

**ISOROC Polska S.A.** is a manufacturer of mineral wool panels for use in construction.

Our products provide improved energy and acoustic efficiency of buildings. The whole range has the highest class of reaction to fire A1, which additionally increases the fire safety of the building.

Thanks to their thermal, acoustic and fire protection properties, ISOROC products help to save energy and create a healthy and safe microclimate in rooms.

On 13 September 2017, the Belgian Association for the Certification of Construction Materials (BCCA) awarded ISOROC brand products with the Certificate of the European Council for the Certification of Mineral Wool Products (EUCEB).

Constant and high quality of our products is guaranteed by the implemented and maintained systems of Factory Production Control and Quality Management **ISO 9001.** 







## Ladies and Gentlemen, Dear Customers,

The year 2020 is a special year with many challenges. The pandemic affects the lives of all of us. It affects our way and mode of operation, as well as the priorities we set ourselves. The latter are unchangeable at ISOROC POLSKA S.A. – the health and safety of our employees with the simultaneous provision of high level of service to our customers. Recent months have shown that we are able to adapt to the new reality, while maintaining the full operational capacity and high quality of service. We have not remained passive in terms of product portfolio development. To meet the needs and expectations of the construction market, we introduce new solutions:

ISOFFIT – board with lining of glass veil for ceiling insulation over unheated rooms.

ISOFAS 35 – an improved product for exterior wall insulation in ETICS technology compared to the standard version.

ISOPANEL-SC – hard stone wool slab for use as thermal, acoustic and fire insulation of staircase walls.

Through the continuous efforts of the team of ISOROC POLSKA S.A. Employees, we strive to consistently deliver products that provide a sense of safety, comfort and warmth where they are used.

Thank you for your interest in our offer and the trust you place in us. At the same time, we invite you to cooperate and contact our technical and commercial advisors.

**Tomasz Parys**Sales Director
ISOROC POLSKA S.A.



# MINERAL WOOL IN YOUR HOUSE IS:



The highest level of thermal insulation



**Fire barrier** 



**Vapour-permeability** 



**Excellent sound absorption properties** 



## **Beneficial impact on the environment**

- reduces energy consumption
- resistant to chemical corrosion
- does not degrade
- its durability exceeds that of plastics

## **APPLICATION**

												PRC	DDU	CTS												
RECOMMENDED USE  X POSSIBLE USE	ISOLIGHT	ISOACOUSTIC	ISOVENT	ISOVENT-M	ISOVENT-MW	ISOPANEL-W	ISOFAS	ISOFAS 35 💥	ISOPANEL/ISOPANEL-SE	SOPANEL-SC *	ISOFAS-P	ISOLOCK	ISOFAS-C1/ISOFAS-C2	ISOFAS-LM	ISOBELT-FS	ISOFAS-LMG/ISOLAM-G	ISOLAM	ISOFFIT *	ISOPANEL-D	ISOROOF-T	MW60 ISOROOF-TOP *	ISODECK	ISOROOF-B	ISOROOF-H	ISOROOF	ISOSTEP
Utility attics				Х																						
Ceilings on joists				Х																						
Ventilated flat roofs				Х																						
Suspended ceilings				Х																						
Frame structures				Х																						
Partition walls				Х																						
Cover walls	Х			Х																						
Three-layer walls	Х				х																					
Ventilated facades		Х																								
Staircases, dilatations																										
External walls - light dry method		Х																								
External walls - heavy dry method		Х																								
External walls - ETICS SYSTEM																										
Ceilings over unheated rooms					х										х											
Floating floors on the ground and ceiling																			Х							
Flat roofs																										



GENERAL CONSTRUCTION
ISOLIGHT
attics, joist ceilings, partition walls, suspended ceilings, steel structures, ventilated flat roofs
<b>ISOACOUSTIC</b> external walls insulated using the light-dry method with panel facade (e.g. sheet metal, boards, siding, etc.), walls with stone or glass cladding, ceilings from underneath with cladding (suspended ceilings), in internal partition wall structures, cavity walls with ventilated and non-ventilated air gap, frame structure fillings, wooden or steel structures, ventilated flat roofs
VENTILATED FACADES
external walls insulated using the light-dry method with a panel facade (e.g. sheet metal, board, siding), three-layer walls, external walls with a stone or glass facade, frame walls, partition walls, three-layer foundation walls, acoustic insulation in acoustic screens, thermal insulation in chimney systems
EXECUTE: A second secon
ISOVENT-MW
ISOPANEL-W
<b>ETICS</b>
ISOFAS/ ISOFAS 35/ ISOPANEL/ ISOPANEL-SE/ ISOPANEL-SC/ ISOFAS-P/ ISOLOCK/ ISOFAS-C1 /ISOFAS-C2
exterior walls insulated with light-wet method (ETICS)  ISOFAS-LM
external walls insulated using the light-wet method (ETICS)
ISOBELT-FS. 22
fire protection strips for exterior walls insulated with light-wet method (ETICS) with polystyrene foam
CEILINGS OF GARAGES AND BASEMENTS
ISOLAM-G (chamfered, primed) 23 ceilings over unheated rooms, e.g. ceilings of garages, cellars, etc., insulated in the garage system (spray method)
ISOFAS-LMG (chamfered, primed)24 ceilings of garages, cellars, etc., insulated in the garage system (spray method)
ISOLAM (chamfered)
ISOFFIT
reliings over unneated rooms, e.g. ceilings of garages, cellars, etc., insulated in the garage system (spray method)  FLOORS
ISOSTEP
insulation of floors under concrete screed
FLAT ROOFS
ISOPANEL-D - System ISODACH
ISOROOF-T - ISO SystemDACH
ISODECK
MW60 ISOROOF-TOP - ISO SystemDACH  Non-ventilated flat roofs for insulation in the ISODACH double layer system (top layer)
ISOROOF-B - ISODACH MONO System
ISOROOF-H - ISODACH MONO System 33 non-ventilated flat roofs for insulation in the single-layer system,
in double-layer systems as a base and top layer, floor insulation under concrete screed  ISOROOF - ISODACH MONO System

# ISOLIGHT Mineral wool slabs General construction



## **Application:**

For thermal, acoustic and fire insulation:

- ✓ attics between rafters,
- ✓ floors between the joists,
- ceilings from underneath with cladding (suspended ceilings),
- ✓ in internal partition wall structures,
- cavity walls with ventilated and non-ventilated air gap
- frame structure fillings, wooden or steel structures
- ✓ ventilated (bipartite) roofs.

#### **Parameters:**

ISOLIGHT MW-EN 13162-T4-DS(70,90)-CS(10)0,5-WS-WL(P)-MU1								
De de sed mus do et mus metics			Measure-		Tolerances			
Declared product properties according to PN-EN13162+A1:2015-04		Test method	ment unit	Codes for classes or tolerances	Values			
Length (dimensional tolerance clas	s)	PN-EN 822	[%]	[-]	±2			
Width (dimensional tolerance class	)	PIN-EIN 022	[%]	[-]	± 1.5			
Thickness	<100 mm	PN-EN 823	[mm/%]	T4	- 3 mm / + 5%			
(dimensional tolerance class)	≥ 100 mm	PIN-EIN 023	[%/mm]	14	- 3% / + 5 mm			
Dimensional stability under specific temperature and relative	PN-EN 1604	[%]	DS(70,90)	$\pm$ 1.0 (change in thickness, length and width)				
humidity conditions			[mm]		± 1 (change in flatness)			
Compressive stresses at 10% relative	e strain	PN-EN 826	[kPa]	CS(10)0,5	≥ 0.5			
Level of short-term water absorptio	n	PN-EN 1609	[kg/m²]	SS	≤ 1.0			
Level of long-term water absorption at partial immersion	PN-EN 12087	[kg/m²]	WL(P)	≤ 3.0				
Coefficient value of water vapor diffusion resistance		PN-EN 12086	[-]	MU1	≤1			
Heat transfer coefficient $\boldsymbol{\lambda}_{\!\scriptscriptstyle D}$	PN-EN 12667	[W.M.K.]	[-]	≤ 0.037				
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1			

#### Declared thermal resistance $\boldsymbol{R}_{\!\scriptscriptstyle D}$ for individual product thicknesses

Thickness [mm]								
50	75	80	100	150	200			
	Heat resistance R <sub>p</sub> [m²K/W]							
1.35	2.00	2.15	2.70	4.05	5.40			



#### Insulation of the pitched roof



- 1 Gypsum board
- 2 ISOLIGHT
- 3 Air gap
- 4 Formwork
- 5 Roof covering

#### Dimensions and packaging

9	Slab dimensions		Number of slabs	Area covered	Volume of	No. of packages	Coverage surface of	Volume of slabs per	
Thickness	Length	Width	in a package	with 1 packet	1 packet	on the pallet	slabs per pallet	pallet	
[mm]	[mm]	[mm]	[pcs]	[m <sup>2</sup> ]	[m³]	[pcs]	[m²]	[m³]	
50			12	6.00	0.300		120.00	6.00	
75			8	4.00	0.300		80.00	0.00	
80	1000	500	6	3.00	0.240		60.00	4.80	
100			6	3.00		20	60.00		
150			4	2.00	0.300		40.00	6.00	
200			3	1.50			30.00		

#### **ISOACOUSTIC**

Mineral wool slabs

General construction



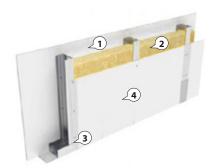
### **Application:**

For thermal, acoustic and fire insulation:

- external walls insulated using the light-dry method with stone, glass, PVC, etc,
- ✓ attics between rafters,
- ✓ floors between the joists,
- ✓ ventilated (bipartite) roofs,
- ceilings from underneath with cladding (suspended ceilings),
- ✓ in internal partition wall structures,
- cavity walls with ventilated and non-ventilated air grip,
- frame structure fillings, wooden or steel structures.



#### **Partition wall insulation**



- 1 Rigips board
- 2 ISOACOUSTIC
- 3 Aluminium frame
- 4 Plasterboard

#### **Parameters:**

#### ISOACOUSTIC

MW-EN 13162-T4-DS(70,90)-CS(10)0,5-WS-WL(P)-MU1-AW0,80 d=50÷74 mm MW-EN 13462-T4-DS(70,90)-CS(10)0,5-WS-WL(P)-MU1-AW0,90 d=75÷200 mm

			Measure-	Tolerances				
Declared product properties a PN-EN13162+A1:201!		Test method	ment unit	Codes for classes or tolerances	Values			
Length (dimensional tolerance class	5)	PN-EN 822	[%]	[-]	±2			
Width (dimensional tolerance class)	Width (dimensional tolerance class)			[-]	± 1.5			
Thickness	<100 mm	PN-EN 823	[mm/%]	T4	- 3 mm / + 5%			
(dimensional tolerance class)	≥ 100 mm	PIN-EIN 023	[%/mm]	14	- 3% / + 5 mm			
Dimensional stability under specific temperature and relative hu	ımidity	PN-EN 1604	[%]	DS(70,90)	± 1.0 (change in thickness, length and width)			
conditions			[mm]		$\pm$ 1 (change in flatness)			
Compressive stresses at 10% relative strain		PN-EN 826	[kPa]	CS(10)0,5	≥ 0.5			
Level of short-term water absorptio	n	PN-EN 1609	[kg/m²]	SS	≤ 1.0			
Level of long-term water absorption at partial immersion	1	PN-EN 12087	[kg/m²]	WL(P)	≤ 3.0			
Coefficient value of water vapor diffusion resistance	·			MU1	≤1			
Weighted sound absorption	<75 mm	- PN-EN ISO 354	[-]	AW0,80	0.80			
coefficient level ≥75 mm		1 14-214 150 554	[-]	AW0,90	0.90			
Heat transfer coefficient $\lambda_{_{D}}$	PN-EN 12667	[W.M.K.]	[-]	≤ 0.036				
Reaction to fire	PN-EN 13501-1	From A	Euroclass	A1				

#### Declared thermal resistance R<sub>D</sub> for individual product thicknesses

		Thickne	ss [mm]					
50	75	80	100	150	200			
	Heat resistance R <sub>D</sub> [m²K/W]							
1.35	2.05	2.20	2.75	4.15	5.55			

#### **Dimensions and packaging**

	Slab dimensions		Number of	Area covered	Volume of	No. of	Coverage	Volume of	
Thickness	Length	Width	slabs in a package	with 1 packet	1 packet	packages on the pallet	surface of slabs per pallet	slabs per pallet	
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]	[pcs]	[m²]	[m³]	
50			12	7.20	0.260	16	115.20		
75			8	4.80	0.360	16	76.80		
80	1000	600	6	3.60	0.288	20	72.00	5.76	
100			6	3.60			57.60	5.76	
150			4	2.40	0.360	16	38.40		
200			3	1.80			28.80		

#### ISOVENT Mineral wool slabs External walls



## **Application:**

For thermal, acoustic and fire insulation:

- external walls insulated using the light-dry method with stone, glass, PVC, etc
- ✓ three-layer walls,
- ✓ frame walls,
- ✓ partition walls,
- ✓ chimney systems,
- ✓ in acoustic screens.

