

MW
SANDWICH
PANELS
TECHNICAL
CATALOG

MW STANDARD sandwich panel
MW DEFENDER sandwich panel
MW LIGHT sandwich panel
MW FIRE sandwich panel
MW PLUS sandwich panel
MW ROOF sandwich panel
Sandwich panels with mineral wool core

EN-2024-02-02

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I. TECHNICAL INFORMATION ON ENCLOSURE MADE OF BALEX METAL SANDWICH PANELS WITH A MINERAL WOOL CORE

1. GENERAL INFORMATION – ABOUT THE COMPANY

Balex Metal Sp. z o.o. is the leading manufacturer of steel construction materials in Poland. The Company's offer includes complete solutions as well as steel roofing and façade systems for residential industry, commercial and agricultural construction.

The range of products is recognised by customers in Poland, Belarus, Lithuania, Latvia, Estonia, Ukraine, Czech Republic, Slovakia, Germany, Denmark, Sweden, Finland, Island, USA, Norway and many others. Consulting and sales services are provided through own network of regional branches, cooperating distributors and a team of professional sales advisors.

Balex Metal owes its leading position in the market of manufacturing double-cladding steel core sandwich panels to its technologically advanced production lines purchased from the most renowned European companies, the team of employees with excellent qualifications as well as its special attention to quality.

2. BALEX METAL SANDWICH PANELS

Investors, architects, general contractors and assembly companies carrying out projects are interested in systematic project solutions. Thus they expect comprehensive provision of all indispensable elements and building material used in a particular project. In order to meet these expectations, BALEXMETAL has introduced complete wall and roof covering solutions in its offer.

The most important elements of these solutions are wall and roof sandwich panels consisting of two claddings made of steel sheets connected with construction and insulation core. Balex Metal offers panels in steel coatings with two types of insulation core:

- sandwich panels with mineral wool core, with strands of wool orientated perpendicularly to the claddings, under the name: MW, described in this catalogue
- sandwich panels with polyisocyanurate core, abbreviated to PIR

The basic type of wall sandwich panels are the ones with standard fastening (specified as Standard), mounted to the support structure all way through in visible places. Another type of wall panels are the ones with mounting connectors that are invisible from the side of facade (referred to as Plus). Specially designed panel lock covers the mounting points and they are invisible on ready facades.

Roof sandwich panels (referred to as Roof) have very deeply re-profiled external coating in trapezoidal shape. This is because they have to bear long-term loads, including snow and own weight, with creep taken into account.

Apart from sandwich panels, the solutions also include a wide range of various elements, such as steel flashings, accessories – connectors, screws, rivets, sealing materials, windows and doors adjusted to be assembled to sandwich panels, roof skylights, gutter and drain systems.

What makes wall sandwich panel, characteristic is their compatibility. Such possibilities are used in designing connections of anti-fire partitions with external building walls. An example of this is joining polyurethane core panels with mineral wool core panels in a vertical arrangement. The result is a vertical band of an external wall, minimum 2 m wide, made of non-flammable material and demanded fire resistance in different fire zones.

It makes sense to join elements of mineral wool core panels and panels with other types of core when designing the connection of ceiling and inter-storey band which should be made of non-flammable materials of appropriate fire resistance.

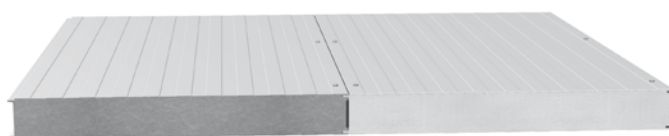


Fig. 1. A joint of MW STANDARD and PIR STANDARD sandwich panels

3. MW SANDWICH PANEL CONSTRUCTION

MW sandwich panels have two claddings of steel sheet and a structural insulation core.

The core is made of hard mineral wool. This material has the highest fire resistance parameters and is responsible for bearing shear stress, maintaining constant distance between coatings and providing high levels of heat and noise insulation.

Panel facings are made of 0,50 - 0,70 mm thick S250GD steel sheets, double zined with zinc layer. The purpose of coatings is to bear normal stresses, and to protect the building against weather conditions.

The wide choice of panel coating profiles and colours enables architects and designers to create various building facades and maintain the balance between beauty and functionality.

4. PRODUCTION TECHNOLOGY

Production of MW sandwich panels began in 2010. Mineral wool core panels are produced in a continuous system, on a modern, fully automated production line.

The technological process of production of MW - mineral wool core sandwich panels consists of several stages, among which the most important for panel properties are:

- profiling of steel coatings
- joining laths of rock wool, which are the panel core: wool strands are positioned vertically, which increases mechanical properties of panel
- inserting the core between two continuously moving steel bands, and sticking the core to the coatings by polyurethane glue

During the production process, it is possible to insert an EPDM - gasket in the panel lock, which makes the connection tighter. The gasket also makes assembly time shorter, as applying additional sealing is not required. Panels with gaskets inserted from the internal side of the lock are recommended as standard. There is an option of making wall panels with gaskets in both inlets, i.e. from both the internal and the external side.

The whole production, including cutting and packing ready products, is a continuous process.

5. PANEL TYPES

Balex Metal offers five types of MW panels:

MW STANDARD sandwich panel - mineral wool core wall sandwich panel with visible joint. The modular (or covering) width of 1000 mm or 1100 mm allows quick assembly and better optimization on the facade. MW STANDARD panels are mounted to the structure by loop through joints. Core: mineral wool of nominal apparent density 110 kg/m³.

MW DEFENDER sandwich panel - a wall sandwich panel with mineral wool core and visible joint (exposed fastening). Modular width (so called covering) 1000 mm or 1100 mm allows for fast assembly and better optimization on the facade. MW DEFENDER panel is fixed to the construction with the switch-through. The core of the panel is a hard mineral wool of nominal apparent density 150 kg/m³. The MW DEFENDER panel meets the requirements of burglary protection grade 2 in accordance with SSF1047.

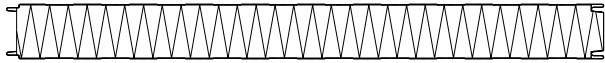
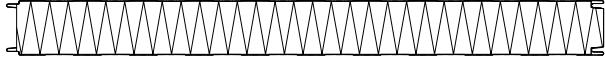
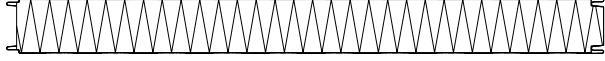
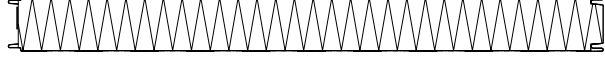
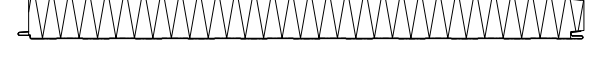
MW LIGHT sandwich panel - a wall sandwich panel with mineral wool core and visible joint (exposed fastening). Modular width (so called covering) 1000 mm or 1100 mm allows for fast assembly and better optimization on the facade. The core of the panel is a mineral wool of nominal apparent density 90 kg/m³.

MW FIRE sandwich panel - a wall sandwich panel with mineral wool core, visible fastening and with expanding sealant which enlarge fire resistance classes. Modular widths (so called covering) 1000 mm or 1100 mm allows for fast assembly and better optimization on the facade. The core of the panel is a mineral wool of nominal apparent density 110 kg/m³.

MW PLUS sandwich panel - mineral wool core wall sandwich panel with concealed joint invisible from the facade side, with modular widths of 1050 mm and 1000 mm. The fact that the fastening is invisible from the facade side and various profile types makes these panels very attractive from architectural and functional point of view.

MW ROOF sandwich panel - mineral wool core roof sandwich panel, with 1000 mm modular width and trapezoidal shaping of external surface. Trapezoidal profile of the upper coating guarantees high load bearing capacity for use loads and also during assembly.

Table 1. Types of MW sandwich panels

Panel	Panel width [mm]	Panel shape
1	2	3
MW STANDARD sandwich panel	80; 100; 120; 150; 175; 200; 240	
MW DEFENDER sandwich panel	200; 240	
MW LIGHT sandwich panel	80; 100; 120; 150; 175; 200; 240	
MW FIRE sandwich panel	100; 120; 150; 175; 200; 240	
MW PLUS sandwich panel	80; 100; 120; 150; 175; 200	
MW ROOF sandwich panel	100; 120; 150; 175; 200	

6. THE SCOPE OF PANEL APPLICATION

Sandwich panels with mineral wool core are a building material commonly used as a light coating of buildings with increased fire resistance requirements, e.g.: industrial, warehouse, sports and production halls, shopping, office and social buildings and facilities, hangars, garages, workshops, administration and public buildings, storages (including the facilities where there is contact with food).

A wide scope of colours and various shapes of panel profiles make it possible to create a range of interesting building structures. The construction of the panels enables fast and easy assembly, in vertical and horizontal arrangement, whatever the weather. The type and arrangement of sandwich panels are selected by the designer, taking into account the purpose of the building, conditions of use, possible influence of the internal environment and weather factors.

MW wall panels may also be applied on self-supporting suspended ceilings.

Sandwich panels are designated for low and moderate temperatures. Constant temperature on panel surface should not exceed + 60°C. Due to their low heat conductivity coefficient, BALEXMETAL sandwich panels are perfect for facades of heated buildings, as they minimise heat losses.

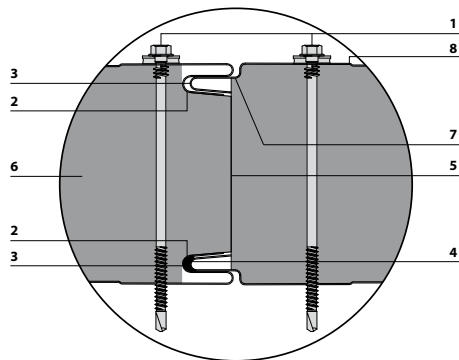
7. SANDWICH PANELS JOINT TYPES

BALEXMETAL sandwich panels have a new construction. The unique shape of longitudinal joints, with optimal proportions between the thickness of tongue and groove in both coatings, both on the external and the internal side, has significantly increased fire resistance parameters of the panels.

Optional EPDM gasket in one or both of the lock grooves, applied during the production process, additionally increases connection tightness.

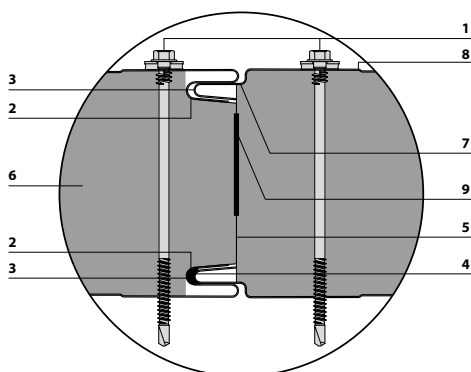
7.1. MW STANDARD, MW DEFENDER, MW LIGHT sandwich panels with a visible joint

The longitudinal tongue and groove joint of sandwich panels is made of specially shaped steel claddings. Both the internal cladding and the external one have a two wrap shaped lock increasing fire tightness and facilitating assembly by conical tilt of one of the joint surfaces. Such a shape of the steel claddings enables applying sealing masses into the panel joint during assembly, which improves tightness against air and moisture penetration.



- 1) fastening joints
- 2) unique, two-side shaping of panel – lock joint, increasing fire tightness and facilitating assembly
- 3) conical tilt of internal internal joint surface, facilitating assembly, suitable for connection with panels with other cores
- 4) EPDM gasket applied during production, increasing connection tightness (optional)
- 5) adjusted panel connection, maintaining high thermal insulation properties
- 6) mineral wool core, specially prefabricated in line, providing high resistance
- 7) coating shape profiling technology, providing high durability of anti-corrosion claddings
- 8) a wide scope of external coating profiles, meeting high architectural requirements

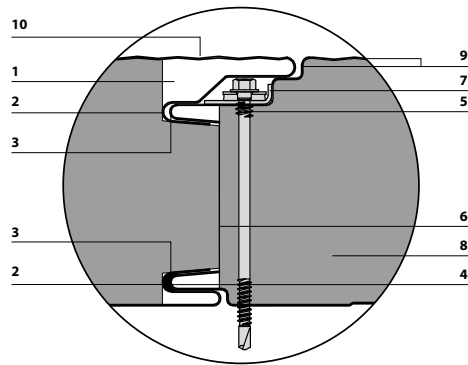
7.2. MW FIRE sandwich panels with visible joint



- 1) fastening joints
- 2) unique, two-side shaping of panel – lock joint, increasing fire tightness and facilitating assembly
- 3) conical tilt of internal internal joint surface, facilitating assembly, suitable for connection with panels with other cores
- 4) EPDM gasket applied during production, increasing connection tightness (optional)
- 5) adjusted panel connection, maintaining high thermal insulation properties
- 6) mineral wool core, specially prefabricated in line, providing high resistance
- 7) coating shape profiling technology, providing high durability of anti-corrosion claddings
- 8) a wide scope of external coating profiles, meeting high architectural requirements
- 9) expanding gasket

7.3. MW PLUS sandwich panel with a concealed joint

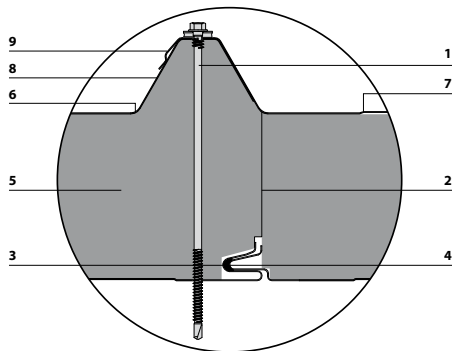
MW PLUS sandwich panels with a concealed joint are also of the tongue and groove type, but they have an additional cladding protrusion formed specifically in the longitudinal joint on the facade side, covering the connector fastening the preceding panel.



- 1) concealed structural connection, giving the facade an aesthetic look
- 2) unique, two-side shaping of panel - lock joint increasing fire tightness and facilitating assembly
- 3) conical tilt of internal internal joint surface, facilitating assembly, suitable for connection with panels with other cores
- 4) EPDM gasket applied during production, increasing connection tightness (optional)
- 5) longitudinal groove facilitating positioning of fasteners
- 6) precise panel connection, maintaining high thermal insulation properties
- 7) steel washer in the panel lock, increasing the bearing capacity of the connection
- 8) mineral wool core, specially prefabricated in line, providing high resistance
- 9) coating shape profiling technology, providing high durability of anti-corrosion claddings
- 10) a wide scope of external coating profiles, meeting high architectural requirements

7.4. MW ROOF sandwich panel

The longitudinal joint of MW ROOF sandwich panels consists of specifically shaped steel cladding. The lower cladding in one panel have a shape of groove, and in the other one of the tongue. The upper coatings have been designed so that the ending of the overlapping sheet of one panel covers the hump of the other panel filled with mineral wool. The system of connections used increases fire tightness and facilitates assembly. In addition, the eaves part of the lower coating with the core is removed as standard in MW ROOF sandwich panels. This trim makes it easier to mount the gutter pipes, and makes it possible to have better tightness if panels are joined at length in tongue and groove system.



- 1) fastening joints
- 2) tight panel connection due to the adjusted mineral wool core
- 3) conical tilt of internal internal joint surface, facilitating assembly, suitable for connection with panels with other cores
- 4) EPDM gasket applied during production, increasing connection tightness (optional)
- 5) mineral wool core, specially prefabricated in line, providing high resistance
- 6) coating shape profiling technology, providing high durability of anti-corrosion claddings
- 7) trapezoidal profiling of external coating to increase bearing capacity of the roof panels and facilitating rainwater drainage
- 8) special profiling of the hump shape, providing panel tightness
- 9) clamp profiling, which prevents water penetration and significantly facilitates panel assembly

8. BASIC TECHNICAL INFORMATION

Table 2. Technical information

Panel type	Panel core thickness [mm]	Coating thickness [mm]		Panel weight [kg/m ²]	Panel length L [m]	
		INT	EXT		min	max
1	2	3	4	5	6	7
MW STANDARD sandwich panel	80	0,50-0,70	0,50-0,70	17,6	2,50	15,00
	100			19,8		
	120			22,0		
	150			25,3		
	175			28,1		
	200			30,8		
	240			35,2		
MW DEFENDER sandwich panel	200	0,60-0,70	0,60-0,70	41,3	2,50	15,00
	240			46,1		
MW LIGHT sandwich panel	80	0,50-0,70	0,50-0,70	16,0	2,50	15,00
	100			17,8		
	120			19,6		
	150			22,3		
	175			24,6		
	200			26,8		
	240			30,4		
MW FIRE sandwich panel	100	0,50-0,70	0,50-0,70	19,8	2,50	15,00
	120			22,0		
	150			25,3		
	175			28,1		
	200			30,8		
	240			35,2		
MW PLUS sandwich panel	80	0,50-0,70	0,50-0,70	17,6	2,50	15,00
	100			19,8		
	120			22,0		
	150			25,3		
	175			28,1		
	200			30,8		
MW ROOF sandwich panel	100/145	0,50-0,70	0,50-0,70	20,3	2,50	15,00
	120/165			22,4		
	150/195			25,6		
	175/220			28,3		
	200/245			30,9		

Note: MW ROOF sandwich panel thickness: the first digit refers to core thickness, and the second one to the total panel thickness including the hump

9. MATERIAL AND CLADDING COATINGS

9.1. Material

S250GD + ZINC

- steel of increased parameters, zined on both sides, permanently secured by anti-corrosion claddings
- steel sheet thickness: 0,50 - 0,70 mm
- organic and metallic claddings

9.2. Coatings

PREMIUM OFFER

CESAR 55

- polyurethane coating with polyamide, thickness: 55 µm
- corrosion resistance up to RC5
- durability: 30 years, depending on the environment
- resistance to intensive UV RUV4 radiation
- for standard, aggressive and demanding environments
- highly resistant to scratches
- the colour maintains its look and stability for a full use cycle
- for use on roofs, walls, **standard, aggressive and demanding environments**: cold, damp, high UV radiation, industrial and contaminated environments
- colors are presented on the company's website

STANDARD OFFER

SP POLYESTER GLOSS

- cladding thickness 25 µm – for exteriors; resistant to temperature changes and weather conditions, good corrosion resistance
- cladding thickness 15 µm – for interiors – internal layers of walls and roofs
- colours are presented on the company's website

SP POLYESTER MAT

- cladding thickness 35 µm
- for exteriors; resistant to temperature changes and weather conditions, good corrosion resistance
- perfect for roof on commercial and industrial buildings
- colours are presented on the company's website

ALUZINC + Easyfilm®

- metallic cover of basis weight: 150 and 185 g/m²
- cladding thickness 20 µm (for 150 g/m²), 25 µm (for 185 g/m²)
- two side cladding applied thermally in a continuous process, additional secured by a thin organic cladding: SPT (Special Protection Treatment), Easyfilm® (environmentally friendly, without chrome, compliant with the EU directives)
- resistance to increased temperatures; high resistance to corrosion; excellent heat and light reflectiveness; good abrasion resistance.

SPECIAL REQUESTS OFFER

PCV(F) "food safe"

- cladding thickness 120 µm
- white foil
- special cladding with increased hardness
- for food industry facilities and cold storages; easy to wash and resistant to most washing agents

GALVANIZED STEEL

- cladding thickness 20 µm
- metallic cladding with basis weight 275 g/m² (self-galvanisation process occurs, i.e. scratches and cut edges cover themselves with zinc)
- two-side cladding, applied thermally on steel sheet
- high resistance to corrosion factors and mechanical damage

10. FACING COLOUR SCHEME

Colour scheme according to the Balex Metal World of Colours palette

PREMIUM coating

CESAR 55 - polyurethane with polyamide: 7016, 8017, 9005, 9006, 9007, 9010

Organic coatings

SP Polyester Gloss 25 µm: 9010, 8004, 8019, 6005, 9005, 3011, 7024, 7016, 7035, 6020, 3016, 1015, 3000, 6011, 9006, 5010, 1003, 9007, 9002, 7047, 7040, 7012, 5003, 6018, 8017

SP Polyester Mat 35 µm: 8620M, 9005M, 8637M, 3301M, 7591M, 7016M, 6490M

PVC(F) food safe 120 µm: 9010

Metallic coatings

ALUCYNK+ Easyfilm®:

Stainless steel

Table 3. Classification of colours by relative brightness

Symbol	Name	Group
9010	white	very bright
9002	grey white	
7035	light grey	
1015	ivory	
6011	reseda green	bright
9006	silver metallic	
9007	grey-aluminium	
1003	signal-yellow	
9005	black	dark
5010	signal-blue	
6005	dark green	
6020	fir-green	
7024	graphite-grey	
7016	graphite	
8019	dark brown	
8017	chocolate brown	
8012	red-brown	
8004	brick (incl. Rustic)	
3016	coral-red	
3011	red	
3009	cherry	
3000	fiery-red	

Not all the colours are available for all steel thicknesses (0.5, 0.6, 0.7).
For more information please contact our sales representative.

11. FACINGS PROFILING SCHEME

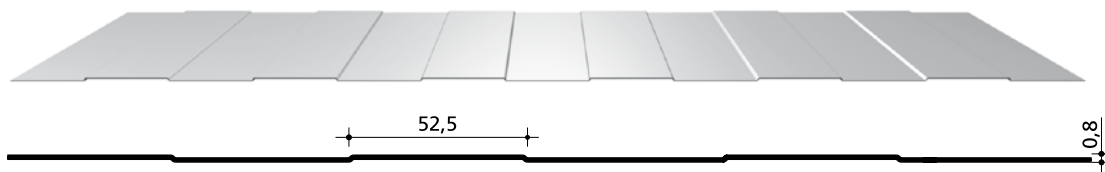
Sandwich panels from Balex Metal have various profile types available, in particular of external facade facing. This is why it is possible to create an effect of beautiful and unique facades.

Profile types:

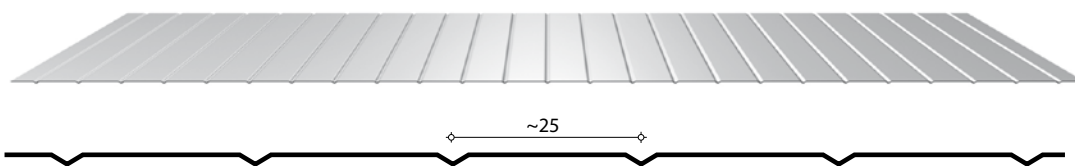
M = MICROPROFILED



L = LINED



R = GROOVING



G = FLAT*



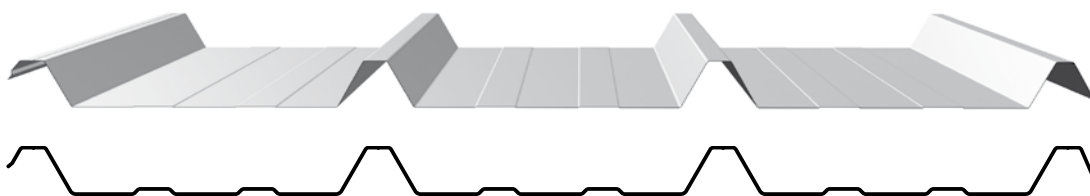
1L = CLEARLINE*



2L = DOUBLE CLEARLINE*



T = TRAPEZOIDAL



* Thicknesses of 0.5 mm in G/1L/2L profiles require the Customer to sign a declaration in which he accepts the possibility of a visible deviation from flatness, being within the permissible tolerance of up to 0.6 mm / 200 mm in accordance with the EN 14509 standard. Stainless steel cladding not available.

The table below shows combinations of profiling types of external and internal claddings available for respective panel types.

Tabela 4. Combinations of profiling types

Panel type	External cladding							Internal cladding	
	M	L	R	G*	1L	2L	T	L	G*
MW STANDARD sandwich panel	●	●	●	●	●	●		●	●
MW DEFENDER sandwich panel	●	●	●	●	●	●		●	●
MW LIGHT sandwich panel	●	●	●	●	●	●		●	●
MW FIRE sandwich panel	●	●	●	●	●	●		●	●
MW PLUS 1000 sandwich panel	●	●			●	●		●	●
MW PLUS 1050 sandwich panel	●	●	●	●	●	●		●	●
MW ROOF sandwich panel							●	●	●

* Available only for the cladding thickness $\geq 0,5$ mm

12. RESISTANCE CONSIDERATIONS

1. The following assumptions have been made for the tables showing bearing capacity and rigidity values for using MW sandwich panels:
 - the limit of usability, which in the case of sandwich panels is rigidity, is deemed to have been exceeded if diffractions of wall and roof panels under short term loads exceed 1/200 of the span, and in the case of long term loads exceed 1/100 of the span.
2. The range of use for sandwich panels due to their bearing capacity and rigidity should be in accordance with the tables given. The values of permissible loads specified in the tables take into account:
 - a) influence of thermal loads triggered by differences in temperatures between external and internal claddings ($t_{int.} = 25^{\circ}\text{C}$ in the summer and $t_{int.} = 20^{\circ}\text{C}$ in the winter). As far as thermal loads are concerned, the assumed temperature differences depend on the colour of the external cladding of the panels.
 - b) influence of long term loads (for roof panels)
 - c) the most unfavourable load combinations
 - d) increased diffraction where the load is from the direction of support, when panels are fastened by two connectors at width.
3. The maximum loads given in the tables should be compared to characteristic loads.
4. The maximum loads given in the tables have been specified for panels in three external cladding colour groups, where the assumed external temperature values ($t_{ext.}$) are as follows:
 - a) group I - very light colours: in the summer $t_{ext.} = 55^{\circ}\text{C}$
 - b) group II - light colours: in the summer $t_{ext.} = 65^{\circ}\text{C}$
 - c) group III - dark colours: in the summer $t_{ext.} = 80^{\circ}\text{C}$.
5. The tables include all types and combinations of profiles for both claddings of sheet.
6. For permissible loads for spans that are not given in the tables interpolation may be applied.
7. Minimum width of intermediate supports is 60 mm, and end supports 40 mm.
8. To fasten sandwich panels use the fasteners described in chapter 17.
9. In near edge areas, the span of supports should be appropriately decreased in relation to the ones given in the tables.
10. The values for load from the support direction may be applied if the element to which the panel is screwed has a width not lower than 1.5 mm.

Tabela 5. 1 span arrangement - maximum characteristic loads for MW STANDARD sandwich panels with mineral wool core, in claddings of 0,50/0,50 mm thickness, profile types: M/L, 40 mm outer support width.
Direction of force - TO THE SUPPORT

MW STANDARD sandwich panel																													
Core thickness	Colour group	Maximum loads [kN/m²] for the span L[m]																											
		1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00	7,25	7,50	7,75	8,00
80	I	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,65	0,59	0,55	0,50	0,47	0,43	0,40	0,38	0,35	0,31
	II	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,65	0,59	0,55	0,50	0,47	0,43	0,40	0,38	0,35	0,31
	III	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,65	0,59	0,55	0,50	0,47	0,43	0,40	0,38	0,35	0,31
100	I	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,55	0,52	0,48	0,45	0,42	0,37
	II	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,55	0,52	0,48	0,45	0,42	0,37
	III	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,55	0,52	0,48	0,45	0,42	0,37
120	I	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,57	0,54	0,53	0,51	0,48	0,45
	II	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,57	0,54	0,53	0,51	0,48	0,45
	III	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,57	0,54	0,53	0,51	0,48	0,45
150	I	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,57	0,54	0,53	0,51	0,49	0,48
	II	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,57	0,54	0,53	0,51	0,49	0,48
	III	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,57	0,54	0,53	0,51	0,49	0,48
175	I	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,57	0,54	0,53	0,51	0,49	0,48
	II	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,57	0,54	0,53	0,51	0,49	0,48
	III	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,57	0,54	0,53	0,51	0,49	0,48
200	I	2,80	2,33	2,00	1,75	1,55	1,40	1,27	1,16	1,07	1,07	0,94	0,88	0,83	0,78	0,74	0,70	0,67	0,64	0,61	0,58	0,56	0,54	0,52	0,50	0,48	0,47	0,45	0,44
	II	2,80	2,33	2,00	1,75	1,55	1,40	1,27	1,16	1,07	1,07	0,94	0,88	0,83	0,78	0,74	0,70	0,67	0,64	0,61	0,58	0,56	0,54	0,52	0,50	0,48	0,47	0,45	0,44
	III	2,80	2,33	2,00	1,75	1,55	1,40	1,27	1,16	1,07	1,07	0,94	0,88	0,83	0,78	0,74	0,70	0,67	0,64	0,61	0,58	0,56	0,54	0,52	0,50	0,48	0,47	0,45	0,44
240	I	2,80	2,33	2,00	1,75	1,55	1,40	1,27	1,16	1,07	1,07	0,94	0,88	0,83	0,78	0,74	0,70	0,67	0,64	0,61	0,58	0,56	0,54	0,52	0,50	0,48	0,47	0,45	0,44
	II	2,80	2,33	2,00	1,75	1,55	1,40	1,27	1,16	1,07	1,07	0,94	0,88	0,83	0,78	0,74	0,70	0,67	0,64	0,61	0,58	0,56	0,54	0,52	0,50	0,48	0,47	0,45	0,44
	III	2,80	2,33	2,00	1,75	1,55	1,40	1,27	1,16	1,07	1,07	0,94	0,88	0,83	0,78	0,74	0,70	0,67	0,64	0,61	0,58	0,56	0,54	0,52	0,50	0,48	0,47	0,45	0,44

Colour groups: **I** - very light colours, **II** - light colours, **III** - dark colours
Linear support has been assumed. Panels mounted by loop through connectors with aluminium or steel washers.

Tabela 6. 2 span arrangement - maximum characteristic loads for MW STANDARD sandwich panels with mineral wool core, in claddings of 0,50/0,50 mm thickness, profile types: M/L, 40 mm outer support width, 60 mm inner support width.
Direction of force - TO THE SUPPORT

MW STANDARD sandwich panel																													
Core thickness	Colour group	Maximum loads [kN/m²] for the span L[m]																											
		1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00	7,25	7,50	7,75	8,00
80	I	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,35	0,33
	II	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,35	0,33
	III	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,35	0,33
100	I	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	II	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	III	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
120	I	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	II	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	III	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
150	I	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	II	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	III	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
175	I	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	II	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	III	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
200	I	2,10	1,75	1,50	1,31	1,16	1,05	0,96	0,88	0,81	0,75	0,70	0,66	0,62	0,58	0,55	0,53	0,50	0,48	0,46	0,44	0,42	0,40	0,39	0,37	0,36	0,35	0,34	0,33
	II	2,10	1,75	1,50	1,31	1,16	1,05	0,96	0,88	0,81	0,75	0,70	0,66	0,62	0,58	0,55	0,53	0,50	0,48	0,46	0,44	0,42	0,40	0,39	0,37	0,36	0,35	0,34	0,33
	III	2,10	1,75	1,50	1,31	1,16	1,05	0,96	0,88	0,81	0,75	0,70	0,66	0,62	0,58	0,55	0,53	0,50	0,48	0,46	0,44	0,42	0,40	0,39	0,37	0,36	0,35	0,34	0,33
240	I	2,10	1,75	1,50	1,31	1,16	1,05	0,96	0,88	0,81	0,75	0,70	0,66	0,62	0,58	0,55	0,53	0,50	0,48	0,46	0,44	0,42	0,40	0,39	0,37	0,36	0,35	0,34	0,33
	II	2,10	1,75	1,50	1,31	1,16	1,05	0,96	0,88	0,81	0,75	0,70	0,66	0,62	0,58	0,55	0,53	0,50	0,48	0,46	0,44	0,42	0,40	0,39	0,37	0,36	0,35	0,34	0,33
	III	2,10	1,75	1,50	1,31	1,16	1,05	0,96	0,88	0,81	0,75	0,70	0,66	0,62	0,58	0,55	0,53	0,50	0,48	0,46	0,44	0,42	0,40	0,39	0,37	0,36	0,35	0,34	0,33

Tabela 7. 3 span arrangement - maximum characteristic loads for MW STANDARD sandwich panels with mineral wool core, in claddings of 0,50/0,50 mm thickness, profile types: M/L, 40 mm outer support width, 60 mm inner support width.

Direction of force - TO THE SUPPORT

MW STANDARD sandwich panel																													
Core thickness	Colour group	Maximum loads [kN/m²] for the span L[m]																											
		1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00	7,25	7,50	7,75	8,00
80	I	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,35	0,33
	II	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,35	0,33
	III	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,35	0,33
100	I	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	II	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	III	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
120	I	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	II	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	III	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
150	I	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	II	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	III	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
175	I	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	II	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	III	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
200	I	2,10	1,75	1,50	1,31	1,16	1,05	0,96	0,88	0,81	0,75	0,70	0,66	0,62	0,58	0,55	0,53	0,50	0,48	0,46	0,44	0,42	0,40	0,39	0,37	0,36	0,35	0,34	0,33
	II	2,10	1,75	1,50	1,31	1,16	1,05	0,96	0,88	0,81	0,75	0,70	0,66	0,62	0,58	0,55	0,53	0,50	0,48	0,46	0,44	0,42	0,40	0,39	0,37	0,36	0,35	0,34	0,33
	III	2,10	1,75	1,50	1,31	1,16	1,05	0,96	0,88	0,81	0,75	0,70	0,66	0,62	0,58	0,55	0,53	0,50	0,48	0,46	0,44	0,42	0,40	0,39	0,37	0,36	0,35	0,34	0,33
240	I	2,10	1,75	1,50	1,31	1,16	1,05	0,96	0,88	0,81	0,75	0,70	0,66	0,62	0,58	0,55	0,53	0,50	0,48	0,46	0,44	0,42	0,40	0,39	0,37	0,36	0,35	0,34	0,33
	II	2,10	1,75	1,50	1,31	1,16	1,05	0,96	0,88	0,81	0,75	0,70	0,66	0,62	0,58	0,55	0,53	0,50	0,48	0,46	0,44	0,42	0,40	0,39	0,37	0,36	0,35	0,34	0,33
	III	2,10	1,75	1,50	1,31	1,16	1,05	0,96	0,88	0,81	0,75	0,70	0,66	0,62	0,58	0,55	0,53	0,50	0,48	0,46	0,44	0,42	0,40	0,39	0,37	0,36	0,35	0,34	0,33

Colour groups: **I** - very light colours, **II** - light colours, **III** - dark colours

Linear support has been assumed. Panels mounted by loop through connectors with aluminium or steel washers.

