
Adhered with synthetic glue	○ 6	○ 6	● 6	● 3, 6	●	●
Loose laid and ballasted	●	●	○	○ 7	○ 7	○ 7
Mechanically fixed	●	●	○	○ 7	○ 7	○ 7
EPDM	**LE**	**LE Tapered**	**ME, CoverPlus**	**BGM**	**BG**	**BG Tapered**
Adhered with synthetic glue	○ 6	○ 6	●	●	●	●
Loose laid and ballasted	●	●	○	○	○	○
Mechanically fixed	●	●	○	○	○	○

1. Hot bonding only possible on BG side of ROOF BGM
2. Insulation boards to be brushed thoroughly before applying the adhesive
3. Cold bonding only possible on M side of BGM
4. The manufacturer of the selfadhesive membrane shall prove the suitability to apply the product, perhaps in combination with an adhesive primer
5. 2-layered bituminous roofing. Base layer treated with special bitumen in partial bonding pattern, the top layer is fully torched
6. Solution depending on membrane used. Contact UNILIN for more information
7. When applying PVC onto bitumen, a separation layer should be applied according to the instruction of the PVC membrane manufacturer

● Preferred application by Unilin

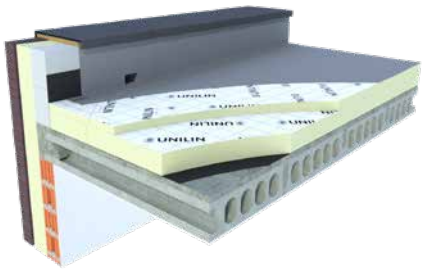
○ Application allowed under specified conditions, contact UNILIN

● Application not allowed

6. SYSTEM CHARACTERISTICS

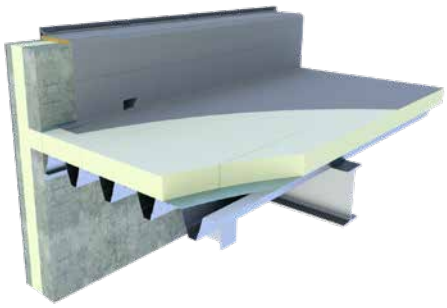
UTHERM ROOF LE

- ✓ Euroclass E, B-s1-d0 End-use on steeldeck
- ✓ Available with slope up to 30 mm (2,5%) per board
- ✓ Compressive strength ≥ 150 kPa, UEAtc class C
- ✓ Suitable for synthetic glue adhering
- ✓ Suitable for Broof t1/t2/t4 roofing systems
- ✓ Wind design load capacity up to 3 kPa (300 kg/m²)
- ✓ Standard lambda value of 0,022 W/m.K
- ✓ On request available in PREMIUM with lambda 0,020 W/m.K



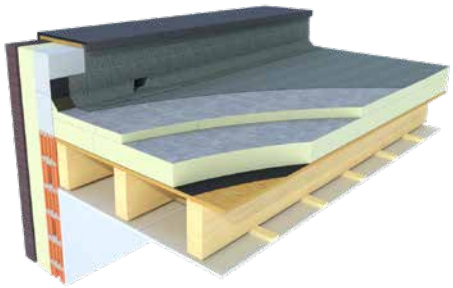
UTHERM ROOF M/ME

- ✓ Euroclass F/E
- ✓ Compressive strength ≥ 150 kPa, UEAtc class C
- ✓ Suitable for bitumen bonding and glue adhering
- ✓ Suitable for Broof t1/t2/t4 roofing systems
- ✓ Wind design load capacity up to 4 kPa (400 kg/m²)
- ✓ Lambda value as low as 0,025 – 0,027 W/m.K



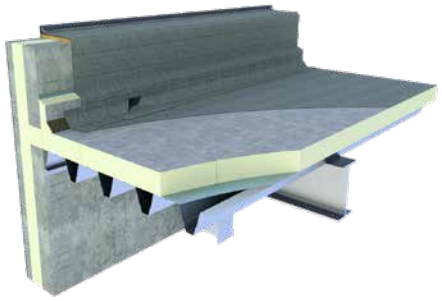
UTHERM ROOF BGM

- ✓ Euroclass F
- ✓ Compressive strength ≥ 150 kPa, UEAtc class C
- ✓ Suitable for bitumen bonding and glue adhering
- ✓ Multi useable (BGM/ME)
- ✓ Suitable for Broof t1/t2/t4 roofing systems
- ✓ Wind design load capacity up to 4 kPa (400 kg/m²)
- ✓ Lambda value as low as 0,025 – 0,027 W/m.K



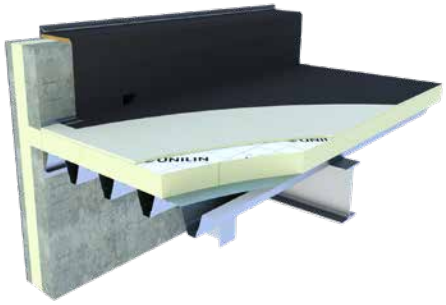
UTHERM ROOF BG

- ✓ Euroclass F
- ✓ Available with slope up to 20 mm per board
- ✓ Compressive strength ≥ 150 kPa, UEAtc class C
- ✓ Suitable for hot and cold bitumen bonding
- ✓ Suitable for Broof t1/t2/t4 roofing systems
- ✓ Wind design load capacity up to 4 kPa (400 kg/m²)
- ✓ Lambda value as low as 0,025 – 0,027 W/m.K



UTHERM CoverPlus

- ✓ High density PIR based coverboard, Euroclass E
- ✓ Compressive strength ≥ 600 kPa, UEAtc class C/D
- ✓ Suitable for bitumen bonding and glue adhering
- ✓ Suitable for Broof t1/t2/t4 roofing systems
- ✓ Wind load capacity up to 5 kPa (500 kg/m²)
- ✓ Lambda value as low as 0,030 W/m.K



7. TAPERED INSULATION

With a flat or low pitched roof, tapered insulation ensures that a slope is created where rainwater can drain into a drainage point.