#### **Parameters:**

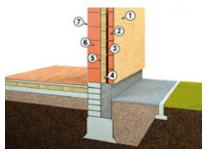
ISOVENT MW-EN 13162-T4-DS(70,90)-CS(10)15-WS-WL(P)-MU1								
		Measure-		Tolerances				
Declared product properties a PN-EN13162+A1:201!	Test method	measure- ment unit	Codes for classes or tolerances	Values				
Length (dimensional tolerance class	5)	PN-EN 822	[%]	[-]	±2			
Width (dimensional tolerance class)	)	FIN-LIN OZZ	[%]	[-]	± 1.5			
Thickness (dimensional tolerance	<100 mm	PN-EN 823	[mm/%]	T4	- 3mm/ + 5%			
class)	≥ 100 mm		[%/mm]	14	- 3% / + 5 mm			
Rectangularity S <sub>b</sub>		PN-EN 824	[mm]	[-]	≤5			
Flatness S <sub>max</sub>		PN-EN 825	[mm]	[-]	≤ 6			
Dimensional stability under specific relative humidity conditions	temperature and	PN-EN 1604	[%]	DS(70,90)	± 1,0 (change in thickness, length and width)			
relative numbrity conditions			[mm]		$\pm$ 1 (change in flatness)			
Compressive stresses at 10% relative	strain	PN-EN 826	[kPa]	CS(10)15	≥ 15			
Level of short-term water absorption	n	PN-EN 1609	[kg/m²]	SS	≤ 1.0			
Coefficient value of water vapor diffusion resistance	PN-EN 12086	[-]	MU1	≤1				
Heat transfer coefficient $\lambda_{\scriptscriptstyle D}$	PN-EN 12667	[W.M.K.]	[-]	≤ 0.036				
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1			

#### Declared thermal resistance $\boldsymbol{R}_{\!\scriptscriptstyle D}$ for individual product thicknesses

		Thickness [mm]						
50	80	100	150	200				
	Heat resistance R <sub>D</sub> [m <sup>2</sup> K/W]							
1.35	2.20	2.75	4.15	5.55				



## Insulation of the external three-layer wall



- 1 Mineral plaster
- 2 Ceramic hollow bricks
- 3 Ventilation gap
- 4 ISOVENT
- 5 Connector
- 6 Ceramic hollow bricks
- 7 Plaster

#### **Dimensions and packaging**

	Slab dimensions		Number of	Area	Volume of	No. of	Coverage surface	Volume of slabs		
Thickness	Length	Width	slabs in a package	covered with 1 package	1 package	packages on the pallet	of slabs per pallet	per pallet		
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]	[pcs]	[m²]	[m³]		
50			6	3.60	0.180	16	57.60			
80	1000	1000		3	1.80	0.144	20	36.00		
100			1000 600		1000 600	600	3	1.80	0.180	16
150			2	1.20	0.180	16	19.20	1		
200			2	1.20	0.240	12	14.40			

#### **ISOVENT-M**

Mineral wool slabs **External walls** 



### **Application:**

For thermal, acoustic and fire insulation:

- external walls insulated using the light-dry method with a panel facade (e.g. made of sheet metal, boards, siding),
- ✓ three-layer walls,
- external walls with a stone or glass facade,
- ✓ frame walls,
- ✓ partition walls,
- ✓ in acoustic screens.

#### **Parameters:**

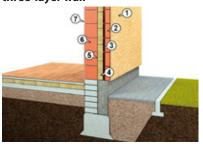
ISOVENT-M
MW-EN 13162-T3-DS(70,90)-CS(10)10-TR5-WS-WL(P)-MU1-AW1,00

			Manager		Tolerances
Declared product properties PN-EN13162+A1:20		Test method	Measure- ment unit	Codes for classes or tolerances	Values
Length (dimensional tolerance class	al tolerance class)		[%]	[-]	±2
Width (dimensional tolerance class)		PN-EN 822	[%]	[-]	± 1.5
Thickness	<100 mm	PN-EN 823	[mm/%]	T3	- 3 mm / + 10%
(dimensional tolerance class)	≥ 100 mm	PIN-EIN 023	[%/mm]	13	- 3% / + 10 mm
Rectangularity S <sub>b</sub>		PN-EN 824	mm/m	[-]	≤5
Flatness S <sub>max</sub>		PN-EN 825	mm	[-]	≤6
Dimensional stability under specific temperature and relative		PN-EN 1604	[%]	DS(70,90)	$\pm$ 1.0 (change in thickness, length and width)
humidity conditions			[mm]		± 1 (change in flatness)
Compressive stresses at 10% relative	mpressive stresses at 10% relative strain		[kPa]	CS(10)10	≥ 10
Tensile strength perpendicular to frontal surfaces		PN-EN 1607	[kPa]	TR5	≥5
Level of short-term water absorption	n	PN-EN 1609	[kg/m²]	SS	≤ 1.0
Level of long-term water absorption at partial immersion	•		[kg/m²]	WL(P)	≤ 3.0
Coefficient value of water vapour dif	fusion resistance	PN-EN 12086	[-]	MU1	≤1
Weighted sound absorption coefficient	ent level	PN-EN ISO 354	[-]	AW1,00	1.00
Heat transfer coefficient $\lambda_{_{D}}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.035
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1

#### Declared thermal resistance $\boldsymbol{R}_{\!\scriptscriptstyle D}$ for individual product thicknesses

	Thickness [mm]									
50	80	100	120	150	200					
Heat resistance R <sub>p</sub> [m²K/W]										
1.40 2.25 2.85 3.40 4.25 5.70										

## Insulation of the external three-layer wall



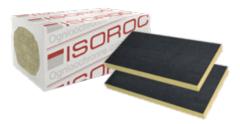
- 1 Mineral plaster
- 2 Ceramic hollow bricks
- 3 Ventilation gap
- 4 ISOVENT-M
- 5 Connector
- 6 Ceramic hollow bricks
- 7 Plaster

#### **Dimensions and packaging**

	Slab dimensio	ns	Number of	Area		No. of	Coverage	Volume of
Thickness	Length	Width	slabs in a package	covered with 1 package	Volume of 1 package	packages on the pallet	surface of slabs per pallet	slabs per pallet
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]	[pcs]	[m²]	[m³]
50			6	3.60	0.180	16	57.60	
80			3	1.80	0.144	20	36.00	
100	1000	600	3	1.80	0.180	16	28.80	2.88
120	1000	00 600	2	1.20	0.144	20	24.00	2.00
150			2	1.20	0.180	16	19.20	
200			2	1.20	0.240	12	14.40	

#### **ISOVENT-MW**

Mineral wool slabs with a glass veil **External walls** 



### Finishing:

Plates covered with black glass veil on one side

#### **Application:**

For thermal, acoustic and fire insulation:

- external walls insulated using the light-dry method with stone, glass, PVC, etc,
- ✓ three-layer walls,
- ✓ frame walls,
- ✓ partition walls,
- ✓ in acoustic screens.

#### **Parameters:**

MW-EN 13162-T3-DS(70	ISOVENT   0,90)-CS(10)1		-WL(P)-M	U1-AW1,00
		Manager		Tolerances
red product properties according to	Test	Measure-	Codes	

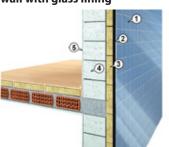
			Measure-		Tolerances	
Declared product properties a PN-EN13162+A1:201.		Test method	ment unit	Codes for classes or tolerances	Values	
Length (dimensional tolerance class)		PN-EN 822	[%]	[-]	±2	
Width (dimensional tolerance class)		FIN-LIN OZZ	[%]	[-]	± 1.5	
Thickness	<100 mm	PN-FN 823	[mm/%]	T3	- 3 mm / + 10%	
(dimensional tolerance class)	≥ 100 mm	PIN-EIN 023	[%/mm]	13	- 3% / + 10 mm	
Rectangularity S <sub>b</sub>		PN-EN 824	mm/m	[-]	≤5	
Flatness S <sub>max</sub>		PN-EN 825	mm	[-]	≤6	
Dimensional stability under specific temperature and relative		PN-EN 1604	[%]	DS(70,90)	$\pm$ 1.0 (change in thickness, length and width)	
humidity conditions			[mm]		± 1 (change in flatness)	
Compressive stresses at 10% relative strain		PN-EN 826	[kPa]	CS(10)10	≥ 10	
Tensile strength perpendicular to frontal surfaces		PN-EN 1607	[kPa]	TR5	≥5	
Level of short-term water absorptio	n	PN-EN 1609	[kg/m²]	SS	≤ 1.0	
Level of long-term water absorption at partial immersion	1	PN-EN 12087	[kg/m²]	WL(P)	≤ 3.0	
Coefficient value of water vapor diffusion resistance		PN-EN 12086 [-] MU1		≤1		
Weighted sound absorption coefficient level		PN-EN ISO 354	[-]	AW1,00	1.00	
Heat transfer coefficient $\lambda_{_{D}}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.036	
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1	

#### Declared thermal resistance $\mathbf{R}_{\mathrm{D}}$ for individual product thicknesses

	Thickness [mm]									
50	80	100	120	150	200					
Heat resistance R <sub>D</sub> [m²K/W]										
1.35	2.20	2.75	3.30	4.15	5.55					



## Insulation of external wall with glass lining



- 1 Glass lining
- 2 Ventilation gap
- 3 ISOVENT-MW
- 4 Concrete blocks
- 5 Plaster

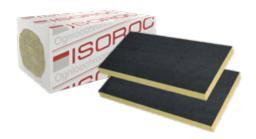
#### **Dimensions and packaging**

:	Slab dimensio	ns	Number of	Area		No. of	Coverage	Volume of slabs per pallet	
Thickness	Length	Width	slabs in a package	covered with 1 package	Volume of 1 package	packages on the pallet	surface of slabs per pallet		
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]	[pcs]	[m²]	[m³]	
50			6	3.60	0.180	16	57.60		
80			3	1.80	0.144	20	36.00		
100		(00	3	1.80	0.180	16	28.80	2.00	
120	1000	1000 600	2	1.20	0.144	20	24.00	2.88	
150			2	1.20	0.180	16	19.20		
200			2	1.20	0.240	12	14.40		

If you are interested in other thicknesses or dimensions than those indicated above, please contact your Technical and Commercial Advisor.

#### **ISOPANEL-W**

Mineral wool slabs with a glass veil **External walls** 



#### Finishing:

Plates covered with black glass veil on one side

#### **Application:**

For thermal, acoustic and fire insulation:

- external walls insulated using the light-dry method with stone, glass, PVC, etc,
- ✓ three-layer walls,
- ✓ frame walls,
- ✓ partition walls,
- ✓ in acoustic screens.

#### **Parameters:**

MW-I	EN 13162-T3	B-DS(70,90)-	CS(10)15-	TR5-WS-M	U1
			Manager		Tolerances
Declared product properties a PN-EN13162+A1:201:		Test method	Measure- ment unit	Codes for classes or tolerances	Values
Length (dimensional tolerance class	5)	- PN-EN 822	[%]	[-]	±2
Width (dimensional tolerance class)	)	FIN-LIN OZZ	[%]	[-]	± 1.5
Thickness (dimensional tolerance	<100 mm	PN-EN 823	[mm/%]	T3	- 3 mm / + 10%
class)	≥ 100 mm	T IN-LIN 023	[%/mm]	13	- 3% / + 10 mm
Rectangularity S <sub>b</sub>		PN-EN 824	[mm]	[-]	≤ 5
Flatness S <sub>max</sub>		PN-EN 825	[mm]	[-]	≤ 6
Dimensional stability under specific relative humidity conditions	temperature and	PN-EN 1604	[%]	DS(70,90)	± 1,0 (change in thickness, length and width)
relative numbrily conditions			[mm]		± 1 (change in flatness)
Compressive stresses at 10% relative	strain	PN-EN 826	[kPa]	CS(10)15	≥ 15
Tensile strength perpendicular to frontal surfaces		PN-EN 1607	[kPa]	TR5	≥5
Level of short-term water absorption	n	PN-EN 1609	[kg/m²]	SS	≤ 1.0
Coefficient value of water vapor diffusion resistance		PN-EN 12086	[-]	MU1	≤1
Heat transfer coefficient $\lambda_{\scriptscriptstyle D}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.036
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1

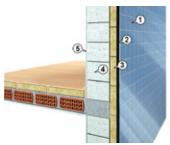
**ISOPANEL-W** 

#### Declared thermal resistance $\boldsymbol{R}_{\!\scriptscriptstyle D}$ for individual product thicknesses

Thickness [mm]							
50 80 100							
Heat resistance R <sub>D</sub> [m²K/W]							
1.35	2.20	2.75					



## Insulation of external wall with glass lining



- 1 Glass lining
- 2 Ventilation gap
- 3 ISOPANEL-W
- 4 Concrete blocks
- 5 Plaster

#### **Dimensions and packaging**

	9	Slab dimensio	ns	Number of	Area	Volume of No. of		Coverage surface	Volume of slabs
Thickr	ness	Length	Width	slabs in a package	covered with 1 package	1 package	packages on the pallet	of slabs per pallet	per pallet
[mn	n]	[mm]	[mm]	[pcs]	[m²]	[m³]	[pcs]	[m <sup>2</sup> ]	[m³]
50	)			6	3.60	0.180	16	57.60	
80	)	1000	600	3	1.80	0.144	20	36.00	2.88
100	0			3	1.80	0.180	16	28.80	

#### ISOFAS Mineral wool slabs External walls



## **Application:**

For thermal, acoustic and fire insulation:

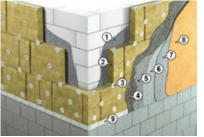
 external walls insulated using the light-wet method, the so-called ETICS (External Thermal Insulation Composite System).