Tabela 8. 1 span arrangement - maximum characteristic loads for MW STANDARD sandwich panels with mineral wool core, in claddings of 0,50/0,50 mm thickness, profile types: M/L, 40 mm outer support width, Direction of force - FROM THE SUPPORT

MW STANDARD sandwich panel																													
Core thickness	Colour group	Maximum loads [kN/m²] for the span L[m]																											
		1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00	7,25	7,50	7,75	8,00
80	I	-3,47	-2,89	-2,48	-2,17	-1,92	-1,73	-1,57	-1,44	-1,33	-1,23	-1,15	-1,08	-1,02	-0,97	-0,92	-0,87	-0,83	-0,79	-0,72	-0,66	-0,61	-0,57	-0,52	-0,49	-0,45	-0,42	-0,39	-0,36
	II	-3,47	-2,89	-2,48	-2,17	-1,92	-1,73	-1,57	-1,44	-1,33	-1,23	-1,15	-1,08	-1,02	-0,97	-0,92	-0,87	-0,83	-0,79	-0,72	-0,66	-0,61	-0,57	-0,52	-0,48	-0,43	-0,39	-0,35	-0,31
	III	-3,47	-2,89	-2,48	-2,17	-1,92	-1,73	-1,57	-1,44	-1,33	-1,23	-1,15	-1,08	-1,02	-0,97	-0,92	-0,87	-0,83	-0,79	-0,72	-0,66	-0,55	-0,46	-0,39	-0,32	-0,26	-0,21	-0,17	-0,14
100	I	-4,35	-3,63	-3,11	-2,72	-2,41	-2,17	-1,97	-1,81	-1,67	-1,55	-1,45	-1,36	-1,28	-1,20	-1,14	-1,08	-1,02	-0,94	-0,86	-0,79	-0,72	-0,67	-0,62	-0,58	-0,54	-0,50	-0,47	-0,44
	II	-4,35	-3,63	-3,11	-2,72	-2,41	-2,17	-1,97	-1,81	-1,67	-1,55	-1,45	-1,36	-1,28	-1,20	-1,14	-1,08	-1,02	-0,94	-0,86	-0,79	-0,72	-0,67	-0,62	-0,58	-0,54	-0,50	-0,47	-0,44
	III	-4,35	-3,63	-3,11	-2,72	-2,41	-2,17	-1,97	-1,81	-1,67	-1,55	-1,45	-1,36	-1,28	-1,20	-1,14	-1,08	-1,02	-0,94	-0,86	-0,79	-0,72	-0,67	-0,62	-0,58	-0,54	-0,50	-0,47	-0,42
120	I	-5,24	-4,36	-3,74	-3,27	-2,90	-2,61	-2,38	-2,18	-2,01	-1,86	-1,74	-1,63	-1,53	-1,45	-1,37	-1,27	-1,15	-1,05	-0,97	-0,89	-0,82	-0,76	-0,70	-0,65	-0,61	-0,57	-0,53	-0,50
	II	-5,24	-4,36	-3,74	-3,27	-2,90	-2,61	-2,38	-2,18	-2,01	-1,86	-1,74	-1,63	-1,53	-1,45	-1,37	-1,27	-1,15	-1,05	-0,97	-0,89	-0,82	-0,76	-0,70	-0,65	-0,61	-0,57	-0,53	-0,50
	III	-5,24	-4,36	-3,74	-3,27	-2,90	-2,61	-2,38	-2,18	-2,01	-1,86	-1,74	-1,63	-1,53	-1,45	-1,37	-1,27	-1,15	-1,05	-0,97	-0,89	-0,82	-0,76	-0,70	-0,65	-0,61	-0,57	-0,53	-0,50
150	I	-6,56	-5,46	-4,68	-4,10	-3,64	-3,27	-2,98	-2,73	-2,52	-2,34	-2,18	-2,04	-1,92	-1,79	-1,60	-1,45	-1,31	-1,19	-1,09	-1,00	-0,93	-0,86	-0,80	-0,74	-0,69	-0,65	-0,61	-0,57
	II	-6,56	-5,46	-4,68	-4,10	-3,64	-3,27	-2,98	-2,73	-2,52	-2,34	-2,18	-2,04	-1,92	-1,79	-1,60	-1,45	-1,31	-1,19	-1,09	-1,00	-0,93	-0,86	-0,80	-0,74	-0,69	-0,65	-0,61	-0,57
	III	-6,56	-5,46	-4,68	-4,10	-3,64	-3,27	-2,98	-2,73	-2,52	-2,34	-2,18	-2,04	-1,92	-1,79	-1,60	-1,45	-1,31	-1,19	-1,09	-1,00	-0,93	-0,86	-0,80	-0,74	-0,69	-0,65	-0,61	-0,57
175	I	-7,66	-6,38	-5,47	-4,78	-4,25	-3,83	-3,48	-3,19	-2,94	-2,73	-2,55	-2,39	-2,19	-1,95	-1,75	-1,58	-1,43	-1,31	-1,19	-1,10	-1,01	-0,94	-0,87	-0,81	-0,76	-0,71	-0,66	-0,62
	II	-7,66	-6,38	-5,47	-4,78	-4,25	-3,83	-3,48	-3,19	-2,94	-2,73	-2,55	-2,39	-2,19	-1,95	-1,75	-1,58	-1,43	-1,31	-1,19	-1,10	-1,01	-0,94	-0,87	-0,81	-0,76	-0,71	-0,66	-0,62
	III	-7,66	-6,38	-5,47	-4,78	-4,25	-3,83	-3,48	-3,19	-2,94	-2,73	-2,55	-2,39	-2,19	-1,95	-1,75	-1,58	-1,43	-1,31	-1,19	-1,10	-1,01	-0,94	-0,87	-0,81	-0,76	-0,71	-0,66	-0,62
200	I	-8,76	-7,30	-6,25	-5,47	-4,86	-4,38	-3,98	-3,65	-3,37	-3,12	-2,92	-2,65	-2,34	-2,09	-1,88	-1,69	-1,53	-1,40	-1,28	-1,17	-1,08	-1,00	-0,94	-0,87	-0,81	-0,76	-0,71	-0,66
	II	-8,76	-7,30	-6,25	-5,47	-4,86	-4,38	-3,98	-3,65	-3,37	-3,12	-2,92	-2,65	-2,34	-2,09	-1,88	-1,69	-1,53	-1,40	-1,28	-1,17	-1,08	-1,00	-0,94	-0,87	-0,81	-0,76	-0,71	-0,66
	III	-8,76	-7,30	-6,25	-5,47	-4,86	-4,38	-3,98	-3,65	-3,37	-3,12	-2,92	-2,65	-2,34	-2,09	-1,88	-1,69	-1,53	-1,40	-1,28	-1,17	-1,08	-1,00	-0,94	-0,87	-0,81	-0,76	-0,71	-0,66
240	I	-10,52	-8,76	-7,51	-6,57	-5,84	-5,26	-4,78	-4,38	-4,04	-3,64	-3,17	-2,78	-2,46	-2,20	-1,97	-1,78	-1,61	-1,47	-1,34	-1,23	-1,14	-1,05	-0,98	-0,91	-0,85	-0,80	-0,74	-0,70
	II	-10,52	-8,76	-7,51	-6,57	-5,84	-5,26	-4,78	-4,38	-4,04	-3,64	-3,17	-2,78	-2,46	-2,20	-1,97	-1,78	-1,61	-1,47	-1,34	-1,23	-1,14	-1,05	-0,98	-0,91	-0,85	-0,80	-0,74	-0,70
	III	-10,52	-8,76	-7,51	-6,57	-5,84	-5,26	-4,78	-4,38	-4,04	-3,64	-3,17	-2,78	-2,46	-2,20	-1,97	-1,78	-1,61	-1,47	-1,34	-1,23	-1,14	-1,05	-0,98	-0,91	-0,85	-0,80	-0,74	-0,70

Direction of force - FROM THE SUPPORT

Colour groups: I - very light colours, II - light colours, III - dark colours
Linear support has been assumed. Panels mounted by loop through connectors with aluminium or steel washers.

Direction of force - FROM THE SUPPORT

Colour groups: I - very light colours, II - light colours, III - dark colours
Linear support has been assumed. Panels mounted by loop through connectors with aluminium or steel washers.

Tabela 11. 1 span arrangement - maximum characteristic loads for MW PLUS sandwich panels with mineral wool core, in claddings of 0,50/0,50 mm thickness, profile types: M/L, 40 mm outer support width.

Direction of force - TO THE SUPPORT

MW PLUS sandwich panel																													
Core thickness	Colour group	Maximum loads [kN/m²] for the span L[m]																											
		1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00	7,25	7,50	7,75	8,00
80	I	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,65	0,59	0,55	0,50	0,47	0,43	0,40	0,38	0,35	0,31
	II	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,65	0,59	0,55	0,50	0,47	0,43	0,40	0,38	0,35	0,31
	III	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,65	0,59	0,55	0,50	0,47	0,43	0,40	0,38	0,35	0,31
100	I	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,55	0,52	0,48	0,45	0,42	0,37
	II	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,55	0,52	0,48	0,45	0,42	0,37
	III	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,55	0,52	0,48	0,45	0,42	0,37
120	I	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,57	0,54	0,53	0,51	0,48	0,45
	II	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,57	0,54	0,53	0,51	0,48	0,45
	III	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,57	0,54	0,53	0,51	0,48	0,45
150	I	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,57	0,54	0,53	0,51	0,49	0,48
	II	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,57	0,54	0,53	0,51	0,49	0,48
	III	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,57	0,54	0,53	0,51	0,49	0,48
175	I	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,57	0,54	0,53	0,51	0,49	0,48
	II	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,57	0,54	0,53	0,51	0,49	0,48
	III	3,04	2,53	2,17	1,90	1,69	1,52	1,38	1,26	1,17	1,08	1,01	0,96	0,90	0,85	0,81	0,76	0,73	0,69	0,66	0,64	0,61	0,59	0,57	0,54	0,53	0,51	0,49	0,48
200	I	2,80	2,33	2,00	1,75	1,55	1,40	1,27	1,16	1,07	1,00	0,94	0,88	0,83	0,78	0,74	0,70	0,67	0,64	0,61	0,58	0,56	0,54	0,52	0,50	0,48	0,47	0,45	0,44
	II	2,80	2,33	2,00	1,75	1,55	1,40	1,27	1,16	1,07	1,00	0,94	0,88	0,83	0,78	0,74	0,70	0,67	0,64	0,61	0,58	0,56	0,54	0,52	0,50	0,48	0,47	0,45	0,44
	III	2,80	2,33	2,00	1,75	1,55	1,40	1,27	1,16	1,07	1,00	0,94	0,88	0,83	0,78	0,74	0,70	0,67	0,64	0,61	0,58	0,56	0,54	0,52	0,50	0,48	0,47	0,45	0,44

Colour groups: I - very light colours, II - light colours, III - dark colours

Linear support has been assumed. Panels mounted by loop through connectors with aluminium or steel washers.

Tabela 12. 2 span arrangement - maximum characteristic loads for MW PLUS sandwich panels with mineral wool core, in claddings of 0,50/0,50 mm thickness, profile types: M/L, 40 mm outer support width, 60 mm inner support width.

Direction of force - TO THE SUPPORT

		MW PLUS sandwich panel																											
Core thickness	Colour group	Maximum loads [kN/m²] for the span L[m]																											
		1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00	7,25	7,50	7,75	8,00
80	I	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,35	0,33
	II	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,35	0,33
	III	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,35	0,33
100	I	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	II	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	III	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
120	I	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	II	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	III	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
150	I	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	II	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	III	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
175	I	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	II	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	III	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
200	I	2,10	1,75	1,50	1,31	1,16	1,05	0,96	0,88	0,81	0,75	0,70	0,66	0,62	0,58	0,55	0,53	0,50	0,48	0,46	0,44	0,42	0,40	0,39	0,37	0,36	0,35	0,34	0,33
	II	2,10	1,75	1,50	1,31	1,16	1,05	0,96	0,88	0,81	0,75	0,70	0,66	0,62	0,58	0,55	0,53	0,50	0,48	0,46	0,44	0,42	0,40	0,39	0,37	0,36	0,35	0,34	0,33
	III	2,10	1,75	1,50	1,31	1,16	1,05	0,96	0,88	0,81	0,75	0,70	0,66	0,62	0,58	0,55	0,53	0,50	0,48	0,46	0,44	0,42	0,40	0,39	0,37	0,36	0,35	0,34	0,33

Colour groups: I - very light colours, II - light colours, III - dark colours

Linear support has been assumed. Panels mounted by loop through connectors with aluminium or steel washers.

Tabela 13. 3 span arrangement - maximum characteristic loads for MW PLUS sandwich panels with mineral wool core, in claddings of 0,50/0,50 mm thickness, profile types: M/L, 40 mm outer support width, 60 mm inner support width.
Direction of force - TO THE SUPPORT

		MW PLUS sandwich panel																											
Core thickness	Colour group	Maximum loads [kN/m²] for the span L[m]																											
		1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00	7,25	7,50	7,75	8,00
80	I	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,35	0,33
	II	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,35	0,33
	III	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,35	0,33
100	I	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	II	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	III	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
120	I	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	II	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	III	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
150	I	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	II	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	III	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
175	I	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	II	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
	III	2,28	1,90	1,63	1,42	1,26	1,14	1,03	0,96	0,88	0,82	0,76	0,72	0,67	0,64	0,60	0,57	0,54	0,52	0,50	0,48	0,46	0,44	0,42	0,41	0,39	0,38	0,37	0,36
200	I	2,10	1,75	1,50	1,31	1,16	1,05	0,96	0,88	0,81	0,75	0,70	0,66	0,62	0,58	0,55	0,53	0,50	0,48	0,46	0,44	0,42	0,40	0,39	0,37	0,36	0,35	0,34	0,33
	II	2,10	1,75	1,50	1,31	1,16	1,05	0,96	0,88	0,81	0,75	0,70	0,66	0,62	0,58	0,55	0,53	0,50	0,48	0,46	0,44	0,42	0,40	0,39	0,37	0,36	0,35	0,34	0,33
	III	2,10	1,75	1,50	1,31	1,16	1,05	0,96	0,88	0,81	0,75	0,70	0,66	0,62	0,58	0,55	0,53	0,50	0,48	0,46	0,44	0,42	0,40	0,39	0,37	0,36	0,35	0,34	0,33

Colour groups: **I** - very light colours, **II** - light colours, **III** - dark colours
 Linear support has been assumed. Panels mounted by loop through connectors with aluminium or steel washers.

Tabela 14. 1 span arrangement - maximum characteristic loads for MW PLUS sandwich panels with mineral wool core, in claddings of 0,50/0,50 mm thickness, profile types: M/L, 40 mm outer support width.
Direction of force - FROM THE SUPPORT

MW PLUS sandwich panel																													
Core thickness	Colour group	Maximum loads [kN/m²] for the span L[m]																											
		1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00	7,25	7,50	7,75	8,00
80	I	-3,47	-2,89	-2,48	-2,17	-1,92	-1,73	-1,57	-1,44	-1,33	-1,23	-1,15	-1,08	-1,02	-0,97	-0,92	-0,87	-0,83	-0,79	-0,72	-0,66	-0,61	-0,57	-0,52	-0,49	-0,45	-0,42	-0,39	-0,36
	II	-3,47	-2,89	-2,48	-2,17	-1,92	-1,73	-1,57	-1,44	-1,33	-1,23	-1,15	-1,08	-1,02	-0,97	-0,92	-0,87	-0,83	-0,79	-0,72	-0,66	-0,61	-0,57	-0,52	-0,48	-0,43	-0,39	-0,35	-0,31
	III	-3,47	-2,89	-2,48	-2,17	-1,92	-1,73	-1,57	-1,44	-1,33	-1,23	-1,15	-1,08	-1,02	-0,97	-0,92	-0,87	-0,83	-0,79	-0,72	-0,66	-0,55	-0,46	-0,39	-0,32	-0,26	-0,21	-0,17	-0,14
100	I	-4,35	-3,63	-3,11	-2,72	-2,41	-2,17	-1,97	-1,81	-1,67	-1,55	-1,45	-1,36	-1,28	-1,20	-1,14	-1,08	-1,02	-0,94	-0,86	-0,79	-0,72	-0,67	-0,62	-0,58	-0,54	-0,50	-0,47	-0,44
	II	-4,35	-3,63	-3,11	-2,72	-2,41	-2,17	-1,97	-1,81	-1,67	-1,55	-1,45	-1,36	-1,28	-1,20	-1,14	-1,08	-1,02	-0,94	-0,86	-0,79	-0,72	-0,67	-0,62	-0,58	-0,54	-0,50	-0,47	-0,44
	III	-4,35	-3,63	-3,11	-2,72	-2,41	-2,17	-1,97	-1,81	-1,67	-1,55	-1,45	-1,36	-1,28	-1,20	-1,14	-1,08	-1,02	-0,94	-0,86	-0,79	-0,72	-0,67	-0,62	-0,58	-0,54	-0,50	-0,47	-0,42
120	I	-5,24	-4,36	-3,74	-3,27	-2,90	-2,61	-2,38	-2,18	-2,01	-1,86	-1,74	-1,63	-1,53	-1,45	-1,37	-1,27	-1,15	-1,05	-0,97	-0,89	-0,82	-0,76	-0,70	-0,65	-0,61	-0,57	-0,53	-0,50
	II	-5,24	-4,36	-3,74	-3,27	-2,90	-2,61	-2,38	-2,18	-2,01	-1,86	-1,74	-1,63	-1,53	-1,45	-1,37	-1,27	-1,15	-1,05	-0,97	-0,89	-0,82	-0,76	-0,70	-0,65	-0,61	-0,57	-0,53	-0,50
	III	-5,24	-4,36	-3,74	-3,27	-2,90	-2,61	-2,38	-2,18	-2,01	-1,86	-1,74	-1,63	-1,53	-1,45	-1,37	-1,27	-1,15	-1,05	-0,97	-0,89	-0,82	-0,76	-0,70	-0,65	-0,61	-0,57	-0,53	-0,50
150	I	-6,56	-5,46	-4,68	-4,10	-3,64	-3,27	-2,98	-2,73	-2,52	-2,34	-2,18	-2,04	-1,92	-1,79	-1,60	-1,45	-1,31	-1,19	-1,09	-1,00	-0,93	-0,86	-0,80	-0,74	-0,69	-0,65	-0,61	-0,57
	II	-6,56	-5,46	-4,68	-4,10	-3,64	-3,27	-2,98	-2,73	-2,52	-2,34	-2,18	-2,04	-1,92	-1,79	-1,60	-1,45	-1,31	-1,19	-1,09	-1,00	-0,93	-0,86	-0,80	-0,74	-0,69	-0,65	-0,61	-0,57
	III	-6,56	-5,46	-4,68	-4,10	-3,64	-3,27	-2,98	-2,73	-2,52	-2,34	-2,18	-2,04	-1,92	-1,79	-1,60	-1,45	-1,31	-1,19	-1,09	-1,00	-0,93	-0,86	-0,80	-0,74	-0,69	-0,65	-0,61	-0,57
175	I	-7,66	-6,38	-5,47	-4,78	-4,25	-3,83	-3,48	-3,19	-2,94	-2,73	-2,55	-2,39	-2,19	-1,95	-1,75	-1,58	-1,43	-1,31	-1,19	-1,10	-1,01	-0,94	-0,87	-0,81	-0,76	-0,71	-0,66	-0,62
	II	-7,66	-6,38	-5,47	-4,78	-4,25	-3,83	-3,48	-3,19	-2,94	-2,73	-2,55	-2,39	-2,19	-1,95	-1,75	-1,58	-1,43	-1,31	-1,19	-1,10	-1,01	-0,94	-0,87	-0,81	-0,76	-0,71	-0,66	-0,62
	III	-7,66	-6,38	-5,47	-4,78	-4,25	-3,83	-3,48	-3,19	-2,94	-2,73	-2,55	-2,39	-2,19	-1,95	-1,75	-1,58	-1,43	-1,31	-1,19	-1,10	-1,01	-0,94	-0,87	-0,81	-0,76	-0,71	-0,66	-0,62
200	I	-8,76	-7,30	-6,25	-5,47	-4,86	-4,38	-3,98	-3,65	-3,37	-3,12	-2,92	-2,65	-2,34	-2,09	-1,88	-1,69	-1,53	-1,40	-1,28	-1,17	-1,08	-1,00	-0,94	-0,87	-0,81	-0,76	-0,71	-0,66
	II	-8,76	-7,30	-6,25	-5,47	-4,86	-4,38	-3,98	-3,65	-3,37	-3,12	-2,92	-2,65	-2,34	-2,09	-1,88	-1,69	-1,53	-1,40	-1,28	-1,17	-1,08	-1,00	-0,94	-0,87	-0,81	-0,76	-0,71	-0,66
	III	-8,76	-7,30	-6,25	-5,47	-4,86	-4,38	-3,98	-3,65	-3,37	-3,12	-2,92	-2,65	-2,34	-2,09	-1,88	-1,69	-1,53	-1,40	-1,28	-1,17	-1,08	-1,00	-0,94	-0,87	-0,81	-0,76	-0,71	-0,66

Colour groups: **I** - very light colours, **II** - light colours, **III** - dark colours
 Linear support has been assumed. Panels mounted by loop through connectors with aluminium or steel washers.

Tabela 17. 1 span arrangement - maximum characteristic loads for MW LIGHT sandwich panels with mineral wool core, in claddings of 0,50/0,50 mm thickness, profile types: M/L, 40 mm outer support width.
Direction of force - TO THE SUPPORT

MW LIGHT sandwich panel																													
Core thickness	Colour group	Maximum loads [kN/m²] for the span L[m]																											
		1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00	7,25	7,50	7,75	8,00
80	I	1,98	1,65	1,41	1,23	1,10	0,99	0,90	0,83	0,76	0,71	0,66	0,62	0,58	0,55	0,52	0,50	0,47	0,45	0,43	0,41	0,40	0,38	0,37	0,35	0,34	0,32	0,30	0,28
	II	1,98	1,65	1,41	1,23	1,10	0,99	0,90	0,83	0,76	0,71	0,66	0,62	0,58	0,55	0,52	0,50	0,47	0,45	0,43	0,41	0,40	0,38	0,37	0,35	0,34	0,32	0,30	0,28
	III	1,98	1,65	1,41	1,23	1,10	0,99	0,90	0,83	0,76	0,71	0,66	0,62	0,58	0,55	0,52	0,50	0,47	0,45	0,43	0,41	0,40	0,38	0,37	0,35	0,34	0,32	0,30	0,28
100	I	1,98	1,65	1,41	1,23	1,10	0,99	0,90	0,83	0,76	0,71	0,66	0,62	0,58	0,55	0,52	0,50	0,47	0,45	0,43	0,41	0,40	0,38	0,37	0,35	0,34	0,33	0,32	0,31
	II	1,98	1,65	1,41	1,23	1,10	0,99	0,90	0,83	0,76	0,71	0,66	0,62	0,58	0,55	0,52	0,50	0,47	0,45	0,43	0,41	0,40	0,38	0,37	0,35	0,34	0,33	0,32	0,31
	III	1,98	1,65	1,41	1,23	1,10	0,99	0,90	0,83	0,76	0,71	0,66	0,62	0,58	0,55	0,52	0,50	0,47	0,45	0,43	0,41	0,40	0,38	0,37	0,35	0,34	0,33	0,32	0,31
120	I	1,98	1,65	1,41	1,23	1,10	0,99	0,90	0,83	0,76	0,71	0,66	0,62	0,58	0,55	0,52	0,50	0,47	0,45	0,43	0,41	0,40	0,38	0,37	0,35	0,34	0,33	0,32	0,31
	II	1,98	1,65	1,41	1,23	1,10	0,99	0,90	0,83	0,76	0,71	0,66	0,62	0,58	0,55	0,52	0,50	0,47	0,45	0,43	0,41	0,40	0,38	0,37	0,35	0,34	0,33	0,32	0,31
	III	1,98	1,65	1,41	1,23	1,10	0,99	0,90	0,83	0,76	0,71	0,66	0,62	0,58	0,55	0,52	0,50	0,47	0,45	0,43	0,41	0,40	0,38	0,37	0,35	0,34	0,33	0,32	0,31
150	I	1,98	1,65	1,41	1,23	1,10	0,99	0,90	0,83	0,76	0,71	0,66	0,62	0,58	0,55	0,52	0,50	0,47	0,45	0,43	0,41	0,40	0,38	0,37	0,35	0,34	0,33	0,32	0,31
	II	1,98	1,65	1,41	1,23	1,10	0,99	0,90	0,83	0,76	0,71	0,66	0,62	0,58	0,55	0,52	0,50	0,47	0,45	0,43	0,41	0,40	0,38	0,37	0,35	0,34	0,33	0,32	0,31
	III	1,98	1,65	1,41	1,23	1,10	0,99	0,90	0,83	0,76	0,71	0,66	0,62	0,58	0,55	0,52	0,50	0,47	0,45	0,43	0,41	0,40	0,38	0,37	0,35	0,34	0,33	0,32	0,31
175	I	1,82	1,52	1,30	1,14	1,01	0,92	0,83	0,76	0,71	0,65	0,61	0,57	0,54	0,51	0,48	0,46	0,44	0,42	0,40	0,38	0,36	0,35	0,34	0,32	0,31	0,30	0,29	0,28
	II	1,82	1,52	1,30	1,14	1,01	0,92	0,83	0,76	0,71	0,65	0,61	0,57	0,54	0,51	0,48	0,46	0,44	0,42	0,40	0,38	0,36	0,35	0,34	0,32	0,31	0,30	0,29	0,28
	III	1,82	1,52	1,30	1,14	1,01	0,92	0,83	0,76	0,71	0,65	0,61	0,57	0,54	0,51	0,48	0,46	0,44	0,42	0,40	0,38	0,36	0,35	0,34	0,32	0,31	0,30	0,29	0,28
200	I	1,82	1,52	1,30	1,14	1,01	0,92	0,83	0,76	0,71	0,65	0,61	0,57	0,54	0,51	0,48	0,46	0,44	0,42	0,40	0,38	0,36	0,35	0,34	0,32	0,31	0,30	0,29	0,28
	II	1,82	1,52	1,30	1,14	1,01	0,92	0,83	0,76	0,71	0,65	0,61	0,57	0,54	0,51	0,48	0,46	0,44	0,42	0,40	0,38	0,36	0,35	0,34	0,32	0,31	0,30	0,29	0,28
	III	1,82	1,52	1,30	1,14	1,01	0,92	0,83	0,76	0,71	0,65	0,61	0,57	0,54	0,51	0,48	0,46	0,44	0,42	0,40	0,38	0,36	0,35	0,34	0,32	0,31	0,30	0,29	0,28
240	I	1,82	1,52	1,30	1,14	1,01	0,92	0,83	0,76	0,71	0,65	0,61	0,57	0,54	0,51	0,48	0,46	0,44	0,42	0,40	0,38	0,36	0,35	0,34	0,32	0,31	0,30	0,29	0,28
	II	1,82	1,52	1,30	1,14	1,01	0,92	0,83	0,76	0,71	0,65	0,61	0,57	0,54	0,51	0,48	0,46	0,44	0,42	0,40	0,38	0,36	0,35	0,34	0,32	0,31	0,30	0,29	0,28
	III	1,82	1,52	1,30	1,14	1,01	0,92	0,83	0,76	0,71	0,65	0,61	0,57	0,54	0,51	0,48	0,46	0,44	0,42	0,40	0,38	0,36	0,35	0,34	0,32	0,31	0,30	0,29	0,28

Colour groups: **I** - very light colours, **II** - light colours, **III** - dark colours
 Linear support has been assumed. Panels mounted by loop through connectors with aluminium or steel washers.

Tabela 18. 2 span arrangement - maximum characteristic loads for MW LIGHT sandwich panels with mineral wool core, in claddings of 0,50/0,50 mm thickness, profile types: M/L, 40 mm outer support width, 60 mm inner support width.
Direction of force - TO THE SUPPORT

MW LIGHT sandwich panel																													
Core thickness	Colour group	Maximum loads [kN/m²] for the span L[m]																											
		1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00	7,25	7,50	7,75	8,00
80	I	1,48	1,23	1,06	0,93	0,83	0,75	0,68	0,62	0,57	0,53	0,50	0,46	0,44	0,41	0,39	0,37	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23
	II	1,48	1,23	1,06	0,93	0,83	0,75	0,68	0,62	0,57	0,53	0,50	0,46	0,44	0,41	0,39	0,37	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23
	III	1,48	1,23	1,06	0,93	0,83	0,75	0,68	0,62	0,57	0,53	0,50	0,46	0,44	0,41	0,39	0,37	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23
100	I	1,48	1,23	1,06	0,93	0,83	0,75	0,68	0,62	0,57	0,53	0,50	0,46	0,44	0,41	0,39	0,37	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23
	II	1,48	1,23	1,06	0,93	0,83	0,75	0,68	0,62	0,57	0,53	0,50	0,46	0,44	0,41	0,39	0,37	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23
	III	1,48	1,23	1,06	0,93	0,83	0,75	0,68	0,62	0,57	0,53	0,50	0,46	0,44	0,41	0,39	0,37	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23
120	I	1,48	1,23	1,06	0,93	0,83	0,75	0,68	0,62	0,57	0,53	0,50	0,46	0,44	0,41	0,39	0,37	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23
	II	1,48	1,23	1,06	0,93	0,83	0,75	0,68	0,62	0,57	0,53	0,50	0,46	0,44	0,41	0,39	0,37	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23
	III	1,48	1,23	1,06	0,93	0,83	0,75	0,68	0,62	0,57	0,53	0,50	0,46	0,44	0,41	0,39	0,37	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23
150	I	1,48	1,23	1,06	0,93	0,83	0,75	0,68	0,62	0,57	0,53	0,50	0,46	0,44	0,41	0,39	0,37	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23
	II	1,48	1,23	1,06	0,93	0,83	0,75	0,68	0,62	0,57	0,53	0,50	0,46	0,44	0,41	0,39	0,37	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23
	III	1,48	1,23	1,06	0,93	0,83	0,75	0,68	0,62	0,57	0,53	0,50	0,46	0,44	0,41	0,39	0,37	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23
175	I	1,37	1,14	0,98	0,86	0,76	0,69	0,62	0,57	0,51	0,46	0,43	0,40	0,38	0,36	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23	0,22	0,21
	II	1,37	1,14	0,98	0,86	0,76	0,69	0,62	0,57	0,51	0,46	0,43	0,40	0,38	0,36	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23	0,22	0,21
	III	1,37	1,14	0,98	0,86	0,76	0,69	0,62	0,57	0,51	0,46	0,43	0,40	0,38	0,36	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23	0,22	0,21
200	I	1,37	1,14	0,98	0,86	0,76	0,69	0,62	0,57	0,51	0,46	0,43	0,40	0,38	0,36	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23	0,22	0,21
	II	1,37	1,14	0,98	0,86	0,76	0,69	0,62	0,57	0,51	0,46	0,43	0,40	0,38	0,36	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23	0,22	0,21
	III	1,37	1,14	0,98	0,86	0,76	0,69	0,62	0,57	0,51	0,46	0,43	0,40	0,38	0,36	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23	0,22	0,21
240	I	1,37	1,14	0,98	0,86	0,76	0,69	0,62	0,57	0,51	0,46	0,43	0,40	0,38	0,36	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23	0,22	0,21
	II	1,37	1,14	0,98	0,86	0,76	0,69	0,62	0,57	0,51	0,46	0,43	0,40	0,38	0,36	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23	0,22	0,21
	III	1,37	1,14	0,98	0,86	0,76	0,69	0,62	0,57	0,51	0,46	0,43	0,40	0,38	0,36	0,35	0,34	0,32	0,31	0,30	0,29	0,28	0,27	0,26	0,25	0,24	0,23	0,22	0,21

Tabela 21. 2 span arrangement - maximum characteristic loads for MW LIGHT sandwich panels with mineral wool core, in claddings of 0,50/0,50 mm thickness, profile types: M/L, 40 mm outer support width, 60 mm inner support width.
Direction of force - FROM THE SUPPORT

		MW LIGHT sandwich panel																											
Core thickness	Colour group	Maximum loads [kN/m²] for the span L[m]																											
		1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00	7,25	7,50	7,75	8,00
80	I	-2,52	-2,10	-1,79	-1,57	-1,39	-1,25	-1,14	-1,04	-0,97	-0,90	-0,84	-0,79	-0,74	-0,70	-0,66	-0,63	-0,60	-0,57	-0,55	-0,50	-0,46	-0,43	-0,40	-0,37	-0,34	-0,32	-0,30	-0,28
	II	-2,52	-2,10	-1,79	-1,57	-1,39	-1,25	-1,14	-1,04	-0,97	-0,90	-0,84	-0,79	-0,74	-0,70	-0,66	-0,63	-0,60	-0,57	-0,55	-0,50	-0,46	-0,43	-0,40	-0,37	-0,34	-0,32	-0,30	-0,28
	III	-2,52	-2,10	-1,79	-1,57	-1,39	-1,25	-1,14	-1,04	-0,97	-0,90	-0,84	-0,79	-0,74	-0,67	-0,55	-0,46	-0,38	-0,32	-0,28	-0,24	-0,21	-0,18	-0,16	-0,14	-0,12	-0,11	-0,10	-0,09
100	I	-3,16	-2,63	-2,25	-1,97	-1,75	-1,57	-1,43	-1,31	-1,21	-1,12	-1,05	-0,99	-0,93	-0,88	-0,83	-0,79	-0,75	-0,72	-0,67	-0,61	-0,56	-0,52	-0,48	-0,45	-0,42	-0,39	-0,37	-0,34
	II	-3,16	-2,63	-2,25	-1,97	-1,75	-1,57	-1,43	-1,31	-1,21	-1,12	-1,05	-0,99	-0,93	-0,88	-0,83	-0,79	-0,75	-0,72	-0,67	-0,61	-0,56	-0,52	-0,48	-0,45	-0,42	-0,39	-0,37	-0,34
	III	-3,16	-2,63	-2,25	-1,97	-1,75	-1,57	-1,43	-1,31	-1,21	-1,12	-1,05	-0,99	-0,93	-0,88	-0,71	-0,58	-0,48	-0,40	-0,34	-0,29	-0,25	-0,21	-0,18	-0,16	-0,14	-0,12	-0,11	-0,09
120	I	-3,80	-3,16	-2,71	-2,37	-2,11	-1,89	-1,72	-1,58	-1,46	-1,35	-1,26	-1,18	-1,11	-1,05	-0,99	-0,95	-0,91	-0,86	-0,78	-0,72	-0,66	-0,61	-0,57	-0,53	-0,49	-0,46	-0,43	-0,40
	II	-3,80	-3,16	-2,71	-2,37	-2,11	-1,89	-1,72	-1,58	-1,46	-1,35	-1,26	-1,18	-1,11	-1,05	-0,99	-0,95	-0,91	-0,86	-0,78	-0,72	-0,66	-0,61	-0,57	-0,53	-0,49	-0,46	-0,43	-0,40
	III	-3,80	-3,16	-2,71	-2,37	-2,11	-1,89	-1,72	-1,58	-1,46	-1,35	-1,26	-1,18	-1,11	-1,05	-0,91	-0,74	-0,60	-0,50	-0,42	-0,35	-0,29	-0,25	-0,21	-0,18	-0,16	-0,14	-0,12	-0,10
150	I	-4,76	-3,96	-3,39	-2,97	-2,64	-2,37	-2,16	-1,98	-1,83	-1,69	-1,58	-1,48	-1,39	-1,32	-1,25	-1,18	-1,13	-1,03	-0,95	-0,87	-0,80	-0,74	-0,69	-0,64	-0,59	-0,55	-0,52	-0,49
	II	-4,76	-3,96	-3,39	-2,97	-2,64	-2,37	-2,16	-1,98	-1,83	-1,69	-1,58	-1,48	-1,39	-1,32	-1,25	-1,18	-1,13	-1,03	-0,95	-0,87	-0,80	-0,74	-0,69	-0,64	-0,59	-0,55	-0,52	-0,49
	III	-4,76	-3,96	-3,39	-2,97	-2,64	-2,37	-2,16	-1,98	-1,83	-1,69	-1,58	-1,48	-1,39	-1,32	-1,16	-1,18	-0,81	-0,66	-0,54	-0,44	-0,37	-0,31	-0,26	-0,22	-0,18	-0,15	-0,13	-0,11
175	I	-5,55	-4,63	-3,97	-3,47	-3,08	-2,77	-2,52	-2,31	-2,13	-1,98	-1,85	-1,73	-1,63	-1,54	-1,46	-1,33	-1,21	-1,10	-0,62	-0,93	-0,86	-0,79	-0,73	-0,68	-0,64	-0,59	-0,56	-0,52
	II	-5,55	-4,63	-3,97	-3,47	-3,08	-2,77	-2,52	-2,31	-2,13	-1,98	-1,85	-1,73	-1,63	-1,54	-1,46	-1,33	-1,21	-1,10	-0,62	-0,93	-0,86	-0,79	-0,73	-0,68	-0,64	-0,59	-0,54	-0,49
	III	-5,55	-4,63	-3,97	-3,47	-3,08	-2,77	-2,52	-2,31	-2,13	-1,98	-1,85	-1,73	-1,63	-1,54	-1,19	-1,33	-0,78	-0,62	-0,48	-0,38	-0,30	-0,23	-0,18	-0,14	-0,11	-0,08	-0,05	-0,04
200	I	-6,36	-5,30	-4,54	-3,97	-3,53	-3,18	-2,89	-2,65	-2,44	-2,27	-2,12	-1,98	-1,87	-1,72	-1,54	-1,39	-1,26	-1,15	-1,05	-0,97	-0,90	-0,83	-0,77	-0,71	-0,66	-0,62	-0,58	-0,54
	II	-6,36	-5,30	-4,54	-3,97	-3,53	-3,18	-2,89	-2,65	-2,44	-2,27	-2,12	-1,98	-1,87	-1,72	-1,54	-1,39	-1,26	-1,15	-1,05	-0,97	-0,90	-0,83	-0,77	-0,71	-0,65	-0,58	-0,52	-0,47
	III	-6,36	-5,30	-4,54	-3,97	-3,53	-3,18	-2,89	-2,65	-2,44	-2,27	-2,12	-1,98	-1,87	-1,63	-1,20	-0,99	-0,74	-0,56	-0,41	-0,30	-0,21	-0,14	-0,09	-0,05	-0,01	0,00	0,00	0,00
240	I	-7,63	-6,36	-5,45	-4,77	-4,24	-3,81	-3,47	-3,18	-2,93	-2,72	-2,49	-2,18	-1,93	-1,73	-1,55	-1,40	-1,27	-1,15	-1,05	-0,98	-0,90	-0,83	-0,77	-0,72	-0,67	-0,62	-0,58	-0,55
	II	-7,63	-6,36	-5,45	-4,77	-4,24	-3,81	-3,47	-3,18	-2,93	-2,72	-2,49	-2,18	-1,93	-1,73	-1,55	-1,40	-1,27	-1,15	-1,01	-0,91	-0,76	-0,64	-0,54	-0,46	-0,39	-0,34	-0,29	-0,25
	III	-7,63	-6,36	-5,45	-4,77	-4,24	-3,81	-3,47	-3,18	-2,93	-2,72	-2,49	-2,18	-1,52	-1,73	-0,67	-0,37	-0,15	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Colour groups: I - very light colours, II - light colours, III - dark colours
Linear support has been assumed. Panels mounted by loop through connectors with aluminium or steel washers.

