

SAFE-R

Phenolic insulation boards

EXPORT DELIVERY PROGRAM



SAFE-R PHENOLIC BOARDS: THINNER, BETTER AND SAFER INSULATION

< going the extra mile for you

Lambda
value as
low as
0,020
W/m.K

Fire rating:
as low as
**Euroclass
B**

 **UNILIN**
FOR SMART LIVING



SAFE-R

SAFE-R is an insulation board made from phenolic foam, covered on both sides with a vapour control low emissivity foil facing or a glass tissue facing.

The declared lambda value is as low as 0.020 W/mK and the improved reaction to fire of the Phenolic board compared to other insulation materials makes SAFE-R so exceptional.



ENHANCED FIRE CLASSIFICATION

Fire safety is not a luxury but an absolute basic requirement. The excellent fire properties (B-s1, d0) of SAFE-R make it the ideal wall insulation board for insulating ventilated façades in medium high-rise and high-rise buildings.

Fire rating:
as low as
**Euroclass
B**

SAFE-R: INSULATING IN A SLEEKER AND MORE ENERGY & COST-EFFICIENT MANNER

The lambda value of 0.020 W/m.K makes SAFE-R the solution for achieving lower U-values and meeting the increasingly strict building regulations.

Compared to EPS or mineral wool, the SAFE-R board is up to 40% thinner while achieving the same U-values. This means using the superior performance phenolic insulation achieves lower U-values without distorting the architecture, even in traditional constructions.

EVEN MORE USER-FRIENDLY

Thanks to its compact cell structure, the SAFE-R insulation board is very light. Cutting or sawing is easy without creating too much dust.



EVEN MORE APPLICATIONS

A special glass tissue facing makes SAFE-R the ideal board for combinations with prefab concrete elements and other external wall insulation systems.

The improved fire properties make SAFE-R perfect for applications in which insulation value, thickness and reaction to fire play an important role.

EVEN MORE STRUCTURAL AND SUSTAINABLE

SAFE-R has excellent compressive strength so that the insulation boards have quite a lot of load-bearing capacity. Therefore, SAFE-R is extremely suitable for insulating floors at ground level and in storeys.

An Environmental Product Declaration (EPD) is available for SAFE-R. The insulation boards are manufactured with ISO 14001 certification and SAFE-R is ideally suited for BREEAM projects that set very high requirements in terms of sustainability.

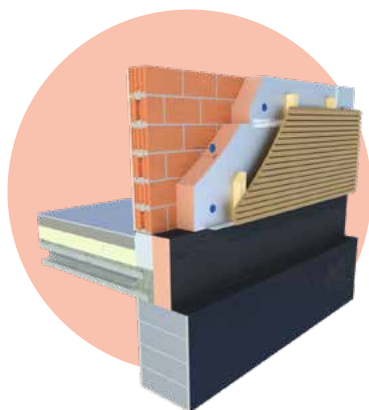
TO RECAP EVERYTHING

- ➔ Declared lambda value as low as 0.020 W/mK
- ➔ Space-savings: excellent insulation value even with low thickness
- ➔ Excellent fire classification: as low as B-s1. d0
- ➔ Usable in prefab concrete applications
- ➔ Covered by an Environmental Product Declaration (EPD)
- ➔ Lightweight and easy to process
- ➔ Manufactured to ISO 9001, ISO 14001 and OHSAS 18001 specifications
- ➔ Delivered under BRE product certification




SAFE-R LB

Phenolic foam Insulation board for ventilated (rainscreen) façade, steel & timber frame works and soffit



SAFE-R LB is a Euroclass B phenolic foam insulation board finished on both sides with an aluminium composite foil facing.