#### Slab marking:

The outside of the slab is marked with an overprint



## Insulation of external walls in ETICS system



- 1 Adhesive mortar
- 2 ISOFAS
- 3 Mechanical connector with steel core
- 4 Reinforcing mortar
- 5 Glass fiber mesh
- 6 Plaster lining
- 7 Mineral plaster
- 8 Façade paint
- 9 Plinth strip

#### **Parameters:**

				50÷1	19 mm	120÷200 mm			
1	SOFAS			DS(70,90	13162-T4- )-CS(10)20- -WL(P)-MU1	MW-EN 13162-T4- DS(70,90)-CS(10)30-TR10- WS-WL(P)-MU1			
			Measure-	Tolerances					
Declared product properties PN-EN13162+A1:201		Test method	ment unit	Codes for classes or tolerances	Values	Codes for classes or tolerances	Values		
Length (dimensional tolerance	class)	PN-EN 822	[%]	[-]	± 2	[-]	±2		
Width (dimensional tolerance c	lass)	PN-EN 822	[%]	[-]	± 1.5	[-]	± 1.5		
Thickness	<100 mm	PN-EN 823	[mm/%]	T4	- 3 mm / + 5%	- T4	- 3 mm / + 5%		
(dimensional tolerance class)	≥ 100 mm	THY ENGES	[%/mm]		- 3% / + 5 mm		- 3% / + 5 mm		
Rectangularity S <sub>b</sub>		PN-EN 824	mm/m	[-]	≤ 5	[-]	≤5		
Flatness S <sub>max</sub>		PN-EN 825	mm	[-]	≤ 6	[-]	≤6		
Dimensional stability under specific temperature and relative		PN-EN 1604	[%]	DS(70,90)	± 1.0 (change in thickness, length and width)	DS(70,90)	± 1.0 (change in thickness, length and width)		
humidity conditions			[mm]		± 1 (change in flatness)		± 1 (change in flatness)		
Compressive stresses at 10% rel	ative strain	PN-EN 826	[kPa]	CS(10)20	≥ 20	CS(10)30	≥ 30		
Tensile strength perpendicular to frontal surfaces		PN-EN 1607	[kPa]	TR10	≥ 10	TR10	≥ 10		
Level of short-term water absor	ption	PN-EN 1609	[kg/m²]	SS	≤ 1.0	SS	≤ 1.0		
Level of long-term water absorp at partial immersion	otion	PN-EN 12087	[kPa]	WL(P)	≤ 3.0	WL(P)	≤ 3.0		
Coefficient value of water vapor resistance	ur diffusion	PN-EN 12086	[-]	MU1	≤1	MU1	≤1		
Heat transfer coefficient $\lambda_{\scriptscriptstyle D}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.036	[-]	≤ 0.036		
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1	Euroclass	A1		

#### Declared thermal resistance R<sub>D</sub> for individual product thicknesses

	Thickness [mm]										
50	60	80	100	120	140	150	160	180	200		
	Heat resistance R <sub>D</sub> [m²K/W]										
1.35	1.65	2.20	2.75	3.30	3.85	4.15	4.40	5.00	5.55		

:	Slab dimensio	ns	Number of	Area	Volume of	No. of	Slab	Coverage
Thickness	Length	Width	slabs in a package	covered with 1 package	1 package	packages on the pallet	coverage surface on the pallet	surface on the pallet
[mm]	[mm]	[mm]	[pcs]	[m <sup>2</sup> ]	[m³]	[pcs]	[m²]	[m³]
50			6	3.60	0.180	16	57.60	2.880
60			5	3.00	0.180	16	48.00	2.880
80			3	1.80	0.144	20	36.00	2.880
100			3	1.80	0.180	16	28.80	2.880
120			2	1.20	0.144	20	24.00	2.880
140	1000	600	2	1.20	0.168	16	19.20	2.688
150			2	1.20	0.180	16	19.20	2.880
160			2	1.20	0.192	12+16	33.60	5.376
170			2	1.20	0.204	12+16	33.60	5.712
180			2	1.20	0.216	12	14.40	2.592
200			2	1.20	0.240	12	14.40	2.880

If you need other thicknesses than those mentioned above, please contact your Technical and Commercial Advisor.

# ISOFAS 35 Mineral wool slabs External walls



## **Application:**

For thermal, acoustic and fire insulation:

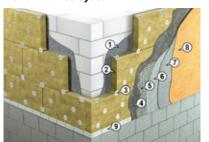
 external walls insulated using the light-wet method, the so-called ETICS (External Thermal Insulation Composite System).

#### **Parameters:**

				50÷	200 mm		
	ISOFAS	35		MW-EN 13162-T5-DS(70,90)-CS(10)20- TR10-WS-WL(P)-MU1-AFr5			
		_		Tolerances			
Declared product properti PN-EN13162+A1:.		Test method	Measurement unit	Codes for classes or levels	Values		
Length (dimensional tolerance class	)	PN-EN 822	[%]	[-]	± 2		
Width (dimensional tolerance class	5)	PN-EN 622	[%]	[-]	± 1.5		
Thickness (dimensional tolerance	<100 mm	- PN-EN 823	[mm/%]	- T5	-1 mm /+3 mm		
class)	≥ 100 mm	FIN-EN 023	[%/mm]	13	-1% /+ 3 mm		
Rectangularity S <sub>b</sub>		PN-EN 824	mm/m	[-]	≤5		
Flatness S <sub>max</sub>		PN-EN 825	mm	[-]	≤6		
Dimensional stability under specific temperature and relaconditions	ative humidity	PN-EN 1604	[%]	DS(70,90)	± 1.0 (change in thickness, length and width)		
			[mm]		± 1(change in flatness)		
Compressive stresses at 10%		PN-EN 826	[kPa]	CS(10)20	≥ 20		
Tensile strength perpendicul surfaces	ar to frontal	PN-EN 1607	[kPa]	TR10	≥ 10		
Level of short-term water absorption		PN-EN 1609	[kg/m²]	SS	≤ 1.0		
Coefficient value of water va diffusion resistance	por	PN-EN 12087	[-]	WL(P)	≤ 3.0		
Level of long-term water abs	orption at partial	PN-EN 12086	[kg/m²]	MU1	≤ 1.0		
Airflow resistance		PN-EN 29053	[kPa·s/m²]	AFr5	≥5		
Heat transfer coefficient $\lambda_{\scriptscriptstyle D}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.035		
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1		



## Insulation of external walls in ETICS system



- 1 Adhesive mortar
- 2 ISOFAS 35
- 3 Mechanical connector with steel core
- 4 Reinforcing mortar
- 5 Glass fiber mesh
- 6 Plaster lining
- 7 Mineral plaster
- 8 Façade paint
- 9 Plinth strip

## Declared thermal resistance $\boldsymbol{R}_{\!\scriptscriptstyle D}$ for individual product thicknesses

	Thickness [mm]											
50 60 80 100 120 140 150 160 180 200												
	Heat resistance R <sub>p</sub> [m²K/W]											
1.40         1.70         2.25         2.85         3.40         4.00         4.25         4.55         5.10         5.70												

#### **Dimensions and packaging**

9	Slab dimensio	ins	Number of	Area	Volume of	No. of	Coverage surface	Volume of slabs
Thickness	Length	Width	slabs in a package	covered with 1 package	1 package	packages on the pallet	of slabs per pallet	per pallet
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]	[pcs]	[m <sup>2</sup> ]	[m³]
50			8	4.80	0.240	24	115.20	5.760
60			6	3.60	0.216	24	86.40	5.184
80			5	3.00	0.24,	24	72.00	5.760
100			4	2.40	0.24,	24	57.60	5.760
120	1000	600	3	1.80	0.216	24	43.20	5.184
140			3	1.80	0.252	20	36.00	5.040
150			2	1.20	0.180	32	38.40	5.760
160			2	1.20	0.192	28	33.60	5.376
180			2	1.20	0.216	24	28.80	5.184
200			2	1.20	0.240	24	28.80	5.760

#### **ISOPANEL-SC**

Mineral wool slabs

#### **Staircase walls**



## **Application:**

For thermal, acoustic and fire insulation: ✓ staircases.







#### Internal wall insulation



- 1 Masonry element
- 2 ISOPANEL-SC
- 3 Reinforced layer
- 4 Primer
- 5 Finishing layer

#### **Parameters:**

MW-EN 13	3162-T5-l	ISOPANEL-Se DS(70,90)-CS(1		/S-WL(P)-MU1	-AFr5		
		_		Tolerances			
Declared product properties ac PN-EN13162+A1:2015-		Test method	Measurement unit	Codes for classes or levels	Values		
Length (dimensional tolerance cla	ass)	PN-EN 822	[%]	[-]	± 2		
Width (dimensional tolerance cla	ss)	T IV-LIV 022	[%]	[-]	± 1.5		
Thickness (dimensional tolerance class)	100 mm		[mm/%]	T5	-1mm /+3mm		
Rectangularity S <sub>b</sub>		PN-EN 824	[mm]	[-]	≤ 5		
Flatness S <sub>max</sub>		PN-EN 825	[mm]	[-]	≤ 6		
Dimensional stability under specific temperature and relative conditions	humidity	PN-EN 1604	[%]	DS(70,90)	± 1.0 (change in thickness, length and width)		
			[mm]		± 1(change in flatness)		
Compressive stresses at 10% relat	ive strain	PN-EN 826	[kPa]	CS(10)20	≥ 20		
Tensile strength perpendicular to surfaces	frontal	PN-EN 1607	[kPa]	TR10	≥ 10		
Level of short-term water absorption		PN-EN 1609	[kg/m²]	SS	≤ 1.0		
Coefficient value of water vapor diffusion resistance		PN-EN 12087	[-]	WL(P)	≤ 3.0		
Level of long-term water absorption at partial immersion		PN-EN 12086	[kg/m²]	MU1	≤ 1.0		
Airflow resistance		PN-EN 12667	[kPa·s/m2]	AFr	≥ 5		
Heat transfer coefficient $\lambda_{\scriptscriptstyle D}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.035		
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1		

#### Declared thermal resistance $\boldsymbol{R}_{\!\scriptscriptstyle D}$ for individual product thicknesses

Thickness [mm]	
30	
Heat resistance R <sub>D</sub> [m <sup>2</sup> K/W]	
0.85	

	Slab dimensions		Number of Area		Volume of	No. of	Coverage surface of	Volumo of clabs	
Thickness	Length	Width	slabs in a package	covered with 1 package	1 package	packages on the pallet	slabs per pallet	per pallet	
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]	[pcs]	[m²]	[m³]	
30	1200	600	8	5.76	0.1728	36	207.36	6.2208	

#### **ISOPANEL-SE**

Mineral wool slabs

External walls



## **Application:**

For thermal, acoustic and fire insulation:

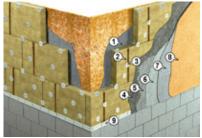
 external walls insulated using the light-wet method, the so-called ETICS (External Thermal Insulation Composite System).