Tabela 22. 3 span arrangement - maximum characteristic loads for MW LIGHT sandwich panels with mineral wool core, in claddings of 0,50/0,50 mm thickness, profile types: M/L, 40 mm outer support width, 60 mm inner support width.
Direction of force - FROM THE SUPPORT

MW LIGHT sandwich panel																													
Core thickness	Colour group	Maximum loads [kN/m²] for the span L[m]																											
		1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00	7,25	7,50	7,75	8,00
80	I	-2,51	-2,09	-1,79	-1,57	-1,39	-1,25	-1,14	-1,04	-0,97	-0,90	-0,84	-0,79	-0,74	-0,70	-0,66	-0,63	-0,60	-0,57	-0,55	-0,50	-0,46	-0,43	-0,40	-0,37	-0,34	-0,32	-0,30	-0,28
	II	-2,51	-2,09	-1,79	-1,57	-1,39	-1,25	-1,14	-1,04	-0,97	-0,90	-0,84	-0,79	-0,74	-0,70	-0,66	0,63	-0,60	-0,57	-0,55	-0,50	-0,46	-0,43	-0,40	-0,37	-0,34	-0,32	-0,30	-0,28
	III	-2,51	-2,09	-1,79	-1,57	-1,39	-1,25	-1,14	-1,04	-0,97	-0,90	-0,84	-0,79	-0,74	-0,70	-0,66	-0,63	-0,60	-0,57	-0,55	-0,50	-0,46	-0,42	-0,38	-0,35	-0,33	-0,30	-0,28	-0,26
100	I	-3,15	-2,63	-2,25	-1,97	-1,75	-1,57	-1,43	-1,31	-1,21	-1,12	-1,05	-0,99	-0,93	-0,88	-0,83	-0,79	-0,75	-0,72	-0,67	-0,61	-0,56	-0,52	-0,48	-0,45	-0,42	-0,39	-0,37	-0,34
	II	-3,15	-2,63	-2,25	-1,97	-1,75	-1,57	-1,43	-1,31	-1,21	-1,12	-1,05	-0,99	-0,93	-0,88	-0,83	-0,79	-0,75	-0,72	-0,67	-0,61	-0,56	-0,52	-0,48	-0,45	-0,42	-0,39	-0,37	-0,34
	III	-3,15	-2,63	-2,25	-1,97	-1,75	-1,57	-1,43	-1,31	-1,21	-1,12	-1,05	-0,99	-0,93	-0,88	-0,83	-0,79	-0,75	-0,72	-0,65	-0,59	-0,53	-0,48	-0,44	-0,40	-0,37	-0,34	-0,32	-0,29
120	I	-3,79	-3,16	-2,71	-2,37	-2,11	-1,89	-1,72	-1,58	-1,46	-1,35	-1,26	-1,18	-1,11	-1,05	-0,99	-0,95	-0,91	-0,86	-0,78	-0,72	-0,66	-0,61	-0,57	-0,53	-0,49	-0,46	-0,43	-0,40
	II	-3,79	-3,16	-2,71	-2,37	-2,11	-1,89	-1,72	-1,58	-1,46	-1,35	-1,26	-1,18	-1,11	-1,05	-0,99	-0,95	-0,91	-0,86	-0,78	-0,72	-0,66	-0,61	-0,57	-0,53	-0,49	-0,46	-0,43	-0,40
	III	-3,79	-3,16	-2,71	-2,37	-2,11	-1,89	-1,72	-1,58	-1,46	-1,35	-1,26	-1,18	-1,11	-1,05	-0,99	-0,95	-0,91	-0,83	-0,74	-0,67	-0,60	-0,54	-0,49	-0,45	-0,41	-0,38	-0,35	-0,33
150	I	-4,75	-3,96	-3,39	-2,97	-2,64	-2,37	-2,16	-1,98	-1,83	-1,69	-1,58	-1,48	-1,39	-1,32	-1,25	-1,18	-1,13	-1,03	-0,95	-0,87	-0,80	-0,74	-0,69	-0,64	-0,59	-0,55	-0,52	-0,49
	II	-4,75	-3,96	-3,39	-2,97	-2,64	-2,37	-2,16	-1,98	-1,83	-1,69	-1,58	-1,48	-1,39	-1,32	-1,25	-1,18	-1,13	-1,03	-0,95	-0,87	-0,80	-0,74	-0,69	-0,64	-0,59	-0,55	-0,52	-0,49
	III	-4,75	-3,96	-3,39	-2,97	-2,64	-2,37	-2,16	-1,98	-1,83	-1,69	-1,58	-1,48	-1,39	-1,32	-1,25	-1,18	-1,05	-0,98	-0,87	-0,77	-0,69	-0,62	-0,56	-0,51	-0,47	-0,43	-0,39	-0,36
175	I	-5,55	-4,63	-3,97	-3,47	-3,08	-2,77	-2,52	-2,31	-2,13	-1,98	-1,85	-1,73	-1,63	-1,54	-1,46	-1,33	-1,21	-1,10	-0,90	-0,93	-0,86	-0,79	-0,73	-0,68	-0,64	-0,59	-0,56	-0,52
	II	-5,55	-4,63	-3,97	-3,47	-3,08	-2,77	-2,52	-2,31	-2,13	-1,98	-1,85	-1,73	-1,63	-1,54	-1,46	-1,33	-1,21	-1,10	-0,90	-0,93	-0,86	-0,79	-0,73	-0,68	-0,64	-0,59	-0,56	-0,52
	III	-5,55	-4,63	-3,97	-3,47	-3,08	-2,77	-2,52	-2,31	-2,13	-1,98	-1,85	-1,73	-1,63	-1,54	-1,34	-1,12	-1,21	-0,90	-0,78	-0,68	-0,60	-0,54	-0,48	-0,43	-0,39	-0,35	-0,32	-0,30
200	I	-6,36	-5,30	-4,54	-3,97	-3,53	-3,18	-2,89	-2,65	-2,44	-2,27	-2,12	-1,98	-1,87	-1,72	-1,54	-1,39	-1,26	-1,15	-1,05	-0,97	-0,90	-0,83	-0,77	-0,71	-0,66	-0,62	-0,58	-0,54
	II	-6,36	-5,30	-4,54	-3,97	-3,53	-3,18	-2,89	-2,65	-2,44	-2,27	-2,12	-1,98	-1,87	-1,72	-1,54	-1,39	-1,26	-1,15	-1,05	-0,97	-0,90	-0,83	-0,77	-0,71	-0,66	-0,62	-0,58	-0,54
	III	-6,36	-5,30	-4,54	-3,97	-3,53	-3,18	-2,89	-2,65	-2,44	-2,27	-2,12	-1,98	-1,87	-1,50	-1,22	-1,39	-0,92	-0,78	-0,66	-0,57	-0,49	-0,43	-0,38	-0,33	-0,29	-0,26	-0,23	-0,21
240	I	-7,63	-6,36	-5,45	-4,77	-4,24	-3,81	-3,47	-3,18	-2,93	-2,72	-2,49	-2,18	-1,93	-1,73	-1,55	-1,40	-1,27	-1,15	-1,05	-0,98	-0,90	-0,83	-0,77	-0,72	-0,67	-0,62	-0,58	-0,55
	II	-7,63	-6,36	-5,45	-4,77	-4,24	-3,81	-3,47	-3,18	-2,93	-2,72	-2,49	-2,18	-1,93	-1,73	-1,55	-1,40	-1,27	-1,15	-1,05	-0,98	-0,90	-0,83	-0,77	-0,70	-0,63	-0,58	-0,53	-0,48
	III	-7,63	-6,36	-5,45	-4,77	-4,24	-3,81	-3,47	-3,18	-2,93	-2,72	-1,87	-1,25	-1,93	-0,69	-0,47	-0,31	-0,19	-0,10	-0,03	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Tabela 23. 1 span arrangement - maximum characteristic loads for MW ROOF sandwich panels with mineral wool core, in claddings of 0,50/0,50 mm thickness, profile types: T/L, 40 mm outer support width. Direction of force - TO THE SUPPORT

		MW ROOF sandwich panel																						
Core thickness	Colour group	Maximum loads [kN/m²] for the span L[m]																						
		0,50	0,75	1,00	1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00
100/145	I	6,66	4,38	3,24	2,55	2,08	1,60	1,29	1,06	0,91	0,79	0,68	0,60	0,53	0,48	0,43	0,39	0,35	0,32	0,29	0,26	0,24	0,22	0,20
	II	6,66	4,38	3,24	2,55	2,08	1,60	1,29	1,06	0,91	0,79	0,68	0,60	0,53	0,48	0,43	0,39	0,35	0,32	0,29	0,26	0,24	0,22	0,20
	III	6,66	4,38	3,24	2,55	2,08	1,60	1,29	1,06	0,91	0,79	0,68	0,60	0,53	0,48	0,43	0,39	0,35	0,32	0,29	0,26	0,24	0,22	0,20
120/165	I	6,64	4,36	3,22	2,53	2,07	1,75	1,47	1,22	1,04	0,91	0,80	0,70	0,63	0,56	0,50	0,46	0,41	0,38	0,34	0,31	0,29	0,26	0,24
	II	6,64	4,36	3,22	2,53	2,07	1,75	1,47	1,22	1,04	0,91	0,80	0,70	0,63	0,56	0,50	0,46	0,41	0,38	0,34	0,31	0,29	0,26	0,24
	III	6,64	4,36	3,22	2,53	2,07	1,75	1,47	1,22	1,04	0,91	0,80	0,70	0,63	0,56	0,50	0,46	0,41	0,38	0,34	0,31	0,29	0,26	0,24
150/195	I	6,61	4,33	3,19	2,50	2,04	1,72	1,47	1,28	1,13	0,99	0,91	0,83	0,75	0,68	0,62	0,56	0,51	0,47	0,43	0,39	0,36	0,33	0,31
	II	6,61	4,33	3,19	2,50	2,04	1,72	1,47	1,28	1,13	0,99	0,91	0,83	0,75	0,68	0,62	0,56	0,51	0,47	0,43	0,39	0,36	0,33	0,31
	III	6,61	4,33	3,19	2,50	2,04	1,72	1,47	1,28	1,13	0,99	0,91	0,83	0,75	0,68	0,62	0,56	0,51	0,47	0,43	0,39	0,36	0,33	0,31
175/220	I	6,59	4,31	3,16	2,48	2,02	1,69	1,45	1,26	1,10	0,98	0,89	0,80	0,72	0,66	0,60	0,55	0,50	0,46	0,43	0,39	0,36	0,34	0,31
	II	6,59	4,31	3,16	2,48	2,02	1,69	1,45	1,26	1,10	0,98	0,89	0,80	0,72	0,66	0,60	0,55	0,50	0,46	0,43	0,39	0,36	0,34	0,31
	III	6,59	4,31	3,16	2,48	2,02	1,69	1,45	1,26	1,10	0,98	0,89	0,80	0,72	0,66	0,60	0,55	0,50	0,46	0,43	0,39	0,36	0,34	0,31
200/245	I	6,56	4,28	3,14	2,45	1,99	1,67	1,42	1,23	1,08	0,97	0,86	0,78	0,70	0,63	0,58	0,53	0,48	0,44	0,40	0,37	0,34	0,31	0,29
	II	6,56	4,28	3,14	2,45	1,99	1,67	1,42	1,23	1,08	0,97	0,86	0,78	0,70	0,63	0,58	0,53	0,48	0,44	0,40	0,37	0,34	0,31	0,29
	III	6,56	4,28	3,14	2,45	1,99	1,67	1,42	1,23	1,08	0,97	0,86	0,78	0,70	0,63	0,58	0,53	0,48	0,44	0,40	0,37	0,34	0,31	0,29

Colour groups: **I** - very light colours, **II** - light colours, **III** - dark colours

Linear support has been assumed. Panels mounted by loop through connectors with aluminium or steel washers.

Tabela 24. 2 span arrangement - maximum characteristic loads for MW ROOF sandwich panels with mineral wool core, in claddings of 0,50/0,50 mm thickness, profile types: T/L, 40 mm outer support width, 60 mm inner support width. Direction of force - TO THE SUPPORT

		MW ROOF sandwich panel																						
Core thickness	Colour group	Maximum loads [kN/m²] for the span L[m]																						
		0,50	0,75	1,00	1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00
100/145	I	4,95	3,24	2,38	1,87	1,52	1,28	1,09	0,96	0,85	0,75	0,68	0,60	0,53	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	II	4,95	3,24	2,38	1,87	1,52	1,28	1,09	0,96	0,85	0,75	0,68	0,60	0,53	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	III	4,95	3,24	2,38	1,87	1,52	1,28	1,09	0,96	0,85	0,75	0,68	0,60	0,53	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
120/165	I	4,93	3,22	2,36	1,85	1,50	1,26	1,07	0,94	0,83	0,73	0,66	0,59	0,53	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	II	4,93	3,22	2,36	1,85	1,50	1,26	1,07	0,94	0,83	0,73	0,66	0,59	0,53	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	III	4,93	3,22	2,36	1,85	1,50	1,26	1,07	0,94	0,83	0,73	0,66	0,59	0,53	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
150/195	I	4,90	3,19	2,33	1,82	1,47	1,23	1,04	0,91	0,80	0,70	0,63	0,56	0,50	0,45	0,41	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	II	4,90	3,19	2,33	1,82	1,47	1,23	1,04	0,91	0,80	0,70	0,63	0,56	0,50	0,45	0,41	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	III	4,90	3,19	2,33	1,82	1,47	1,23	1,04	0,91	0,80	0,70	0,63	0,56	0,50	0,45	0,41	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
175/220	I	4,88	3,16	2,31	1,79	1,45	1,20	1,02	0,89	0,77	0,68	0,60	0,53	0,48	0,43	0,38	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	II	4,88	3,16	2,31	1,79	1,45	1,20	1,02	0,89	0,77	0,68	0,60	0,53	0,48	0,43	0,38	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	III	4,88	3,16	2,31	1,79	1,45	1,20	1,02	0,89	0,77	0,68	0,60	0,53	0,48	0,43	0,38	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
200/245	I	4,85	3,14	2,28	1,77	1,42	1,18	0,99	0,86	0,75	0,66	0,58	0,51	0,45	0,40	0,36	0,32	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	II	4,85	3,14	2,28	1,77	1,42	1,18	0,99	0,86	0,75	0,66	0,58	0,51	0,45	0,40	0,36	0,32	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	III	4,85	3,14	2,28	1,77	1,42	1,18	0,99	0,86	0,75	0,66	0,58	0,51	0,45	0,40	0,36	0,32	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Colour groups: **I** - very light colours, **II** - light colours, **III** - dark colours

Linear support has been assumed. Panels mounted by loop through connectors with aluminium or steel washers.

Tabela 25. 3 span arrangement - maximum characteristic loads for MW ROOF sandwich panels with mineral wool core, in claddings of 0,50/0,50 mm thickness, profile types: T/L, 40 mm outer support width, 60 mm inner support width. Direction of force - TO THE SUPPORT

MW ROOF sandwich panel																									
Core thickness	Colour group	Maximum loads [kN/m²] for the span L[m]																							
		0,50	0,75	1,00	1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	
100/145	I	4,95	3,24	2,38	1,87	1,52	1,28	1,09	0,96	0,85	0,75	0,68	0,60	0,53	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	II	4,95	3,24	2,38	1,87	1,52	1,28	1,09	0,96	0,85	0,75	0,68	0,60	0,53	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	III	4,95	3,24	2,38	1,87	1,52	1,28	1,09	0,96	0,85	0,75	0,68	0,60	0,53	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
120/165	I	4,93	3,22	2,36	1,85	1,50	1,26	1,07	0,94	0,83	0,73	0,66	0,59	0,53	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	II	4,93	3,22	2,36	1,85	1,50	1,26	1,07	0,94	0,83	0,73	0,66	0,59	0,53	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	III	4,93	3,22	2,36	1,85	1,50	1,26	1,07	0,94	0,83	0,73	0,66	0,59	0,53	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
150/195	I	4,90	3,19	2,33	1,82	1,47	1,23	1,04	0,91	0,80	0,70	0,63	0,56	0,50	0,45	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	II	4,90	3,19	2,33	1,82	1,47	1,23	1,04	0,91	0,80	0,70	0,63	0,56	0,50	0,45	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	III	4,90	3,19	2,33	1,82	1,47	1,23	1,04	0,91	0,80	0,70	0,63	0,56	0,50	0,45	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
175/220	I	4,88	3,16	2,31	1,79	1,45	1,20	1,02	0,89	0,77	0,68	0,60	0,53	0,48	0,43	0,38	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	II	4,88	3,16	2,31	1,79	1,45	1,20	1,02	0,89	0,77	0,68	0,60	0,53	0,48	0,43	0,38	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	III	4,88	3,16	2,31	1,79	1,45	1,20	1,02	0,89	0,77	0,68	0,60	0,53	0,48	0,43	0,38	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
200/245	I	4,85	3,14	2,28	1,77	1,42	1,18	0,99	0,86	0,75	0,66	0,58	0,51	0,45	0,40	0,36	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	II	4,85	3,14	2,28	1,77	1,42	1,18	0,99	0,86	0,75	0,66	0,58	0,51	0,45	0,40	0,36	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	III	4,85	3,14	2,28	1,77	1,42	1,18	0,99	0,86	0,75	0,66	0,58	0,51	0,45	0,40	0,36	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Tabela 26. 1 span arrangement - maximum characteristic loads for MW ROOF sandwich panels with mineral wool core, in claddings of 0,50/0,50 mm thickness, profile types: T/L, 40 mm outer support width. Direction of force - FROM THE SUPPORT

MW ROOF sandwich panel																									
Core thickness	Colour group	Maximum loads [kN/m²] for the span L[m]																							
		0,50	0,75	1,00	1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	
100/145	I	-19,26	-10,67	-7,55	-5,99	-4,99	-4,00	-3,35	-2,88	-2,53	-2,26	-2,04	-1,87	-1,65	-1,45	-1,28	-1,15	-1,03	-0,95	-0,86	-0,80	-0,74	-0,68	-0,64	
	II	-19,26	-10,67	-7,55	-5,99	-4,99	-4,00	-3,35	-2,88	-2,53	-2,26	-2,04	-1,87	-1,65	-1,45	-1,28	-1,15	-1,03	-0,95	-0,86	-0,80	-0,74	-0,68	-0,64	
	III	-19,26	-10,67	-7,55	-5,99	-4,99	-4,00	-3,35	-2,88	-2,53	-2,26	-2,04	-1,87	-1,65	-1,45	-1,28	-1,15	-1,03	-0,95	-0,86	-0,80	-0,74	-0,68	-0,64	
120/165	I	-20,27	-11,65	-8,51	-6,92	-5,74	-4,64	-3,89	-3,36	-2,96	-2,65	-2,40	-2,20	-2,03	-1,84	-1,63	-1,45	-1,31	-1,19	-1,08	-1,00	-0,93	-0,86	-0,80	
	II	-20,27	-11,65	-8,51	-6,92	-5,74	-4,64	-3,89	-3,36	-2,96	-2,65	-2,40	-2,20	-2,03	-1,84	-1,63	-1,45	-1,31	-1,19	-1,08	-1,00	-0,93	-0,86	-0,80	
	III	-20,26	-11,65	-8,51	-6,92	-5,74	-4,64	-3,89	-3,36	-2,96	-2,65	-2,40	-2,20	-2,03	-1,84	-1,63	-1,45	-1,31	-1,19	-1,08	-1,00	-0,93	-0,86	-0,80	
150/195	I	-21,77	-13,15	-9,98	-8,35	-6,84	-5,57	-4,70	-4,08	-3,60	-3,23	-2,93	-2,68	-2,48	-2,30	-2,15	-1,96	-1,76	-1,59	-1,45	-1,33	-1,23	-1,14	-1,06	
	II	-21,77	-13,15	-9,98	-8,35	-6,84	-5,57	-4,70	-4,08	-3,60	-3,23	-2,93	-2,68	-2,48	-2,30	-2,15	-1,96	-1,76	-1,59	-1,45	-1,33	-1,23	-1,14	-1,06	
	III	-21,76	-13,15	-9,98	-8,35	-6,84	-5,57	-4,70	-4,08	-3,60	-3,23	-2,93	-2,68	-2,48	-2,30	-2,15	-1,96	-1,76	-1,59	-1,45	-1,33	-1,23	-1,14	-1,06	
175/220	I	-23,02	-14,40	-11,22	-9,56	-7,75	-6,34	-5,37	-4,66	-4,13	-3,71	-3,37	-3,09	-2,85	-2,65	-2,48	-2,33	-2,13	-1,93	-1,75	-1,61	-1,48	-1,37	-1,27	
	II	-23,02	-14,40	-11,22	-9,56	-7,75	-6,34	-5,37	-4,66	-4,13	-3,71	-3,37	-3,09	-2,85	-2,65	-2,48	-2,33	-2,13	-1,93	-1,75	-1,61	-1,48	-1,37	-1,27	
	III	-23,02	-14,40	-11,22	-9,56	-7,75	-6,34	-5,37	-4,66	-4,13	-3,71	-3,37	-3,09	-2,85	-2,65	-2,48	-2,33	-2,13	-1,93	-1,75	-1,61	-1,48	-1,37	-1,27	
200/245	I	-24,29	-15,67	-12,47	-10,78	-8,64	-7,10	-6,03	-5,25	-4,65	-4,18	-3,80	-3,49	-3,22	-3,00	-2,80	-2,64	-2,48	-2,25	-2,04	-1,87	-1,72	-1,59	-1,48	
	II	-24,29	-15,67	-12,47	-10,78	-8,64	-7,10	-6,03	-5,25	-4,65	-4,18	-3,80	-3,49	-3,22	-3,00	-2,80	-2,64	-2,48	-2,25	-2,04	-1,87	-1,72	-1,59	-1,48	
	III	-24,28	-15,67	-12,47	-10,78	-8,64	-7,10	-6,03	-5,25	-4,65	-4,18	-3,80	-3,49	-3,22	-3,00	-2,80	-2,64	-2,48	-2,25	-2,04	-1,87	-1,72	-1,59	-1,48	

Colour groups: **I** - very light colours, **II** - light colours, **III** - dark colours
 Linear support has been assumed. Panels mounted by loop through connectors with aluminium or steel washers.

Tabela 27. 2 span arrangement - maximum characteristic loads for MW ROOF sandwich panels with mineral wool core, in claddings of 0,50/0,50 mm thickness, profile types: T/L, 40 mm outer support width, 60 mm inner support width. Direction of force - FROM THE SUPPORT

MW ROOF sandwich panel																									
Core thickness	Colour group	Maximum loads [kN/m²] for the span L[m]																							
		0,50	0,75	1,00	1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	
100/145	I	-17,37	-8,28	-5,04	-3,49	-2,61	-2,07	-1,70	-1,44	-1,25	-1,10	-1,00	-0,91	-0,83	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	II	-17,11	-8,03	-4,80	-3,27	-2,41	-1,88	-1,53	-1,29	-1,11	-0,99	-0,89	-0,81	-0,74	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	III	-16,74	-7,66	-4,45	-2,94	-2,11	-1,55	-1,10	-0,87	-0,69	-0,57	-0,50	-0,45	-0,42	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
120/165	I	-16,49	-7,98	-4,92	-3,44	-2,60	-2,07	-1,71	-1,45	-1,26	-1,12	-1,01	-0,93	-0,85	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	II	-16,23	-7,73	-4,69	-3,22	-2,40	-1,88	-1,53	-1,29	-1,12	-1,00	-0,90	-0,82	-0,75	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	III	-15,86	-7,37	-4,34	-2,89	-2,09	-1,49	-1,04	-0,81	-0,63	-0,51	-0,44	-0,39	-0,36	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
150/195	I	-15,17	-7,49	-4,70	-3,33	-2,55	-2,04	-1,69	-1,45	-1,26	-1,12	-1,01	-0,94	-0,86	-0,80	-0,75	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	II	-14,92	-7,25	-4,47	-3,11	-2,33	-1,84	-1,51	-1,27	-1,10	-0,99	-0,89	-0,80	-0,74	-0,69	-0,66	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	III	-14,54	-6,89	-4,12	-2,78	-2,02	-1,36	-0,97	-0,69	-0,51	-0,39	-0,32	-0,28	-0,26	-0,25	-0,24	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
175/220	I	-13,58	-6,80	-4,31	-3,08	-2,37	-1,91	-1,59	-1,36	-1,19	-1,06	-0,97	-0,89	-0,82	-0,77	-0,73	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	II	-13,33	-6,56	-4,08	-2,86	-2,15	-1,70	-1,40	-1,25	-1,19	-0,85	-0,75	-0,67	-0,62	-0,58	-0,56	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	III	-12,96	-6,20	-3,73	-2,52	-1,74	-1,08	-0,73	-0,47	-0,31	-0,21	-0,15	-0,12	-0,11	-0,10	-0,08	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
200/245	I	-11,46	-5,80	-3,71	-2,66	-2,05	-1,65	-1,38	-1,19	-1,04	-0,94	-0,86	-0,79	-0,73	-0,69	-0,65	-0,62	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	II	-11,22	-5,56	-3,47	-2,44	-1,83	-1,45	-1,10	-0,89	-0,71	-0,59	-0,51	-0,46	-0,42	-0,40	-0,39	-0,35	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	III	-10,86	-5,21	-3,12	-2,10	-1,18	-0,68	-0,34	-0,12	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Colour groups: **I** - very light colours, **II** - light colours, **III** - dark colours
 Linear support has been assumed. Panels mounted by loop through connectors with aluminium or steel washers.

Tabela 28. 3 span arrangement - maximum characteristic loads for MW ROOF sandwich panels with mineral wool core, in claddings of 0,50/0,50 mm thickness, profile types: T/L, 40 mm outer support width, 60 mm inner support width. Direction of force - FROM THE SUPPORT

MW ROOF sandwich panel																									
Core thickness	Colour group	Maximum loads [kN/m²] for the span L[m]																							
		0,50	0,75	1,00	1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	
100/145	I	-19,27	-9,80	-5,85	-4,01	-3,01	-2,39	-1,98	-1,69	-1,47	-1,31	-1,18	-1,08	-0,89	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	II	-19,27	-9,52	-5,60	-3,80	-2,81	-2,22	-1,83	-1,56	-1,36	-1,21	-1,09	-1,08	-0,86	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	III	-19,27	-9,09	-5,23	-3,47	-2,53	-1,97	-1,61	-1,37	-1,19	-1,06	-0,97	-0,89	-0,82	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
120/165	I	-19,90	-9,37	-5,66	-3,92	-2,95	-2,36	-1,96	-1,69	-1,48	-1,32	-1,19	-1,09	-0,88	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	II	-19,59	-9,09	-5,41	-3,70	-2,76	-2,19	-1,81	-1,55	-1,36	-1,21	-1,10	-1,09	-0,84	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	III	-19,16	-8,68	-5,04	-3,36	-2,46	-1,92	-1,58	-1,34	-1,17	-1,05	-0,96	-0,88	-0,82	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
150/195	I	-18,19	-8,71	-5,34	-3,74	-2,84	-2,29	-1,92	-1,65	-1,46	-1,31	-1,19	-1,09	-1,01	-0,96	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	II	-17,90	-8,44	-5,09	-3,51	-2,64	-2,10	-1,75	-1,50	-1,32	-1,19	-1,08	-1,00	-0,93	-0,88	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	III	-17,47	-8,03	-4,72	-3,17	-2,33	-1,83	-1,50	-1,23	-1,05	-0,98	-0,89	-0,83	-0,78	-0,75	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
175/220	I	-16,20	-7,84	-4,85	-3,42	-2,62	-2,12	-1,78	-1,54	-1,36	-1,23	-1,12	-1,04	-0,98	-0,92	-0,87	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	II	-15,92	-7,58	-4,61	-3,20	-2,41	-1,93	-1,61	-1,39	-1,22	-1,10	-1,01	-0,94	-0,88	-0,83	-0,78	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	III	-15,51	-7,18	-4,23	-2,85	-2,10	-1,57	-1,19	-1,39	-0,86	-0,76	-0,70	-0,66	-0,63	-0,61	-0,60	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
200/245	I	-13,61	-6,65	-4,14	-2,94	-2,25	-1,83	-1,54	-1,34	-1,19	-1,08	-0,44	-0,93	-0,87	-0,82	-0,78	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	II	-13,34	-6,39	-3,89	-2,70	-2,04	-1,63	-1,36	-1,18	-1,04	-0,96	-0,88	-0,82	-0,77	-0,73	-0,69	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
	III	-12,94	-5,99	-3,52	-2,36	-1,56	-1,03	-0,78	-0,60	-0,50	-0,44	-0,41	-0,39	-0,39	-0,39	-0,40	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

13. THERMAL INSULATION PROPERTIES

MW STANDARD, MW PLUS, MW DEFENDER, MW LIGHT, MW FIRE sandwich panels and MW ROOF sandwich panels have very good thermal insulation parameters.

Tests and calculations conducted in the Institute of Building Technology in Warsaw in the Thermal Physics Department, the purpose of which was to specify the heat conductivity coefficient of mineral wool being the panel core and the heat conductivity coefficient of the partition, have confirmed high quality and consistency of parameters in MW panels achieved thanks to using raw materials of the highest quality and continuous control of all production stages.

The calculations of the U_c heat conductivity coefficient take into account the linear thermal bridge occurring in the joint of sandwich panels, and local thermal bridges occurring in places where the panels are fastened to the bearing structure by connectors.

The table below shows U_c heat conductivity coefficients for a partition made of BALEXMETAL roof and wall panels.

Tabela 29. U_c partition heat conductivity coefficients.