Application	Insulation boards for ventilated (rainscreen) façade, steel & timber frame works and soffit
Insulation	Phenolic foam (PF) Declared lambda-value (λ_D): 0,023 W/m.K (d < 50 mm) 0,021 W/m.K (50 mm ≤ d < 100 mm) 0,020 W/m.K (d ≥ 100 mm)
Facing	LB : aluminium composite foil
Dimensions	Standard : 2400 x 1200 mm Also available upon request in size 1200 x 600 mm
Edge finish	Straight on the 4 sides 

Insulation thickness [mm]	R_D^{INSUL} value [m ² K/W] CE	Boards per pack	m ² per pack	Boards per pallet	m ² per pallet	m ² full load [= 11 pal.]
SAFE-R LB : 2400 x 1200 MM						
25	1,05	20	57,60	100	288,00	3.168,00
30	1,30	16	46,08	80	230,40	2.534,40
40	1,70	12	34,56	60	172,80	1.900,80
50	2,35	10	28,80	50	144,00	1.584,00
60	2,85	8	23,04	40	115,20	1.267,20
70	3,30	7	20,16	35	100,80	1.108,80
80	3,80	6	17,28	30	86,40	950,40
90	4,25	5	14,40	25	72,00	792,00
100	5,00	5	14,40	25	72,00	792,00
110	5,50	4	11,52	20	57,60	633,60
120	6,00	4	11,52	20	57,60	633,60
130	6,50	3	8,64	18	51,84	570,24
140	7,00	3	8,64	18	51,84	570,24
160	8,00	3	8,64	15	43,20	475,20

Insulation thickness [mm]	R_D^{INSUL} value [m ² K/W] CE	Boards per pack	m ² per pack	Boards per pallet	m ² per pallet	m ² full load [= 22 pal.]
SAFE-R LB : 1200 x 600 MM						
25	1,05	20	14,40	200	144,00	3.168,00
30	1,30	16	11,52	160	115,20	2.534,40
40	1,70	12	8,64	120	86,40	1.900,80
50	2,35	10	7,20	100	72,00	1.584,00
60	2,85	8	5,76	80	57,60	1.267,20
70	3,30	7	5,04	70	50,40	1.108,80
80	3,80	6	4,32	60	43,20	950,40
90	4,25	5	3,60	50	36,00	792,00
100	5,00	5	3,60	50	36,00	792,00
110	5,50	4	2,88	40	28,80	633,60
120	6,00	4	2,88	40	28,80	633,60
130	6,50	3	2,16	36	25,92	570,24
140	7,00	3	2,16	36	25,92	570,24
160	8,00	3	2,16	30	21,60	475,20

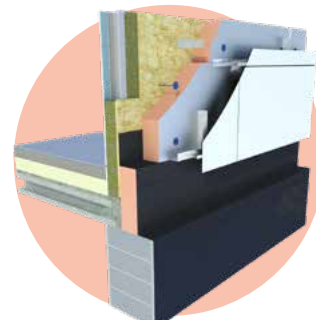
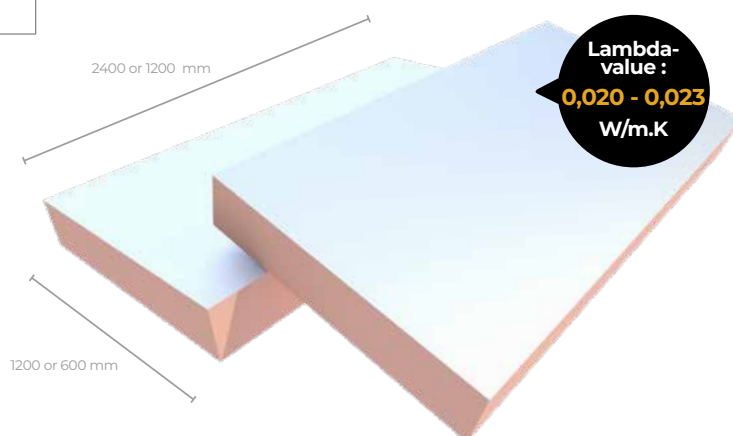
Minimum order quantity of 500m² per thickness. For delivery terms, please contact UNILIN