This slope is achieved by installing the insulation boards, which are one-sided tapered, in a certain scheme that has been determined in advance.

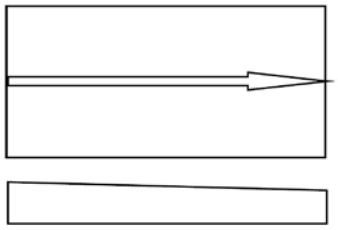
This method can be used if the underlying structure of the flat or low pitched roof does not provide enough tapering .

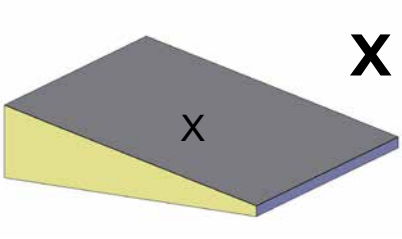
On request, UNILIN can prepare a tapered insulation panel layout for a flat or low pitched roof, based on a few parameters (use the UNILIN tapered roof checklist to provide these parameters upfront).

A: TAPERING

Rainwater drainage to only one side

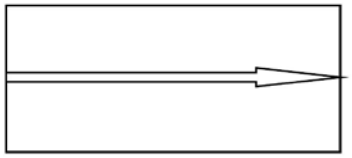
SINGLE LAYER

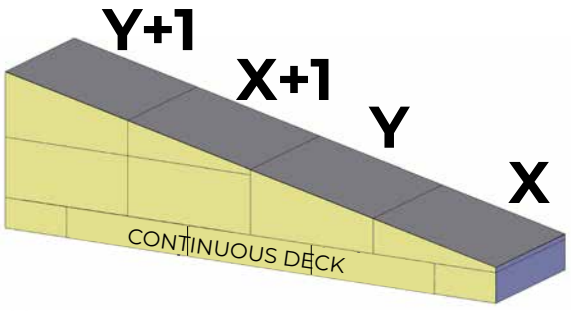


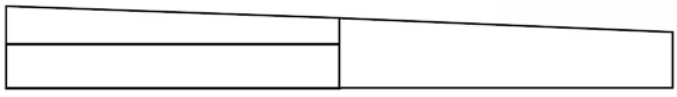


The 1-layer insulation boards are listed on the panel layout with a letter (here specified as “x”).

MULTILAYER







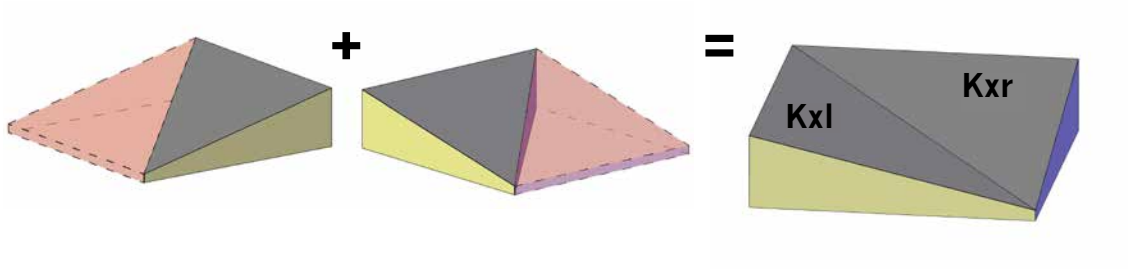
Explanation installation panel layouts for tapered insulation:

- The insulation boards are given a letter based on thickness.
- Where there are several layers of insulation boards, the panel layout indicates with a letter followed by”+ 1” (for example, “X + 1”).
- A continuous layer can be installed below the tapered boards to provide a minimum thickness. This base layer is called “continuous deck” (whole area) in the following overview table.
- Boards that fit to the tapered boards are marked with the letter “N” followed by a serial number.

B: MULTI-SIDED TAPERING

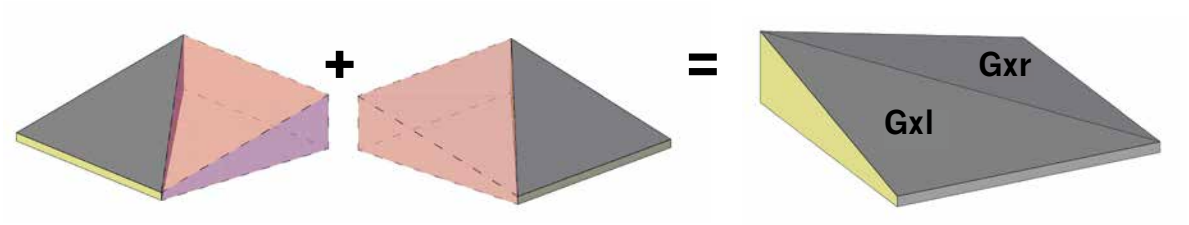
Rainwater drainage to one and the same spot