Panel type	Panel core thickness [mm]	U_c [W/m ² K]
MW STANDARD sandwich panel	80	0,49
	100	0,40
	120	0,34
	150	0,28
	175	0,24
	200	0,20
	240	0,17
MW DEFENDER sandwich panel	200	0,19
	240	0,17
MW LIGHT sandwich panel	80	0,47
	100	0,38
	120	0,32
	150	0,26
	175	0,23
	200	0,19
	240	0,17
MW FIRE sandwich panel	100	0,40
	120	0,34
	150	0,28
	175	0,24
	200	0,20
	240	0,17
MW PLUS sandwich panel	80	0,48
	100	0,38
	120	0,32
	150	0,26
	175	0,23
	200	0,20
MW ROOF sandwich panel	100	0,38
	120	0,32
	150	0,26
	175	0,23
	200	0,19

14. FIRE SAFETY

Fire classification of MW sandwich panels

MW sandwich panels are the building elements of a certain fire resistance class and so they should meet the requirements of fire resistance and fire dispersion specified in the law.

External walls and roof coverings of buildings are subject to the following fire safety classifications:

- fire resistance
- fire spreading

Tabela 30. Fire classification of MW STANDARD, MW LIGHT, MW DEFENDER, MW PLUS and MW FIRE sandwich panels.

Panel type	Thick- ness [mm]	Fire resistance class						Reaction to fire	No Fire Spreading
		Horizontal layout			Vertical layout				
		3m	6m	7,5m	3m	6m	7,5m		
MW STANDARD	80	-			-			A2-s1,d0	YES
	100	up to EI 45	up to EI 30		up to EI 90		up to EI 60		
	120	up to EI 60		up to EI 45	up to EI 60		up to EI 45		
	150	up to EI 90	up to EI 60		up to EI 90	up to EI 60			
	175	up to EI 120		up to EI 90	up to EI 120		up to EI 90		
	200	up to EI 120			up to EI 120				
	240	up to EI 240	up to EI 180		up to EI 240	up to EI 180			
MW LIGHT	80	-			-			A2-s1,d0	YES
	100	up to EI 45	up to EI 30		up to EI 45	up to EI 30			
	120	up to EI 60	up to EI 45		up to EI 60	up to EI 45			
	150	up to EI 60			up to EI 60				
	175	up to EI 90	up to EI 60		up to EI 90	up to EI 60			
	200	up to EI 120	up to EI 90	up to EI 60	up to EI 120	up to EI 90	up to EI 60		
	240	up to EI 120		up to EI 90	up to EI 120		up to EI 90		
MW DEFENDER	200	up to EI 120		up to EI 90	-			-	YES
	240								
MW PLUS	80	-			-			A2-s2,d0	YES
	100	up to EI 30	up to EI 15		up to EI 30	up to EI 15			
	120	up to EI 30			up to EI 30				
	150	up to EI 60			up to EI 60				
	175	up to EI 90		up to EI 60	up to EI 90		up to EI 60		
	200	up to EI 120	up to EI 90		up to EI 120	up to EI 90			
MW FIRE		4m	6m	7,5m	4m	6m	7,5m	A2-s1,d0	YES
	100	up to EI 90		up to EI 60	-				
	120	up to EI 120		up to EI 90					
	150	up to EI 180		up to EI 120					
	175								
	200	up to EI 240	up to EI 180						
	240								

EI X classification means that the criterion of tightness and fire insulation properties of the covering wall is maintained for the time of at least X minutes. If there is exposure to fire from the side of the structure, it must have at least R X class, which means that fire bearing capacity of the construction must be maintained for the same or longer time.

Tabela 31. Fire classification MW ROOF sandwich panels.

Panel type	Thickness [mm]	Fire resistance	Reaction to fire	External fire performance
MW ROOF sandwich panel	100	-	A2-s1,d0	B _{roof} (t ₁)
	120-200	up to REI 90	A2-s1,d0	B _{roof} (t ₁)

REI-90 classification means that the criteria of bearing capacity, tightness and fire resistance are maintained for at least 90 minutes. As for roof resistance to the influence of external fire, MW ROOF sandwich panel covering has been classified as B_{roof}(t₁), which means non-dispersing fire, according to PN-EN 13501-5. B_{roof}(t₁) is valid for roofs with a pitch up to 20°.

15. CORROSION RESISTANCE

Corrosion categories and examples of typical environments acc. to PN-EN ISO 12944-2

C1 corrosion category

- interiors – heated buildings with clean ambience, e.g. offices, shops, schools, hotels

C2 corrosion category

- exteriors – ambiances of little contamination; mainly rural areas

- interiors – unheated buildings with possible condensation, e.g. warehouses, sports halls

C3 corrosion category

- exteriors – urban and industrial ambiances; average contamination with sulphur oxide (IV); water bank and shore areas of little salinity

- interiors – production interiors of high humidity and certain air pollution, e.g. food production facilities, laundries, breweries, milk production units

C4 corrosion category

- exteriors – industrial areas and water shore areas of moderate salinity

- interiors – chemical plants, swimming pools, ship repair yards for ships and boats

C5 corrosion category

- exteriors – industrial areas of high humidity and aggressive ambience

- interiors – building structures or areas with virtually constant condensation and high contamination levels

Table 32. Corrosion resistance classes.

Coating	SP15	SP25	SP35 MAT	CESAR 55	PVC(F) FoodSafe	1.4301
Metallic coating	min Z225 or equal (alloy coatings)					
Corrosion resistance class (external) RC	–	RC3	RC4	RC5*	–	RC5* **
Corrosion resistance class (internal) AC	CPI2	AC3	do AC4*	do AC5*	do CPI5*	do AC5*

* Confirmation of the corrosion resistance class RC/AC by the steel supplier after analyzing the environmental questionnaire only (via the Quality Department)

** Transport, assembly, cleaning, maintenance in accordance with Balex Metal recommendations

16. SOUND INSULATION PROPERTIES

MW sandwich panels have the following acoustic insulation coefficients:

MW STANDARD, MW DEFENDER, MW LIGHT, MW FIRE & MW PLUS sandwich panels, thickness range 80 mm to 240 mm

$$R_w = 32\text{dB}, R_{A1} = 29\text{dB}, R_{A2} = 28\text{dB}$$

Sound absorption properties of MW STANDARD and MW PLUS mineral wool core sandwich panels in two side claddings of steel sheet, with thickness range from 80 mm to 240 mm may be generally expressed by absorption coefficient $\alpha_w = 0,2$ and absorption class E.

MW ROOF sandwich panels, thickness range 100 mm to 200 mm

$$R_w = 33\text{dB}, R_{A1} = 32\text{dB}, R_{A2} = 30\text{dB}$$

Sound absorption properties of MW ROOF sandwich panels in two side claddings of steel sheet, with thickness range from 100 mm to 200 mm may be generally expressed by absorption coefficient $\alpha_w = 0,15$ (L) and absorption class E.

R_w - weighted specific acoustic insulation coefficient,

R_{A1} - specific acoustic insulation assessment coefficient (determined in relation to the "flat" band noise),

R_{A2} - specific acoustic insulation assessment coefficient (determined in relation to low frequency band noise).

The basis for classifying building partitions made of sandwich panels are the values of one digit coefficients determined on the basis of the specific acoustic insulation measurements taken in laboratory conditions, acc. to PN-EN ISO 10140-2:2011 and calculated acc. to PN-EN ISO 717-1:1999.

The requirements for acoustic insulation properties of partitions in general purpose buildings are given in the PN-B-02151-3:1999 standard. For cases that are not included in the standard, in particular in industrial buildings, housings and internal partitions, the requirements should be established individually.

Considering the acoustic properties of MW sandwich panels (specified in the abovementioned coefficients) it should be assumed that, from the acoustics point of view, MW sandwich panels may be used in the following buildings and facilities:

- as housing for walls and roofs of industrial and sports halls, production and warehouse buildings
- for commerce and service pavilions, food and catering facilities, building site supply bases, administration and social buildings – if the requirements for acoustic insulation for a given partition are not higher than the ones given above or if they meet individually determined acoustic requirements.
- as external walls of residential buildings
- for structures and facilities where there are no acoustic requirements

17. FASTENERS

Sandwich panels are mounted to the steel structure by self-drilling connectors. This eliminated the need to drill preliminary loop through openings in panels and the construction. Moreover, self-drilling connectors increase security of fastening and limit the number of used tools. In the case of self-drilling connectors new drilling blades are always used, because these connectors are designated to be used once only, and this has an influence on the durability of the connection.

Self-drilling connectors are used for fastening sandwich panels to the steel structure of maximum wall thickness of 12 mm. The connectors are made of hardened coal steel, with a surface corrosion protection layer.

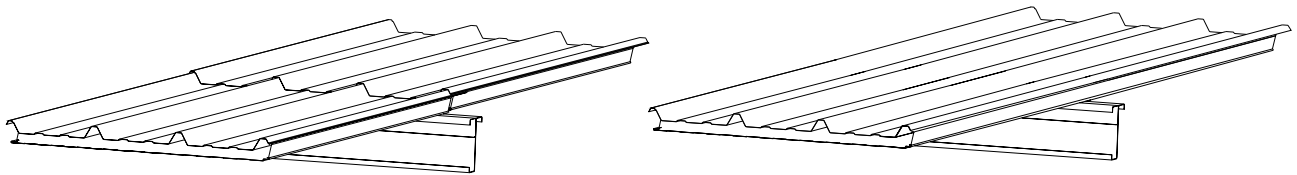
All connectors have washers with vulcanised EPDM. Using EPDM increases durability and tightness of the connection.

- A screw with screwing capacity up to 6 mm, for cold rolled steel substrates

- A screw with screwing capacity up to 12 mm, for hot rolled steel substrates
- A screw with screwing capacity up to 16 mm, for hot rolled steel substrates
- A screw for wood and concrete – for direct fastening to concrete and wood substrates. Drilling the sandwich panel with a 5 mm steel drill prior to the assembly is recommended. A preliminary opening should be made in the concrete substrate with a 5 mm concrete drill.
- Self-threading screw – for steel substrates of over 12 mm thickness. A preliminary opening of 5,8 mm diameter must be made in the sandwich panel and the steel structure prior to the assembly.

18. FASTENING ROOF Panels LENGTHWISE

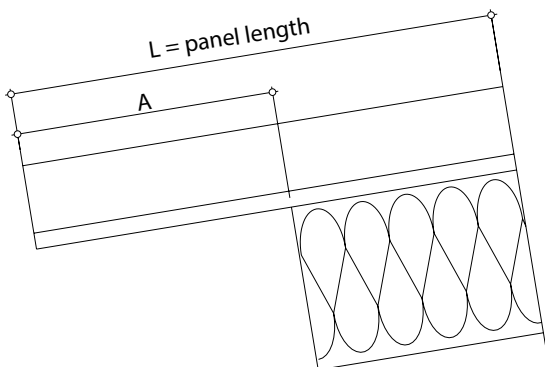
Recommended roof pitch for MW ROOF sandwich panels is:



>7 % - for panels joined at length or with roof skylights

>5 % - for continuous panels and without skylights

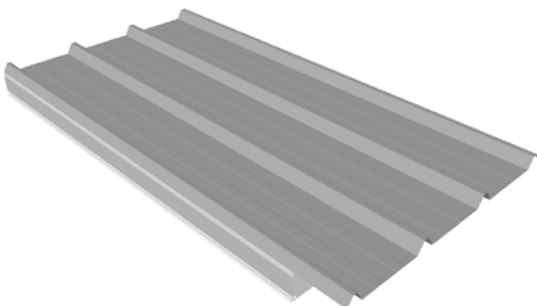
MW ROOF panels have endings, shaped at the stage of production, which facilitate assembly of gutters at eaves or longitudinal joining of panels.



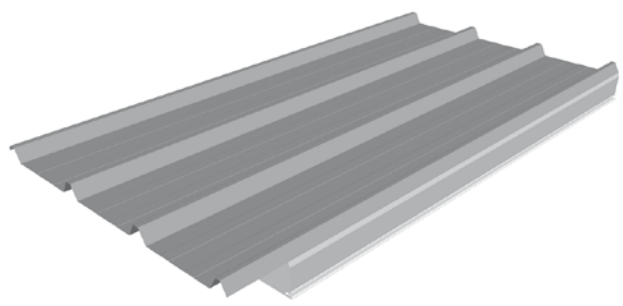
A - overlap:

- standard 50 mm with eaves
- standard 200 mm with overlap
- max 300 mm with overlap
- min 10 mm without overlap

As a standard, MW ROOF sandwich panels are produced in right hand version. They may be produced in the left hand version at the client's request.



RIGHT Panel



LEFT Panel

19. GENERAL GUIDELINES ON ASSEMBLY

Prior to the assembly, it is recommended that the bearing structure is inspected for its making and compliance with the design.

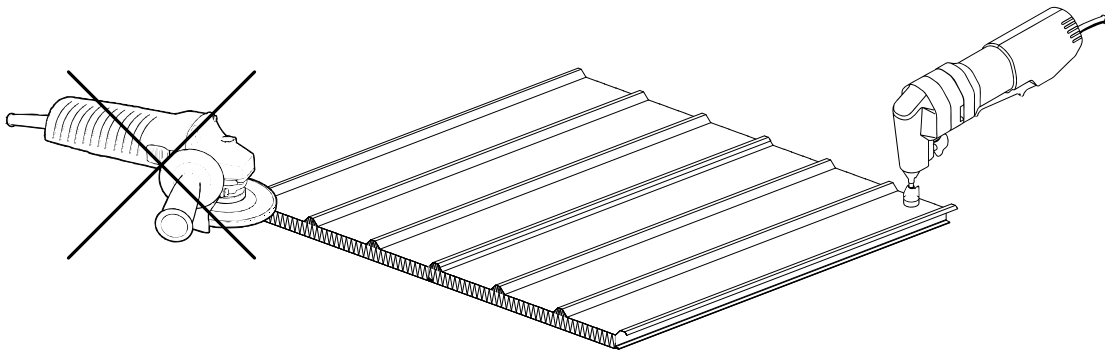
Sandwich panels are secured against debris and damage by protective foil, put on the claddings during the production process. After unpacking the panels, remove the protective foil to prevent its permanent sticking to the protective varnish on claddings.

It is recommended that the panels and flashings are cut on stands covered with soft material, i.e. felt or polystyrene so as to avoid damage to colour layers.

Use a saw with fine blades to cut the panels, and manual scissors for flashings.

Using angle grinders and other tools generating high temperature while cutting is forbidden: it may lead to damage to anti-corrosion layers - fig. no. 5.

Fig. 5



Use appropriate connectors to assemble the sandwich boards, depending on the type of bearing structure and panel core thicknesses. Types of fasteners and their specifications are given in the CONNECTORS chapter.

All connectors have washers with a vulcanised EPDM, which makes them usable for many years with the sealing element being flexible all the time.

Use appropriate electrical tools for screwing the connectors in. Drill-drivers should have appropriate heads for driving long connectors and depth limiter - fig. no. 6. This will guarantee correctness of the assembly, i.e. the connector's perpendicular position to the panel will be maintained; the risk of damage to panel surface will be minimised and fastening will be tight - fig. no 7. Universal drill-drivers with regular, short heads are permissible. However, such tools should be equipped with a depth limiter for inserting connectors. Below are the optimum parameters of electrical tools for sandwich panel assembly:

- power 600 - 750 W
- speed 1500 - 2000 rev./min.
- torque 600 - 700 Ncm

Fig. 6

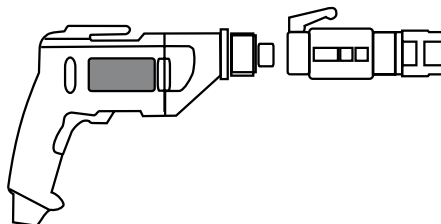
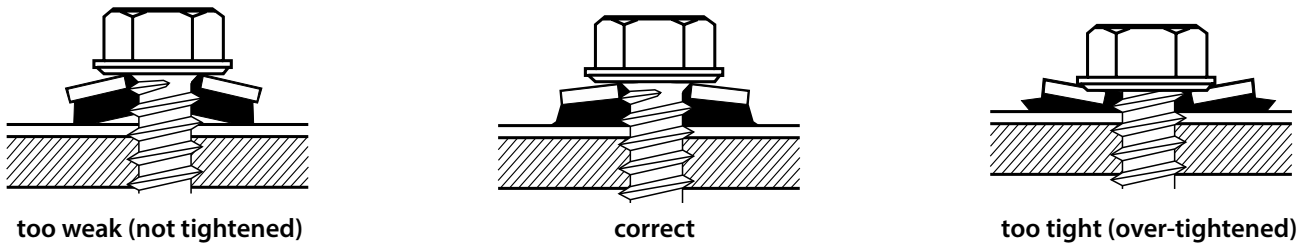


Fig. 7



MW ROOF sandwich panel – assembly example:

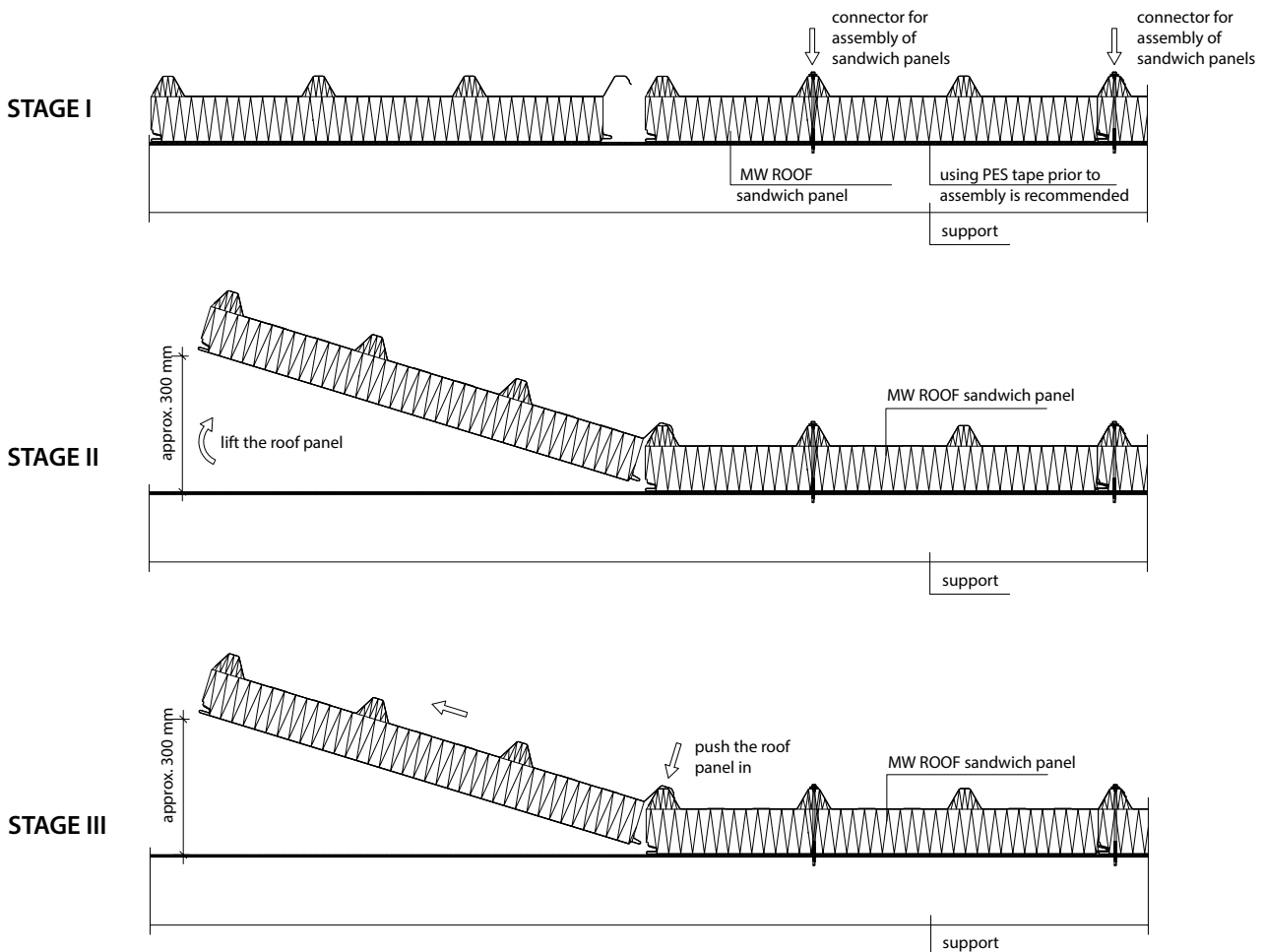
STAGE I - preparing the panel for assembly. Make sure that the neighbouring panel has been mounted correctly and if the recommended PES tape has been placed on the bearing structure

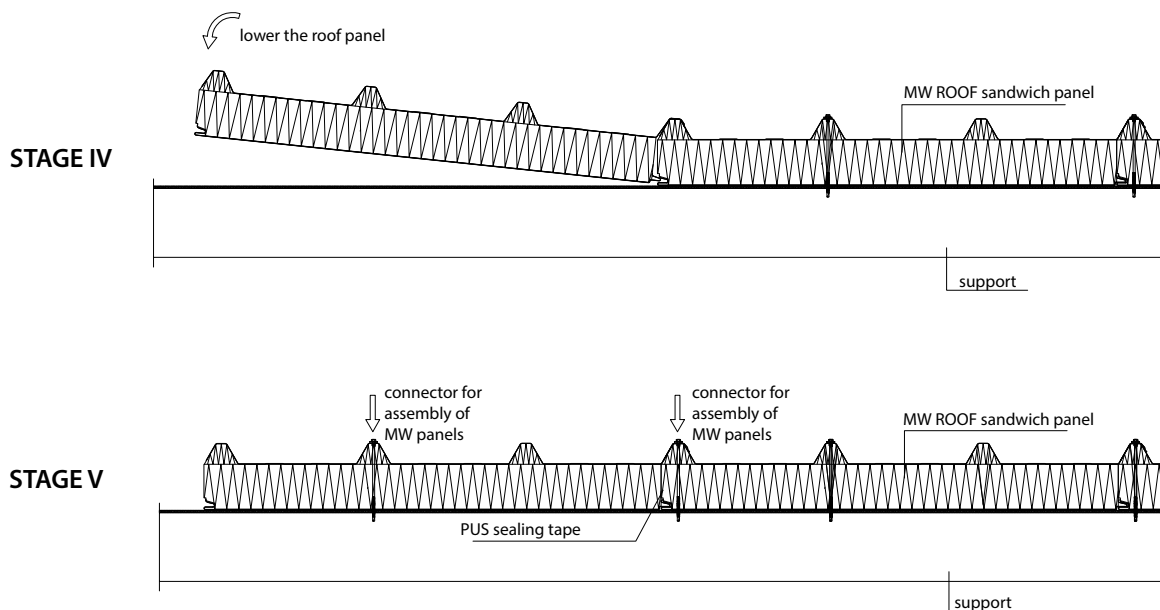
STAGE II - place the overlap on the hump and lift the panel edge by approximately 30 cm (you may use polystyrene supports to stabilise the angle position of the roof panel)

STAGE III - push the stabilised panel in the connection place (as illustrated)

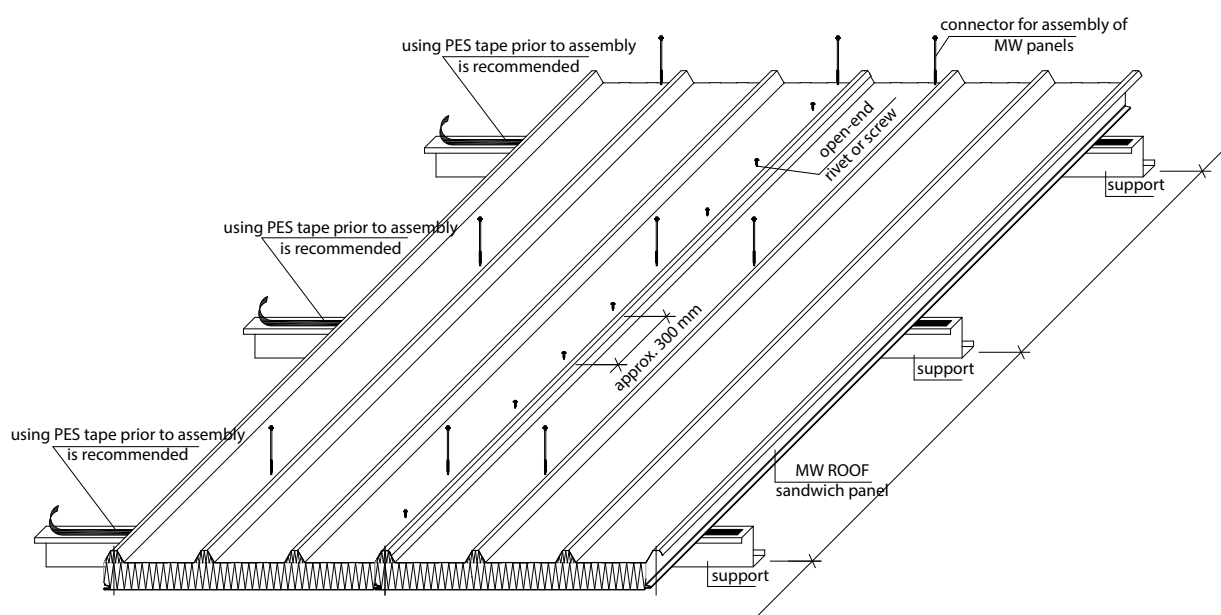
STAGE IV - lower the panel gradual

STAGE V - assemble the connectors to the bearing structure and make the longitudinal connection (by means of farmer's screws or tight rivets)





Fastening MW ROOF sandwich panel to the roof.



Note !

If assembled panels are longer than 8 m, the mounting team should consist of more than 2 people.

After cutting and drilling carefully remove all metal waste and fillings that may change the colour of the cladding. Tighten the whole housing by means of appropriate tapes and sealing foams. Secure all damaged varnish points on the cladding sheets by touch up paint.

20. GUIDELINES ON TRANSPORTATION

Recommended means of transport and their technical conditions:

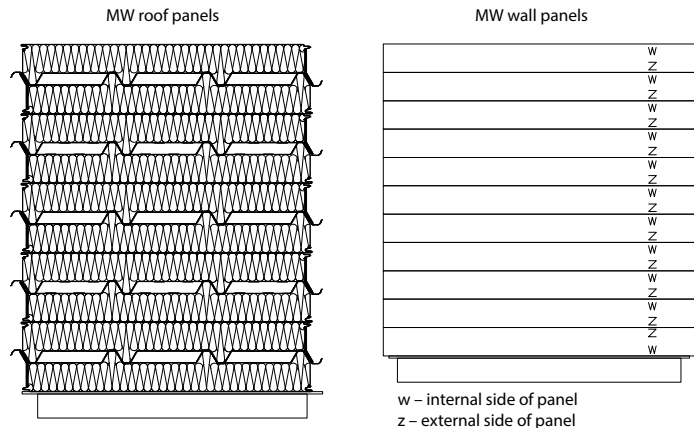
The basic means of transport for sandwich panels are trucks with a trailer or semi-trailer, where long panels may be loaded (up to 13,60 m) on both sides of the vehicle.

The following technical conditions are recommended for vehicles transporting sandwich panels:

- deck trailer ("CURTAIN" type)
- trailer longer than transported panels (panel packages should lie flat)
- transport straps mounting the load should be located on the panel package on each support (strap tension must not cause panel deformation)

How to pack sandwich panels:

The number of sandwich panels in a package depends on the kind and thickness of single panels.



Unloading, handling:

Proceed with great care during loading and unloading operations due to panel weight. Avoid point supports, as this may damage the cladding of the lowermost panel. To prevent this problem, distribute the weight on a larger surface. Make sure you do not drag one panel on the other ones, as this may result in scratching.

When lifting heavy packages, pay attention to proper support of the panels.

Tabela 33. How to support panels at unloading

Length [m]	Number of supports	„Fork“ support span
$L \leq 8$	2	1,50
$L > 8$	4	1,50

Storing panels:

Sandwich panels must be placed on joists, at least 250 mm above ground level. Maximum two packages may be placed one on the other. Storing in closed, airy spaces is recommended, at normal temperatures, away from fertilisers, acids, lye, salts and other corrosive substances. Storing uncovered panels is not allowed. In the case of short term storage under a tarpaulin (max. two weeks), free airflow must be provided. If the storage period is longer than two weeks, the panels must be placed in an appropriately ventilated place and left uncovered, with free access of air to all layers.

Failure to comply with the guidelines above may cause decolouring of claddings, the so-called „white rust“, permanent damage to the core and also loss of warranty rights.

Small repairs and maintenance:

All damage to the claddings done in transportation or assembly should be corrected with touch-up paint. Maintenance of sandwich panels consists in regular inspections and securing any possible damage. Inspections should pay attention to uncovered edges and connections.

Notes on use:

Sandwich panels with dark colour claddings have high heat absorption properties, which may cause local deformations on cladding surfaces due to long exposure to sunlight (in particular in the summer period). This is why thermal movement of panels must be allowed, and panels of limited length should be used. This effects does not influence the use properties of sandwich panels; however, the producer reserves that the client buys sandwich panels in these colours at his/her own risk and has no right to claim against the producer for this reason. In roof panels there are practically no local surface deformations. It is assumed that sheets in dark colours heat up to the temperature of 80 degrees C.

Thus Balex Metal shall not be held responsible for any possible damage due to high temperatures, the effect of which may be local loss of cladding stability. Dark colours are defined in point E.33 by EN14509 standard.

24. CERTIFICATION DOCUMENTS

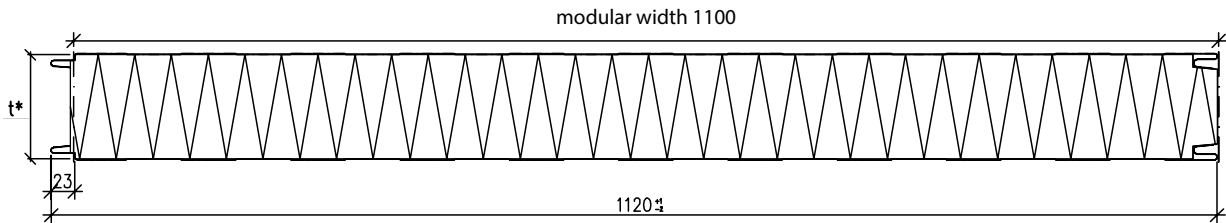
The current certification documents are available at www.balex.eu.