Technical properties

Declared thermal conductivity : λ_D according to EN 13166 : 2012 + A2 : 2016	0,023 W/m.K (d < 50 mm) 0,021 W/m.K (50 mm ≤ d < 100 mm) 0,020 W/m.K (d ≥ 100 mm)
Compressive strength at 10% deformation : CS(10/Y)100 according to EN 826	≥ 100 kPa (1,0 kg/cm ²)
Closed cell content	≥ 90%
Dimensional stability 48h, 70°C, 90%RH 23°C, 50%RH	DS(70,90) : $\Delta e_{l,b} \leq 1,5$ / $\Delta e_d \leq 1,5$ DS(N) : $\Delta e_{l,b} \leq 0,5$ / $\Delta e_d -$
Deformation under compressive load and temperature conditions	DLT(1) ≤ 5%
Density of the PF foam	36,5 kg/m ³ ± 1,5 kg/m ³
Reaction to fire class	B-s1, d0 according to EN 13501-1

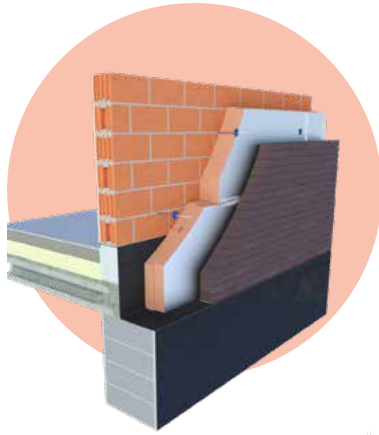
Certificates

KOMO	Approval pending
BBA	4803 Germany : WLS 021/WLS 024
CE	λ 0,020 - 0,023 W/m.K
DOP	SAFE-R LB v1
EPD	BES 6001 RS0039




SAFE-R LD

Phenolic foam
Insulation board
for cavity walls, attics
and floors



SAFE-R LD is a Euroclass D phenolic foam insulation board finished on both sides with an aluminium composite foil facing.

Application	Insulation boards for cavity walls and attics (from the inside out) and ground supported and suspended floors
Insulation	Phenolic foam (PF) Declared lambda-value (λ_D) : 0,023 W/m.K (d < 50 mm) 0,021 W/m.K (50 mm ≤ d < 100 mm) 0,020 W/m.K (d ≥ 100 mm)
Facing	LD : aluminium composite foil
Dimensions	Standard : 1200 x 600 mm (LS) Also available upon request in size 2400 x 1200 (SE)
Edge finish	Rebated (LS) on the 4 sides or straight on the 4 sides (SE) 

Insulation thickness [mm]	$R_{D\text{ INSUL}}$ value [m ² K/W] CE	Boards per pack	m ² per pack	Boards per pallet	m ² per pallet	m ² full load [= 22 pal.]
SAFE-R LD (LS) : 1200 x 600 MM						
25	1,05	20	14,40	200	144,00	3.168,00
30	1,30	16	11,52	160	115,20	2.534,40
40	1,70	12	8,64	120	86,40	1.900,80
50	2,35	10	7,20	100	72,00	1.584,00
60	2,85	8	5,76	80	57,60	1.267,20
70	3,30	7	5,04	70	50,40	1.108,80
80	3,80	6	4,32	60	43,20	950,40
90	4,25	5	3,60	50	36,00	792,00
100	5,00	5	3,60	50	36,00	792,00
110	5,50	4	2,88	40	28,80	633,60
120	6,00	4	2,88	40	28,80	633,60
130	6,50	3	2,16	36	25,92	570,24
140	7,00	3	2,16	36	25,92	570,24
160	8,00	3	2,16	30	21,60	475,20