#### Slab marking:

The outside of the slab is marked with an overprint



## Insulation of external walls in ETICS system



- 1 Adhesive mortar
- 2 ISOPANEL-SE
- 3 Mechanical connector with steel core
- 4 Reinforcing mortar
- $5-Glass\ fiber\ mesh$
- 6 Plaster lining
- 7 Mineral plaster
- 8 Façade paint
- 9 Plinth strip

#### **Parameters:**

MW-EN 13162-T5-DS		EL-SE 50÷200 5(10)30-TR1		WS-WL(P)-	MU1
				Tole	erances
Declared product properties accordi PN-EN13162+A1:2015-04	ng to	Test method	Measurement unit	Codes for classes or tolerances	Values
Length (dimensional tolerance class)		PN-EN 822	[%]	[-]	±2
Width (dimensional tolerance class)		PIN-EIN 022	[%]	[-]	± 1.5
Thickness	[mm/%]			-1 mm/+3 mm	
(dimensional tolerance class)	≥ 100 mm	PN-EN 823	[%/mm]	T5	- 1 mm / + 3 mm
Rectangularity S <sub>b</sub>		PN-EN 824	mm/m	[-]	≤5
Flatness S <sub>max</sub>		PN-EN 825	mm	[-]	≤6
Dimensional stability under specific temperat humidity conditions	ure and relative	PN-EN 1604	[%]	DS(70,90)	± 1.0 (change in thickness, length and width)
			[mm]		± 1 (change in flatness)
Compressive stresses at 10% relative strain		PN-EN 826	[kPa]	CS(10)30	≥ 30
Tensile strength perpendicular to frontal surfaces		PN-EN 1607	[kPa]	TR15	≥ 15
Point load level for 5 mm deformation		EN 12430	[N]	PL(5)250	≥ 250
Level of short-term water absorption		PN-EN 1609	[kg/m²]	SS	≤ 1.0
Level of long-term water absorption at partial immersion	PN-EN 12087	[kg/m²]	WL(P)	≤ 3.0	
Coefficient value of water vapour diffusion res	istance	PN-EN 12086	[-]	MU1	≤1
Heat transfer coefficient $\boldsymbol{\lambda}_{\!\scriptscriptstyle D}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.036
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1

#### Declared thermal resistance R<sub>D</sub> for individual product thicknesses

			U		_							
	Thickness [mm]											
50	60	80	100	120	140	150	160	180	200			
	Heat resistance R <sub>p</sub> [m²K/W]											
1.35	1.65	2.20	2.75	3.30	3.85	4.15	4.40	5.00	5.50			

#### **Dimensions and packaging**

Sla	b dimensio	ns	Number of slabs	Area	Volume of	No. of	Coverage	Slab volume						
Thickness	Length	Width	in a package	covered with 1 package	1 package	packages on the pallet	surface of slabs per pallet	on the pallet						
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]	[pcs]	[m²]	[m³]						
50			6	3.60	0.180	16	57.60	2.880						
60			5	3.00	0.180	16	48.00	2.880						
80		600	600			3	1.80	0.144	20	36.00	2.880			
100						3	1.80	0.180	16	28.80	2.880			
120	1000			2	1.20	0.144	20	24.00	2.880					
140	1000			600	000	600	600	600	2	1.20	0.168	16	19.20	2.688
150										2	1.20	0.180	16	19.20
160			2	1.20	0.192	12+16	33.60	5.376						
180			2	1.20	0.216	12	14.40	2.592						
200			2	1.20	0.240	12	14.40	2.880						

### **ISOPANEL**

Mineral wool slabs

External walls



## **Application:**

For thermal, acoustic and fire insulation:

- external walls insulated using the light wet method (ETICS),
- as acoustic insulation in noise screens,
- ✓ as thermal insulation in chimney systems,
- ✓ for dilatation,
- ✓ staircases.

#### Slab marking:

The outside of the slab is marked with an overprint from the thickness of 50 mm

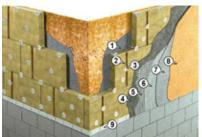








#### Insulation of walls in ETICS system



- 1 Adhesive mortar
- 2 ISOPANEL
- 3 Mechanical connector with steel core
- 4 Reinforcing mortar
- 5 Glass fiber mesh
- 6 Plaster lining
- 7 Mineral plaster
- 8 Façade paint
- 9 Plinth strip

#### **Parameters:**

				25÷49	mm	50÷20	0 mm			
	ISOPA	NEL		MW-EN 13162- CS(10)15-TR7, MU	5-WS-WL(P)-	MW-EN 13162-T3-DS(70,90)- CS(10)15-TR7, 5-WS-WL(P)- MU1				
Declared product p	roperties	_	Measure-		Tolerances					
according t PN-EN13162+A1:	:0	Test method	ment unit	Codes for classes or levels	Values	Codes for classes or levels	Values			
Length (dimensional toleran	ce class)	PN-EN 822	[%]	[-]	± 2	[-]	±2			
Width (dimensional tolerance class)		711 211 322	[%]	[-]	± 1.5	[-]	± 1.5			
Thickness (dimensional	<100 mm	PN-EN 823	[mm/%]	Т3	-3 mm /+10 %	T4	-3 mm /+5%			
olerance class) ≥ 100 mm		111 EN 025	[%/mm]	13	-3% /+ 10 mm		- 3% / + 5 mm			
Rectangularity S <sub>b</sub>		PN-EN 824	mm/m	[-]	≤5	[-]	≤5			
Flatness S <sub>max</sub>		PN-EN 825	mm	[-]	≤6	[-]	≤6			
Dimensional stability specific temperature relative humidity cor	and	PN-EN 1604	[%]	DS(70,90)	± 1.0 (change in thickness, length and width)	DS(70,90)	± 1.0 (change in thickness, length and width)			
relative numbers con	iditions		[mm]		± 1(change in flatness)		± 1(change in flatness)			
Compressive stresses relative strain	at 10%	PN-EN 826	[kPa]	CS(10)20	≥ 20	CS(10)20	≥ 20			
Tensile strength perp to frontal surfaces	endicular	PN-EN 1607	[kPa]	TR7,5	≥ 7.5	TR10	≥ 10			
Level of short-term water absorption		PN-EN 1609	[kg/m²]	SS	≤ 1.0	SS	≤ 1.0			
Coefficient value of water vapor diffusion resistance		PN-EN 12087	[-]	WL(P)	≤ 3.0	WL(P)	≤ 3.0			
Level of long-term w absorption at partial		PN-EN 12086	[kg/m²]	MU1	≤1	MU1	≤1			
Heat transfer coefficie		PN-EN 12667	[W.M.K.]	[-]	≤ 0.036	[-]	≤ 0.036			
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1	Euroclass	A1			

#### Declared thermal resistance $\boldsymbol{R}_{\!\scriptscriptstyle D}$ for individual product thicknesses

	Thickness [mm]											
30 40 50 60 80 100 120 140 150 160												
	Heat resistance R <sub>p</sub> [m²K/W]											
0.80 1.10 1.35 1.65 2.20 2.75 3.30 3.85 4.15 4.40												

	Slab dimensions		Number of	Area	Volume of	No. of	Coverage surface of	Volume of slabs				
Thickness	Length	Width	slabs in a package	covered with 1 package	1 package	packages on the pallet	slabs per pallet	per pallet				
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]	[pcs]	[m²]	[m³]				
30			10	6.00	0.180	16+12	168.00	5.040				
40	0		6	3.60	0.144	16+20	129.60	5.184				
50			6	3.60	0.180	16	57.60	2.880				
60			5	3.00	0.180	16	48.00	2.88				
80	1000	C00	3	1.80	0.144	20	36.00	2.880				
100	1000	600	3	1.80	0.180	16	28.80	2.880				
120			2	1.20	0.144	20	24.00	2.880				
140			2	1.20	0.168	16	19.20	2.688				
150			2	1.20	0.180	16	19.20	2.880				
160			2	1.20	0.192	12+16	33.60	5.376				

#### ISOFAS-P Mineral wool slabs External walls

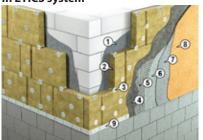


#### **Application:**

For thermal, acoustic and fire insulation:

- external walls insulated using the lightwet method, the so-called ETICS (External Thermal Insulation Composite System).
- ✓ for dilatation,
- ✓ staircases.

## Insulation of external walls in ETICS system



- 1 Adhesive mortar
- 2 ISOFAS-P
- 3 Mechanical connector with steel core
- 4 Reinforcing mortar
- 5 Glass fiber mesh
- 6 Plaster lining
- 7 Mineral plaster
- 8 Façade paint
- 9 Plinth strip

#### **Parameters:**

MW-EN	ISOFAS-P 20÷49 mm MW-EN 13162-T3-DS(70,90)-CS(10)20-TR10-WS-WL(P)-MU1										
		_		Tolerances							
Declared product properties ac PN-EN13162+A1:2015		Test method	Measurement unit	Codes for classes or levels	Values						
Length (dimensional tolerance c	ass)	PN-FN 822	[%]	[-]	± 2						
Width (dimensional tolerance class)		FIV-LIV 022	[%]	[-]	± 1.5						
Thickness (dimensional tolerance class) <100 mm		PN-EN 823	[mm/%]	T3	-3 mm /+10 %						
Rectangularity S <sub>b</sub>		PN-EN 824	[mm]	[-]	≤ 5						
Flatness S <sub>max</sub>		PN-EN 825	[mm]	[-]	≤ 6						
Dimensional stability under specific temperature and relative conditions	humidity	PN-EN 1604	[%]	DS(70,90)	± 1.0 (change in thickness, length and width)						
Conditions			[mm]		± 1(change in flatness)						
Compressive stresses at 10% rela	tive strain	PN-EN 826	[kPa]	CS(10)20	≥ 20						
Tensile strength perpendicular to surfaces	frontal	PN-EN 1607	[kPa]	TR10	≥ 10						
Level of short-term water absorption		PN-EN 1609	[kg/m²]	SS	≤ 1.0						
Coefficient value of water vapor diffusion resistance		PN-EN 12087	[-]	WL(P)	≤ 3.0						
Level of long-term water absorption	tion at	PN-EN 12086	[kg/m²]	MU1	≤1						
Heat transfer coefficient $\lambda_{\scriptscriptstyle D}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.038						
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1						

#### Declared thermal resistance $R_{\scriptscriptstyle D}$ for individual product thicknesses

Thickness [mm]	Thickness [mm]						
20							
Heat resistance R <sub>D</sub> [m²K/W]							
0.50							

#### **Dimensions and packaging**

	lab dimensions		Number of Area		Volume of	No. of	Coverage surface of	Volumo of clabe
Thickness	Length	Width	slabs in a package	covered 1 package		packages on the pallet	slabs per pallet	per pallet
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]	[pcs]	[m <sup>2</sup> ]	[m³]
20	1000	600	15	9.00	0.180	16+12	252.00	5.040

#### **ISOLOCK**

Stone wool plug

External walls



#### **Application:**

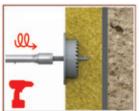
Our mineral wool plug prevents the formation of thermal bridges

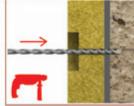
#### **Features and advantages:**

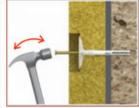
- ✓ This thermal insulation plug reduces thermal permeability at anchorage points.
- ✓ It makes facade surfaces homogeneous and smooth.
- Cost-effective application, the use of a dowel with a thermal insulation plug reduces the required length of the dowel for a given thickness of insulation.
- ✓ Quick and easy product assembly.
- ✓ Heat conduction coefficient  $\lambda$  < 0.040 W/(m×K)

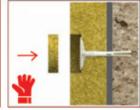
### **Assembly:**

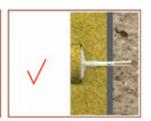
- 1. Use the cutter to make a hole in thermal insulation.
- 2. After fixing a façade dowel, insert the plug into the cut-out hole.











Number of plugs in a package	No. of packages per carton	No. of plugs per carton	No. of cartons per pallet	No. of plugs per pallet
[pcs]	[pcs]	[pcs]	[pcs]	[pcs]
200	10	2000	16	32000

## **ISOFAS-C1 ISOFAS-C2**

Mineral wools slabs **External walls** 



- Isofas-C1; primed on one side
- Isofas-C2; primed on both sides

## **Application:**

For thermal, acoustic and fire insulation:

✓ external walls insulated using the light-wet method, the so-called ETICS (External Thermal Insulation Composite System).