VALLEY BOARD



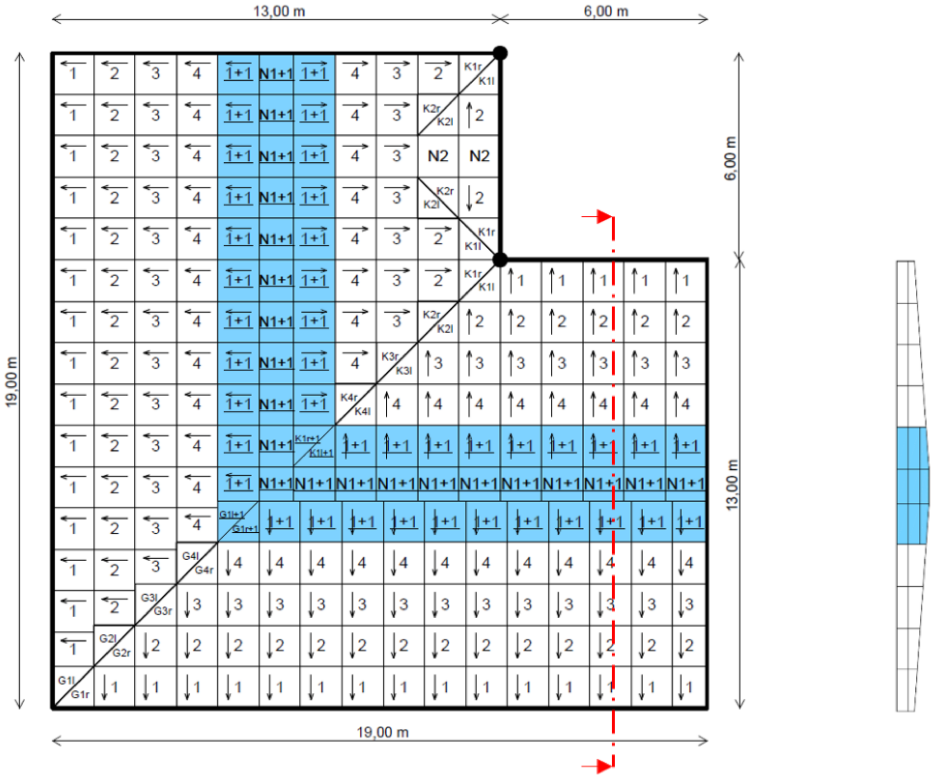
Only possible with a 45 ° drainage connection. The waste can only be reused when combining the inner and outer corner. The Valley boards are indicated on the panel layout by a letter preceded by “K”.

RIDGE BOARD



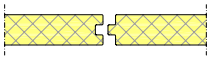
The Ridge boards are indicated on the layout plan by a letter preceded by “G”

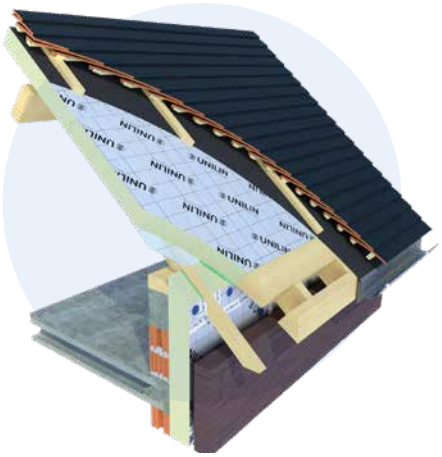
EXAMPLE OF A LAY-OUT PLAN OF THE TAPERED ROOF BOARDS



UTHERM SARKING LE

- High thermal conductivity
- Lightweight
- Easy to install
- Tongue and groove junctions reduce thermal bridging

Application Type	Sarking and Pitched roofs
Dimensions	1200 x 2400 mm
Edge Finish	Tongue and Groove 
Compressive Strength	≥ 150 kPa (1,5 kg/cm²)
Thermal Conductivity	0,022 W/m.K
Fire Rating	E in accordance with EN 13501-1
Certification	CE, EPD, FIW



UTHERM Sarking LE is a high performance rigid PIR foam insulation board suitable for Sarking and Pitched roofs on top of rafters or substrates (i.e. timber boarding, ...).

The board comprises a gastight, low emissivity aluminium composite foil facing.

Also applicable for installation from the inside of a pitched roof. Consult our technical services for more details.

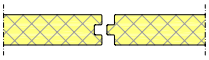
UTHERM Sarking LE is manufactured in accordance with EN 13165.

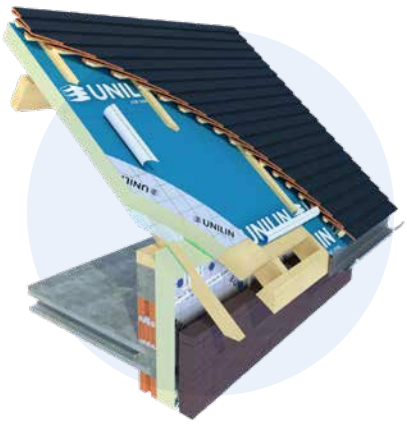
Thickness [mm]	R-Value [m²K/W]	Packing details [sheets/pack]	[m²/pack]
UTHERM SARKING LE 1200 x 2400 MM			
40*	1,80	12	34,56
60*	2,70	8	23,04
80*	3,60	6	17,28
100*	4,50	3	8,64
120*	5,45	4	11,52
140*	6,35	3	8,64
160*	7,25	3	8,64
180*	8,15	2	5,76
200*	9,05	2	5,76

(*) Minimum order quantities and delivery upon consulation

UTHERM SARKING LE PLUS

- **Breathable underlay felt already adhered on top**
- **Tongue and groove junctions reduces thermal bridging**
- **Glare-free surface**
- **Lightweight**
- **High thermal conductivity**
- **Easy to install**

Application Type	Sarking and Pitched roofs
Dimensions	1200 x 2400 mm
Edge Finish	Tongue and Groove 
Compressive Strength	≥ 150 kPa (1,5 kg/cm²)
Thermal Conductivity	0,022 W/m.K
Fire Rating	E in accordance with EN 13501-1
Certification	CE, EPD, FIW



UTHERM Sarking LE Plus is a high performance rigid PIR foam insulation board suitable for Sarking and Pitched roofs on top of rafters or substrates (i.e. timber boarding, ...).

The board comprises a gastight, low emissivity aluminium composite foil facing with a **breathable underlay felt adhered on one side**. The underlay felt has a double-sided self-adhesive overlap on 2 sides.

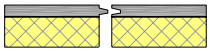
UTHERM Sarking LE Plus is manufactured in accordance with EN 13165.