Insulation thickness [mm]	$R_{D\text{ INSUL}}$ value [m ² K/W] CE	Boards per pack	m ² per pack	Boards per pallet	m ² per pallet	m ² full load [= 11 pal.]
SAFE-R LD (SE) : 2400 x 1200 MM						
25	1,05	20	57,60	100	288,00	3.168,00
30	1,30	16	46,08	80	230,40	2.534,40
40	1,70	12	34,56	60	172,80	1.900,80
50	2,35	10	28,80	50	144,00	1584,00
60	2,85	8	23,04	40	115,20	1.267,20
70	3,30	7	20,16	35	100,80	1.108,80
80	3,80	6	17,28	30	86,40	950,40
90	4,25	5	14,40	25	72,00	792,00
100	5,00	5	14,40	25	72,00	792,00
110	5,50	4	11,52	20	57,60	633,60
120	6,00	4	11,52	20	57,60	633,60
130	6,50	3	8,64	18	51,84	570,24
140	7,00	3	8,64	18	51,84	570,24
160	8,00	3	8,64	15	43,20	475,20

Minimum order quantity of 500m² per thickness. For delivery terms, please contact UNILIN

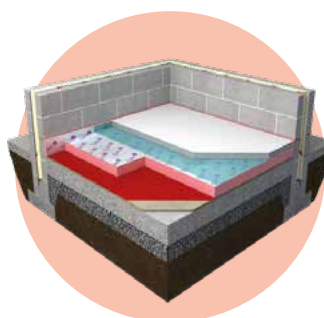
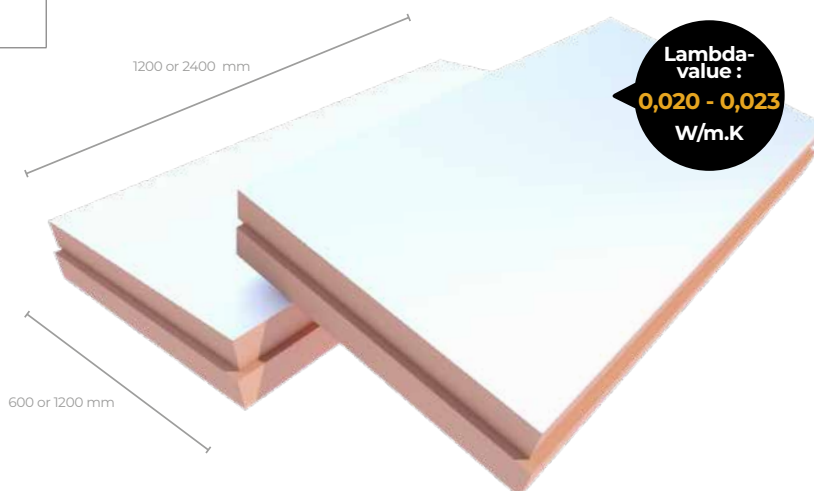


Technical properties

Declared thermal conductivity : λ_D according to EN 13166 : 2012 + A2 : 2016	0,023 W/m.K (d < 50 mm) 0,021 W/m.K (50 mm ≤ d < 100 mm) 0,020 W/m.K (d ≥ 100 mm)
Compressive strength at 10% deformation : CS(10/Y)100 according to EN 826	≥ 100 kPa (1,0 kg/cm ²)
Closed cell content	≥ 90%
Dimensional stability 48h, 70°C, 90%RH 23°C, 50%RH	DS(70,90) : $\Delta e_{l,b} \leq 1.5$ / $\Delta e_d \leq 1.5$ DS(N) : $\Delta e_{l,b} \leq 0.5$ / $\Delta e_d -$
Deformation under compressive load and temperature conditions	DLT(1) ≤ 5%
Density of the phenolic foam	36,5 kg/m ³ ± 1,5 kg/m ³
Reaction to fire class	D-s1, d0 according to EN 13501-1