#### **Parameters:**

				50÷	119 mm	120÷200 mm		
	FAS-C1 FAS-C2			DS(70,90	13162-T4- 0)-CS(10)20- -WL(P)-MU1	MW-EN 13162-T5- DS(70,90)-CS(10)30- TR10-WS-WL(P)-MU1		
				Tolerances				
Declared product properties according to PN-EN13162+A1:2015-04		Test method	Measurement unit	Codes for classes or toler- ances	Values	Codes for classes or tolerances	Values	
Length (dimensional tolerance class)		PN-EN 822	[%]	[-]	±2	[-]	±2	
Width (dimensional tolerance class)		FIN-LIN OZZ	[%]	[-]	± 1.5	[-]	± 1.5	
Thickness	<100 mm		[mm/%]		- 3 mm / + 5%		-	
(dimensional tolerance class)	≥ 100 mm	PN-EN 823	[%/mm]	T4	- 3% / + 5 mm	T5	- 1% / + 3 mm	
Rectangularity S <sub>b</sub>		PN-EN 824	mm/m	[-]	≤ 5	[-]	≤ 5	
Flatness S <sub>max</sub>		PN-EN 825	mm	[-]	≤ 6	[-]	≤ 6	
Dimensional stability under specific te and relative humidity conditions	mperature	PN-EN 1604	[%]	DS(70,90)	± 1.0 (change in thickness, length and width)	DS(70,90)	± 1.0 (change in thickness, length and width)	
			[mm]		± 1 (change in flatness)		± 1 (change in flatness)	
Compressive stresses at 10% relative s	train	PN-EN 826	[kPa]	CS(10)20	≥ 20	CS(10)30	≥ 30	
Tensile strength perpendicular to front	al surfaces	PN-EN 1607	[kPa]	TR10	≥ 10	TR10	≥ 10	
Level of short-term water absorption		PN-EN 1609	[kg/m²]	SS	≤ 1.0	SS	≤ 1.0	
Level of long-term water absorption at partial immersion		PN-EN 12087	[kg/m²]	WL(P)	≤ 3.0	WL(P)	≤ 3.0	
Coefficient value of water vapor diffusion resistance		PN-EN 12086	[-]	MU1	≤1	MU1	≤1	
Heat transfer coefficient $\boldsymbol{\lambda}_{\!\scriptscriptstyle D}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.036	[-]	≤ 0.036	
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1	Euroclass	A1	

#### Declared thermal resistance R<sub>D</sub> for individual product thicknesses

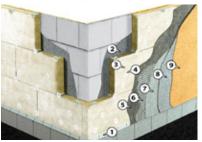
	Thickness [mm]										
50	60	80	100	120	140	150	160	180	200		
	Heat resistance R <sub>D</sub> [m²K/W]										
1.35	1.35         1.65         2.20         2.75         3.30         3.85         4.15         4.40         5.00         5.55										

#### **Dimensions and packaging**

	Slab dimensio	ns	Number of	Area	Volume of	No. of	Coverage	Slab volume
Thickness	Length	Width	slabs in a package	covered with 1 package	1 package	packages on the pallet	surface of slabs per pallet	on the pallet
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]	[pcs]	[m²]	[m³]
50			6	3.60	0.180	16	57.60	2.880
60	_		5	3.00	0.180	16	48.00	2.880
80			3	1.80	0.144	20	36.00	2.880
100			3	1.80	0.180	16	28.80	2.880
120	1000	(00	2	1.20	0.144	20	24.00	2.880
140	1000	600	2	1.20	0.168	16	19.20	2.688
150			2	1.20	0.180	16	19.20	2.880
160			2	1.20	0.192	12+16	33.60	5.376
180			2	1.20	0.216	12	14.40	2.592
200			2	1.20	0.240	12	14.40	2.880

If you need other thicknesses than those mentioned above, please contact your Technical and Commercial Advisor.

#### **Insulation of external** walls in ETICS system



- 1 Plinth strip
- 2 Adhesive mortar
- 3 ISOFAS-C1/ISOFAS-C2
- 4 Mechanical connector with steel core
- 5 Reinforcing mortar
- 6 Glass fiber mesh
- 7 Plaster lining
- 8 Mineral plaster
- 9 Façade paint

#### **ISOFAS-LM**

Mineral wool fin panels **External walls** 



## **Application:**

For thermal, acoustic and fire insulation:

 external walls insulated using the light-wet method, the so-called ETICS (External Thermal Insulation Composite System).

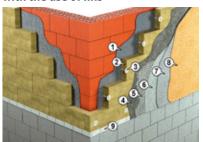
#### **Parameters:**

			50 ÷ 2	00 mm	210 ÷ 300 mm		
ISOFAS-LM			DS(70,90)	13162-T5- -CS(10)60- WL(P)-MU1	MW-EN 13162-T5- DS(70,90)-CS(10)60- TR80-WS-WL(P)-MU1		
		Measure-	Tolerances				
Declared product properties according to PN-EN13162+A1:2015-04	Test method	ment unit	Codes for classes or tolerances	Values	Codes for classes or tolerances	Values	
Length (dimensional tolerance class)	DN EN 022	[%]	[-]	± 2	[-]	±2	
Width (dimensional tolerance class)	PN-EN 822	[%]	[-]	± 1.5	[-]	± 1.5	
Thickness (dimensional tolerance class)	PN-EN 823	[mm/mm]	T5	-1 mm/+3 mm -1%/+3 mm	T5	- -1%/+3 mm	
Rectangularity S	PN-EN 824	mm/m	[-]	≤ 5	[-]	≤ 5	
Flatness S	PN-EN 825	mm	[-]	≤ 6	[-]	≤ 6	
Dimensional stability under specific temperature and relative humidity conditions	PN-EN 1604	[%]	DS(70,90)	± 1.0 (change in thickness, length and width)	DS(70,90)	± 1.0 (change in thickness, length and width)	
indimitary conditions		[mm]		± 1 (change in flatness)		± 1 (change in flatness)	
Compressive stresses at 10% relative strain	PN-EN 826	[kPa]	CS(10)60	≥ 60	CS(10)60	≥ 60	
Tensile strength perpendicular to frontal surfaces	PN-EN 1607	[kPa]	TR90	≥ 90	TR80	≥ 80	
Level of short-term water absorption	PN-EN 1609	[kg/m²]	SS	≤ 1.0	SS	≤ 1.0	
Level of long-term water absorption at partial immersion	PN-EN 12087	[kg/m²]	WL(P)	≤ 3.0	WL(P)	≤ 3.0	
Coefficient value of water vapor diffusion resistance	PN-EN 12086	[-]	MU1	≤1	MU1	≤1	
Heat transfer coefficient $\lambda_{\scriptscriptstyle D}$	PN-EN 12667	[W.M.K.]	[-]	≤ 0.041	[-]	≤ 0.041	
Reaction to fire	PN-EN 13501-1	From A to F	Euroclass	A1	Euroclass	A1	

#### Declared thermal resistance $\boldsymbol{R}_{\!\scriptscriptstyle D}$ for individual product thicknesses

	Thickness [mm]											
50	80	100	120	150	200	250	300					
	Heat resistance R <sub>D</sub> [m <sup>2</sup> K/W]											
1.20	1.95	2.40	2.90	3.65	4.85	6.05	7.30					

## Insulation of external walls in ETICS system with the use of fins



- 1 Adhesive mortar
- 2 ISOFAS-LM
- ${\bf 3}$  Mechanical connector with steel core (optional)
- 4 Reinforcing mortar
- 5 Glass fiber mesh
- 6 Plaster lining
- 7 Mineral plaster
- 8 Façade paint
- 9 Plinth strip

#### **Dimensions and packaging**

	Slab dimensions		Number of	Area		No. of	Coverage	W
Thickness	Length	Width	slabs in a package	covered with 1 package	Volume of 1 package	packages on the pallet	surface of slabs per pallet	Volume of slabs per pallet
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]	[pcs]	[m²]	[m³]
50			8	1.92	0.0960	60	115.20	5.760
80			6	1.44	0.1152	50	72.00	5.760
100			4	0.96	0.0960	60	57.60	5.760
120			4	0.96	0.1152	50	48.00	5.760
140			4	0.96	0.1344	40	38.40	5.376
150			4	0.96	0.1440	40	38.40	5.760
160	1200	200	4	0.96	0.1536	35	33.60	5.376
180	1200	200	4	0.96	0.1728	30	28.80	5.184
200			4	0.96	0.1920	30	28.80	5.760
240			2	0.48	0.1152	50	24.00	5.760
250			2	0.48	0.1200	50	24.00	6.000
260			2	0.48	0.1248	45	21.60	5.616
280			2	0.48	0.1344	45	21.60	6.048
300			2	0.48	0.1440	40	19.20	5.760
If you need o	ther thickness	es than those me	entioned above	nlease contact your T	echnical and (	ommercial Ad	visor	

#### **ISOBELT-FS** Mineral wool fin slabs Fire protection strips on facades



## **Application:**

✓ fire protection strips for exterior walls insulated with the light-wet method (ETICS) using materials other than non-flammable.









## **Parameters:**

ISOBELT-FS MW-EN 13162-T5-DS(70,90)-CS(10)15-TR7,5-WS-WL(P)-MU1											
Declared product properties a	ccording to		Measurement	Tolerances							
PN-EN13162+A1:2015		Test method	unit	Codes for classes or levels	Values						
Length (dimensional tolerance class	)	PN-FN 822	[%]	[-]	±2						
Width (dimensional tolerance class)		TH EN OZZ	[%]	[-]	± 1.5						
Thickness			[mm/mm]	T5	- 1mm/ + 3 mm						
(dimensional tolerance class)	≥ 100 mm		[%/mm]		- 1%/ + 3 mm						
Rectangularity S <sub>b</sub>	PN-EN 824	[mm]	[-]	≤5							
Flatness S <sub>max</sub>	PN-EN 825	[mm]	[-]	≤6							
Dimensional stability under specific and relative humidity conditions	temperature	PN-EN 1604	[%]	DS(70,90)	$\pm$ 1,0 (change in thickness, length and width)						
			[mm]		± 1 (change in flatness)						
Compressive stresses at 10% relative	strain	PN-EN 826	[kPa]	CS(10)15	≥ 15						
Tensile strength perpendicular to frontal surfaces		PN-EN 1607	[kPa]	TR7,5	≥7.5						
Level of short-term water absorptio	n	PN-EN 1609	[kg/m²]	SS	≤ 1.0						
Level of long-term water absorption at partial immersion		PN-EN 12087	[kg/m²]	WL(P)	≤ 3.0						
Coefficient value of water vapour di	PN-EN 12086	[-]	MU1	≤1							
Heat transfer coefficient $\boldsymbol{\lambda}_{\!\scriptscriptstyle D}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.037						
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1						

#### Insulation of the wall in the ETICS system using polystyrene foam with mineral wool fire protection strips



- 1 Adhesive mortar
- 2 ISOBELT-FS
- 3 Mechanical connector for wool with steel core
- 4 Reinforced layer adhesive mortar
- 5 Reinforcing mesh (fibreglass)
- 6 Plaster lining
- 7 Mineral plaster
- 8 Façade paint
- 9 Mechanical connector
- 10 Polystyrene foam

#### Declared thermal resistance $\boldsymbol{R}_{\!\scriptscriptstyle D}$ for individual product thicknesses

	Thickness [mm]									
50	80	100	120	140	150	160	180	200		
Heat resistance R <sub>D</sub> [m²K/W]										
1.35	2.15	2.70	3.20	3.75	4.05	4.30	4.85	5.40		

#### **Dimensions and packaging**

	Slab dimensio	ns	Number of	Area		No. of	Coverage	
Thickness	Length	Width	slabs in a package	slabs covered		packages on the pallet	surface of slabs per pallet	Volume of slabs per pallet
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]	[pcs]	[m²]	[m³]
50			8	1.6	0.08	36	57.6	2.88
80			6	1.2	0.096	30	36	2.88
100			4	0.8	0.08	36	28.8	2.88
120			4	0.8	0.096	30	24	2.88
140	1000	200	4	0.8	0.112	24	19.2	2.688
150			4	0.8	0.120	24	19.2	2.88
160			4	0.8	0.128	18	14.4	2.304
180			4	0.8	0.144	18	14.4	2.592
200			4	0.8	0.16	18	14.4	2.88

#### **ISOLAM-G**

#### chamfered, primed

Mineral wool fin slabs



#### **Application:**

Chamfered, single-sided primed fin slabs for thermal, acoustic and fire insulation:

 ceilings over unheated rooms (e.g. ceilings of garages, cellars, etc.) insulated in the garage system (spray method)



## Insulation of the ceiling over an unheated room



- 1 Ceiling
- 2 Adhesive mortar (applied to the wool)
- 3 ISOLAM-G
- 4 Plaster

#### **Parameters:**

#### ISOLAM-G MW-EN 13162-T5-DS(70,90)-CS(10)15-TR7,5-WS-WL(P)-MU1-AWi

Dealers de made at monaction a			Measurement	Ţ	olerances
Declared product properties a PN-EN13162+A1:2015		Test method	unit	Codes for classes or levels	Values
Length (dimensional tolerance class	)	PN-EN 822	[%]	[-]	±2
Width (dimensional tolerance class)		PIN-EIN OZZ	[%]	[-]	± 1.5
Thickness	<100 mm	PN-EN 823	[mm/mm]	T5	- 1mm/ + 3 mm
(dimensional tolerance class)	≥ 100 mm	I IN-LIN 023	[%/mm]	13	- 1%/ + 3 mm
Rectangularity S <sub>b</sub>		PN-EN 824	[mm]	[-]	≤5
Flatness S <sub>max</sub>		PN-EN 825	[mm]	[-]	≤ 6
Dimensional stability under specific and relative humidity conditions	PN-EN 1604	[%]	DS(70,90)	$\pm$ 1,0 (change in thickness, length and width)	
			[mm]		± 1 (change in flatness)
Compressive stresses at 10% relative	PN-EN 826	[kPa]	CS(10)15	≥ 15	
Tensile strength perpendicular to frontal surfaces		PN-EN 1607	[kPa]	TR7,5	≥7.5
Level of short-term water absorptio	n	PN-EN 1609	[kg/m²]	SS	≤ 1.0
Level of long-term water absorption at partial immersion		PN-EN 12087	[kg/m²]	WL(P)	≤ 3.0
Coefficient value of water vapour di	fusion resistance	PN-EN 12086	[-]	MU1	≤1
Weinhand accord abanmation	50 - 79 mm			AW 0.90	0.90
Weighted sound absorption coefficient level	80 - 99 mm	PN-EN ISO 354	[-]	AW 0.95	0.95
Coefficient level	100 - 200 mm			AW 1.00	1.00
Heat transfer coefficient $\lambda_{\scriptscriptstyle D}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.037
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1