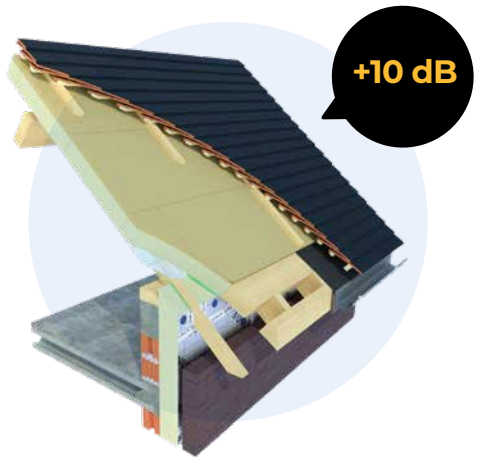
Thickness [mm]	R-Value [m²K/W]	Packing details [sheets/pack]	[m²/pack]
UTHERM SARKING LE PLUS 1200 x 2400 MM			
60	2,70	6	17,28
80	3,60	4	11,52
100	4,50	3	8,64
120	5,45	3	8,64
140	6,35	3	8,64
160	7,25	2	5,76
180*	8,15	2	5,76
200*	9,05	2	5,76

* Minimum order quantity and delivery upon consulation

UTHERM SARKING L COMFORT

- Strong acoustic performance (up to +10 dB)
- Tongue and groove joints reduces thermal bridging
- Lightweight
- High thermal conductivity
- Easy to install

Application Type	Sarking and Pitched roofs
Dimensions	611 x 2511 mm
Edge Finish	Tongue and groove in the wood fibre panel 
Compressive Strength	≥ 150 kPa (1,5 kg/cm²)
Thermal Conductivity	0,022 W/m.K
Fire Rating	F in accordance with EN 13501-1
Certification	CE, EPD



Thickness [mm]	R-Value [m²K/W]	Packing details [sheets/pack]	[m²/pack]
UTHERM SARKING L COMFORT 611 x 2511 MM			
60+35*	3,50	24	36,82
80+35*	4,40	20	30,68
100+35*	5,30	16	24,55
120+35*	6,25	14	21,48
140+35*	7,15	12	18,41
160+35*	8,05	12	18,41

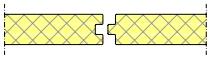
* Minimum order quantity and delivery upon consulation

UTHERM Sarking L Comfort is a high performance rigid PIR foam insulation board suitable for Sarking and Pitched roofs on top of rafters or substrates (i.e. timber boarding, ...).

The board comprises a gastight, low emmisivity aluminium composite foil facing with a **35 mm wood fibre board adhered on one side, which offers additional acoustic and thermal performance.**

UTHERM Sarking L Comfort is manufactured in accordance with EN 13165.

UTHERM SOFFIT AW

Application Type	Ceiling
Dimensions	600 x 1200 mm
Edge Finish	Tongue and Groove 
Compressive Strength	≥ 150 kPa (1,5 kg/cm²)
Thermal Conductivity	0,023 W/m.K
Fire Rating	D-s2-d0 in accordance with EN 13501-1
Certification	CE, EPD

- **100% textured aluminium facing with improved fire rating**
- **High thermal performance**
- **Effective insulation of for instance basement ceilings**
- **Tongue and Groove joints reduces thermal bridging**
- **Attractive white interior finish**
- **Easy to install**

Thickness [mm]	R-Value [m²K/W]	Packing details [sheets/pack]	[m²/pack]
UTHERM SOFFIT AW 600 x 1200 MM			
40*	1,70	12	8,64
60*	2,60	8	5,76
80*	3,45	6	4,32
100*	4,30	5	3,60

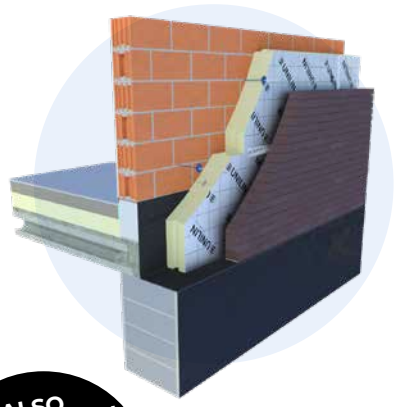
* Minimum order quantity and delivery upon consulation

UTHERM Soffit AW is a high performance rigid PIR foam insulation board. Suitable for aesthetic ceiling works in buildings such as basements, parking decks, etc.

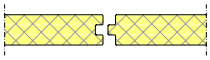
The insulation board is laminated with a textured aluminum facing, which is **white on one side**.

UTHERM Soffit AW is manufactured in accordance with EN 13165.

UTHERM WALL LE



ALSO AVAILABLE IN PREMIUM lambda 0,020 W/m.K

Application Type	External walls (i.e. cavity wall, rainscreen/ ventilated facades, timber and metal framing)
Dimensions	600 x 1200 mm
Edge Finish	Tongue and Groove 
Compressive Strength	≥ 150 kPa (1,5 kg/cm²)
Thermal Conductivity	0,022 W/m.K
Fire Rating	E in accordance with EN 13501-1
Certification	CE, EPD, FIW

- **Reduced waste due to practical size**
- **Allows thinner walls and more valuable living space**
- **Tongue and groove edge finish reduces thermal bridging and provides airtight walls when combined with UNITAPE**
- **High thermal performance**
- **Easy to install**
- **Also available with a 25mm flexible mineral wool insulation adhered on one side, allowing application on rough block walls and avoiding air rotations**

WALL LE

WALL L FLEX

UTHERM Wall LE is a high performance rigid PIR foam insulation board for external walls (i.e. cavity wall, rainscreen/ventilated facades, timber and metal framing)

The board comprises a gastight, low emissivity aluminium composite foil facing.

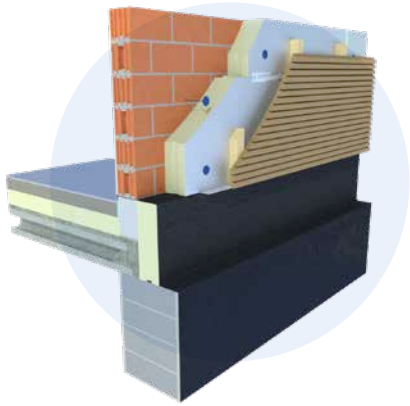
UTHERM Wall LE is manufactured in accordance with EN 13165.