II. DETAILED SOLUTIONS FOR ENCLOSURE MADE OF BALEX METAL MW STANDARD, MW DEFENDER, MW LIGHT, MW FIRE, MW PLUS & MW ROOF SANDWICH PANELS WITH MINERAL WOOL CORE

1. MW STANDARD, MW DEFENDER, MW LIGHT sandwich panels

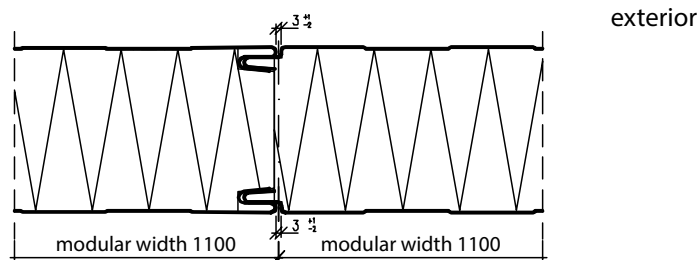
1.1. MW-W-ST01

MW STANDARD sandwich panel - joint, profile types

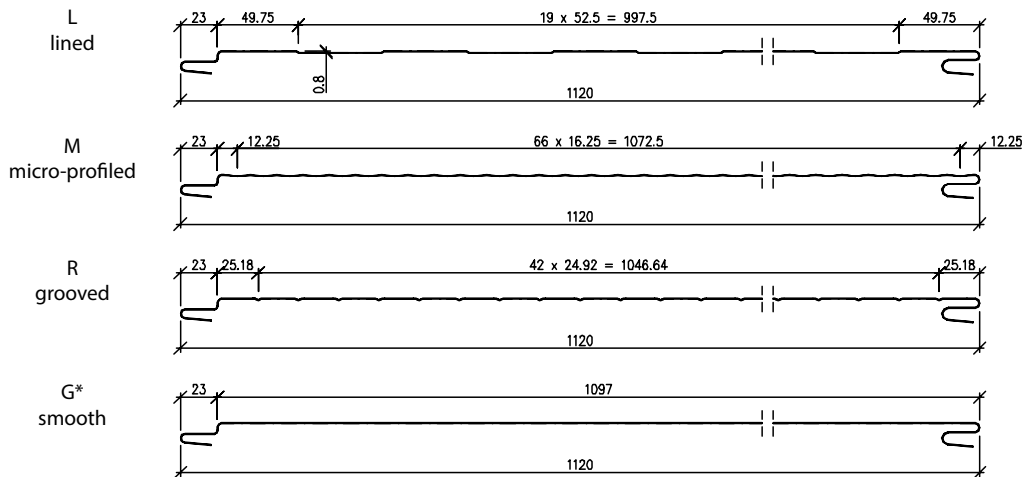


*Panel thickness range

t = 80; 100; 120; 130; 140; 150; 160; 180; 200; 230 [mm]

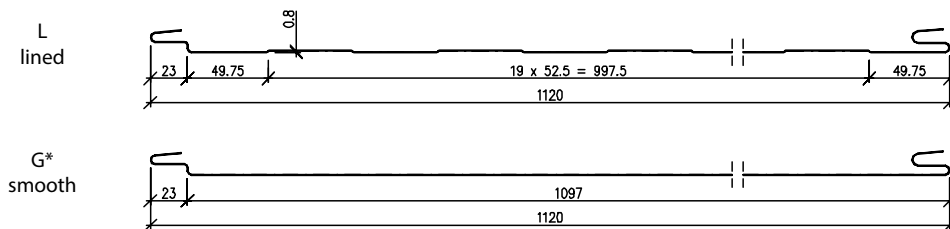


EXTERNAL CLADDINGS:



INTERNAL CLADDINGS:

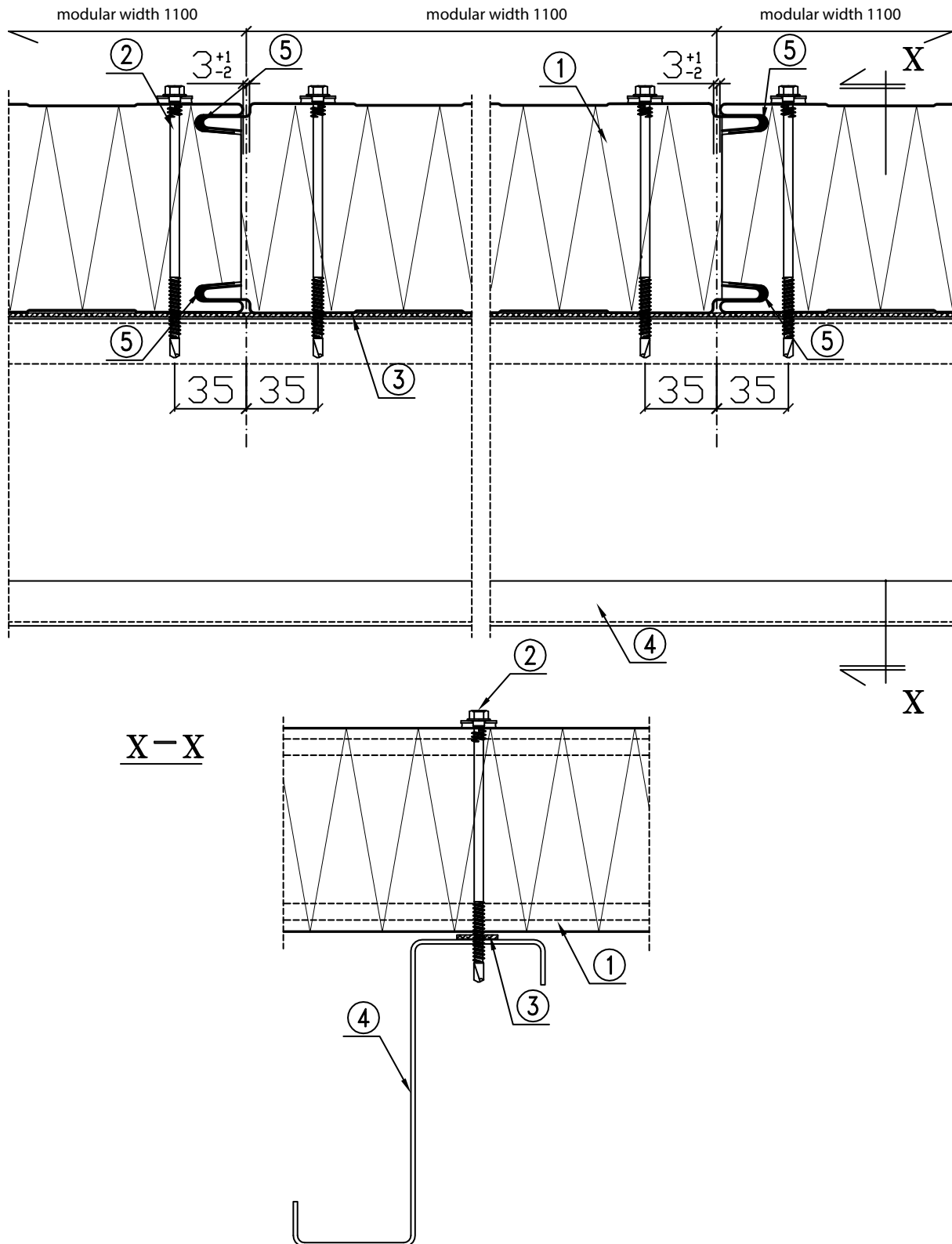
expansion 1200 mm



* flat for claddings thicker than 0,50 mm

1.2. MW-W-ST02

Panel fastening - vertical arrangement of panels

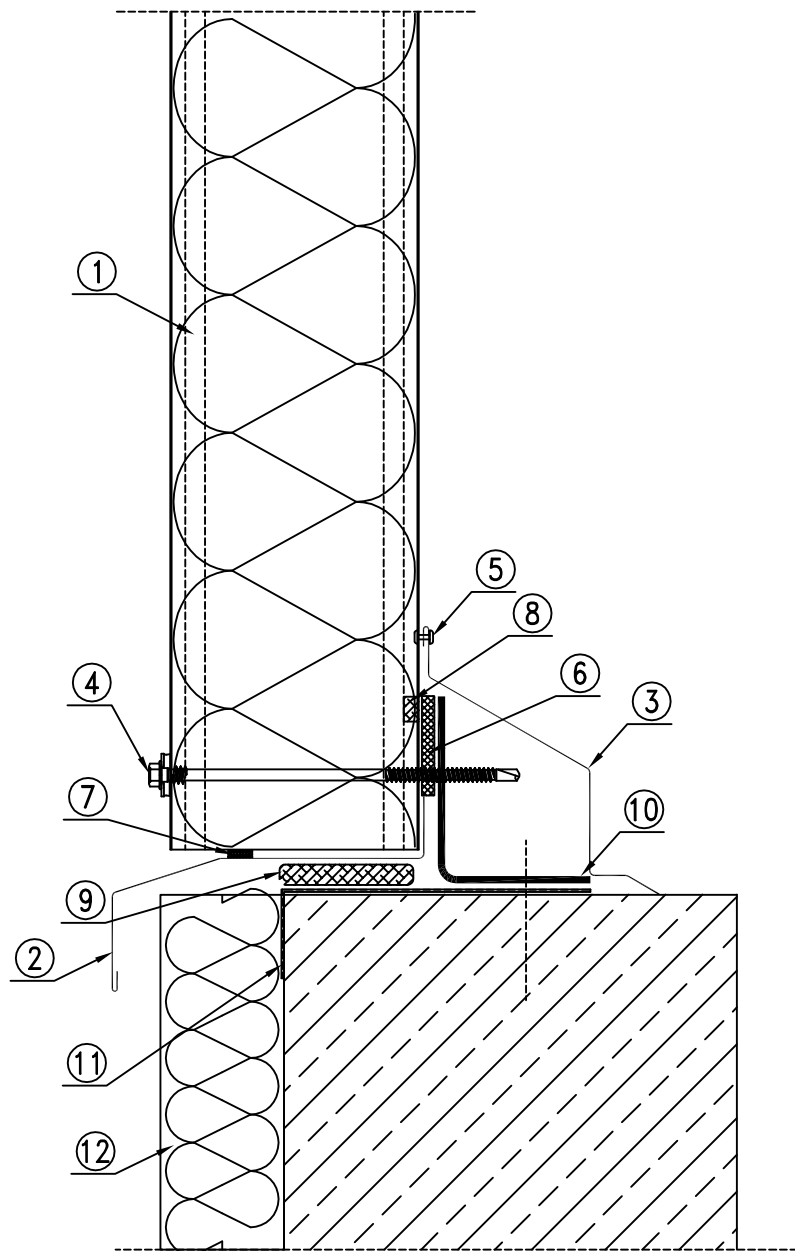


1. MW STANDARD, MW DEFENDER, MW LIGHT sandwich panel
2. Self-drilling connector for fastening sandwich panels
3. PES 3x20 adhesive sealing tape (recommended)
4. Steel bolt: cold-bent, hot-rolled, wooden etc. acc. to the construction design
5. Sealing (butyl sealing is recommended)

1.3. MW-W-ST03

Basing panels on a ground beam or foundation

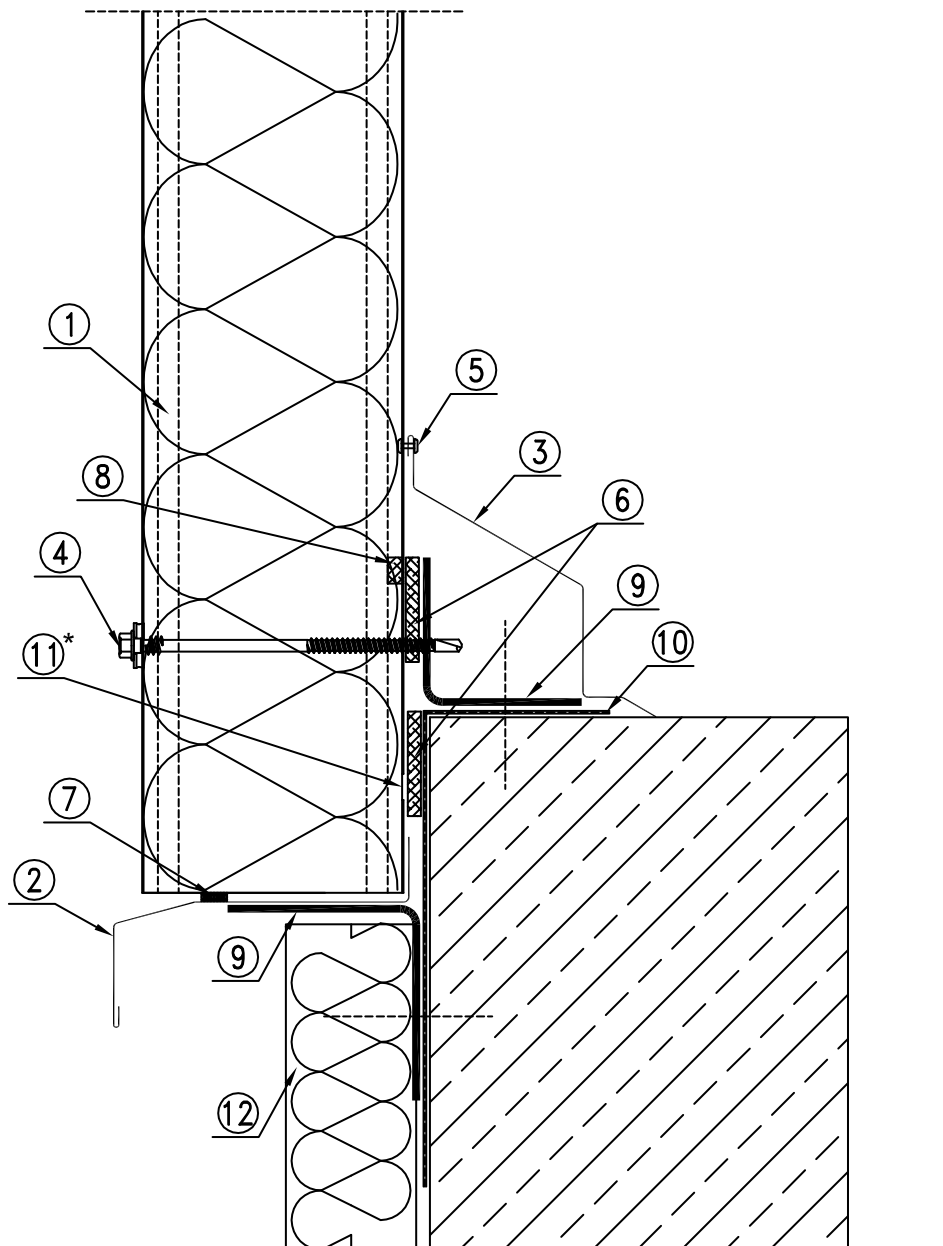
- vertical arrangement of panels



1. MW STANDARD, MW DEFENDER, MW LIGHT sandwich panel
2. OBR100 or individual flashing
3. OBR101 or individual flashing
4. Sandwich panel fastener: LB1 or LB2
5. Self-drilling connector LB6 or blind rivet AL/Fe, approx. every 300 mm
6. PUS 5x40 adhesive sealing tape or equivalent
7. Butyl sealing tape (recommended)
8. Sealing mass in the panel joint
9. Impregnated polyurethane gasket, thickness 20 mm or equivalent
10. Connection angle acc. to the construction design
11. Damp-proof insulation acc. to the architectural design
12. Thermal insulation of ground beam + plastering acc. to the architectural design

1.4. MW-W-ST04

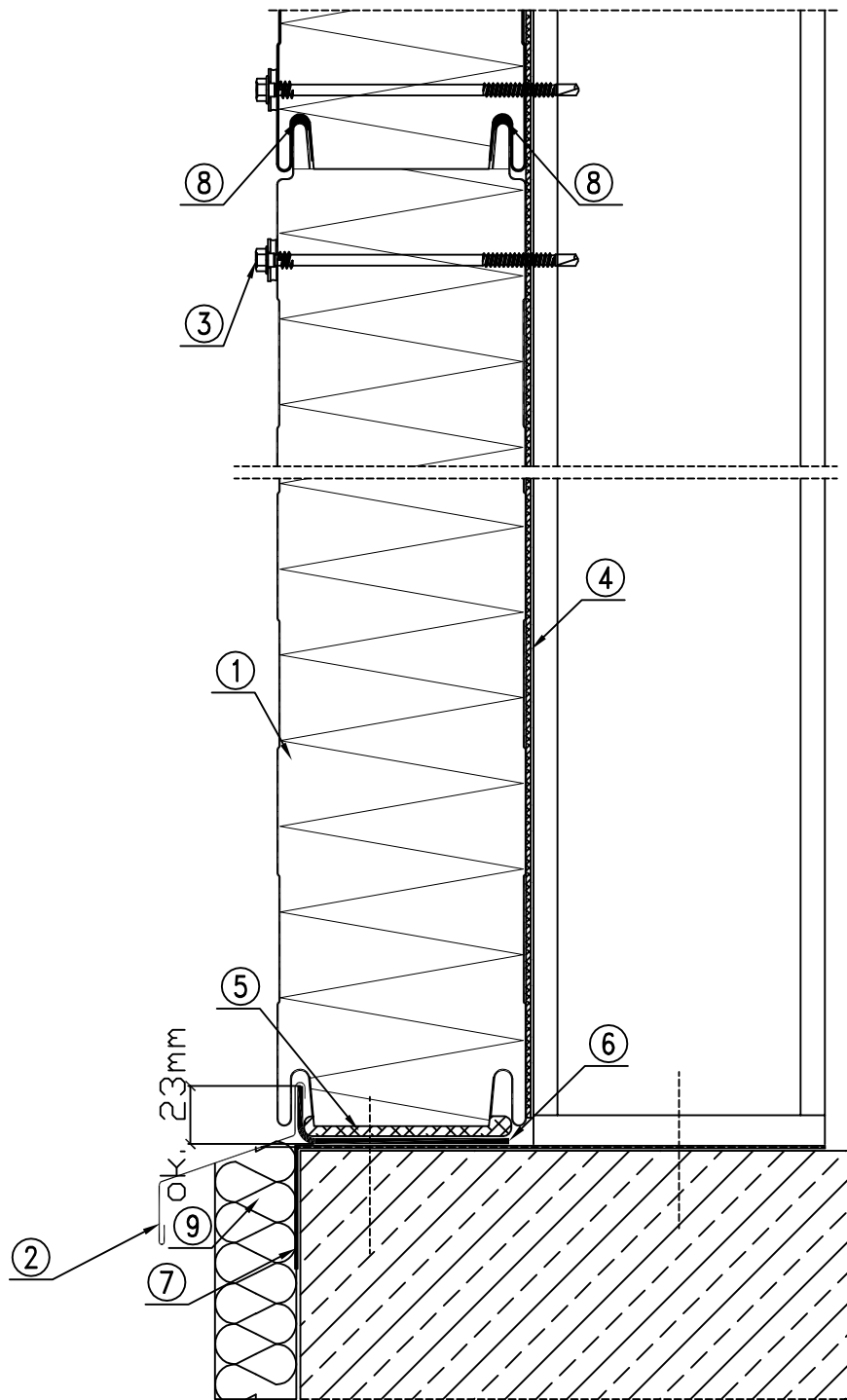
Supporting panels below the upper level of the ground beam or foundation
- vertical arrangement of panels



1. MW STANDARD, MW DEFENDER, MW LIGHT sandwich panel
 2. OBR 100 or individual flashing
 3. OBR 101 or individual flashing
 4. Sandwich panel fastener: LB1 or LB2
 5. Self-drilling connector LB6 or blind rivet AL/Fe, approx. every 300 mm
 6. PUS 5x40 adhesive sealing tape or equivalent
 7. Butyl sealing tape (recommended)
 8. Sealing mass in the panel joint
 9. Connection angle acc. to the construction design
 10. Damp-proof insulation acc. to the architectural design
 11. Cladding with a 10 mm wide gap (throat distance of the support max 300 mm)
 12. Thermal insulation of ground beam + plaster acc. to the architectural design
- * recommended for improving thermal insulation properties

1.5. MW-W-ST05

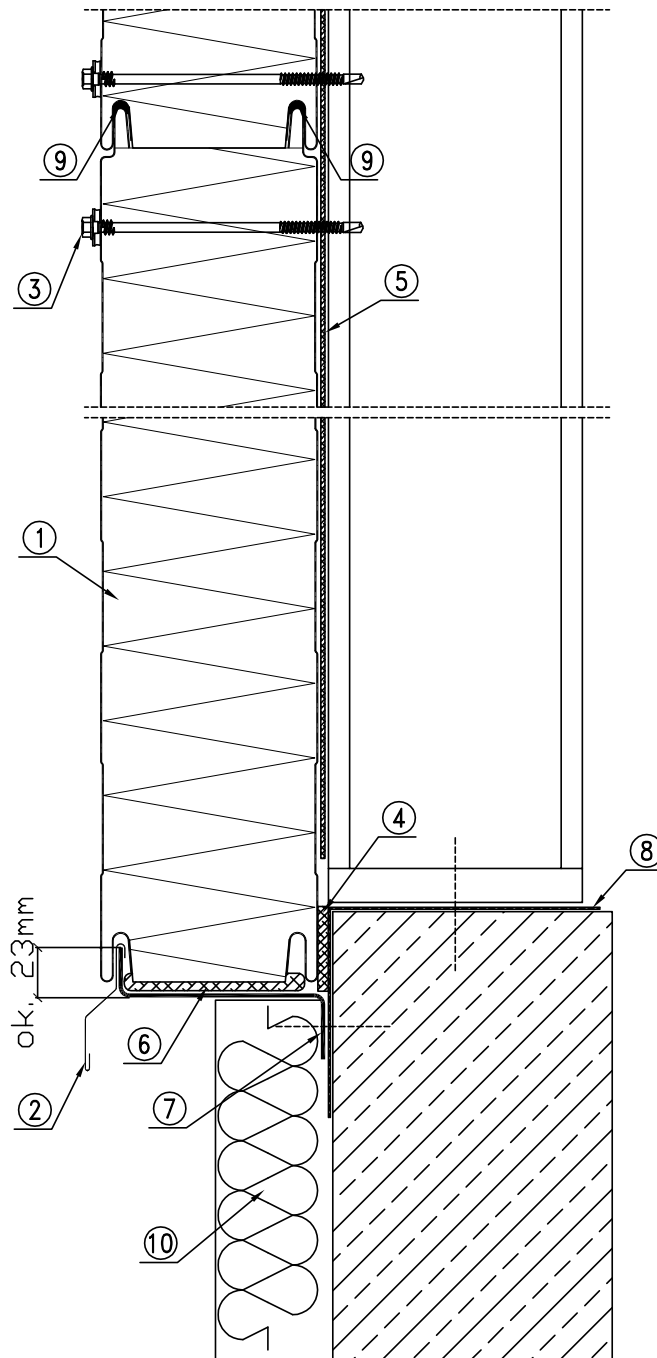
Basing panels on a ground beam or foundation - horizontal arrangement of panels



1. MW STANDARD, MW DEFENDER, MW LIGHT sandwich panel
2. Individual flashing
3. Sandwich panel fastener: LB1 - LB5
4. PES 3x20 adhesive sealing tape (recommended)
5. Impregnated polyurethane gasket; thickness: 20 mm or equivalent
6. Connection angle acc. to the construction design
7. Damp-proof insulation acc. to the architectural design
8. Butyl mass (recommended)
9. Thermal insulation + plastering acc. to the architectural design

1.6. MW-W-ST06

Supporting panels below the upper level of the ground beam or foundation
- horizontal arrangement of panels

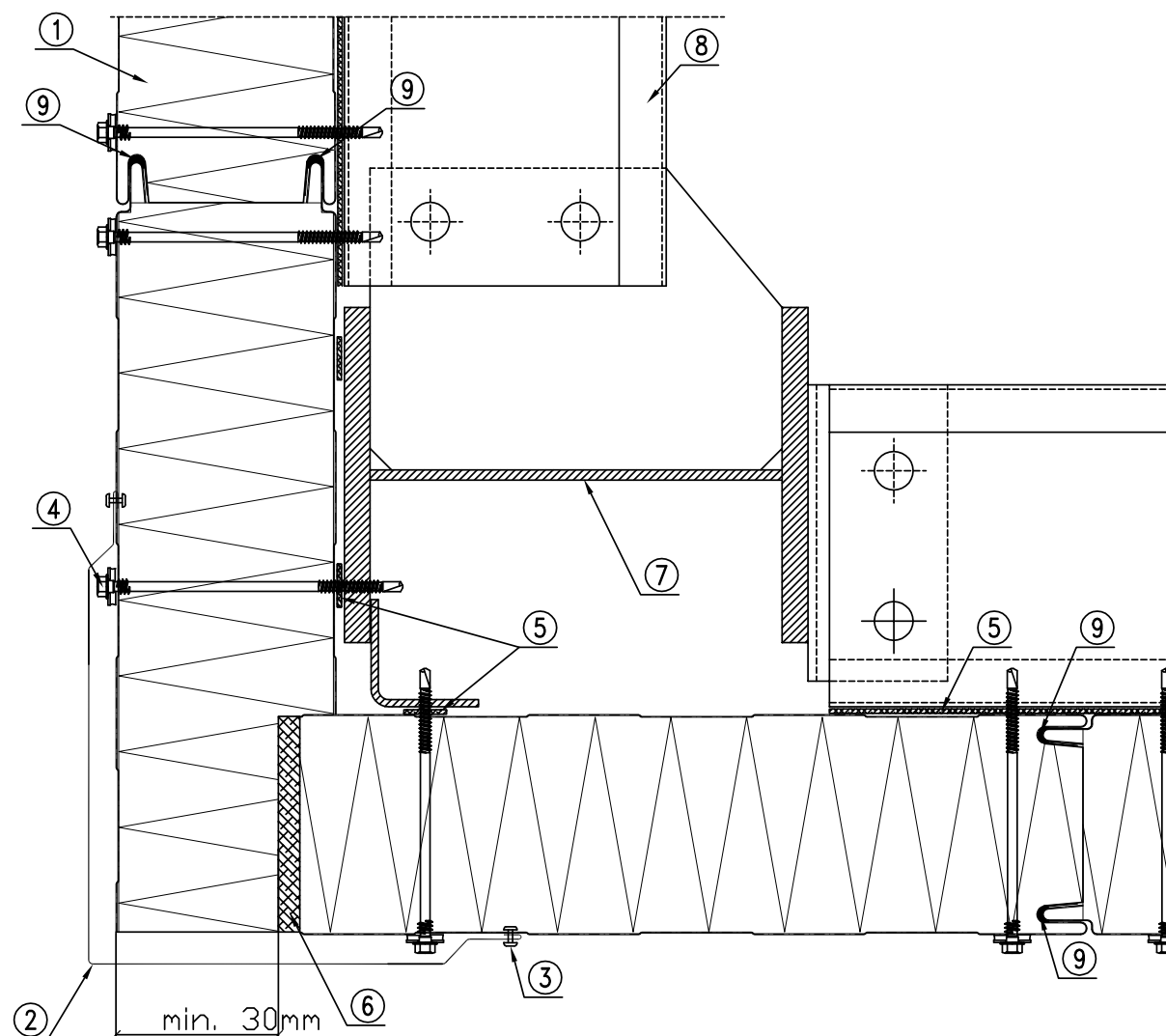


1. MW STANDARD, MW DEFENDER, MW LIGHT sandwich panel
2. OBR102 flashing or individual flashing
3. Sandwich panel fastener: LB1 - LB5
4. PUS 5x40 adhesive sealing tape or equivalent
5. PES 3x20 adhesive sealing tape (recommended) or equivalent
6. Impregnated polyurethane gasket, thickness: 20 mm or equivalent
7. Z-section acc. to the construction design
8. Damp-proof insulation acc. to the architectural design
9. Butyl mass (recommended)
10. Thermal insulation + plastering acc. to the architectural design

1.7. MW-W-ST07

Joining panels in the corner

- vertical arrangement of panels - option I

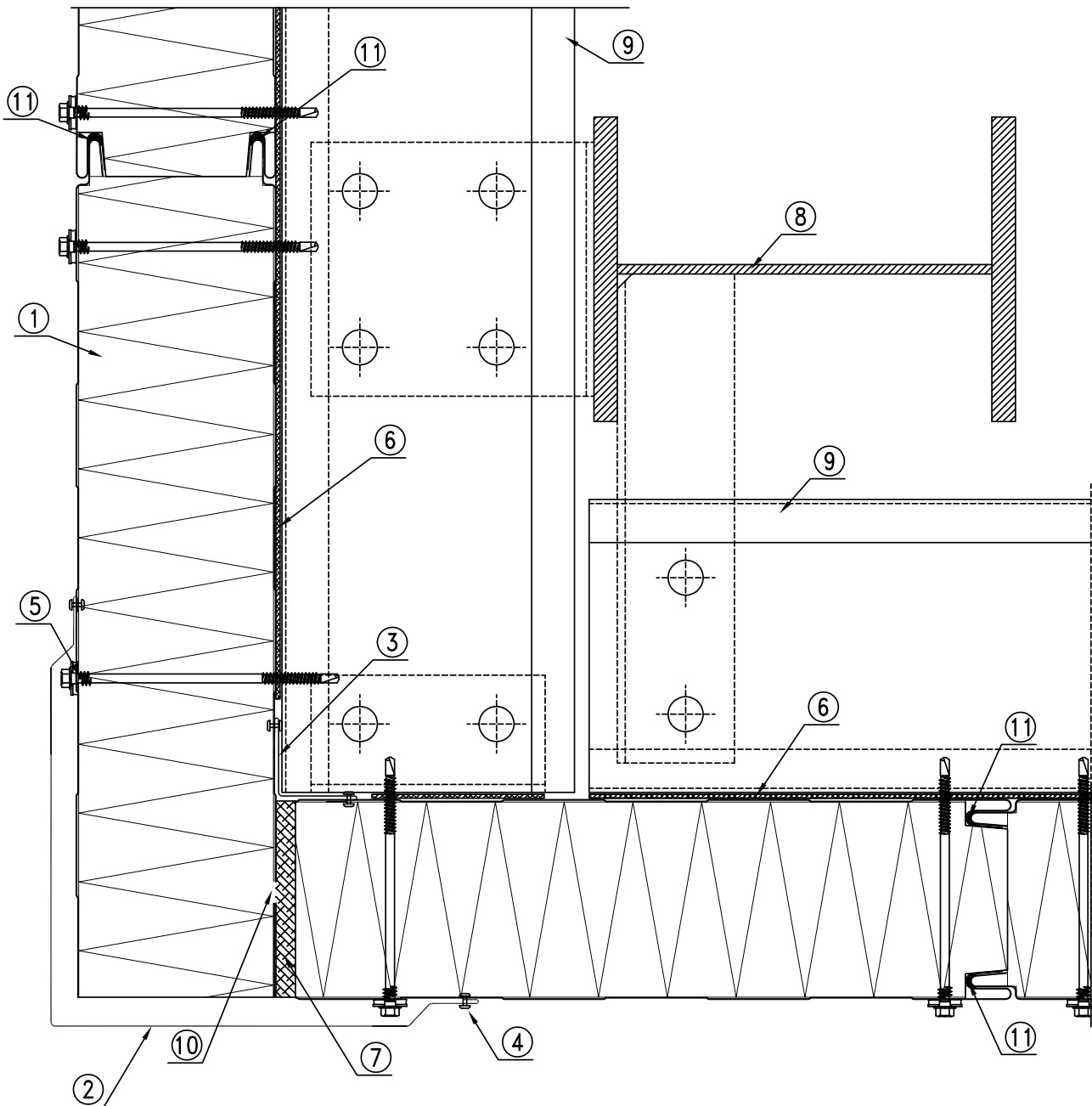


1. MW STANDARD, MW DEFENDER, MW LIGHT sandwich panel
2. OBR103 flashing or individual flashing
3. LB6 self-drilling connector or blind rivet AL/Fe, approx. every 300 mm
4. Sandwich panel fastener: LB1 - LB5
5. PES 3x20 adhesive sealing tape
6. Mineral wool or impregnated polyurethane expandable gasket
7. Steel, reinforced concrete, wooden column + connection angle acc. to the construction design
8. Transom acc. to the construction design
9. Butyl sealing - recommended

1.8. MW-W-ST08

Joining panels in the corner

- vertical arrangement of panels - option II

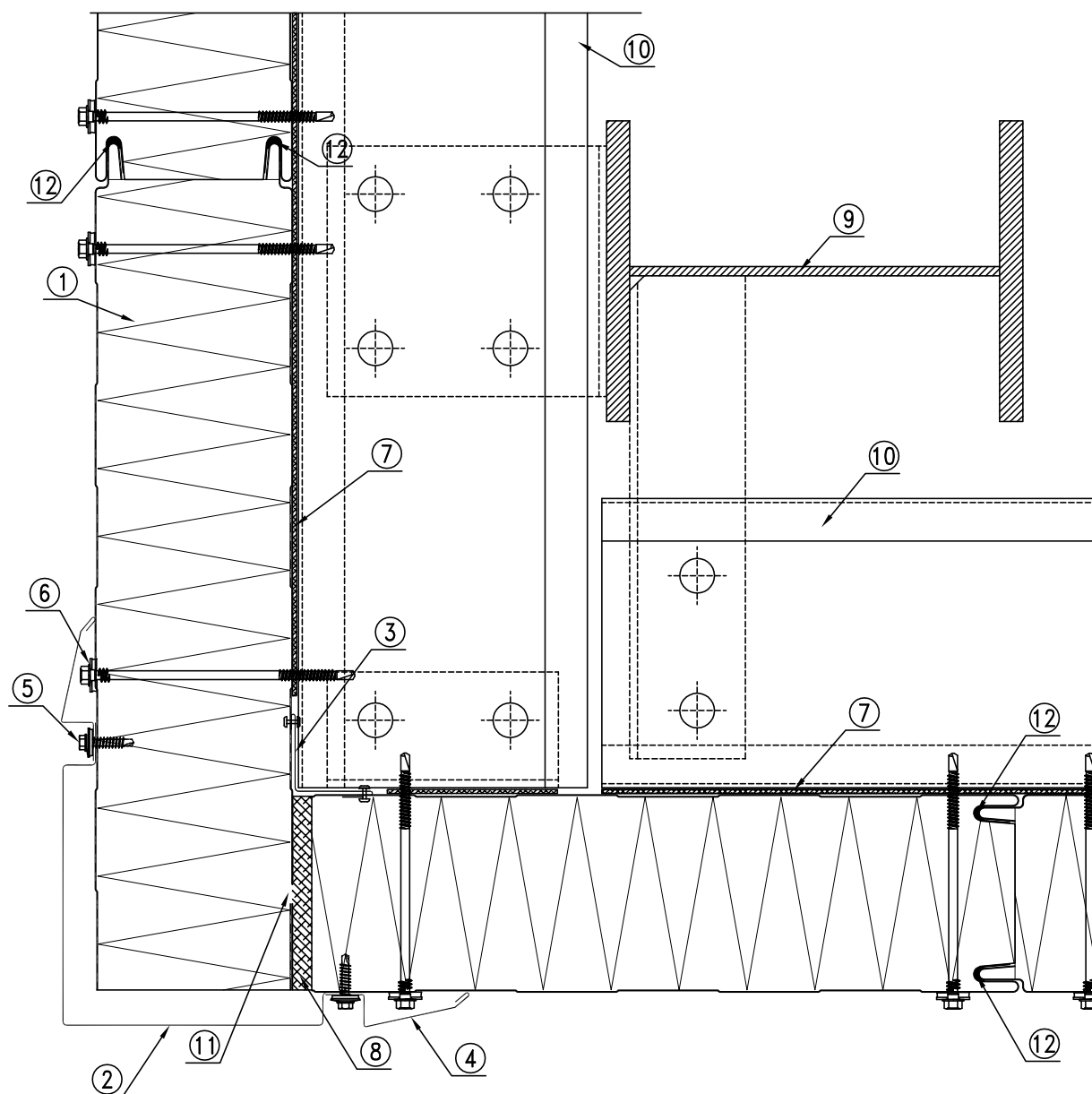


1. MW STANDARD, MW DEFENDER, MW LIGHT sandwich panel
2. OBR103 flashing or individual flashing
3. OBR104 flashing or individual flashing
4. LB6 self-drilling connector or blind rivet AL/Fe, approx. every 300 mm
5. Sandwich panel fastener: LB1 - LB5
6. PES 3x20 adhesive sealing panel (recommended)
7. Mineral wool or impregnated polyurethane expandable gasket
8. Steel, reinforced concrete, wooden column acc. to the construction design
9. Transom acc. to the construction design
10. Cladding with a 10 mm wide gap (recommended for improving thermal insulation parameters)
11. Butyl sealing - recommended