#### Declared thermal resistance R<sub>D</sub> for individual product thicknesses

	Thickness [mm]									
50	80	100	120	140	150	160	180	200		
	Heat resistance R <sub>D</sub> [m²K/W]									
1.35	2.15	2.70	3.20	3.75	4.05	4.30	4.85	5.40		

#### **Dimensions and packaging**

	Slab dimensions		Number of slabs	Coverage surface of	Volume of slabs per
Thickness	Length	Width	on the pallet	slabs per pallet	pallet
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]
50			288	57.60	2.880
60			240	48.00	2.880
80			180	36.00	2.880
100			144	28.80	2.880
120	1000		120	24.00	2.880
140	1000	200	96	19.20	2.688
150			96	19.20	2.880
160			84	16.80	2.688
180		84	14.40	2.592	
200				14.40	2.880

#### **ISOFAS-LMG**

# **chamfered, primed**Mineral wool fin slabs **Garage systems**



## **Application:**

Chamfered, single-sided primed fin slabs for thermal, acoustic and fire insulation:

 ceilings over unheated rooms (e.g. ceilings of garages, basements, etc., insulated in the garage system (using the spraying method).

#### **Parameters:**

MW-EN 13162-T5-D	ISOFAS S(70,90)-C		0-WS-WL(	P)-MU1	
				T Codes	olerances
Declared product properties according to PN-EN1316	Test method	Measurement unit	for classes or toler- ances	Values	
Length (dimensional tolerance class)		- PN-EN 822	[%]	[-]	±2
Width (dimensional tolerance class)		T IV LIV 022	[%]	[-]	± 1.5
Thickness (dimensional tolerance class)	<100 mm ≥ 100 mm	PN-EN 823	[mm/mm] [%/mm]	T5	-1 mm/+3 mm -1%/+3 mm
Rectangularity S <sub>b</sub>	PN-EN 824	mm/m	[-]	≤5	
Flatness S <sub>max</sub>	PN-EN 825	mm	[-]	≤6	
Dimensional stability under specific temperature and r humidity conditions	Dimensional stability under specific temperature and relative			DS(70,90)	$\pm$ 1.0 (change in thickness, length and width)
illuminaty conditions			[mm]		± 1 (change in flatness)
Compression strength		PN-EN 826	[kPa]	CS(Y)30	≥ 30
Tensile strength perpendicular to frontal surfaces		PN-EN 1607	[kPa]	TR60	≥ 60
Level of short-term water absorption		PN-EN 1609	[kg/m²]	SS	≤ 1.0
Level of long-term water absorption at partial immersi	ion	PN-EN 12087	[kg/m²]	WL(P)	≤ 3.0
Coefficient value of water vapour diffusion resistance		PN-EN 12086	[-]	MU1	≤1
Heat transfer coefficient $\lambda_{_D}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.041
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1

#### Declared thermal resistance R<sub>D</sub> for individual product thicknesses

	Thickness [mm]										
50	80	100	120	140	150	160	180	200			
	Heat resistance R <sub>p</sub> [m²K/W]										
1.20	1.95	2.40	2.90	3.40	3.65	3.90	4.35	4.85			

## Insulation of the ceiling over an unheated room



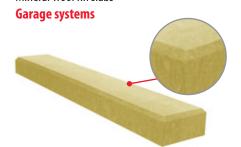
- 1 Ceiling
- 2 Adhesive mortar (applied to the wool)
- 3 ISOFAS-LMG
- 4 Plaster

#### **Dimensions and packaging**

	Slab dimensions		Number of slabs	Coverage surface of	Volume of slabs per	
Thickness	Length	Width	on the pallet	slabs per pallet	pallet	
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]	
50			240	57.60		
60		200	200	48.00		
80			150	36.00		
100			120	28.80		
120	1200		100	24.00	2.88	
140	1200	200	80	19.20	2.00	
150			80	19.20		
160			70	16.80		
180		70	14.40			
200			60	14.40		

#### **ISOLAM**

## **chamfered**Mineral wool fin slabs



## **Application:**

Chamfered, non-primed fin slabs for thermal, acoustic and fire insulation:

 ceilings over unheated rooms (e.g. ceilings of garages, cellars, etc.) insulated in the garage system (spray method)

#### **Parameters:**

#### ISOLAM MW-EN 13162-T5-DS(70,90)-CS(10)15-TR7,5-WS-WL(P)-MU1-AWi

Declared product properties a	ccording to		Measurement	To	olerances
PN-EN13162+A1:201		Test method	unit	Codes for classes or levels	Values
Length (dimensional tolerance class	5)	PN-EN 822	[%]	[-]	±2
Width (dimensional tolerance class)		FIN-LIN OZZ	[%]	[-]	± 1.5
Thickness	<100 mm	PN-EN 823	[mm/mm]	T5	- 1mm/ + 3 mm
(dimensional tolerance class)	≥ 100 mm	PIN-EIN 023	[%/mm]	15	- 1%/ + 3 mm
Rectangularity S <sub>b</sub>		PN-EN 824	[mm]	[-]	≤5
Flatness S <sub>max</sub>		PN-EN 825	[mm]	[-]	≤6
Dimensional stability under specific temperature and relative humidity conditions		PN-EN 1604	[%]	DS(70,90)	$\pm$ 1,0 (change in thickness, length and width)
,			[mm]		± 1 (change in flatness)
Compressive stresses at 10% relativ	PN-EN 826	[kPa]	CS(10)15	≥ 15	
Tensile strength perpendicular to frontal surfaces		PN-EN 1607	[kPa]	TR7,5	≥7.5
Level of short-term water absorptio	n	PN-EN 1609	[kg/m²]	SS	≤ 1.0
Level of long-term water absorption at partial immersion		PN-EN 12087	[kg/m²]	WL(P)	≤ 3.0
Coefficient value of water vapour di resistance	ffusion	PN-EN 12086	[-]	MU1	≤1
William III e	50 - 79 mm			AW 0.90	0.90
Weighted sound absorption coefficient level	80 - 99 mm	PN-EN ISO 354	[-]	AW 0.95	0.95
COCINCICIIL IEVEI	100 - 200 mm			AW 1.00	1.00
Heat transfer coefficient $\lambda_{_{D}}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.037
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1



## Insulation of the ceiling over an unheated room



- 1 Ceiling
- 2 Adhesive mortar
- 3 ISOLAM
- 4 Primer
- 5 Spraying layer

#### Declared thermal resistance $\boldsymbol{R}_{\!\scriptscriptstyle D}$ for individual product thicknesses

Thickness [mm]									
50	80	100	120	140	150	160	180	200	
Heat resistance R <sub>D</sub> [m²K/W]									
1.35	2.15	2.70	3.20	3.75	4.05	4.30	4.85	5.40	

#### **Dimensions and packaging**

	Slab dimensions			Coverage surface of	Volume of slabs per	
Thickness	Length	Width	Number of slabs on the pallet	slabs per pallet	pallet	
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]	
50			288	57.60	2.880	
80			180	36.00	2.880	
100			144	28.80	2.880	
120			120	24.00	2.880	
140	1000	200	96	19.20	2.688	
150			96	19.20	2.880	
160			84	16.80	2.688	
180			84	14.40	2.592	
200			72	14.40	2.880	

#### **ISOFFIT**

Mineral wool slabs with a glass veil **Ceilings** 



## **Application:**

For thermal, acoustic and fire insulation:

ceilings over unheated rooms (e.g. ceilings of garages, cellars, etc.).

#### **Parameters:**

MW-EN 1316	ISOFFIT d=50÷200 mm MW-EN 13162-T3-DS(70,90)-CS(10)10-TR5-WS-WL(P)-MU1-AW1,00										
Declared product properties a	Declared product properties according to		Measurement	Tolerances							
PN-EN13162+A1:2015-04		Test method	unit	Codes for classes or levels	Values						
Length (dimensional tolerance class	s)	PN-FN 822	[%]	[-]	±2						
Width (dimensional tolerance class)		TIN-LIN OZZ	[%]	[-]	± 1.5						
Thickness	<100 mm	PN-EN 823	[mm/mm]	T3	- 3mm/ + 10%						
(dimensional tolerance class)	≥ 100 mm	FIN-LIN 023	[%/mm]	15	- 3%/ + 10 mm						
Rectangularity S <sub>b</sub>		PN-EN 824	[mm]	[-]	≤ 5						
Flatness S <sub>max</sub>	Flatness S <sub>max</sub>			[-]	≤ 6						
Dimensional stability under specific temperature and relative humidity conditions		PN-EN 1604	[%]	DS(70,90)	± 1,0 (change in thickness, length and width)						
			[mm]		$\pm$ 1 (change in flatness)						
Compressive stresses at 10% relative	e strain	PN-EN 826	[kPa]	CS(10)10	≥ 10						
Tensile strength perpendicular to frontal surfaces		PN-EN 1607	[kPa]	TR5	≥5						
Level of short-term water absorptio	n	PN-EN 1609	[kg/m²]	SS	≤ 1.0						
Level of long-term water absorption at partial immersion		PN-EN 12087	[kg/m²]	WL(P)	≤ 3.0						
Coefficient value of water vapour di	ffusion resistance	PN-EN 12086	[-]	MU1	≤1						
Weighted sound absorption coeffici	ent level	PN-EN ISO 354	[-]	AW 1.00	1.00						
Heat transfer coefficient $\lambda_{\scriptscriptstyle D}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.035						
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1						



#### Declared thermal resistance R<sub>D</sub> for individual product thicknesses

	Thickness [mm]									
50	50 60 70 80 100 120 140 150 180 200									
	Heat resistance R <sub>D</sub> [m²K/W]									
1.40	1.70	2.00	2.25	2.85	3.40	4.00	4.25	5.10	5.70	

## Insulation of the ceiling over an unheated room



- 1 Ceiling
- 2 ISOFFIT
- 3 Mechanical connectors\*

#### **Dimensions and packaging**

	Slab dimensions		Number of slabs	Coverage surface of	Volume of slabs per
Thickness	Length	Width	on the pallet	slabs per pallet	pallet
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]
50			96	57.60	2.880
60			80	48.00	2.880
70			64	38.40	2.600
80			60	36.00	2.880
100	1000	600	48	28.80	2.880
120	1000	600	40	24.00	2.880
140			32	19.20	2.688
150			32	19.20	2.880
180			24	14.40	2.592
200			24	14.40	2.880

<sup>\*</sup>optional glue mounting

# ISOSTEP Mineral wool slabs Floor insulation



## **Application:**

For thermal, acoustic and fire insulation:

 $\checkmark$  floating floors on ceilings between levels



## Thermal and acoustic insulation of floating floors



- 1 Mineral wool circumferential expansion joint
- 2 ISOSTEP

#### **Parameters:**

				30	) mm	40 ÷ 50 mm	
ISOSTEP				MW-EN 13162-T4- DS(70,90)-CS(10/40)- WS-WL(P)-MU1-AFr5		MW-EN 13162-T7- DS(70,90)-CS(10/50)- WS-WL(P)-CP2-MU1- AFr5	
					Tolera	ances	
Declared product properties PN-EN13162+A1:20		Test method	Measure- ment unit	Codes for classes or toler- ances	Values	Codes for classes or toler- ances	Values
Length (dimensional toleran	ce class)	PN-EN 822	[%]	[-]	±2	[-]	± 2
Width (dimensional toleranc	e class)	FIN-LIN OZZ	[%]	[-]	± 1.5	[-]	± 1.5
Thickness	<100 mm	PN-EN 823	[mm/%]	T4	- 3 mm / + 5%	T7	[-]
(dimensional tolerance class)	≥ 100 mm	TW EN 023	[%/mm]	14	[-]	''	0/+10%
Rectangularity S <sub>b</sub>		PN-EN 824	mm/m	[-]	≤5	[-]	≤ 5
Flatness S <sub>max</sub>		PN-EN 825	mm	[-]	≤ 6	[-]	≤ 6
Dimensional stability under specific temperature and relat	ive	PN-EN 1604	[%]	DS(70,90)	± 1.0 (change in thickness, length and width)	DS(70,90)	± 1.0 (change in thickness, length and width)
humidity conditions			[mm]		± 1 (change in flatness)		± 1 (change in flatness)
Compressive stresses at 10% relative strain		PN-EN 826	[kPa]	CS(10/40)	≥ 40	CS(10/50)	≥ 50
Level of short-term water abs	orption	PN-EN 1609	[kg/m²]	SS	≤ 1.0	SS	≤ 1.0
Level of long-term water abso at partial immersion	rption	PN-EN 12087	[kg/m²]	WL(P)	≤ 3.0	WL(P)	≤ 3.0
Compressibility		PN-EN 12431	mm	-	-	CP 2	≤ 2
Coefficient value of water vapour diffusion resistance		PN-EN 12086	[-]	MU1	≤1	MU1	≤1
Airflow resistance		PN-EN 29053	[kPa*s/m²]	AFr	≥ 5	AFr	≥5
Heat transfer coefficient $\lambda_{_D}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.040	[-]	≤ 0.40
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1	Euroclass	A1