Thickness [mm]	R-Value [m²K/W]	Packing details [sheets/pack]	[m²/pack]
UTHERM WALL LE 600 x 1200 MM			
40*	1,80	12	8,64
50*	2,25	10	7,20
60	2,70	8	5,76
70*	3,15	7	5,04
80	3,60	6	4,32
90*	4,05	5	3,60
100	4,50	5	3,60
110*	5,00	4	2,88
120	5,45	4	2,88
140	6,35	3	2,16
160*	7,25	3	2,16

* Minimum order quantity and delivery upon consulation

UTHERM WALL A

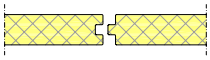
- **100% textured aluminium facing with improved fire rating**
- **Reduced waste due to practical size**
- **Allows thinner walls and more valuable living space**
- **Tongue and groove junctions reduces thermal bridging**
- **High thermal performance**
- **Easy to install**



UTHERM Wall A is a high performance rigid PIR foam insulation board for external walls (i.e. cavity wall, rainscreen/ventilated facades, timber and metal framing).

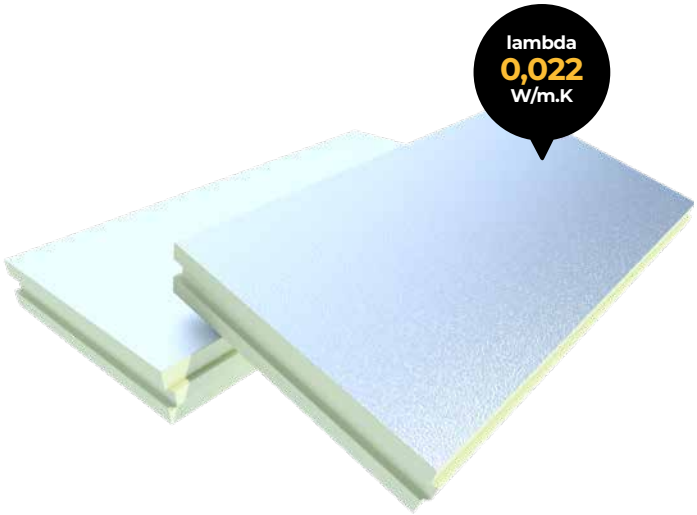
The board comprises a textured aluminium foil facing.

UTHERM Wall A is manufactured in accordance with EN 13165 and corresponds to fire class D-s2-d0 in accordance with EN 13501-1.

Application Type	External walls (i.e. cavity wall, rainscreen/ ventilated facades, timber and metal framing)
Dimensions	600 x 1200 mm
Edge Finish	Tongue and Groove 
Compressive Strength	≥ 150 kPa (1,5 kg/cm²)
Thermal Conductivity	0,022 W/m.K
Fire Rating	D-s2-d0 in accordance with EN 13501-1
Certification	CE, EPD, FIW

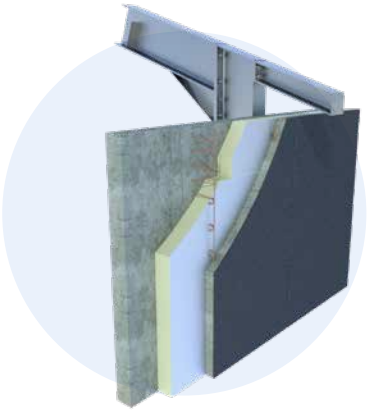
Thickness [mm]	**R-Value** [m²K/W]	**Packing details** [sheets/pack]	[m²/pack]
UTHERM WALL A 600 x 1200 MM			
40*	1,80	12	8,64
50*	2,25	10	7,20
60	2,70	8	5,76
70*	3,15	7	5,04
80	3,60	6	4,32
90*	4,05	5	3,60
100	4,50	5	3,60
110*	5,00	4	2,88
120	5,45	4	2,88
140	6,35	3	2,16
160*	7,25	3	2,16

* Minimum order quantity and delivery upon consulation



UTHERM CONCRETE L

- Special concrete resistant facing
- Lightweight
- High thermal performance
- Easy to install
- Special sizes on demand



ALSO AVAILABLE IN PREMIUM lambda 0,020 W/m.K

UTHERM Concrete L is a high performance rigid PIR foam insulation board, alkali (concrete) resistant and suitable for prefab concrete works.

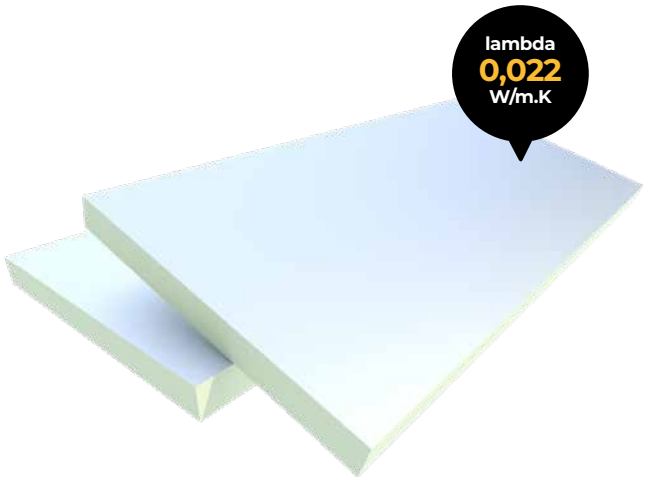
The board comprises an alkali resistant gastight low emissivity aluminium composite foil facing.

UTHERM Concrete L is manufactured in accordance with EN 13165.