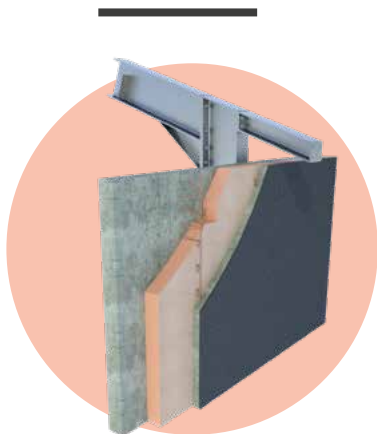
Certificates

KOMO	CTG-722/01
BBA	4803 Germany : WLS 021/WLS 024
CE	λ 0,020 - 0,023 W/m.K
DOP	SAFE-R LD v1
EPD	BES 6001 RS0039




SAFE-R GD

Phenolic foam insulation board for prefabricated concrete sandwich panels and external walls



SAFE-R GD is a Euroclass D phenolic foam insulation board finished on both sides with a non-woven glass tissue facing, alkaline resistant.

Application	Insulation boards for prefabricated concrete sandwich panels and external walls
Insulation	Phenolic foam (PF) Declared lambda-value (λ_D): 0,023 W/m.K (d < 50 mm) 0,021 W/m.K (50 mm ≤ d < 100 mm) 0,020 W/m.K (d ≥ 100 mm)
Facing	GD : non-woven glass tissue, alkaline resistant
Dimensions	Standard : 2400 x 1200 mm Also available upon request in size 1200 x 600 mm
Edge finish	Straight on the 4 sides 

Insulation thickness [mm]	$R_{D \text{ INSUL}}$ value [m ² K/W] CE	Boards per pack	m ² per pack	Boards per pallet	m ² per pallet	m ² full load [= 11 pal.]
SAFE-R GD : 2400 x 1200 MM						
25	1,05	12	34,56	96	276,48	3.041,28
30	1,30	10	28,80	80	230,40	2.534,40
40	1,70	7	20,16	56	161,28	1.774,08
50	2,35	6	17,28	48	138,24	1.520,64
60	2,85	5	14,40	40	115,20	1.267,20
70	3,30	4	11,52	32	92,16	1.013,76
80	3,80	4	11,52	28	80,64	887,04
90	4,25	4	11,52	24	69,12	760,32
100	5,00	4	11,52	24	69,12	760,32
110	5,50	3	8,64	21	60,48	665,28
120	6,00	3	8,64	18	51,84	570,24
130	6,50	3	8,64	18	51,84	570,24
140	7,00	2	5,76	16	40,32	506,88
160	8,00	2	5,76	14	40,32	443,52

Insulation thickness [mm]	$R_{D \text{ INSUL}}$ value [m ² K/W] CE	Boards per pack	m ² per pack	Boards per pallet	m ² per pallet	m ² full load [= 22 pal.]
SAFE-R GD : 1200 x 600 MM						
25	1,05	18	12,96	180	129,60	2.851,20
30	1,30	16	11,52	160	115,20	2.534,40
40	1,70	12	8,64	120	86,40	1.900,80
50	2,35	10	7,20	100	72,00	1.584,00
60	2,85	8	5,76	80	57,60	1.267,20
70	3,30	7	5,04	70	50,40	1.108,80
80	3,80	6	4,32	60	43,20	950,40
90	4,25	5	3,60	50	36,00	792,00
100	5,00	5	3,60	50	36,00	792,00
110	5,50	4	2,88	40	28,80	633,60
120	6,00	3	2,16	42	30,24	665,28
130	6,50	3	2,16	36	25,92	570,24
140	7,00	3	2,16	36	25,92	570,24
160	8,00	3	2,16	30	21,60	475,20