#### Declared thermal resistance $\boldsymbol{R}_{\!\scriptscriptstyle D}$ for individual product thicknesses

Thickness [mm]									
30 40 50									
	Heat resistance R <sub>p</sub> [m²K/W]								
0.75 1.00 1.25									

#### **Dimensions and packaging**

	Slab dimensions		Number of	Area		No. of	Coverage	
Thickness	Length	Width	slabs in a package	covered with 1 package	Volume of 1 package	packages on the pallet	surface of slabs per pallet	Volume of slabs per pallet
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]	[pcs]	[m²]	[m³]
30			6	4.32	0.130	24	103.68	3.1104
40	1200	600	4	2.88	0.115	24	69.12	2.7648
50			3	2.16	0.108	28	60.48	3.024

## ISOPANEL-D Mineral wool slabs

Two-layer system ISODACH



## **Application:**

For thermal, acoustic and fire insulation:

 non-ventilated concrete or steel construction floors as a base layer in a two-layer ISODACH insulation system, including top layer ISOROOF-T/MW60 ISOROOF-TOP//ISODECK.

#### **Parameters:**

#### ISOPANEL-D MW-EN 13162-T4-DS(70,90)-CS(10)30-TR10-PL(5)250-WS-WL(P)-MU1

Declared product properties according to PN-EN13162+A1:2015-04			Measure-	Tolerances		
		Test method	measure- ment unit	Codes for classes or tolerances	Values	
Length (dimensional tolerance class	5)	- PN-FN 822	[%]	[-]	±2	
Width (dimensional tolerance class)	)	FIN-LIN OZZ	[%]	[-]	± 1.5	
Thickness	<100 mm	- PN-EN 823	[mm/%]	T4	- 3 mm / + 5%	
(dimensional tolerance class)	≥ 100 mm	PIN-EIN 023	[%/mm]	14	- 3% / + 5 mm	
Rectangularity S <sub>b</sub>		PN-EN 824	mm/m	[-]	≤5	
Flatness S <sub>max</sub>		PN-EN 825	mm	[-]	≤6	
Dimensional stability under specific temperature and relative		PN-EN 1604	[%]	DS(70,90)	± 1.0 (change in thickness, length and width)	
humidity conditions	humidity conditions		[mm]		$\pm$ 1 (change in flatness)	
Compressive stresses at 10% relative strain		PN-EN 826	[kPa]	CS(10)30	≥ 30	
Tensile strength perpendicular to frontal surfaces		PN-EN 1607	[kPa]	TR10	≥ 10	
Point load level for 5 mm deformation		PN-EN 12430	[N]	PL(5)250	≥ 250	
Level of short-term water absorption	n	PN-EN 1609	[kg/m²]	SS	≤ 1.0	
Level of long-term water absorption at partial immersion		PN-EN 12087	[kg/m²]	WL(P)	≤ 3.0	
Coefficient value of water vapor diffusion resistance		PN-EN 12086	[-]	MU1	≤1	
Heat transfer coefficient $\lambda_{\scriptscriptstyle D}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.036	
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1	



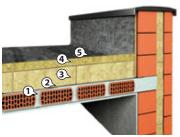




#### Declared thermal resistance R<sub>D</sub> for individual product thicknesses

Thickness [mm]									
50	80	110	120	160					
	Heat resistance R <sub>p</sub> [m²K/W]								
1.35	2.20	3.05	3.30	4.40					

## Insulation of the flat roof in a two-layer system ISODACH



- 1 Dense ribbed ceiling
- 2 Vapor barrier
- 3 ISOPANEL-D/ISOROOF-B/ ISOROOF-H/ ISOROOF
- 4 ISOROOF-T/ISODECK/MW60 ISOROOF-TOP
- 5 Roofing felt

#### **Dimensions and packaging**

Slab dimensions		Number		V.1. (11	
Thickness	Length	Width	of slabs on the pallet	Coverage surface of slabs per pallet	Volume of slabs per pallet
[mm]	[mm]	[mm]	[pcs]	[m <sup>2</sup> ]	[m³]
50			24	57.60	2.880
60			20	48.00	2.880
80			15	36.00	2.880
100			12	28.80	2.880
110	2000	1200	11	26.40	2.904
120			10	24.00	2.880
140			8	19.20	2.688
150			8	19.20	2.880
160			7	16.80	2.688

#### **ISOROOF-T**

Mineral wool slabs

Two-layer system ISODACH



## **Application:**

For thermal, acoustic and fire insulation:

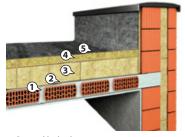
- non-ventilated concrete or steel construction roofs, as a top layer in a two-layer ISODACH insulation system including a subfloor,
- ✓ floor insulation under the floor subfloor.

#### **Parameters:**

#### ISOROOF -T MW-EN 13162-T3-DS(70,90)-CS(10)60-TR15-PL(5)700-WS-WL(P)-MU1

Declared product properties according to PN-EN13162+A1:2015-04			Measure-		Tolerances
		Test method	measure- ment unit	Codes for classes or tolerances	Values
Length (dimensional tolerance class	;)	PN-EN 822	[%]	[-]	±2
Width (dimensional tolerance class)		PIN-EIN 822	[%]	[-]	± 1.5
Thickness (dimensional tolerance class)	<100 mm	PN-EN 823	[mm/%]	T3	- 3 mm / + 10%
Rectangularity S <sub>b</sub>		PN-EN 824	mm/m	[-]	≤5
Flatness S <sub>max</sub>		PN-EN 825	mm	[-]	≤6
Dimensional stability under specific temperature and relative		PN-EN 1604	[%]	DS(70,90)	$\pm$ 1.0 (change in thickness, length and width)
humidity conditions	humidity conditions		[mm]		± 1 (change in flatness)
Compressive stresses at 10% relative strain		PN-EN 826	[kPa]	CS(10)60	≥ 60
Tensile strength perpendicular to frontal surfaces		PN-EN 1607	[kPa]	TR15	≥ 15
Point load level for 5 mm deformation		PN-EN 12430	[N]	PL(5)700	≥ 700
Level of short-term water absorptio	n	PN-EN 1609	[kg/m²]	SS	≤ 1.0
Level of long-term water absorption at partial immersion		PN-EN 12087	[kg/m²]	WL(P)	≤ 3.0
Coefficient value of water vapor diffusion resistance		PN-EN 12086	[-]	MU1	≤1
Heat transfer coefficient $\lambda_{\scriptscriptstyle D}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.039
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1

## Insulation of the flat roof in a two-layer system ISODACH



- 1 Dense ribbed ceiling
- 2 Vapor barrier
- 3 ISOPANEL-D/ISOROOF-B/ISOROOF-H/ISOROOF
- 4 ISOROOF-T/ISODECK/MW60 ISOROOF-TOP
- 5 Roofing felt

#### Declared thermal resistance R<sub>D</sub> for individual product thicknesses

Thickness [mm]	
40	
Heat resistance R <sub>D</sub> [m²K/W]	
1.00	

Slab dimensions			Number of slabs	Coverage surface of	Volume of slabs per
Thickness	Length	Width	on the pallet	slabs per pallet	pallet
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]
40	2000	1200	28	67.20	2.688

## FLAT

# ISODECK Mineral wool slabs Two-layer system ISODACH



## **Application:**

For thermal, acoustic and fire insulation:

- non-ventilated concrete or steel construction roofs, as a top layer in a two-layer ISODACH insulation system including a subfloor,
- ✓ floor insulation under the floor subfloor.

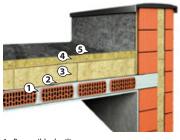
#### **Parameters:**

## ISODECK MW-EN 13162-T3-DS(70,90)-CS(10)50-TR15-PL(5)450-WS-WL(P)-MU1

Declared product properties according to PN-EN13162+A1:2015-04			Measure-	Tolerances		
		Test method	measure- ment unit	Codes for classes or tolerances	Values	
Length (dimensional tolerance class	)	PN-EN 822	[%]	[-]	±2	
Width (dimensional tolerance class)		PIN-EIN OZZ	[%]	[-]	± 1.5	
Thickness (dimensional tolerance class)	<100 mm	PN-EN 823	[mm/%]	T3	- 3 mm / + 10%	
Rectangularity S <sub>b</sub>		PN-EN 824	mm/m	[-]	≤5	
Flatness S <sub>max</sub>		PN-EN 825	mm	[-]	≤6	
Dimensional stability under specific temperature and relative	Dimensional stability under		[%]	DS(70,90)	± 1.0 (change in thickness, length and width)	
humidity conditions			[mm]		$\pm$ 1 (change in flatness)	
Compressive stresses at 10% relative strain	•		[kPa]	CS(10)50	≥ 50	
Tensile strength perpendicular to frontal surfaces		PN-EN 1607	[kPa]	TR15	≥ 15	
Point load level for 5 mm deformation		PN-EN 12430	[N]	PL(5)450	≥ 450	
Level of short-term water absorptio	n	PN-EN 1609	[kg/m²]	SS	≤ 1.0	
Level of long-term water absorption at partial immersion		PN-EN 12087	[kg/m²]	WL(P)	≤ 3.0	
Coefficient value of water vapor diffusion resistance		PN-EN 12086	[-]	MU1	≤1	
Heat transfer coefficient $\lambda_{\scriptscriptstyle D}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.040	
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1	



## Insulation of the flat roof in a two-layer system ISODACH



- 1 Dense ribbed ceiling
- 2 Vapor barrier
- 3 ISOPANEL-D/ ISOROOF-B/ISOROOF-H/ISOROOF
- 4 ISOROOF-T/ISODECK/MW60 ISOROOF-TOP
- 5 Roofing felt

#### Declared thermal resistance $\boldsymbol{R}_{\!\scriptscriptstyle D}$ for individual product thicknesses

Thickness [mm]
40
Heat resistance R <sub>D</sub> [m <sup>2</sup> K/W]
1.00

	Slab dimensions			Coverage surface of	Volume of slabs per	
Thickness	Length	Width	Number of slabs on the pallet	slabs per pallet	pallet	
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]	
40	2000	1200	28	67.20	2.688	

#### **MW60 ISOROOF-TOP**

Mineral wool slabs

Two-layer system ISODACH



### **Application:**

For thermal, acoustic and fire insulation:

- non-ventilated concrete or steel construction roofs, as a top layer in a two-layer ISODACH insulation system including a ISOPANEL-D subfloor,
- ✓ floor insulation under the floor subfloor.