Application Type	Concrete wall panels and prefab concrete works
Dimensions	standard: 1200 x 2400 mm also available in size 600 x 1200mm or customized lengths upon request
Edge Finish	Straight Edge (SE)
Compressive Strength	≥ 150 kPa (1,5 kg/cm²)
Thermal Conductivity	0,022 W/m.K
Fire Rating	F in accordance with EN 13501-1
Certification	CE, EPD

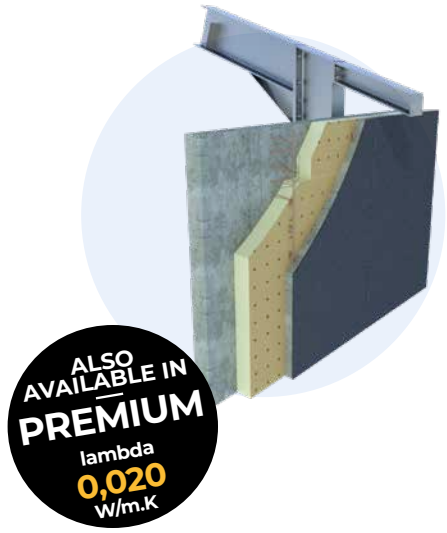
Thickness [mm]	R-Value [m²K/W]	Packing details [sheets/pack]	[m²/pack]
UTHERM CONCRETE L 1200 x 2400 MM			
30*	1,35	16	46,08
40*	1,80	12	34,56
50*	2,25	10	28,80
60*	2,70	8	23,04
70*	3,15	7	20,16
80*	3,60	6	17,28
90*	4,05	5	14,40
100*	4,50	5	14,40
110*	5,00	4	11,52
120*	5,45	4	11,52
130*	5,90	3	8,64
140*	6,35	3	8,64

* Minimum order quantity and delivery upon consulation



UTHERM CONCRETE K

- **Special concrete resistant facing**
- **Multilayer gastight laminate with preprinted grid and brown color**
- **Lightweight**
- **High thermal performance**
- **Easy to install**
- **Special sizes on demand**



UTHERM Concrete K is high performance rigid PIR foam insulation board, alkali (concrete) resistant and suitable for prefab concrete works

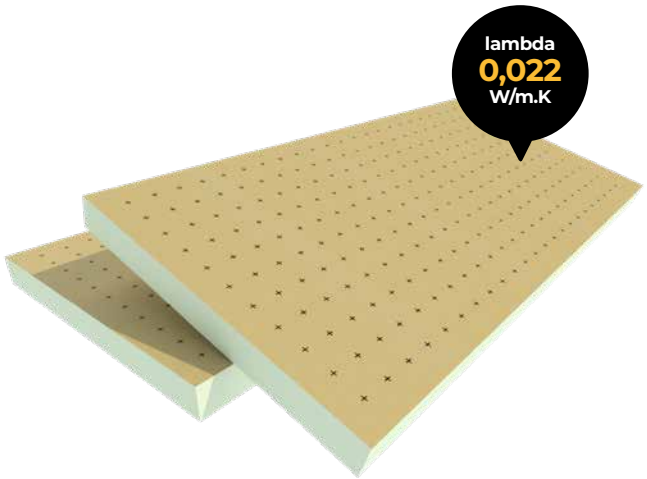
The boards comprises an alkali resistant gastight low emissivity aluminium composite foil facing.

Utherm Concrete K is manufactured in accordance with EN 13165

Application Type	Concrete wall panels and prefab concrete works
Dimensions	standard: 1200 x 2400 mm Also available in size 600 x 1200 mm or customized lengths upon request
Edge Finish	Straight Edge (SE)
Compressive Strength	≥ 150 kPa (1,5 kg/cm²)
Thermal Conductivity	0,022 W/m.K
Fire Rating	F in accordance with EN 13501-1
Certification	CE, EPD

Thickness [mm]	R-Value [m²K/W]	Packing details [sheets/pack]	[m²/pack]
UTHERM CONCRETE K 1200 X 2400 MM			
30*	1,35	16	46,08
40	1,80	12	34,56
50*	2,25	10	28,80
60	2,70	8	23,04
70*	3,15	7	20,16
80	3,60	6	17,28
90*	4,05	5	14,40
100	4,50	5	14,40
110*	5,00	4	11,52
120*	5,45	4	11,52
130*	5,90	3	8,64
140*	6,35	3	8,64

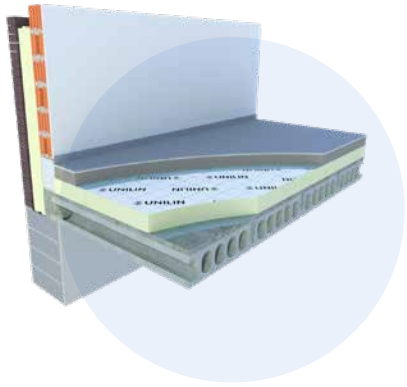
* Minimum order quantity and delivery upon consulation



UTHERM FLOOR LE

- **Printed grid to facilitate easy installation**
- **High thermal performance**
- **Lightweight**
- **High compressive strength**

Application Type	Floor (solid and suspended)
Dimensions	600 x 1200 mm
Edge Finish	Straight Edge (SE) 
Compressive Strength	≥ 150 kPa (1,5 kg/cm²)
Thermal Conductivity	0,022 W/m.K
Fire Rating	E in accordance with EN 13501-1
Certification	CE, EPD, FIW

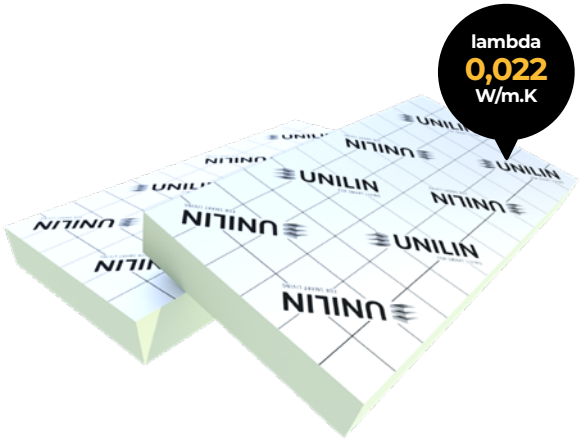


UTHERM Floor LE is a high performance rigid PIR foam insulation board for solid and suspended concrete or wooden floors and also suitable for use in combination with underfloor heating systems.

The board comprises a gastight, low emissivity aluminium composite foil facing **with a printed grid (10 x 10 cm**).