1.9. MW-W-ST09/1

Joining panels in the corner

- vertical arrangement of panels

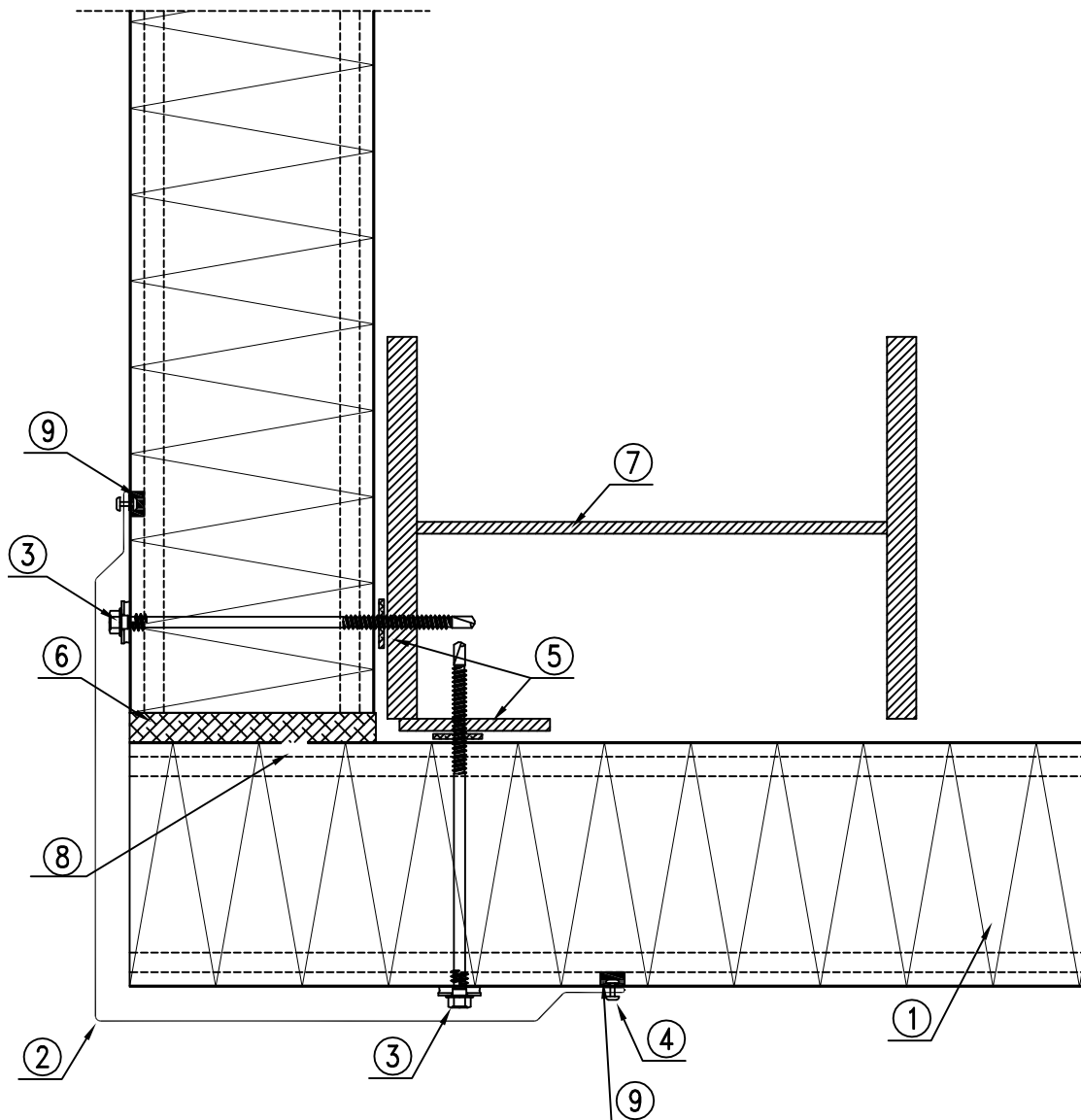


1. MW STANDARD, MW DEFENDER, MW LIGHT sandwich panel
2. OBR113 flashing or individual flashing
3. OBR104 flashing or individual flashing
4. OBR111 flashing or individual flashing
5. LB6 self-drilling connector, approx. every 300 mm
6. Sandwich panel fastener: LB1 - LB5
7. PES 3x20 adhesive sealing tape (recommended)
8. Mineral wool or polyurethane gasket
9. Steel, reinforced concrete, wooden column acc. to the construction design
10. Transom acc. to the construction design
11. Cladding with a 10 mm wide gap for improving thermal insulation parameters
12. Butyl sealing - recommended

1.10. MW-W-ST09/2

Connecting panels in the corner

- horizontal arrangement of panels

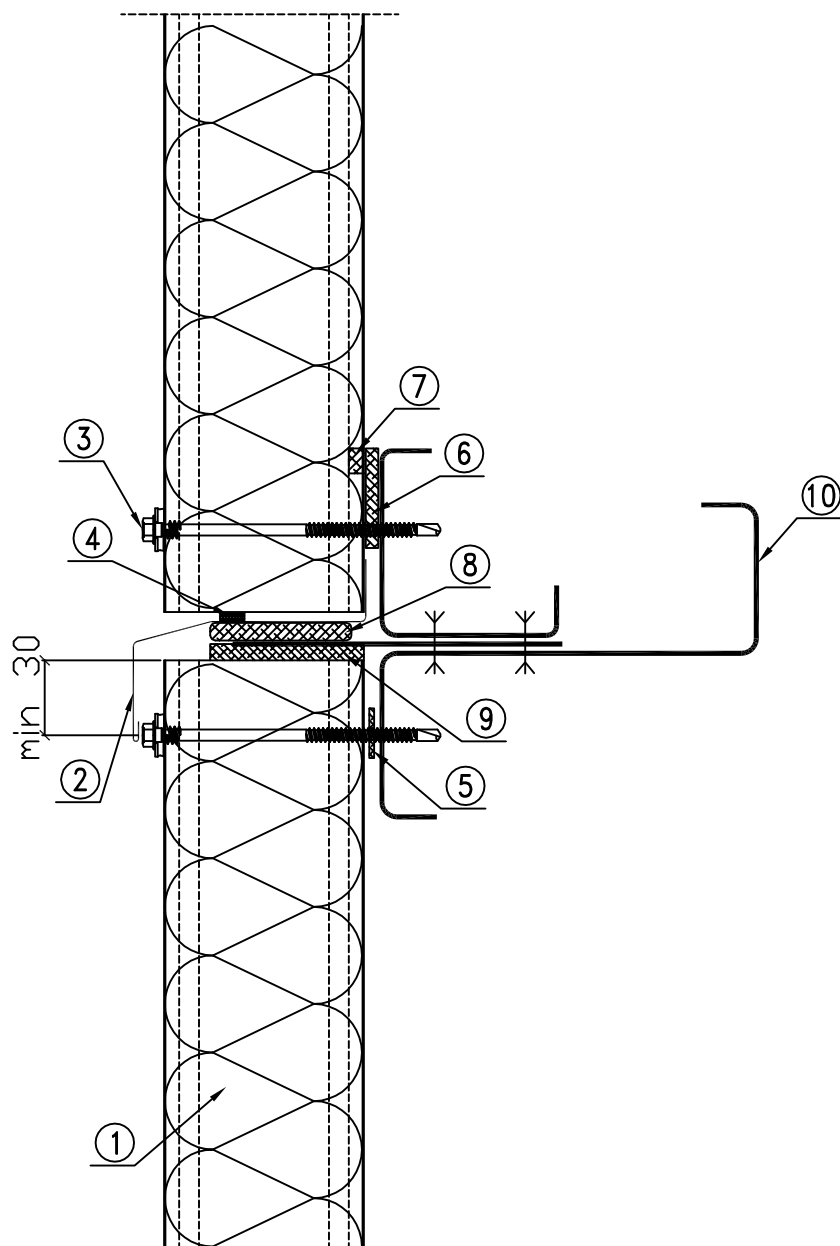


1. MW STANDARD, MW DEFENDER, MW LIGHT sandwich panel
2. OBR103 flashing or individual flashing
3. Sandwich panel fastener: LB1 - LB5
4. LB6 self-drilling connector or blind rivet AL/Fe, approx. every 300 mm
5. PES 3x20 adhesive sealing tape (recommended)
6. Mineral wool or expandable polyurethane gasket
7. Steel, reinforced concrete, wooden column + flat bar acc. to the construction design
8. Cladding with a 10 mm wide gap (recommended for improving thermal insulation parameters)
9. Butyl mass - recommended

1.11. MW-W-ST10

Joining panels lengthwise

- vertical arrangement of panels

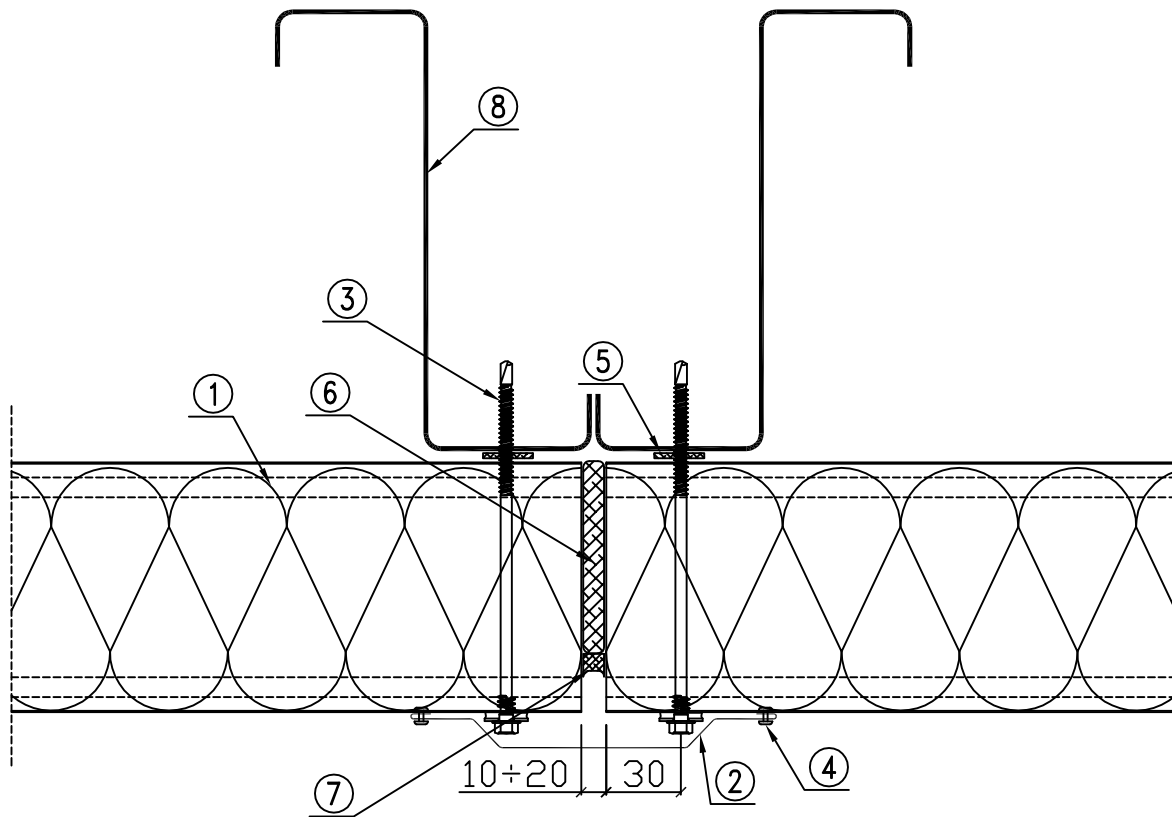


1. MW STANDARD, MW DEFENDER, MW LIGHT sandwich panel
2. OBR100 flashing or individual flashing
3. Sandwich panel fastener: LB1 - LB5
4. Butyl sealing tape (recommended)
5. PES 3x20 adhesive sealing tape (recommended) or equivalent
6. PUS 5x40 adhesive sealing tape or equivalent
7. Sealing mass in panel joint
8. Impregnated polyurethane joint, thickness: 20 mm or equivalent
9. Mineral wool
10. Transom+ angle connector and flat bar acc. to the construction design

1.12. MW-W-ST11/1

Fastening panel to the end support

- horizontal arrangement of panels - option I

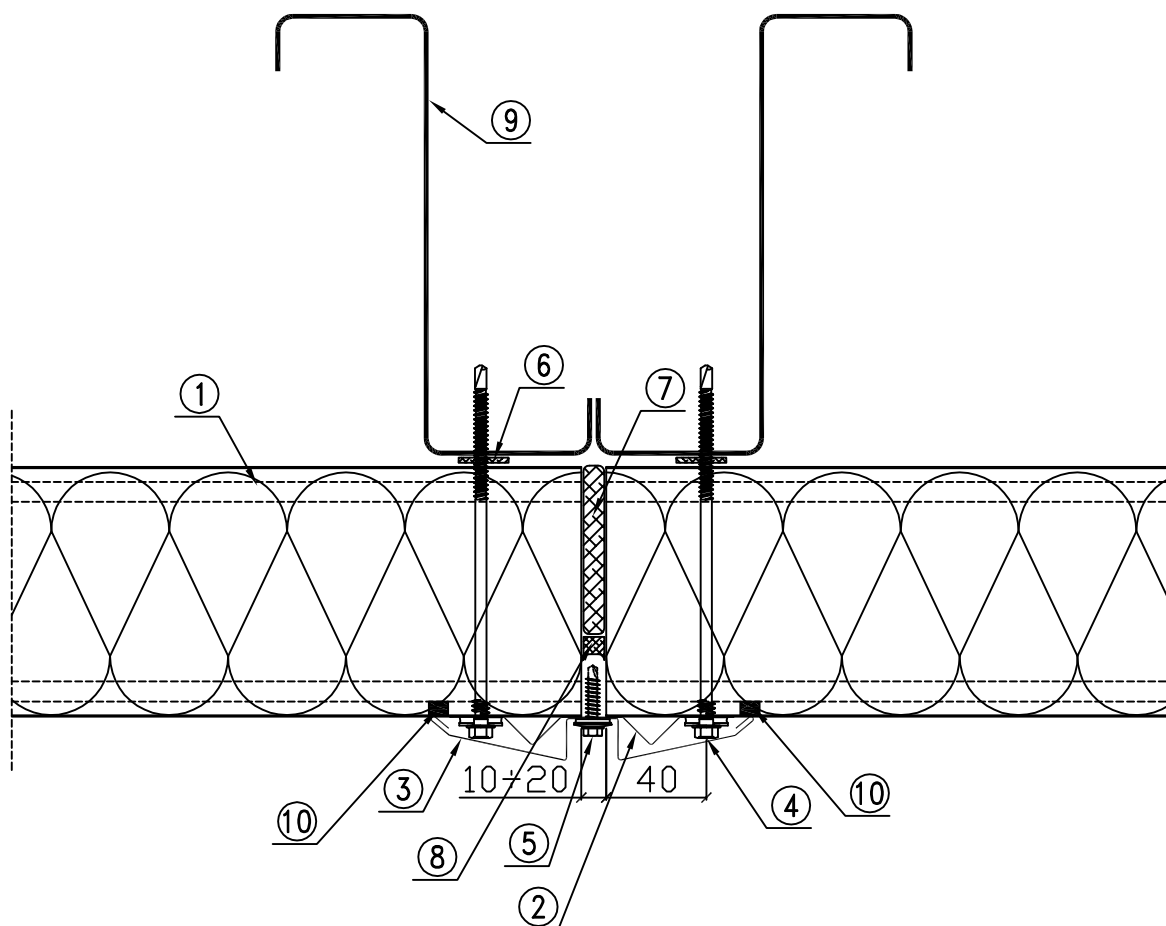


1. MW STANDARD, MW DEFENDER, MW LIGHT sandwich panel
2. OBR105 flashing or individual flashing
3. Sandwich panel fastener: LB1 - LB5
4. Blind rivet AL/Fe or self-drilling connector LB6 approx. every 300 mm
5. PES 3x20 adhesive sealing tape (recommended) or equivalent
6. Impregnated polyurethane expandable gasket or mineral wool
7. Impregnated polyurethane expandable tape 10x4 (20) or equivalent
8. Bearing column acc. to the construction design

1.13. MW-W-ST11/2

Fastening panels to the end support

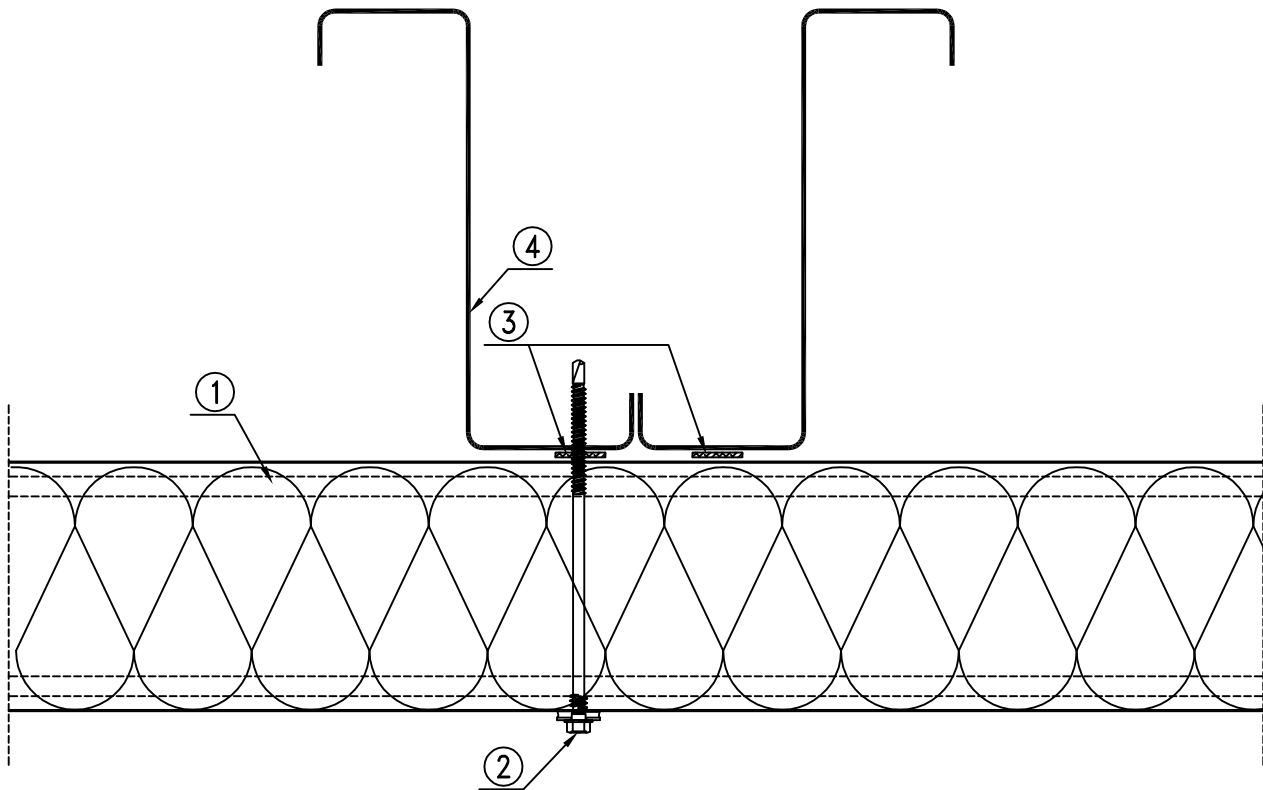
- horizontal arrangement of panels - option II



1. MW STANDARD, MW DEFENDER, MW LIGHT sandwich panel
2. OBR110 flashing (holes for fasteners item 4 should be made during assembly)
3. OBR111 flashing
4. Sandwich panel fastener: LB1 - LB5
5. ŁB6 self-drilling connector approx. every 300 mm
6. PES 3x20 adhesive sealing tape (recommended) or equivalent
7. Impregnated polyurethane expandable gasket or mineral wool
8. Illmod expandable gasket (recommended)
9. Bearing column acc. to the construction design
10. Butyl mass - recommended

1.14. MW-W-ST12

Fastening the panel to the in-between support
- horizontal arrangement of panels

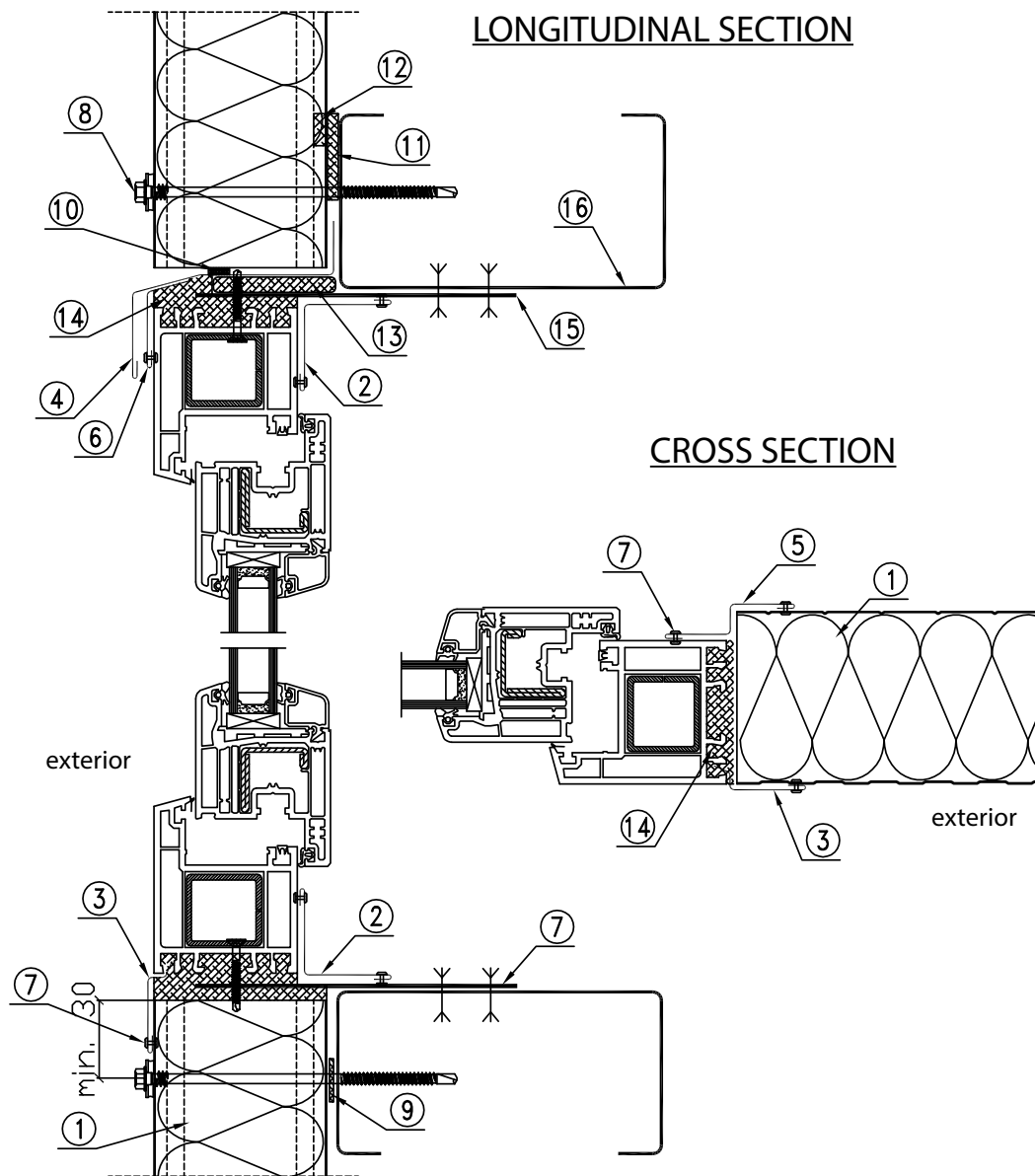


1. MW STANDARD, MW DEFENDER, MW LIGHT sandwich panel
2. LB 1 - LB 5 fasteners for fastening sandwich panels
3. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
4. Bearing post according to the structural design

1.15. MW-W-ST13

Joining panels with window strip

- vertical arrangement of panels - option I

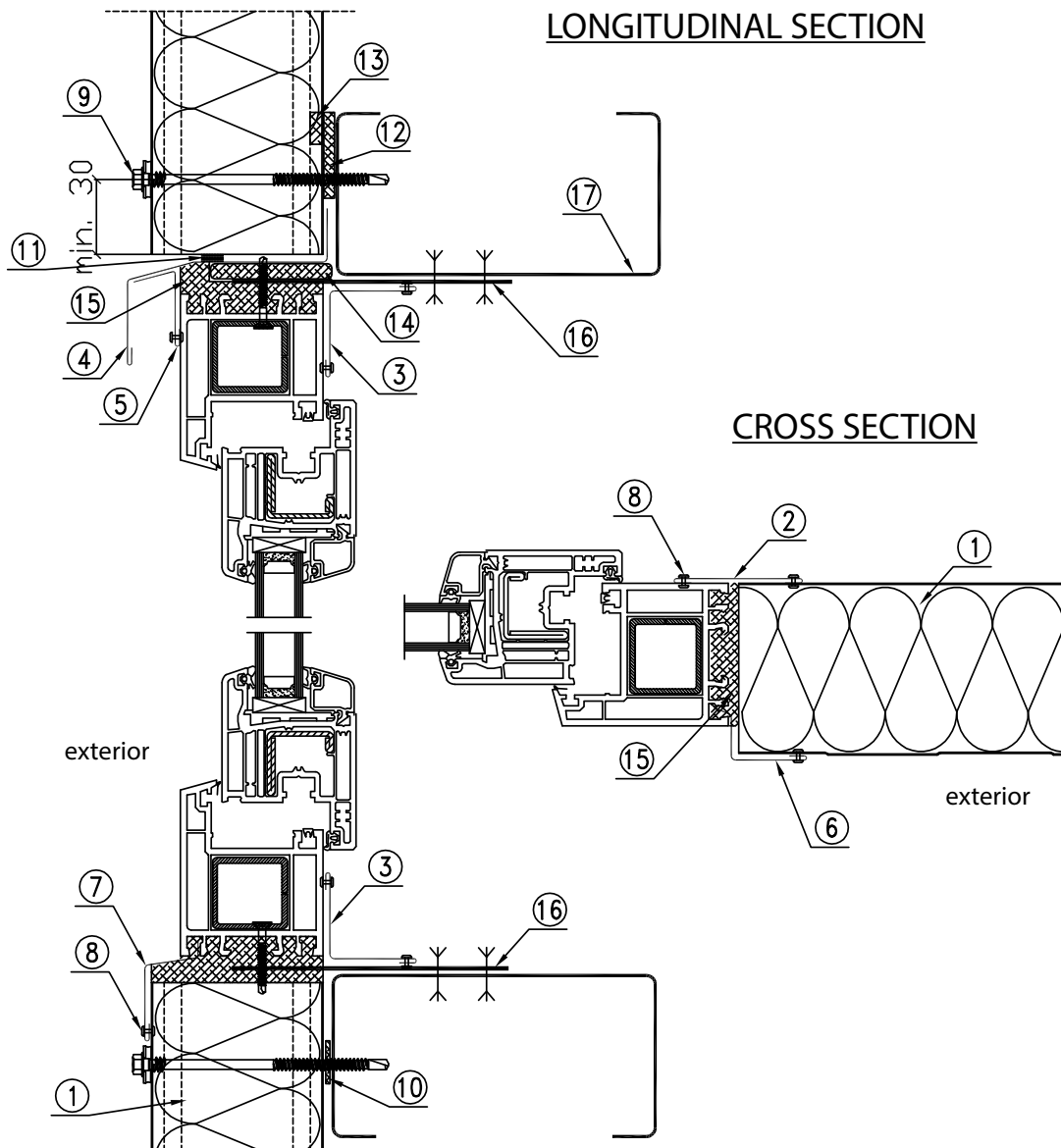


1. MW STANDARD, MW DEFENDER, MW LIGHT sandwich panel
2. OBR 104 flashing or individual flashing
3. OBR 106 flashing or individual flashing
4. OBR 100 flashing or individual flashing
5. Individual flashing
6. Individual flashing
7. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm
8. LB 1- LB 5 fasteners for fastening sandwich panels
9. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
10. Butyl sealing tape (recommended)
11. PUS 5x40 self-adhesive sealing tape or equivalent
12. Sealing compound in the panel joint area
13. Impregnated polyurethane gasket 10 mm thick or equivalent
14. Mineral wool
15. Flat bar for fastening a window
16. Bearing lock acc. to the construction design

1.16. MW-W-ST14

Joining panels with window strip

- vertical arrangement of panels - option II

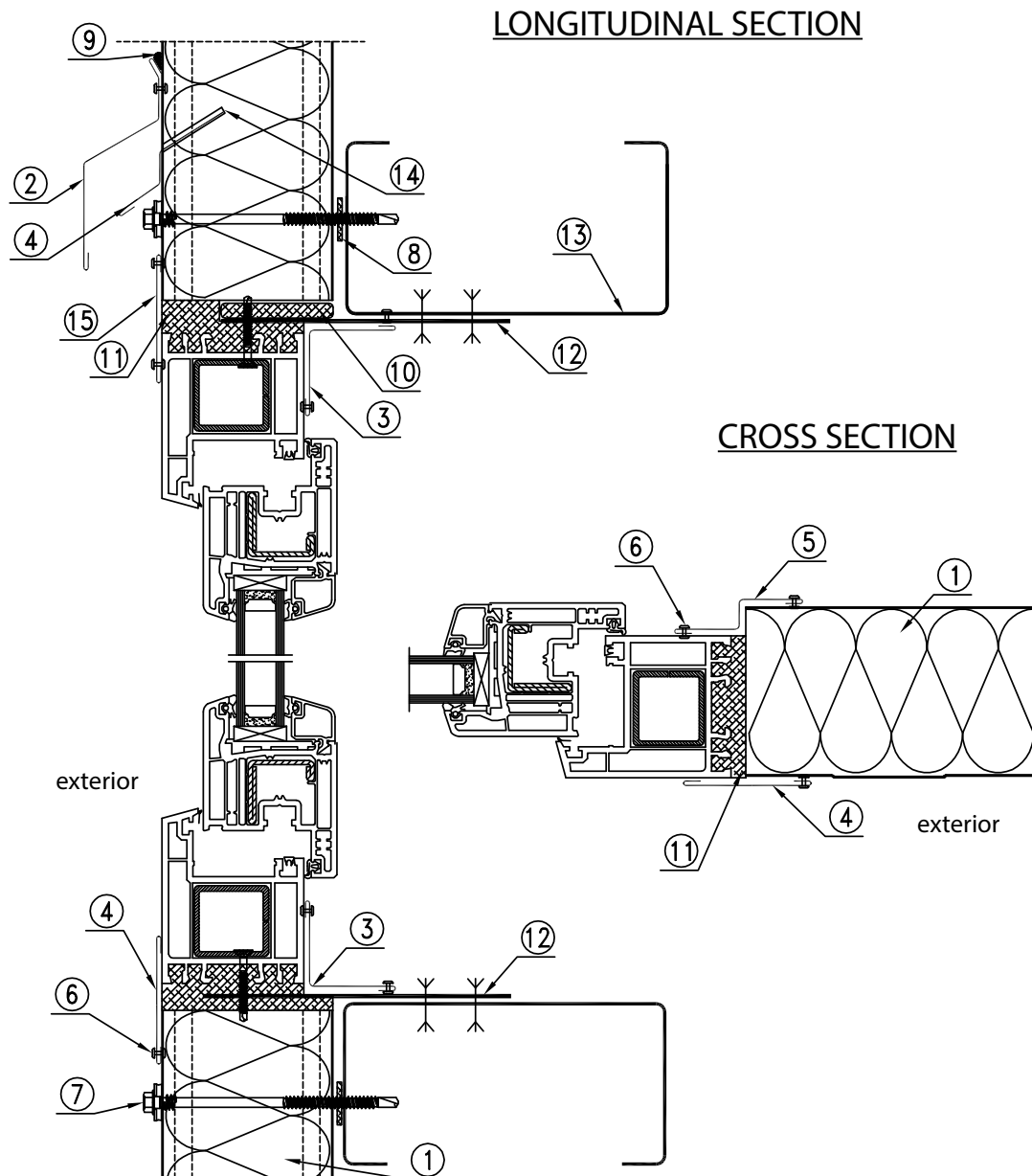


1. MW STANDARD, MW DEFENDER, MW LIGHT sandwich panel
2. OBR 106 flashing or individual flashing
3. OBR 104 flashing or individual flashing
4. OBR 100 flashing or individual flashing
5. Individual flashing
6. Individual flashing
7. Individual flashing
8. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm
9. LB 1- LB 5 fasteners for fastening sandwich panels
10. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
11. Butyl sealing tape (recommended)
12. PUS 5x40 self-adhesive sealing tape or equivalent
13. Sealing compound in the panel joint area
14. Impregnated polyurethane gasket 10 mm thick or equivalent
15. Mineral wool
16. Flat bar for fastening a window
17. Bearing lock acc. to the construction design

1.17. MW-W-ST15

Joining panels with window strip

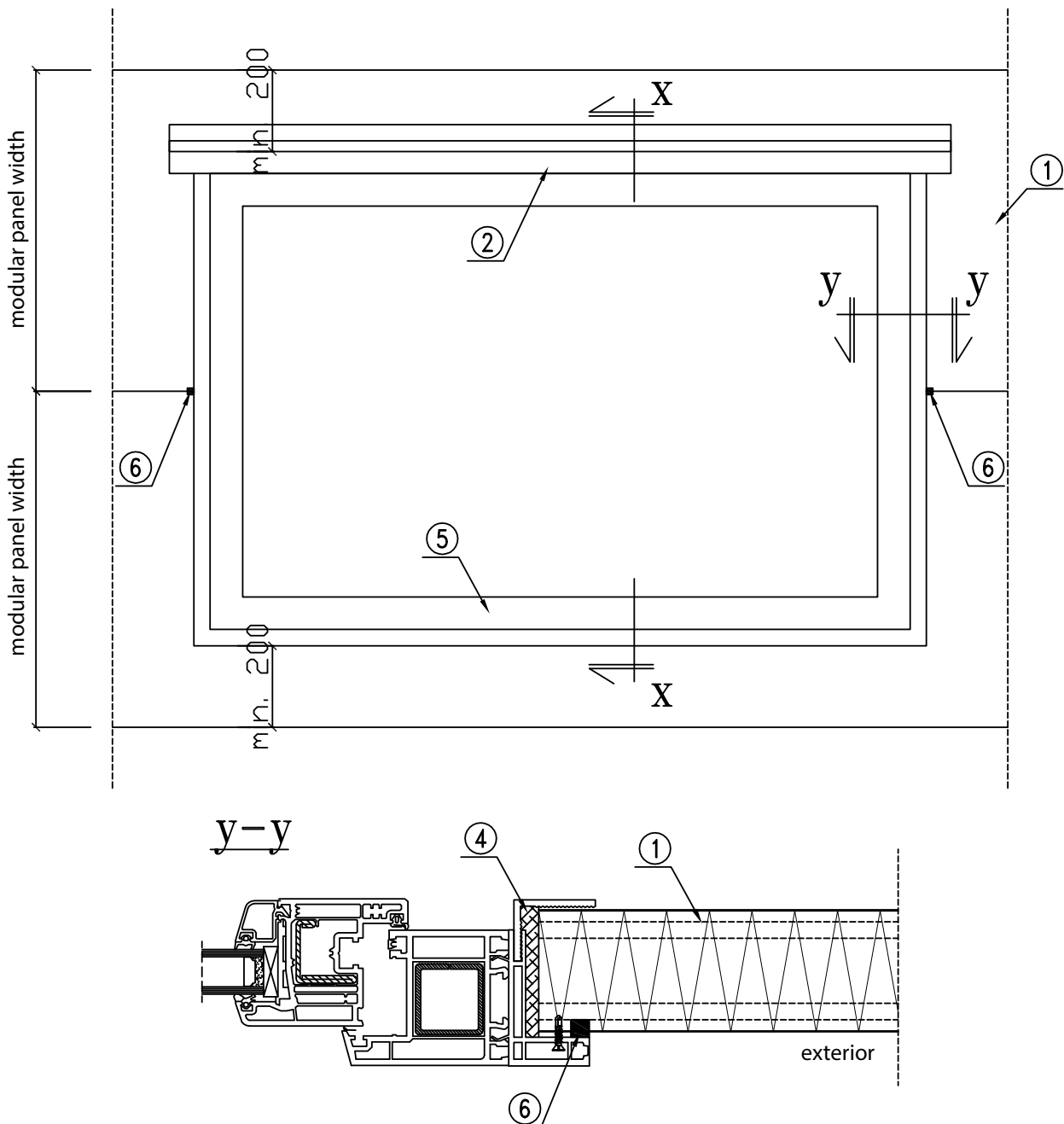
- vertical arrangement of panels - option III