#### **Parameters:**

#### MW60 ISOROOF -TOP 30 ÷ 40mm MW-EN 13162-T5-DS(70,90)-CS(10)60-TR15-PL(5)600-WS-WL(P)-MU1-AFr5

Declared product properties according to PN-EN13162+A1:2015-04			Measure-	Tolerances		
		Test method	ment unit	Codes for classes or tolerances	Values	
Length (dimensional tolerance class	)	PN-EN 822	[%]	[-]	±2	
Width (dimensional tolerance class)		FIN-EIN OZZ	[%]	[-]	± 1.5	
Thickness (dimensional tolerance class)	<100 mm		[mm]	T5	- 1 mm / +3 mm	
Dimensional stability under specific temperature and relative		PN-EN 1604	[%]	DS(70,90)	$\pm$ 1.0 (change in thickness, length and width)	
humidity conditions			[mm]		± 1 (change in flatness)	
Compressive stresses at 10% relative strain		PN-EN 826	[kPa]	CS(10/60)	≥ 60	
Tensile strength perpendicular to frontal surfaces		PN-EN 1607	[kPa]	TR15	≥ 15	
Point load level for 5 mm deformation		PN-EN 12430	[N]	PL(5)600	≥ 600	
Level of short-term water absorption	n	PN-EN 1609	[kg/m²]	SS	≤ 1.0	
Level of long-term water absorption at partial immersion		PN-EN 12087	[kg/m²]	WL(P)	≤ 3.0	
Coefficient value of water vapor diffusion resistance		PN-EN 12086	[-]	MU1	≤ 1.0	
Airflow resistance		PN-EN 29053	[kPa*s/m²]	AFr	≥ 5	
Heat transfer coefficient $\lambda_{\scriptscriptstyle D}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.038	
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1	





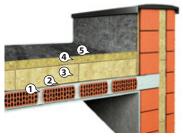




#### Declared thermal resistance $\boldsymbol{R}_{\!\scriptscriptstyle D}$ for individual product thicknesses

Thickness [mm]				
30 40				
Heat resistance R <sub>D</sub> [m <sup>2</sup> K/W]				
0.75	1.05			

## Insulation of the flat roof in a two-layer system ISODACH



- 1 Dense ribbed ceiling
- 2 Vapor barrier
- 3 ISOPANEL-D/ ISOROOF-B/ISOROOF-H/ISOROOF
- 4 ISOROOF-T/ISODECK/MW60 ISOROOF-TOP
- 5 Roofing felt

Slab dimensions			Number of slabs	Coverage surface of	Volume of slabs per	
Thickness	Length	Width	on the pallet	slabs per pallet	pallet	
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]	
30	2000	1200	36	86.40	2.592	
40	2000	1200	28	67.20	2.688	

## FLA

## ISOROOF-B

Mineral wool slabs
Flat roof - ISODACH MONO



## **Application:**

For thermal, acoustic and fire insulation:

- non-ventilated steel or concrete construction floors in a single-layer system,
- ✓ in two-layer systems as a base and top coat,
- ✓ floors intended for use on concrete screeds.

#### **Parameters:**

ISOROOF-B MW-EN 13162-T3-DS(70,90)-CS(10)40-TR7,5-PL(5)400-WS-WL(P)-MU1							
			Manager		Tolerances		
Declared product properties according to PN-EN13162+A1:2015-04		Test method	Measure- ment unit	Codes for classes or tolerances	Values		
Length (dimensional tolerance class)		PN-FN 822	[%]	[-]	±2		
Width (dimensional tolerance class)		FIN-LIN OZZ	[%]	[-]	±1.5		
Thickness	<100 mm	PN-EN 823	[mm/%]	Т3	- 3 mm / + 10%		
(dimensional tolerance class)	≥ 100 mm		[%/mm]		- 3% / + 10 mm		
Rectangularity S <sub>b</sub>		PN-EN 824	mm/m	[-]	≤5		
Flatness S <sub>max</sub>		PN-EN 825	mm	[-]	≤6		
Dimensional stability under specific temperature and relative		PN-EN 1604	[%]	DS(70,90)	± 1.0 (change in thickness, length and width)		
humidity conditions			[mm]		± 1 (change in flatness)		
Compressive stresses at 10% relative strain		PN-EN 826	[kPa]	CS(10)40	≥ 40		
Tensile strength perpendicular to frontal surfaces		PN-EN 1607	[kPa]	TR7,5	≥7.5		
Point load level for 5 mm deformation			[N]	PL(5)400	≥ 400		
Level of short-term water absorption	on	PN-EN 1609	[kg/m²]	SS	≤ 1.0		
Level of long-term water absorption at partial immersion		PN-EN 12087	[kg/m²]	WL(P)	≤ 3.0		
Coefficient value of water vapor diffusion resistance		PN-EN 12086	[-]	MU1	≤1		
Heat transfer coefficient $\lambda_{\scriptscriptstyle D}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.038		
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1		



#### Declared thermal resistance $\boldsymbol{R}_{\!\scriptscriptstyle D}$ for individual product thicknesses

Thickness [mm]					
50 80 100					
Heat resistance R <sub>D</sub> [m <sup>2</sup> K/W]					
1.30	2.10	2.60			

## Insulation of a flat roof in a single layer system ISODACH MONO



- 1 Dense ribbed ceiling
- 2 Vapor barrier
- 3 ISOROOF-B
- 4 Roofing felt

	Slab dimensions		Number													
Thickness	Length	Width	of slabs on the pallet	Coverage surface of slabs per pallet	Volume of slabs per pallet											
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]											
50			24	57.60	2.880											
60						20	48.00	2.880								
80					15	36.00	2.880									
100														12	28.80	2.880
110	2000	1200	11	26.40	2.904											
120					10	24.00	2.880									
140																
150			8	19.20	2.880											
160			7	16.80	2.688											

If you need other thicknesses than those mentioned above, please contact your Technical and Commercial Advisor.

#### **ISOROOF-H**

Mineral wool slabs
Flat roof - ISODACH MONO



## **Application:**

For thermal, acoustic and fire insulation:

- non-ventilated steel or concrete construction floors in a single-layer system,
- ✓ in two-layer systems as a base and top coat,
- ✓ floors intended for use on concrete screeds.

#### **Parameters:**

ISOROOF-H MW-EN 13162-T3-DS(70,90)-CS(10)50-TR15-PL(5)500-WS-WL(P)-MU1								
			Measure-		Tolerances			
Declared product properties according to PN-EN13162+A1:2015-04		Test method	ment unit	Codes for classes or tolerances	Values			
Length (dimensional tolerance class)		- PN-EN 822	[%]	[-]	±2			
Width (dimensional tolerance class)		PN-EN 822	[%]	[-]	±1.5			
Thickness	<100 mm	- PN-EN 823	[mm/%]	Т3	- 3 mm / + 10%			
(dimensional tolerance class)	≥ 100 mm	I IN-LIN 023	[%/mm]	13	- 3% / + 10 mm			
Rectangularity S <sub>b</sub>		PN-EN 824	mm/m	[-]	≤5			
Flatness S <sub>max</sub>	Flatness S <sub>max</sub>		mm	[-]	≤6			
Dimensional stability under specific temperature and relative humidity conditions		PN-EN 1604	[%]	DS(70,90)	± 1.0 (change in thickness, length and width)			
			[mm]		± 1 (change in flatness)			
Compressive stresses at 10% relative strain		PN-EN 826	[kPa]	CS(10)50	≥ 50			
Tensile strength perpendicular to frontal surfaces		PN-EN 1607	[kPa]	TR15	≥ 15			
Point load level for 5 mm deformation	it load level loi		[N]	EN(5)500	≥ 500			
Level of short-term water absorption	n	PN-EN 1609	[kg/m²]	SS	≤ 1.0			
Level of long-term water absorption at partial immersion		PN-EN 12087	[kg/m²]	WL(P)	≤ 3.0			
Coefficient value of water vapor diffusion resistance		PN-EN 12086	[-]	MU1	≤1			
Heat transfer coefficient $\lambda_{_{D}}$	·	PN-EN 12667	[W.M.K.]	[-]	≤ 0.038			
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1			



#### Declared thermal resistance $\boldsymbol{R}_{\!\scriptscriptstyle D}$ for individual product thicknesses

Thickness [mm]					
50 80 100					
Heat resistance R <sub>D</sub> [m²K/W]					
1.30	2.10	2.60			

## Insulation of a flat roof in a single layer system ISODACH MONO



- 1 Dense ribbed ceiling
- 2 Vapor barrier
- 3 ISOROOF-H 4 - Roofing felt

#### **Dimensions and packaging**

Slab dimensions		Number	6 6 611			
Thickness	Length	Width	of slabs on the pallet	Coverage surface of slabs per pallet	Volume of slabs per pallet	
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]	
50			24	57.60	2.880	
60			20	48.00	2.880	
80			15	36.00	2.880	
100	2000	1200	12	28.80	2.880	
110		İ		11	26.40	2.904
120			10	24.00	2.880	
140			8	19.20	2.688	

## FLAT

# ISOROOF Mineral wool slabs Flat roof - ISODACH MONO



#### **Application:**

For thermal, acoustic and fire insulation:

- non-ventilated steel or concrete construction floors in a single-layer system,
- ✓ in two-layer systems as a base and top layer,
- floors intended for use on concrete screeds.



## Insulation of the flat roof in a single-layer system ISODACH MONO



- 1 Dense ribbed ceiling
- 2 Vapor barrier
- 3 ISOROOF
- 4 Roofing felt

#### **Parameters:**

	ISOROOF					100 ÷ 120 mm	
						MW-EN 13162-T3- DS(70,90)-CS(10)60-TR15- PL(5)600-WS-WL(P)-MU1	
			Mos		Tole	rances	
Declared product properti PN-EN13162+A1:2		Test method	Mea- sure- ment unit	Codes for classes or tolerances	Values	Codes for classes or tolerances	Values
Length (dimensional toleran	ce class)	PN-EN 822	[%]	[-]	±2	[-]	±2
Width (dimensional tolerand	e class)	PIN-EIN 022	[%]	[-]	± 1.5	[-]	± 1.5
Thickness	ness <100 mm		[mm/%]	T3	- 3 mm /+ 10%	ТЗ	[-]
(dimensional tolerance class)	≥ 100 mm	PN-EN 823	[%/mm]	13	[-]	13	-3%/+10 mm
Rectangularity S <sub>b</sub>		PN-EN 824	mm/m	[-]	≤5	[-]	≤5
Flatness S <sub>max</sub>		PN-EN 825	mm	[-]	≤6	[-]	≤6
			[%]	DS(70,90)	± 1.0 (change in thickness, length and width)	DS(70,90)	± 1.0 (change in thickness, length and width)
humidity conditions			[mm]		± 1 (change in flatness)		± 1 (change in flatness)
Compressive stresses at 10% relative strain		PN-EN 826	[kPa]	CS(10)60	≥ 60	CS(10)60	≥ 60
Tensile strength perpendicula surfaces	r to frontal	PN-EN 1607	[kPa]	TR15	≥ 15	TR15	≥ 15
Point load level for 5 mm deformation		PN-EN 12430	[N]	PL(5)550	≥ 550	PL(5)600	≥ 600
Level of short-term water abs	orption	PN-EN 1609	[kg/m²]	SS	≤ 1.0	SS	≤ 1.0
Coefficient value of water vap diffusion resistance	or	PN-EN 12087	[kg/m²]	WL(P)	≤ 3.0	WL(P)	≤ 3.0
Coefficient value of water vap resistance	our diffusion	PN-EN 12086	[-]	MU1	≤1	MU1	≤1
Heat transfer coefficient $\boldsymbol{\lambda}_{\!\scriptscriptstyle D}$		PN-EN 12667	[W.M.K.]	[-]	≤ 0.039	[-]	≤ 0.039
Reaction to fire		PN-EN 13501-1	From A to F	Euroclass	A1	Euroclass	A1

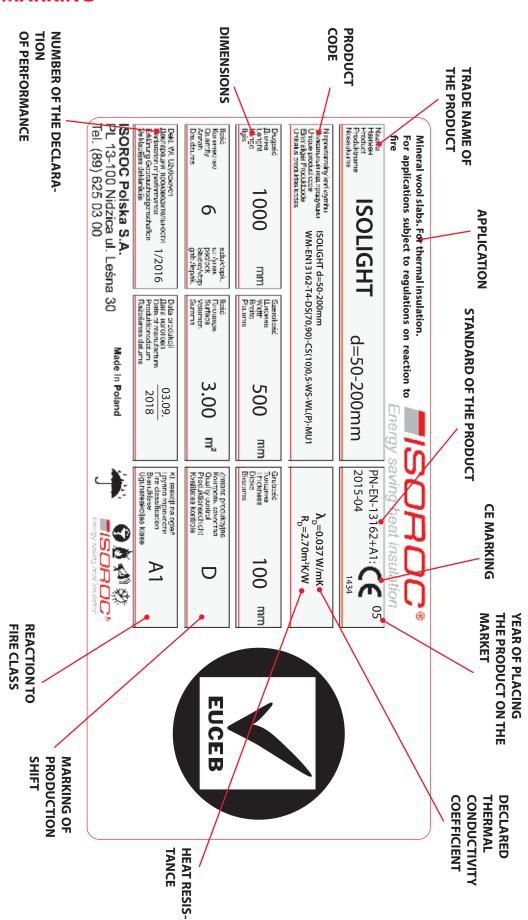
#### Declared thermal resistance R<sub>D</sub> for individual product thicknesses

Thickness [mm]					
50	80	100			
Heat resistance R <sub>D</sub> [m <sup>2</sup> K/W]					
1.25	2.05	2.55			

#### **Dimensions and packaging**

Slab dimensions		Normal con	Communication Clabs		
Thickness	Length	Width	Number of slabs on the pallet	Coverage surface of slabs per pallet	Volume of slabs per pallet
[mm]	[mm]	[mm]	[pcs]	[m²]	[m³]
50	2000	1200	24	57.60	2.880
60			20	48.00	2.880
80			15	36.00	2.880
100			12	28.80	2.880
110			11	26.40	2.904
120			10	24.00	2.880

#### **LABEL MARKING**





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