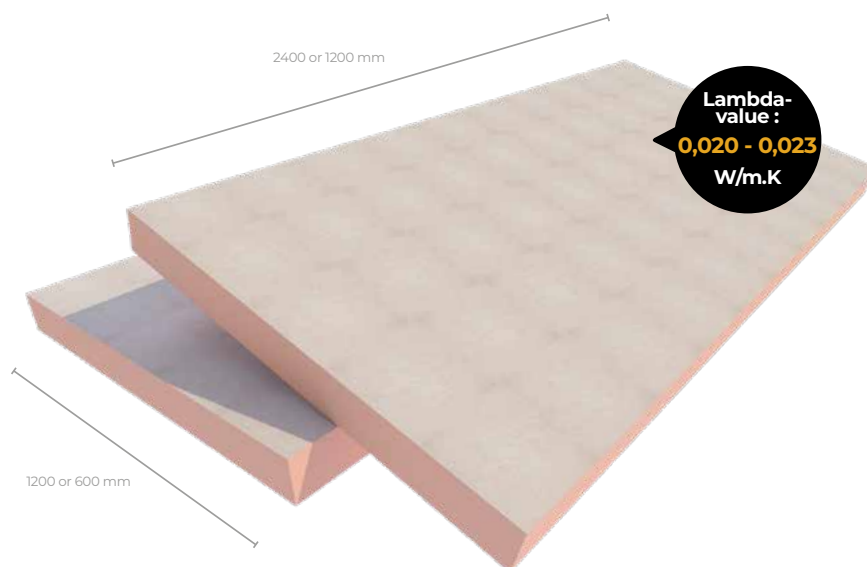
Minimum order quantity of 500m² per thickness. For delivery terms, please contact UNILIN

Technical properties

Declared thermal conductivity : λ_D according to EN 13166 : 2012 + A2 : 2016	0,023 W/m.K (d < 50 mm) 0,021 W/m.K (50 mm ≤ d < 100 mm) 0,020 W/m.K (d ≥ 100 mm)
Compressive strength at 10% deformation : CS(10/Y)100 according to EN 826	≥ 100 kPa (1,0 kg/cm ²)
Closed cell content	≥ 90%
Dimensional stability 48h, 70°C, 90%RH 23°C, 50%RH	DS(70,90) : $\Delta e_{l,b} \leq 1,5$ / $\Delta e_d \leq 1,5$ DS(N) : $\Delta e_{l,b} \leq 0,5$ / $\Delta e_d -$
Deformation under compressive load and temperature conditions	DLT(1) ≤ 5%
Density of the PF foam	36,5 kg/m ³ ± 1,5 kg/m ³
Reaction to fire class	D-s2, d0 according to EN 13501-1

Certificates

KOMO	Approval pending
BBA	4803 Germany : WLS 021/WLS 024
CE	λ 0,020 - 0,023 W/m.K
DOP	SAFE-R GD v1
EPD	BES 6001 RS0039



SPECIAL SOFFIT BOARDS

Phenolic boards bonded to an impact-resistant and non-combustible 6 mm magnesium based building board, which offers a secure finish for ease of maintenance.

This soffit solution, whether in new build or refurbishment, provides the most efficient U-values with minimal thickness of insulation and has a Euroclass B fire classification.



Properties & units

Lenght (mm)	2400	Thermal conductivity	0,020 - 0,021 (W/mK)
Width (mm)	1200	Compressive strength	> 120 (kPa)
Thicknesses (mm)	56 / 66 / 81 / 86 / 106	Reaction to fire	Euroclass B-s1, d0

Other thicknesses may be available depending on minimum order quantity and lead time.

THERMAL DRYLINING BOARDS

Phenolic boards bonded to a 12,5 mm tapered edge plasterboard for internal walls, sloped roofs and ceilings. These boards are designed to provide high levels of thermal insulation and drylining in one operation.



To fix with adhesive dabs

Glass tissue facing on both sides of the phenolic board

Properties & units

Lenght (mm)	2400
Width (mm)	1200
Thicknesses (mm)	37,5 / 50,5 / 62,5 / 72,5 / 82,5

Other thicknesses may be available depending on minimum order quantity and lead time.