1. MW STANDARD, MW DEFENDER, MW LIGHT sandwich panel
2. OBR 107 flashing or individual flashing
3. OBR 104 flashing or individual flashing
4. Individual flashing (cut a groove in foam)
5. Individual flashing
6. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm
7. LB 1- LB 5 fasteners for fastening sandwich panels
8. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
9. Butyl sealing tape (recommended)
10. Impregnated polyurethane gasket 10 mm thick or equivalent
11. Mineral wool
12. Flat bar for fastening a window
13. Bearing lock acc. to the construction design
14. Indent at panel joint
15. Individual flashing

1.18. MW-W-ST16/1

Joining panels with PVC windows
- vertical arrangement of panels

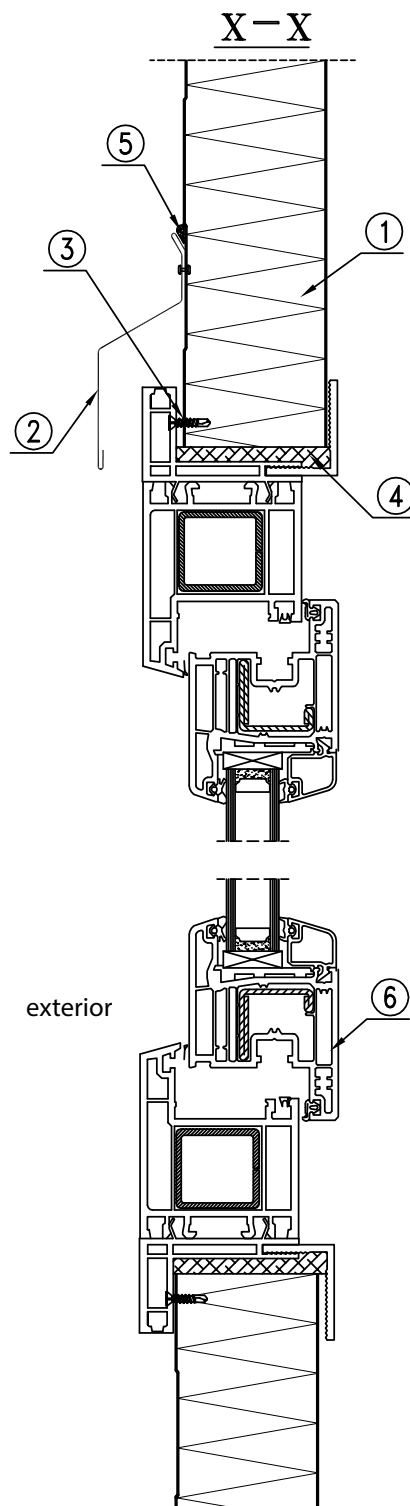


1. MW STANDARD, MW DEFENDER, MW LIGHT sandwich panel
2. OBR 107 or individual flashing
4. Impregnated polyurethane gasket or mineral wool
5. PVC window
6. Permanently flexible compound in the lock under the window's assembly profile

1.19. MW-W-ST16/2

Joining panels with PCV windows

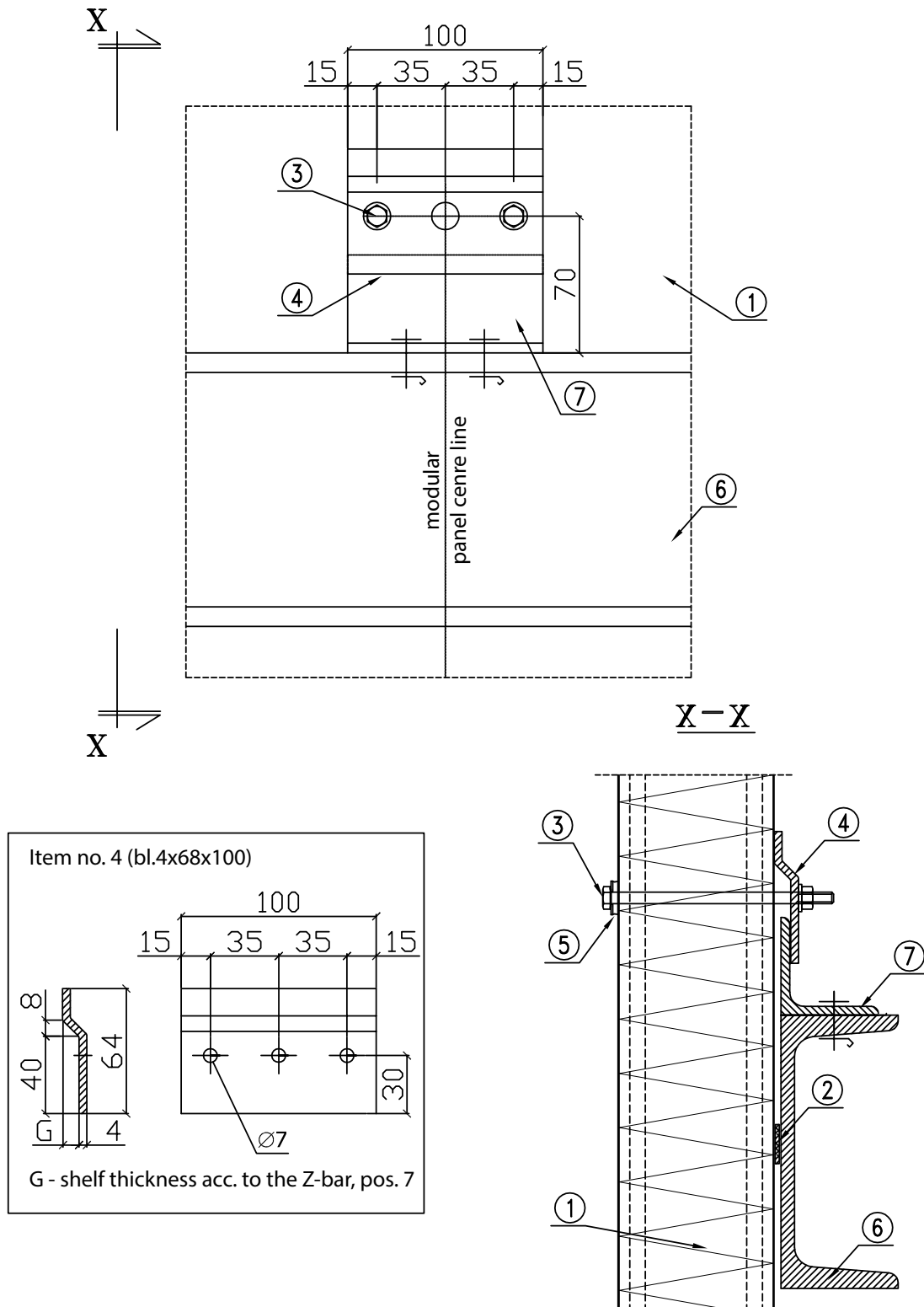
- vertical or horizontal arrangement of panels



1. MW STANDARD, MW DEFENDER, MW LIGHT sandwich panel
2. OBR 107 or individual flashing
3. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm
4. Impregnated polyurethane gasket or mineral wool
5. Sealing compound
6. PVC window

1.20. MW-W-ST17

Fastening panels - sliding connection, recommended for dark colours of facades
- vertical arrangement of panels

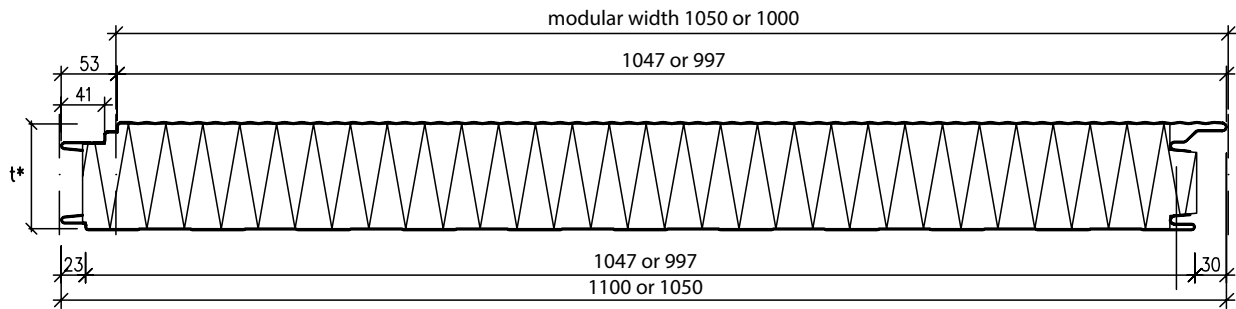


1. MW STANDARD sandwich panel
2. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
3. M6 screw with a self-locking nut
4. Steel washer (sheet 4x68x100) - individual
5. Washer with cured EPDM (recommended T19/3/6,7 SFS)
6. Transom acc. to the construction design
7. Angle acc. to the construction design

2. MW PLUS SANDWICH PANELS

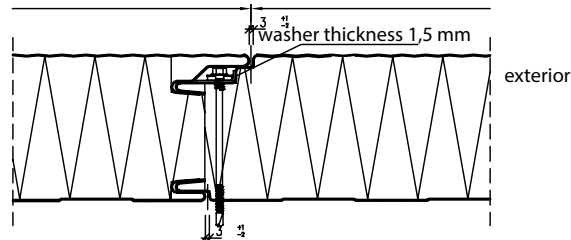
2.1. MW-W-PL01

MW PLUS sandwich panel - joint, profile types

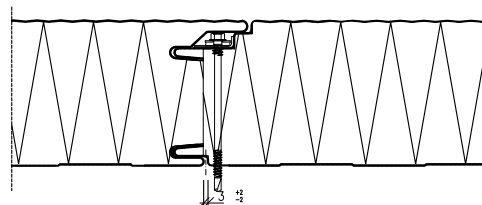


*Range of panel thicknesses $t = 80; 100; 120; 130; 140; 150; 160; 180; 200$ [mm]

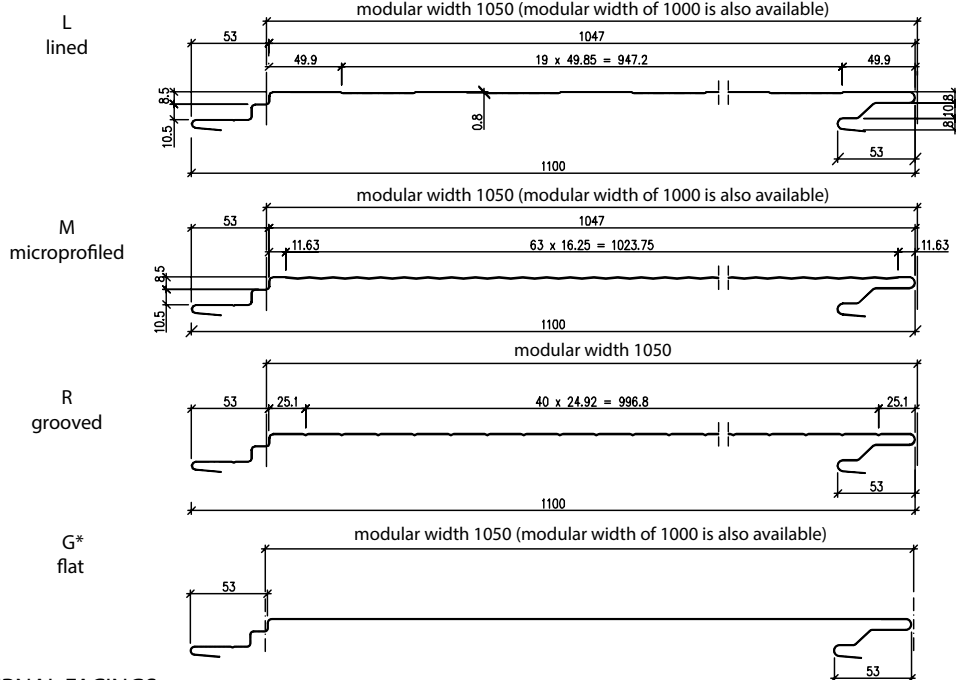
Panel joint



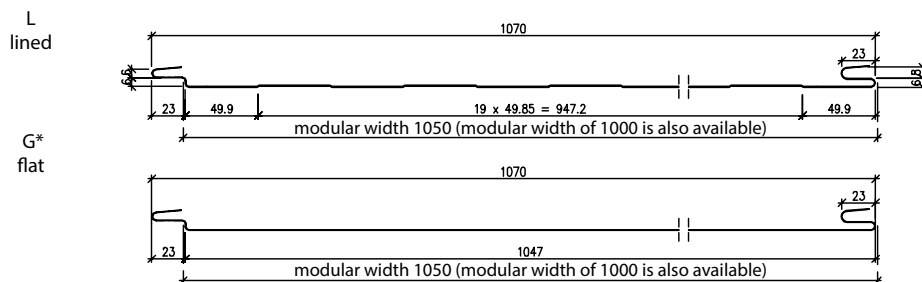
Panel joint with gasket (option)



EXTERNAL FACINGS:



INTERNAL FACINGS:

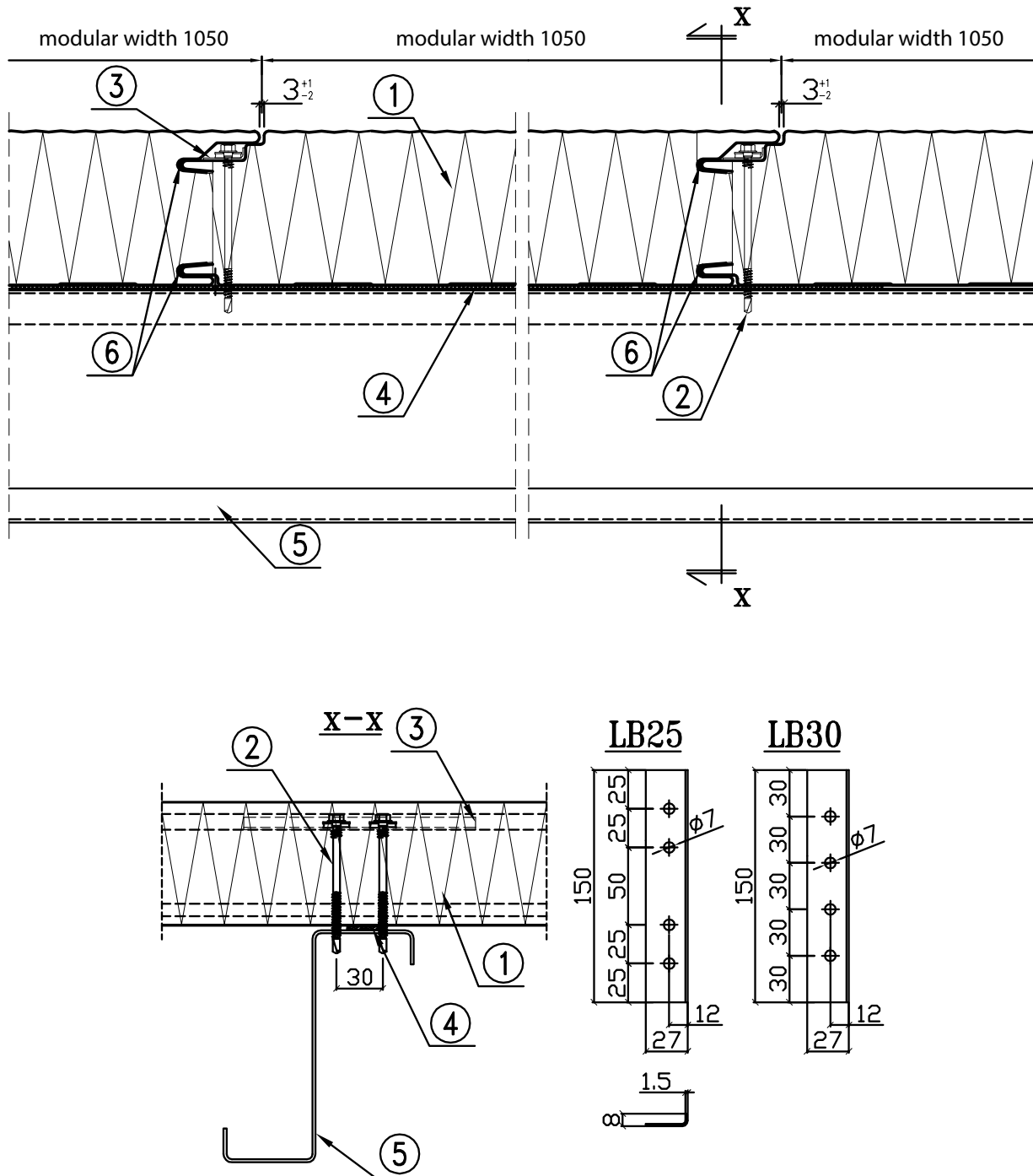


* Available only for the cladding thickness $> 0,5$ mm

2.2. MW-W-PL02

Fastening panels

- vertical arrangement of panels

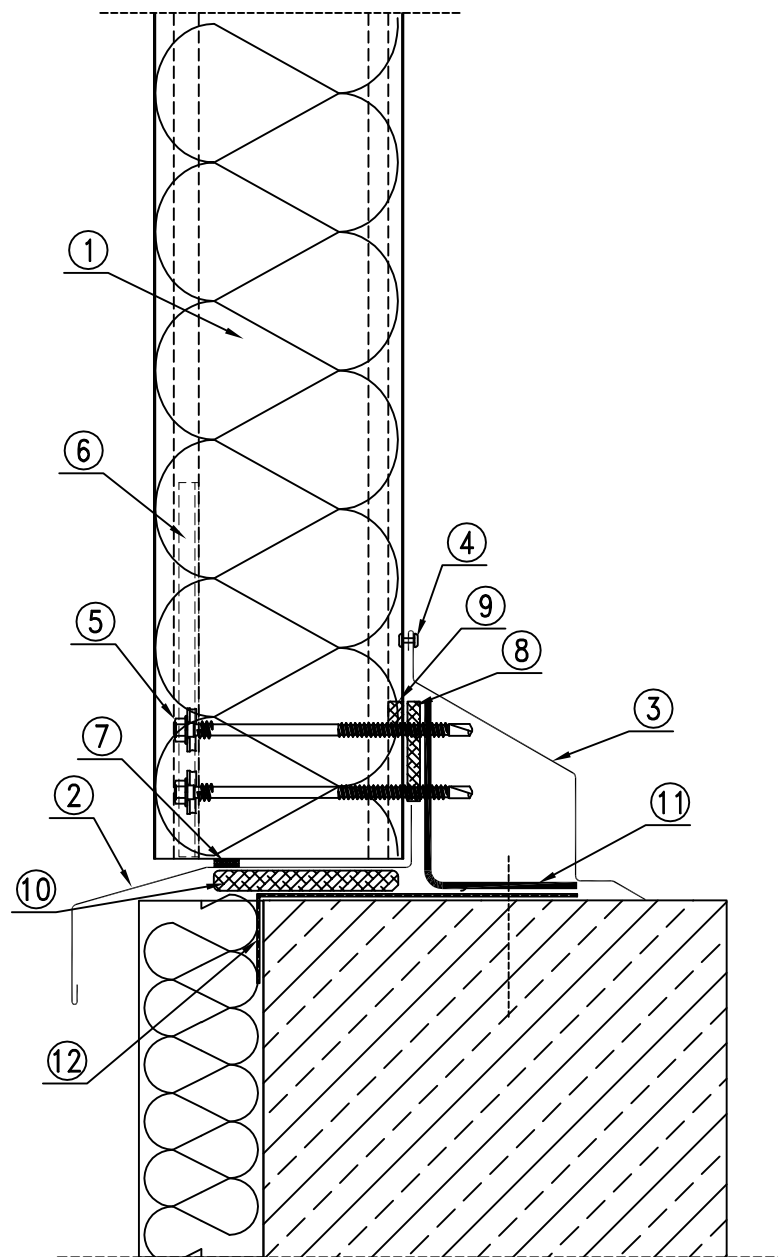


1. MW PLUS sandwich panel
2. LB 1- LB 5 fasteners for fastening sandwich panels
3. LB25 or LB 30 system steel washer
4. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
5. Steel bolt: cold-bent or hot-rolled, wooden etc. acc. to the construction design
6. Butyl sealing - recommended

2.3. MW-W-PL03

Basing panels on a ground beam or foundation

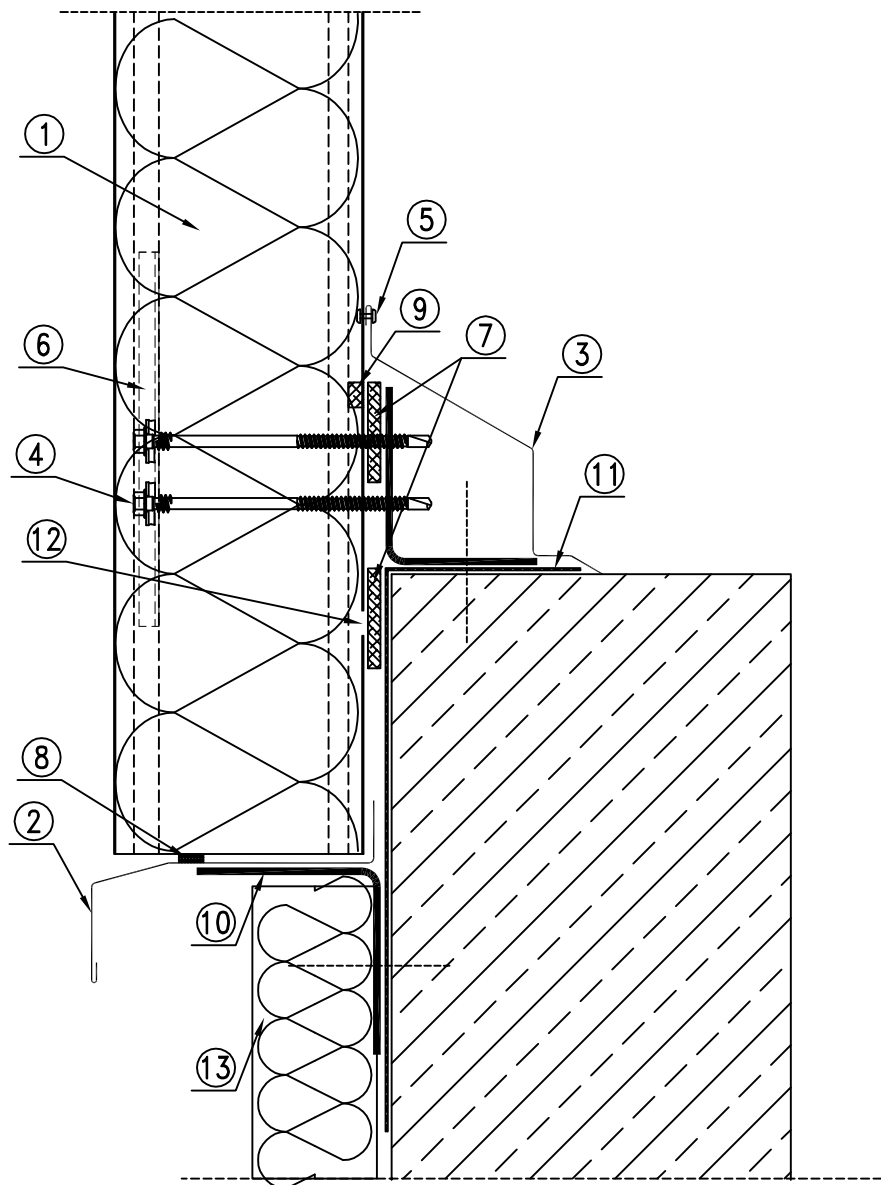
- vertical arrangement of panels



1. MW PLUS sandwich panel
2. OBR 100 flashing or individual flashing
3. OBR 101 flashing or individual flashing
4. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm
5. LB 1 or LB 2 fastener for fastening sandwich panels
6. LB 25 steel washer under fasteners
7. Butyl sealing tape (recommended)
8. PUS 5x40 self-adhesive sealing tape or equivalent
9. Sealing compound in the panel joint area
10. Impregnated polyurethane gasket 20 mm thick or equivalent
11. Angle acc. to the construction design
12. Dampproof insulation according to the architectural design
13. Thermal insulation + plastering according to the architectural design

2.4. MW-W-PL04

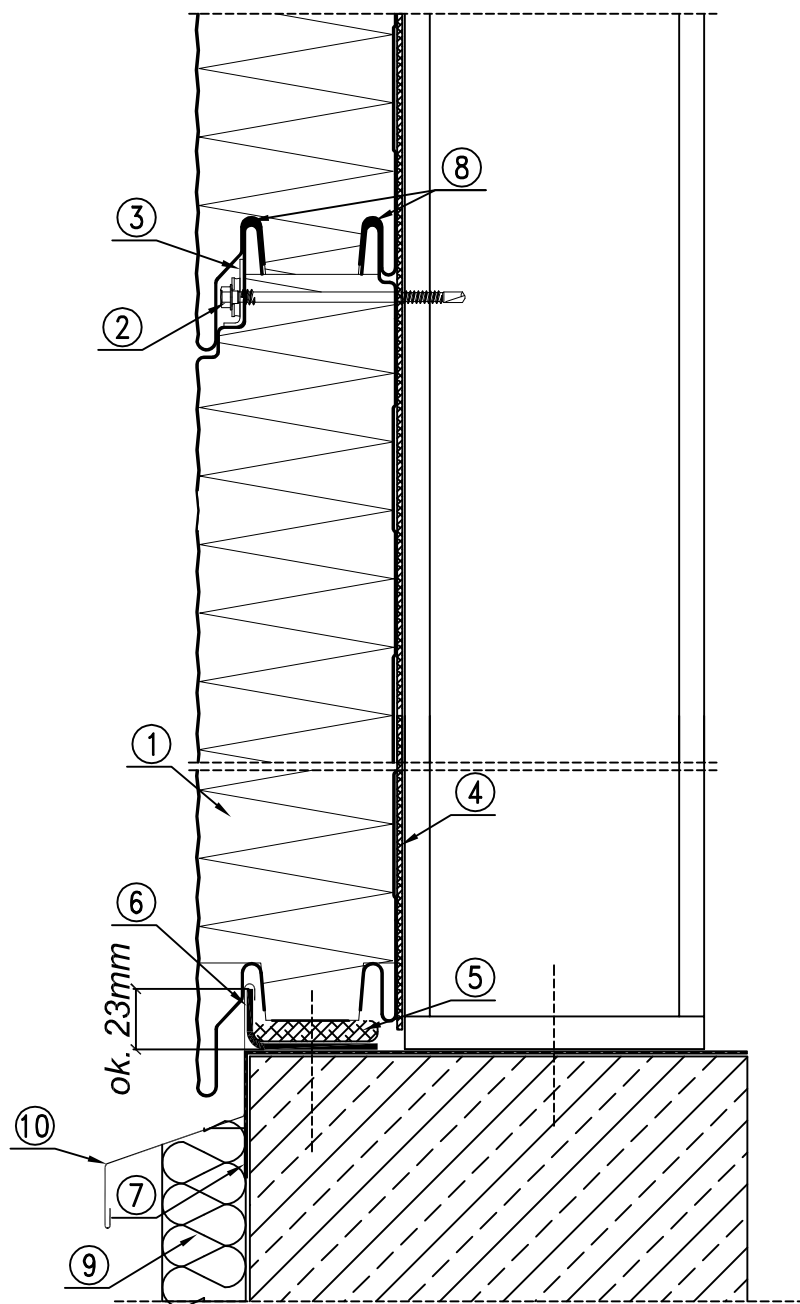
Supporting the panels below the upper level of the ground beam or foundation
- vertical arrangement of the panels



1. MW PLUS sandwich panel
2. OBR 100 flashing or individual flashing
3. OBR 101 flashing or individual flashing
4. LB 1 or LB 2 fastener for fastening BALEXTHERM panels
5. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm
6. LB 25 steel washer under fasteners
7. PUS 5x40 self-adhesive sealing tape or equivalent
8. Butyl sealing tape (recommended)
9. Sealing compound in the panel joint area
10. Angle acc. to the construction design
11. Dampproof insulation according to the architectural design
12. Ground beam thermal insulation + plastering acc. to the architectural design
- * recommended for improving thermal insulation dla properties
13. Thermal insulation + plastering acc. to the architectural design

2.5. MW-W-PL05

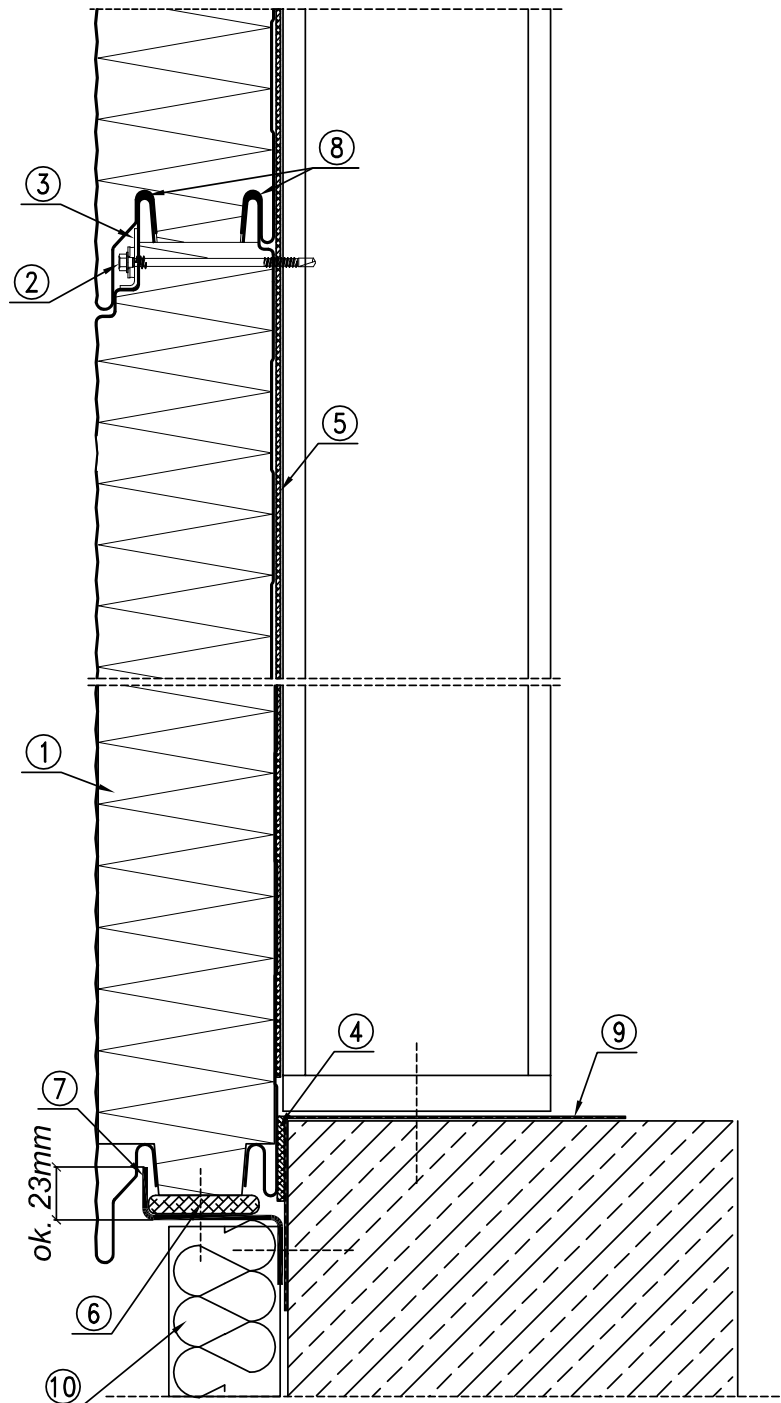
Supporting panels below the upper level of the ground beam or foundation
- horizontal arrangement of panels



1. MW PLUS sandwich panel
2. LB 1- LB 5 fasteners for fastening sandwich panels
3. LB 25 steel washer under fasteners
4. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
5. Impregnated polyurethane gasket 20mm thick or equivalent
6. Angle acc. to the construction design
7. Dampproof insulation according to the architectural design
8. Thermal insulation + plastering according to the architectural design
9. Individual flashing
10. Individual flashing

2.6. MW-W-PL06

Supporting panels below the upper level of the ground beam or foundation
- horizontal arrangement of panels