UTHERM Floor LE is manufactured in accordance with EN 13165.

ALSO AVAILABLE IN **PREMIUM** lambda **0,020** W/m.K



Thickness [mm]	R-Value [m²K/W]	Packing details [sheets/pack]	[m²/pack]
UTHERM FLOOR LE 600 x 1200 MM			
20	0,90	24	17,28
30	1,35	16	11,52
40	1,80	12	8,64
50	2,25	10	7,20
55	2,50	9	6,48
60	2,70	8	5,76
70*	3,15	7	5,04
80	3,60	6	4,32
90*	4,05	5	3,60
100	4,50	5	3,60
120	5,45	4	2,88
140*	6,35	3	2,16
160*	7,25	3	2,16
180*	8,15	2	1,44
200*	9,05	2	1,44

(*) Minimum order quantity and delivery upon consulation

UTHERM AGRI AWFR

- **100% textured aluminium facing with improved fire rating**
- **Special lengths on demand up to 13 m available upon request**
- **Easy to install**
- **Aesthetic white lacquered interior facing including white H-, U-, and/or T- PVC profiles**
- **Suitable for pressured water cleaning**

Application Type	Ceiling application for industrial and agri-cultural buildings
Dimensions	1200 x 2400 mm
Edge Finish	Straight Edge (SE) 
Compressive Strength	≥ 150 kPa (1,5 kg/cm²)
Thermal Conductivity	0,023 W/m.K
Fire Rating	B-s2-d0 (End-use, including profiles) in accordance with EN 13501-1
Certification	CE, EPD, FIW

UTHERM AGRI AWFR is a high performance PIR insulation board, made from a special, flame-retardant rigid PIR foam for use as interior finish of sloped roofs and vertical walls in industrial and agricultural buildings.

The board comprises a textured aluminium facing which is white on one side.

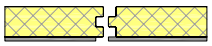
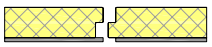
UTHERM AGRI AWFR is manufactured in accordance with EN 13165 and complies with fire class B-s2-d0 following EN 13501-1

Thickness [mm]	R-Value [m²K/W]	Packing details [sheets/pack]	[m²/pack]
UTHERM AGRI AWFR 1200 x 2400 MM			
30*	1,30	16	46,08
40*	1,70	12	34,56
50*	2,15	10	28,80
60*	2,60	8	23,04
70*	3,00	7	20,16
80*	3,45	6	17,28
90*	3,90	5	14,40
100*	4,30	5	14,40

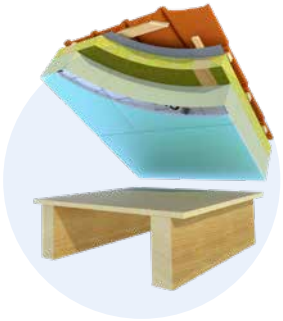
* Minimum order quantity and delivery upon consulation
Board profiling available upon consultation.
Special lengths up to 8 m available upon consultation in all thicknesses.
Special lengths up to 13 m available upon consultation in thicknesses of 40, 60 and 80 mm.
Delivery on special wooden pallets for lengths above 8 m to facilitate site offloading.

UTHERM ATTIC

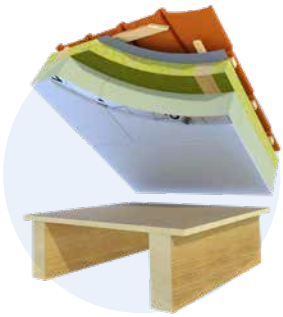
- **Simple, fast and convenient installation (i.e. through small staircase openings)**
- **Optimal thermal insulation for use as interior finish of pitched roof and walls (Gypsum Fibreboard, Plasterboard) or in the attic floor (OSB, Chipboard)**
- **In the attic, the boards are suitable for load-bearing floors such as screed, timber, and concrete**
- **Easy to handle**

Application Type	Inside pitched roof/attic floor
Edge Finish	GFB: Tongue and Groove on board and insulation level  GYP: engineered Tongue and Groove  OSB/CB: engineered Tongue and Groove 
Compressive Strength	≥ 150 kPa (1,5 kg/cm²)
Thermal Conductivity	0,022 W/m.K
Fire Rating	F in accordance with EN 13501-1

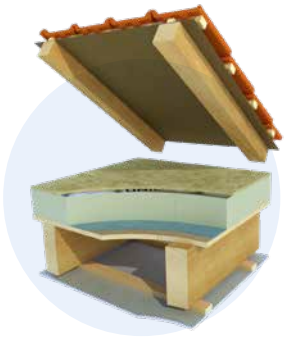
GYP



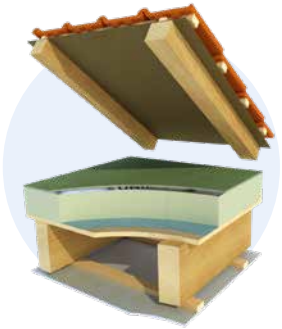
GFB



OSB



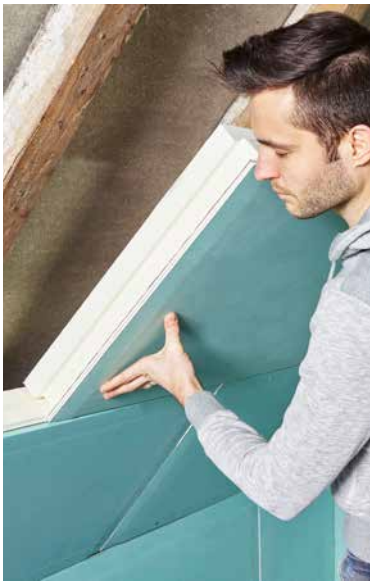
CB

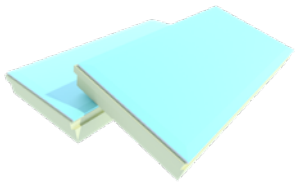


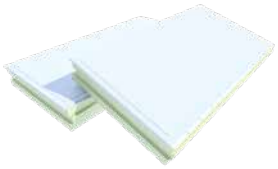
Composite panels for interior wall, pitched roof and attic floor combining a PIR insulating core and interior finishing

UTHERM ATTIC composite panels consist of a high performance PIR foam with a gastight, low emissivity aluminium composite foil facing and are bonded to an interior board.