Thermal conductivity	0,020 - 0,021 (W/mK) (Phenolic only)
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Responsive insulation system

High levels of insulation and drylining in one fix

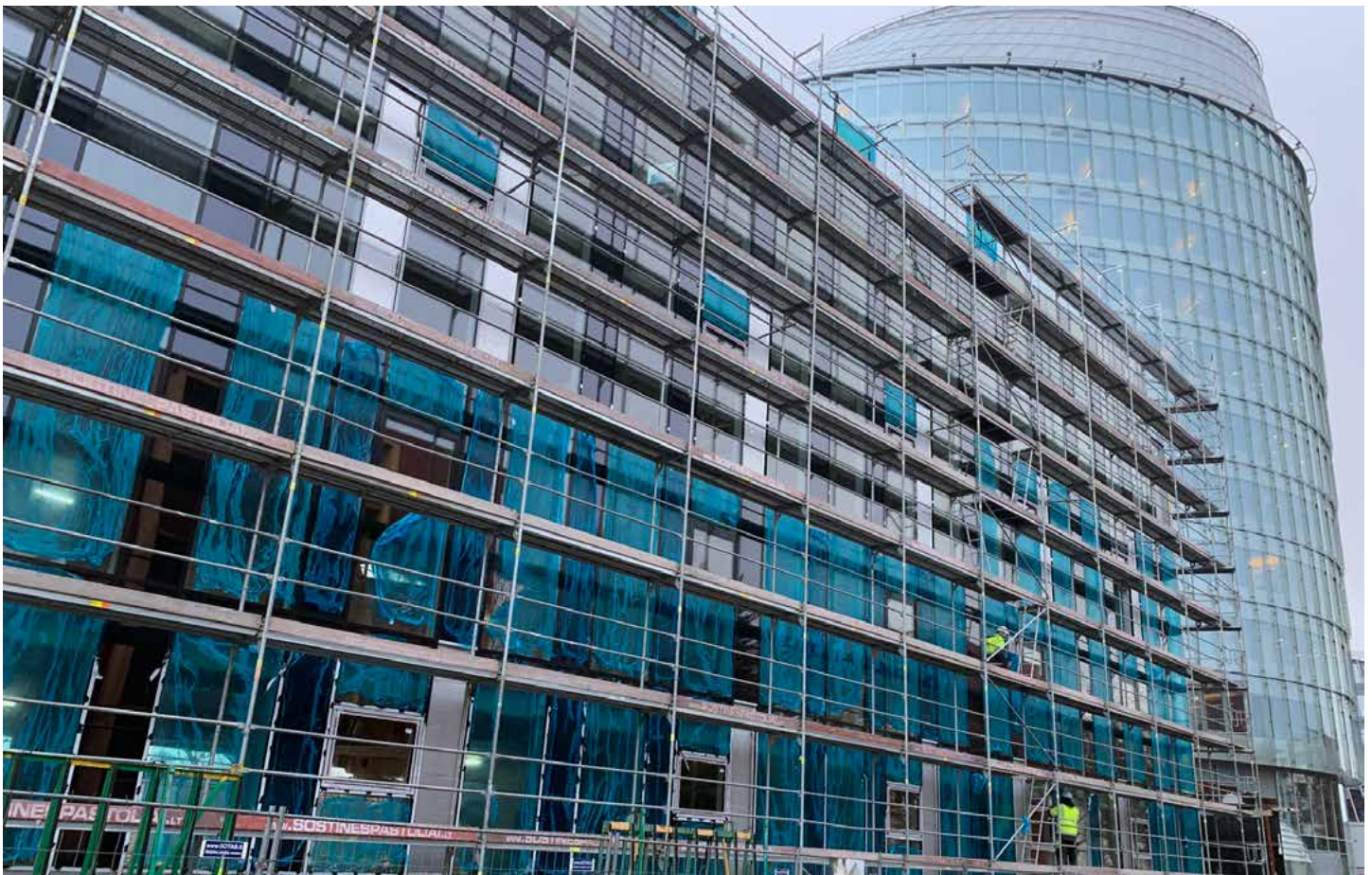
Suitable for newbuild and renovation



To fix mechanically

Aluminium composite foil facing on both sides of the phenolic board

SOME REFERENCES OF SAFE-R LB AND SAFE-R GD



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**



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