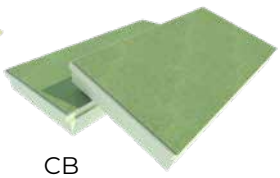
UTHERM ATTIC is manufactured in accordance with EN 13165.




GYP


GFB


OSB


CB

Interior attic wall and roof

UTHERM ATTIC L GYP (Plasterboard)

- 613 x 1200 (Board Dimension)
  602 x 1189 (Net coverage area)
- Easy to finish off
- Tapered edges on all 4 sides of the plasterboard
- Engineered tongue and groove system

UTHERM ATTIC L GFB (Gypsum fibreboard)

- 600 x 1200 mm (Board dimension)
  589 x 1189 mm (Net coverage area)
- Efficient board in terms of acoustics and fire safety
- Tapered edges on all 4 sides of the fireboard
- Combined tongue and groove system

Interior attic floor, wall and roof

UTHERM ATTIC L OSB (OSB board)

- 613 x 1200 (Board Dimension)
  602 x 1189 (Net coverage area)
- Pressure-resistant board
- Engineered tongue and groove system

UTHERM ATTIC L CB (chipboard)

- 613 x 1200 (Board Dimension)
  602 x 1189 (Net coverage area)
- Engineered tongue and groove system

Insulation	Panel	UTHERM ATTIC	R-Value [m²K/W]	Packing details [sheets/pack]	[m²/pack]	Weight [kg/pcs]
UTHERM ATTIC L GYP (PLASTERBOARD)						
80	12,5	92,5	3,70	2	1,44	8,75
100	12,5	112,5	4,50	2	1,44	9,20
120*	12,5	132,5	5,50	2	1,44	9,70
140*	12,5	152,5	6,40	2	1,44	10,15
UTHERM ATTIC L GFB (GYPSUM FIBREBOARD)						
80*	10	90	3,65	2	1,44	9,90
100*	10	110	4,55	2	1,44	10,30
120*	10	130	5,45	2	1,44	10,80
140*	10	150	6,40	2	1,44	11,20
UTHERM ATTIC L OSB						
80	12	92	3,70	2	1,44	7,20
100	12	112	4,60	2	1,44	7,60
120*	12	132	5,55	2	1,44	8,10
140*	12	152	6,45	2	1,44	8,50
UTHERM ATTIC L CB (CHIPBOARD)						
80	8	88	3,65	2	1,44	6,00
100	8	108	4,55	2	1,44	6,50
120*	8	128	5,45	2	1,44	7,00
140*	8	148	6,40	2	1,44	7,40

(*) Minimum order quantity and delivery upon consulation

ACCESSORIES

UTHERM Flat Roof

Angle Fillet	
Size: 30 mm - 50 x 50 mm	Packing details: 60 pieces at 1.2 lm
Size: 30 mm - 100 x 100 mm	Packing details: 42 pieces at 1.2 lm

UTHERM Sarking

Galvanized fixing screws, diameter 6 mm, available in 6 standard lengths	
Length: 180 mm	Packing details: 50 Pieces/Pack
Length: 200 mm	Packing details: 50 Pieces/Pack
Length: 220 mm	Packing details: 50 Pieces/Pack
Length: 240 mm	Packing details: 50 Pieces/Pack
Length: 280 mm	Packing details: 50 Pieces/Pack
Length: 300 mm	Packing details: 50 Pieces/Pack

Free calculation of quantity required upon receipt of order. Please contact UNILIN.

Galvanized fixing screws, diameter 8 mm	
Length: 330 mm	Packing details: 50 Pieces/Pack
Length: 360 mm	Packing details: 50 Pieces/Pack

Free calculation of quantity required upon receipt of order. Please contact UNILIN.

UTHERM Wall

UNITAPE special adhesive tape for joint sealing	
Width: 50 mm	Packing details: 50 lm

UTHERM Agri

White PVC-Profile	
H-Profile 40 mm	Packing details: 10 pieces per 5 lm
H-Profile 60 mm	Packing details: 10 pieces per 5 lm

U-Profile 40 mm	Packing details: 10 pieces per 5 lm
U-Profile 60 mm	Packing details: 10 pieces per 5 lm

T-Profile*	Packing details: 20 pieces per 5 lm

Metal Ceiling Hangers	
Height 35 mm*	Packing details: 300 Pieces/Pack
Height 120 mm*	Packing details: 160 Pieces/Pack

Insulation Screws	
Length 95 mm, Plates: Ø 50 mm*	Packing details: 250 Pieces/Pack

Drill Bits	
for insulation screws*	Packing details: per piece

(*) No stock product. Delivery only possible upon request.

The **UNILIN Group** is a part of U.S. company Mohawk Industries Inc., the world's leading supplier of flooring products. The **UNILIN Group** employs over 5,000 people and is active in different areas of the wood processing industry, with over 20 production sites and three separate divisions:

UNILIN, division flooring:
The development, production and distribution of laminate floors and engineered wood.
BRANDS: **QUICK-STEP, PERGO**

UNILIN, division panels:
The production of MDF-HDF, wood chipboards, flax boards, various finishes of melamine chipboards and MDF boards for the kitchen and furniture industries.
BRANDS: **UNILIN, EVOLA**

UNILIN, division insulation:
Structural insulated roof and wall panels and PIR insulation boards.
BRANDS: **UTHERM, UTHERM PREMIUM, SAFE-R**

UNILIN
FOR SMART LIVING

UNILIN bvba
division insulation
Waregemstraat 112
8792 Desselgem
Belgium
T +32 56 73 50 91
F +32 56 73 50 90
export.insulation@unilin.com

WWW.UNILININSULATION.COM

01/2019