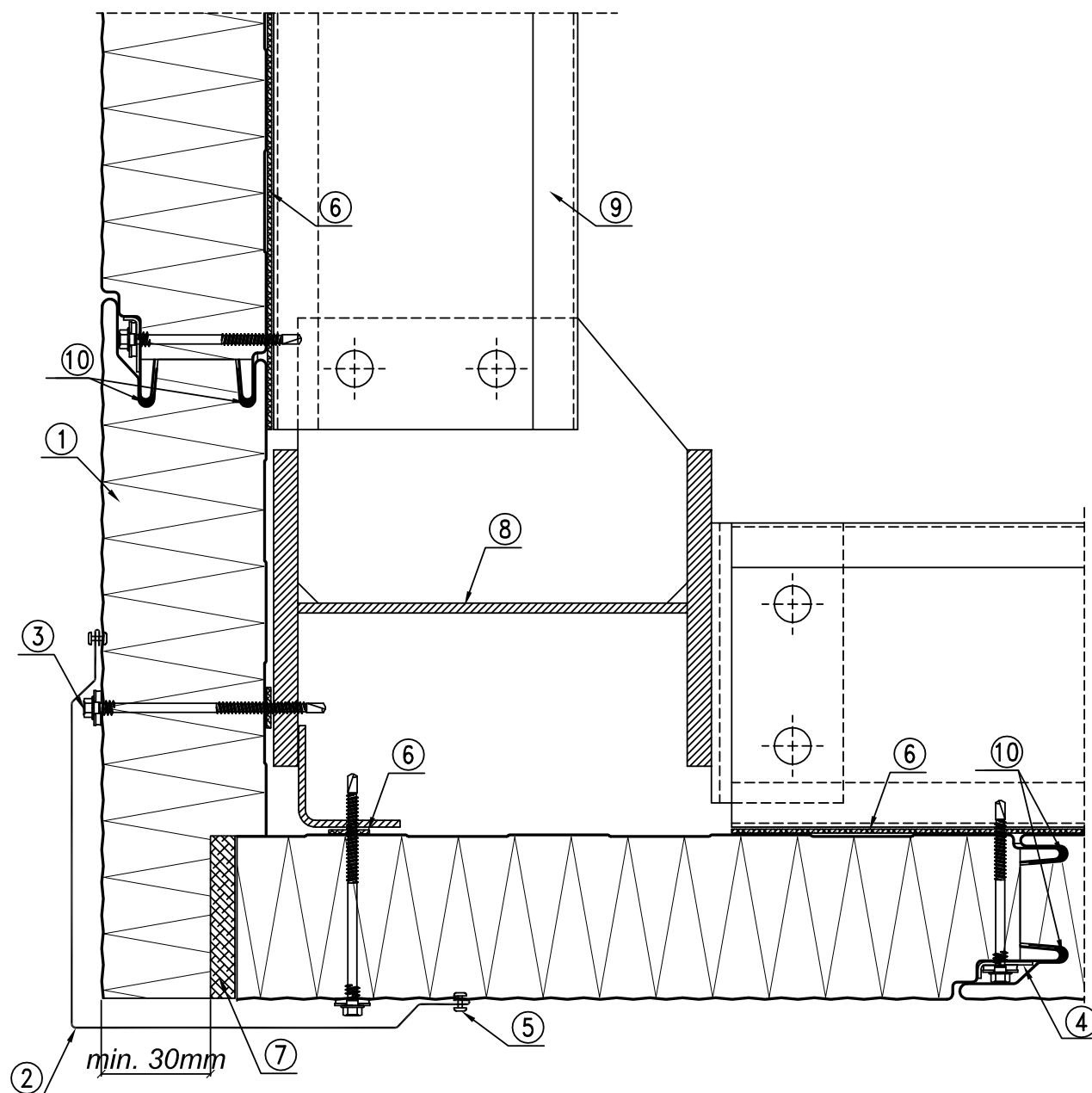


1. MW PLUS sandwich panel
2. LB 1- LB 5 fasteners for fastening sandwich panels
3. LB 25 steel washer under fasteners
4. PUS 5x40 self-adhesive sealing tape or equivalent
5. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
6. Impregnated polyurethane gasket 20 mm thick or equivalent
7. Z-bar acc. to the construction design
8. Butyl sealing - recommended
9. Dampproof insulation acc. to the architecture design
10. Thermal insulation + plastering according to the architectural design

2.7. MW-W-PL07

Joining panels in the corner

- vertical arrangement of panels - option I

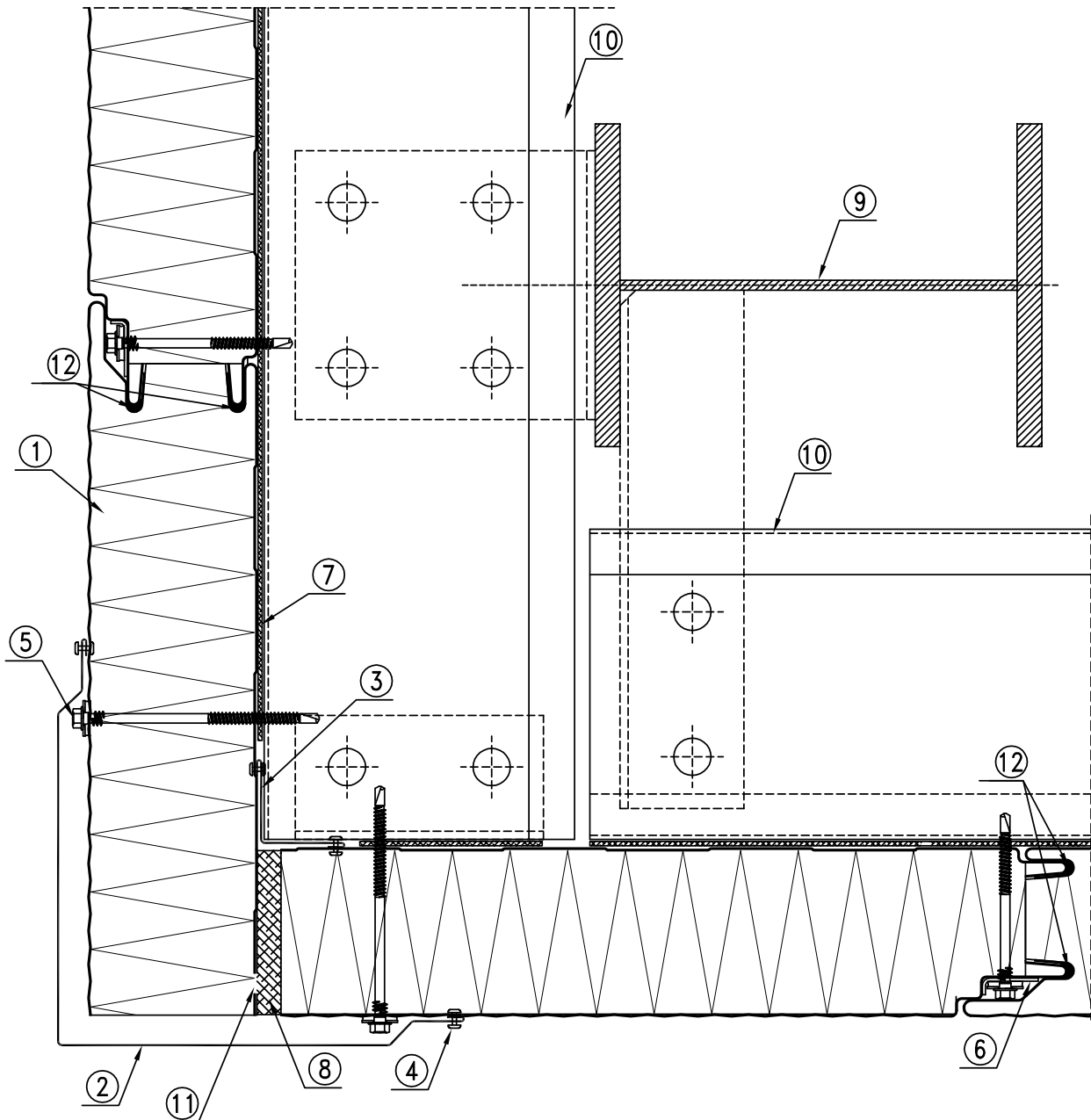


1. MW PLUS sandwich panel
2. OBR 103 flashing or individual flashing
3. LB 1- LB 5 fasteners for fastening sandwich panels
4. LB 25 or LB 30 steel washer under fasteners
5. LB6 self-drilling fastener or AL/Fe blind rivet every 300 mm
6. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
7. Mineral wool or impregnated polyurethane expansion gasket
8. Bearing column + angle acc. to the construction design
9. Transom acc. to the construction design
10. Butyl sealing - recommended

2.8. MW-W-PL08

Joining panels in the corner

- vertical arrangement of panels - option II

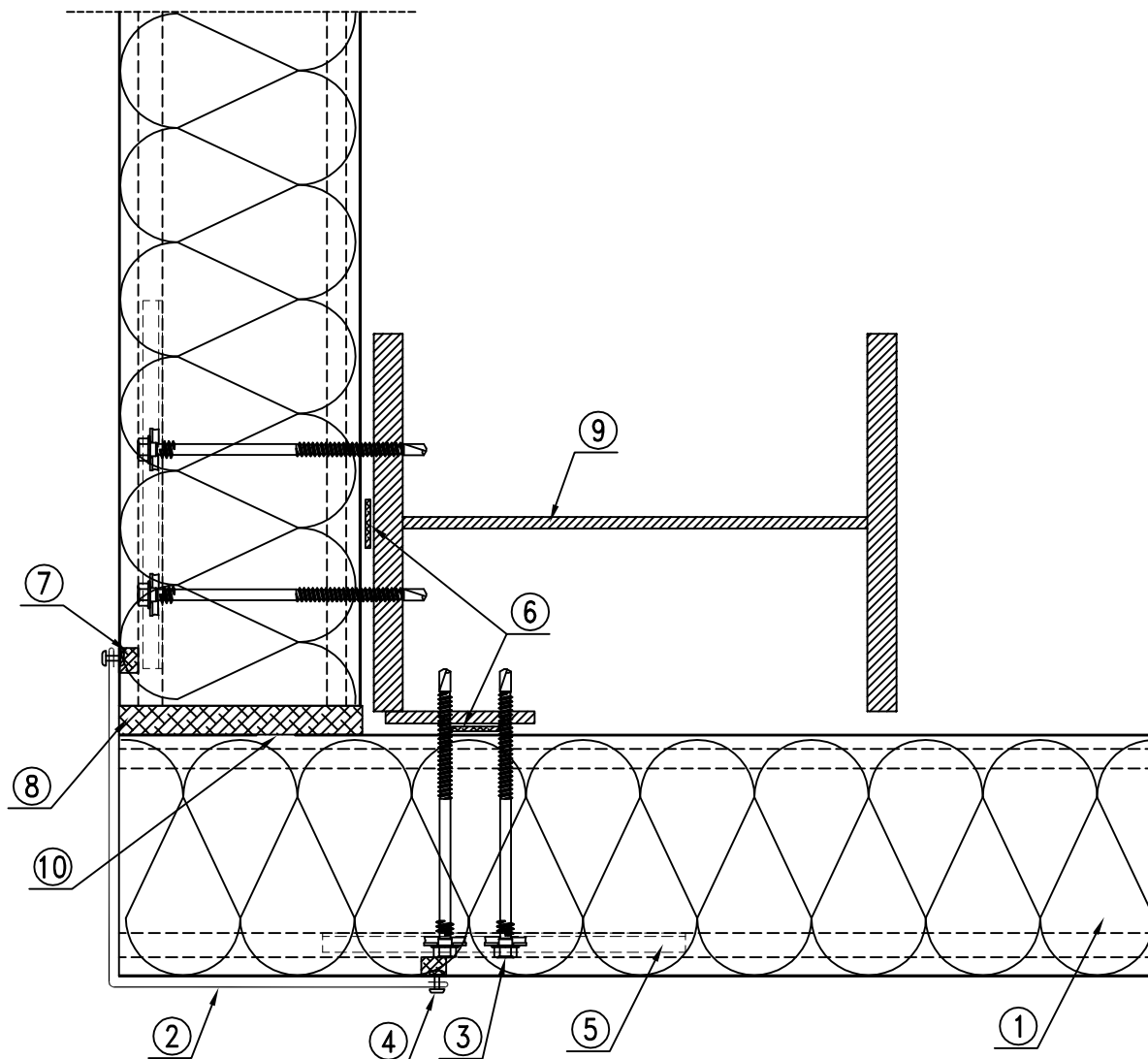


1. MW PLUS sandwich panel
2. OBR 103 flashing or individual flashing
3. OBR 104 flashing or individual flashing
4. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm
5. LB 1- LB 5 fasteners for fastening sandwich panels
6. LB 25 steel washer under fasteners
7. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
8. Mineral wool or polyurethane expansion gasket
9. Steel, reinforced concrete, wooden column acc. to the construction design
10. Transom acc. to the construction design
11. Cladding with a 10 mm wide gap (recommended to improve thermal insulation efficiency)
12. Butyl sealing - recommended

2.9. MW-W-PL09

Joining panels in the corner

- horizontal arrangement of panels

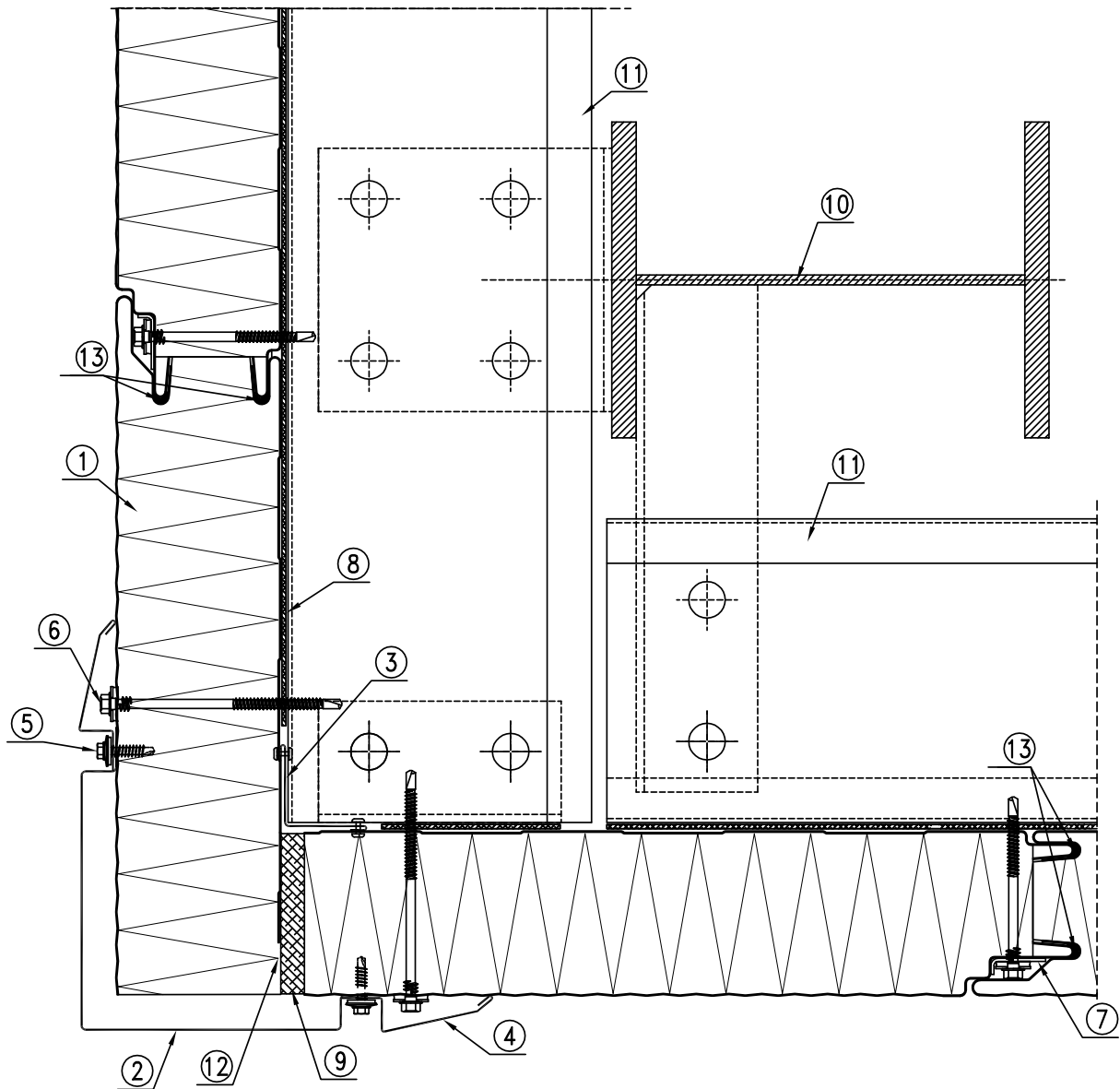


1. MW PLUS sandwich panel
2. OBR 105 or OBR109 flashing or individual flashing
3. LB 1- LB 5 fasteners for fastening sandwich panels
4. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm
5. LB 25 steel washer under fasteners
6. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
7. Butyl sealing compound in the panel joint area
8. Mineral wool or polyurethane expansion gasket
9. Bearing column + flat bar acc. to the construction
10. Cladding with a 10 mm wide gap (recommended to improve thermal insulation efficiency)

2.10. MW-W-PL09/1

Joining panels in the corner

- vertical arrangement of panels

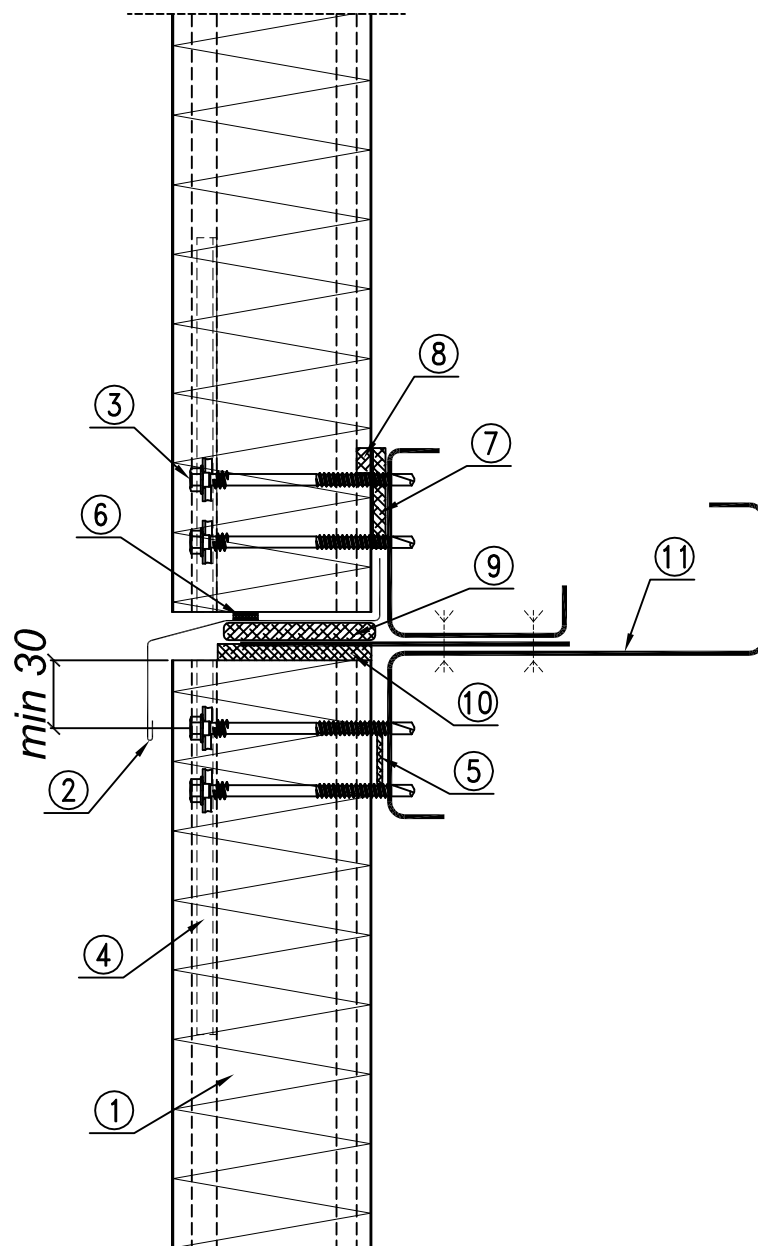


1. MW PLUS sandwich panel
2. OBR 113 flashing or individual flashing
3. OBR 104 flashing or individual flashing
4. OBR 111 flashing or individual flashing
5. LB 6 self-drilling fastener every 300 mm
6. LB 1- LB 5 fasteners for fastening sandwich panels
7. LB 25 steel washer under fasteners
8. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
9. Mineral wool or impregnated polyurethane expansion gasket
10. Bearing column acc. to the construction design
11. Transom acc. to the construction design
12. Cladding with a 10 mm wide gap (recommended to improve thermal insulation efficiency)
13. Butyl sealing

2.11. MW-W-PL10

Joining panels lengthwise

- vertical arrangement of panels

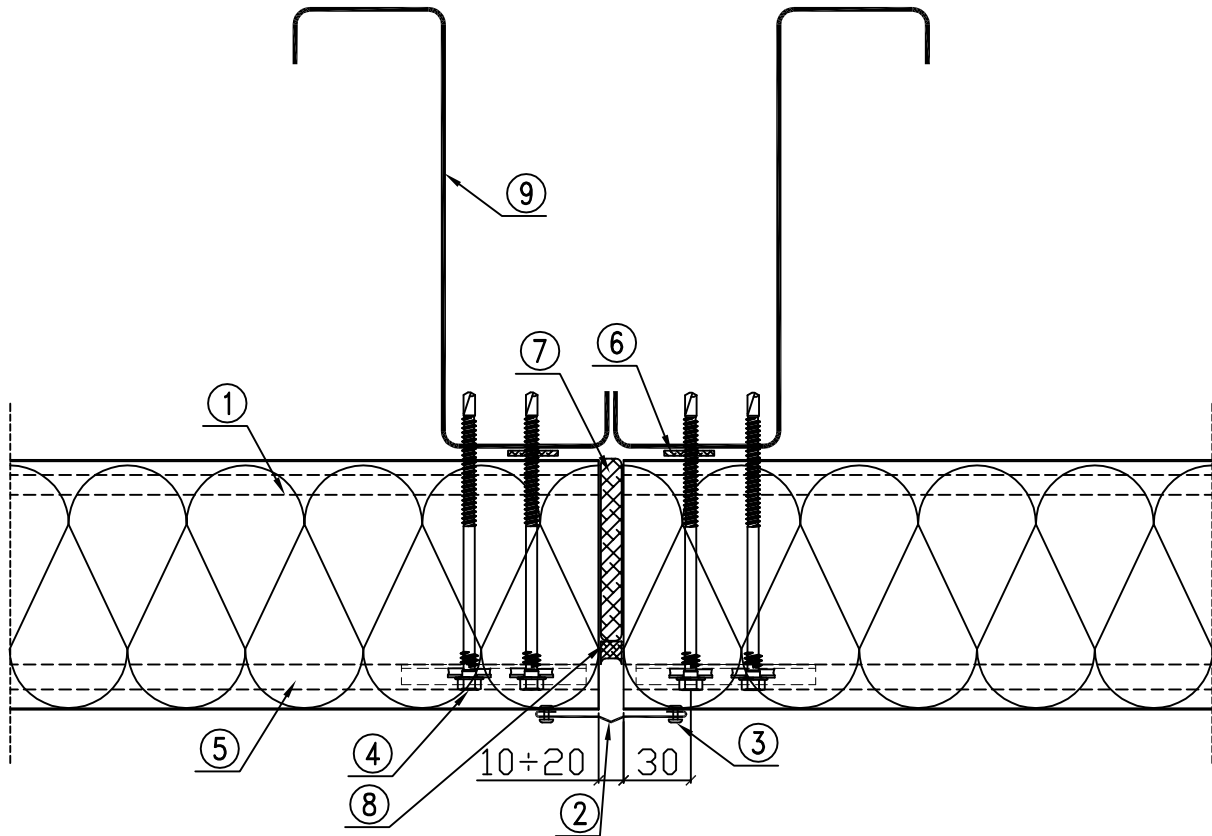


1. MW PLUS sandwich panel
2. OBR 100 flashing or individual flashing
3. LB 1- LB 5 fasteners for fastening sandwich panels
4. LB 25 steel washers under fasteners
5. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
6. Butyl sealing tape (recommended)
7. PUS 5x40 self-adhesive sealing tape or equivalent
8. Sealing compound in the panel joint area
9. Impregnated polyurethane gasket 20 mm thick or mineral wool
10. Sealing inserted during assembly
11. Cold bent or hot rolled, wooden, etc. steel transom + angle and flat bar acc. to the construction design

2.12. MW-W-PL11/1

Fastening panel to the end support

- horizontal arrangement of panels - option I

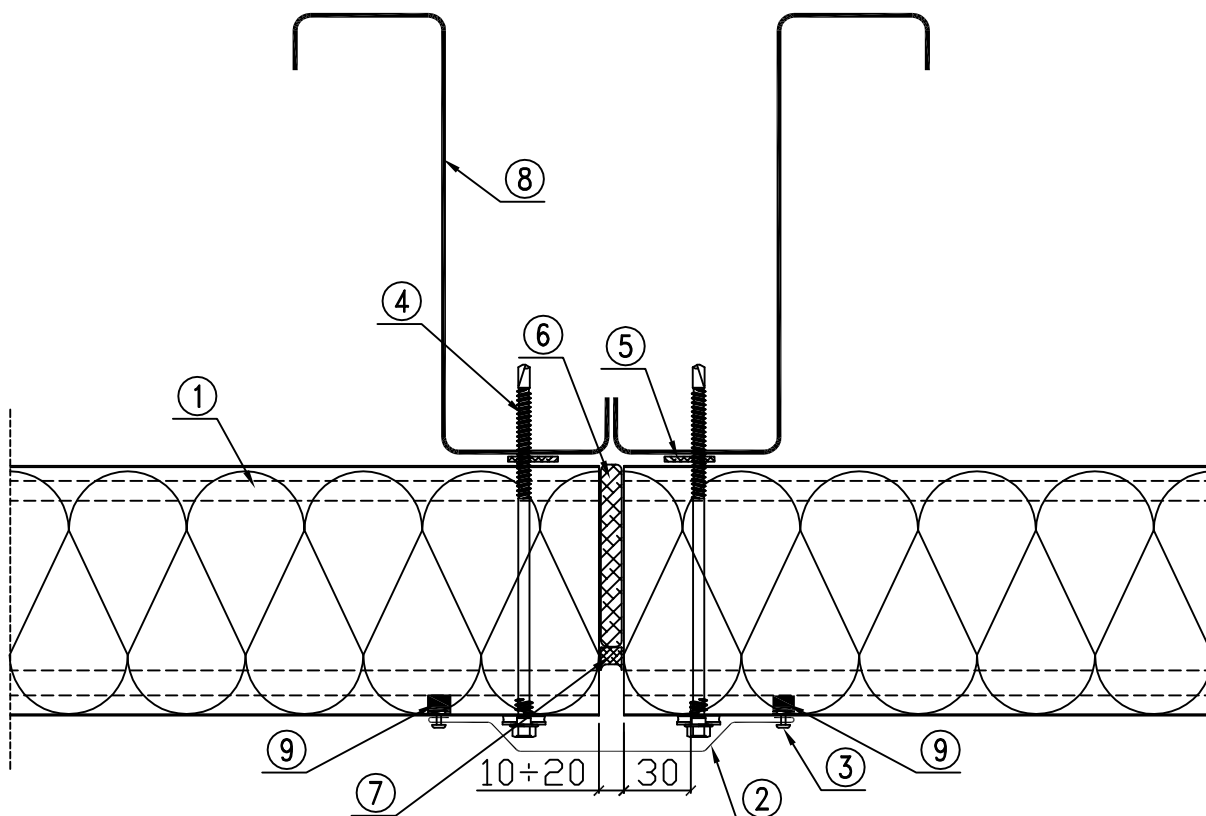


1. MW PLUS sandwich panel
2. OBR 106 flashing or individual flashing
3. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm
4. LB 1- LB 5 fasteners for fastening sandwich panels
5. LB 25 steel washer under fasteners
6. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
7. Impregnated polyurethane expansion gasket or mineral wool
8. Impregnated polyurethane expansive tape 10x4 (20) or equivalent
9. Bearing column acc. to the construction design

2.13. MW-W-PL11/2

Fastening panel to the end support

- horizontal arrangement of panels - option II

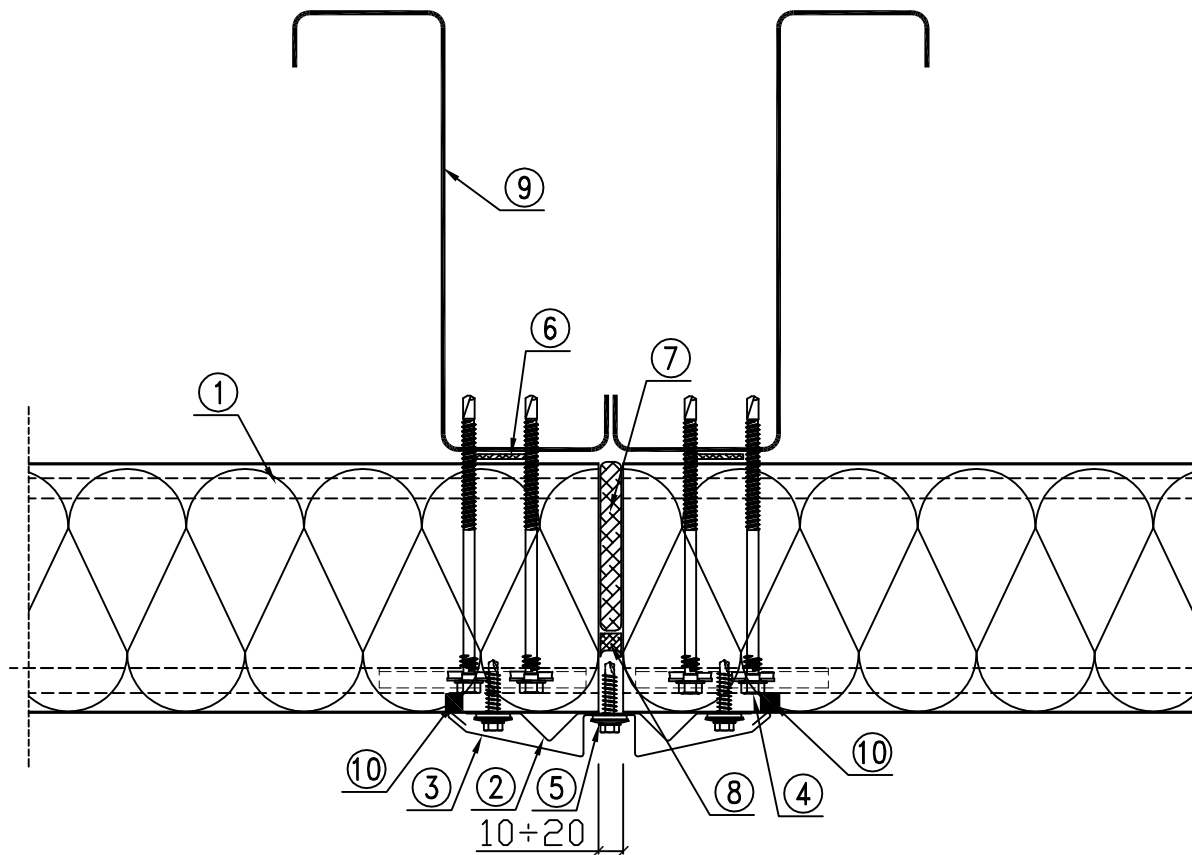


1. MW PLUS sandwich panel
2. OBR 105 flashing or individual flashing
3. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm
4. LB 1- LB 5 fasteners for fastening sandwich panels
5. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
6. Impregnated polyurethane expansion gasket or mineral wool
7. Impregnated polyurethane expansive tape 10x4 (20) or equivalent
8. Bearing column acc. to the construction design
9. Butyl sealing compound in the joint under the flashing

2.14. MW-W-PL11/3

Fastening panel to the end support

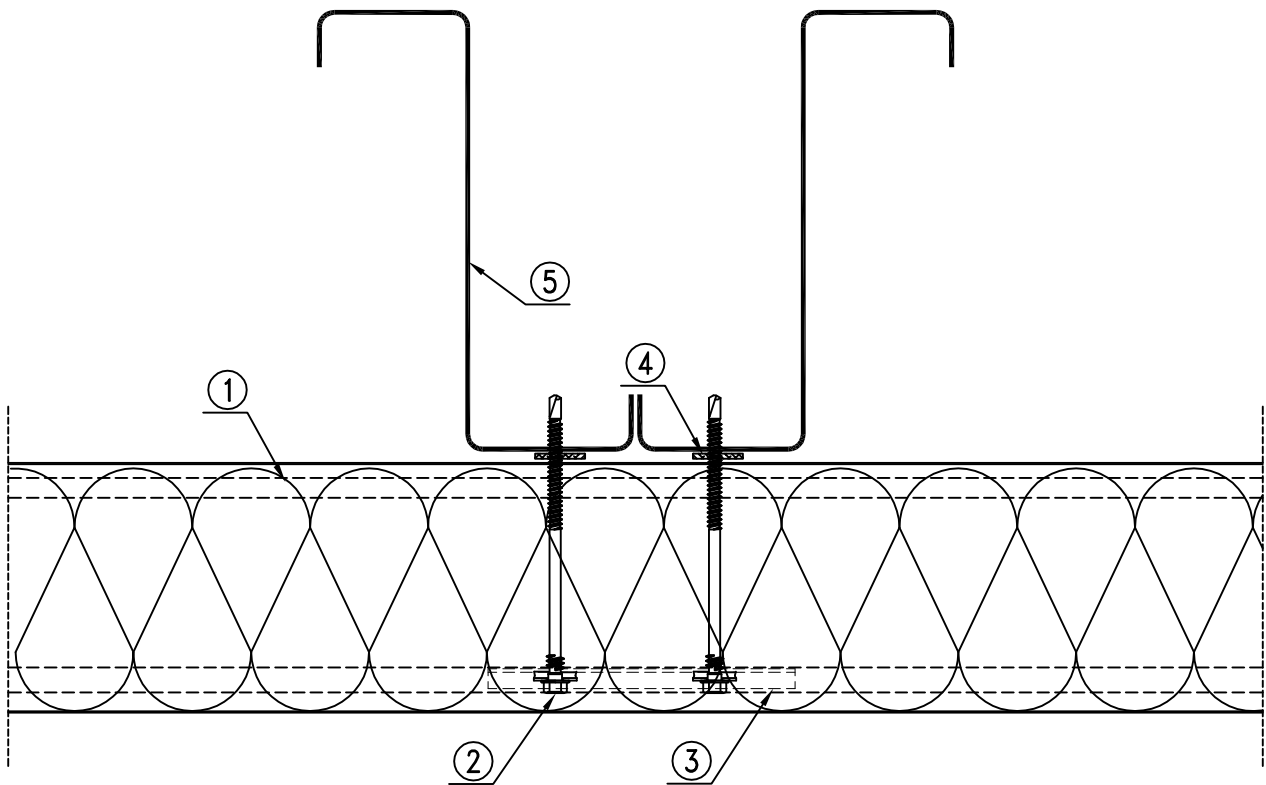
- horizontal arrangement of panels - option III



1. MW PLUS sandwich panel
2. OBR 110 flashing or individual flashing
3. OBR 111 flashing or individual flashing
4. LB 1- LB 5 fasteners for fastening sandwich panels
5. LB 6 self-drilling fastener every 300 mm
6. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
7. Impregnated polyurethane expansion gasket or mineral wool
8. Impregnated polyurethane expansive tape 10x4 (20) or equivalent
9. Bearing column acc. to the construction design
10. Butyl sealing compound in the joint under the flashing

2.15. MW-W-PL12

Fastening panel to the in-between support
- horizontal arrangement of panels

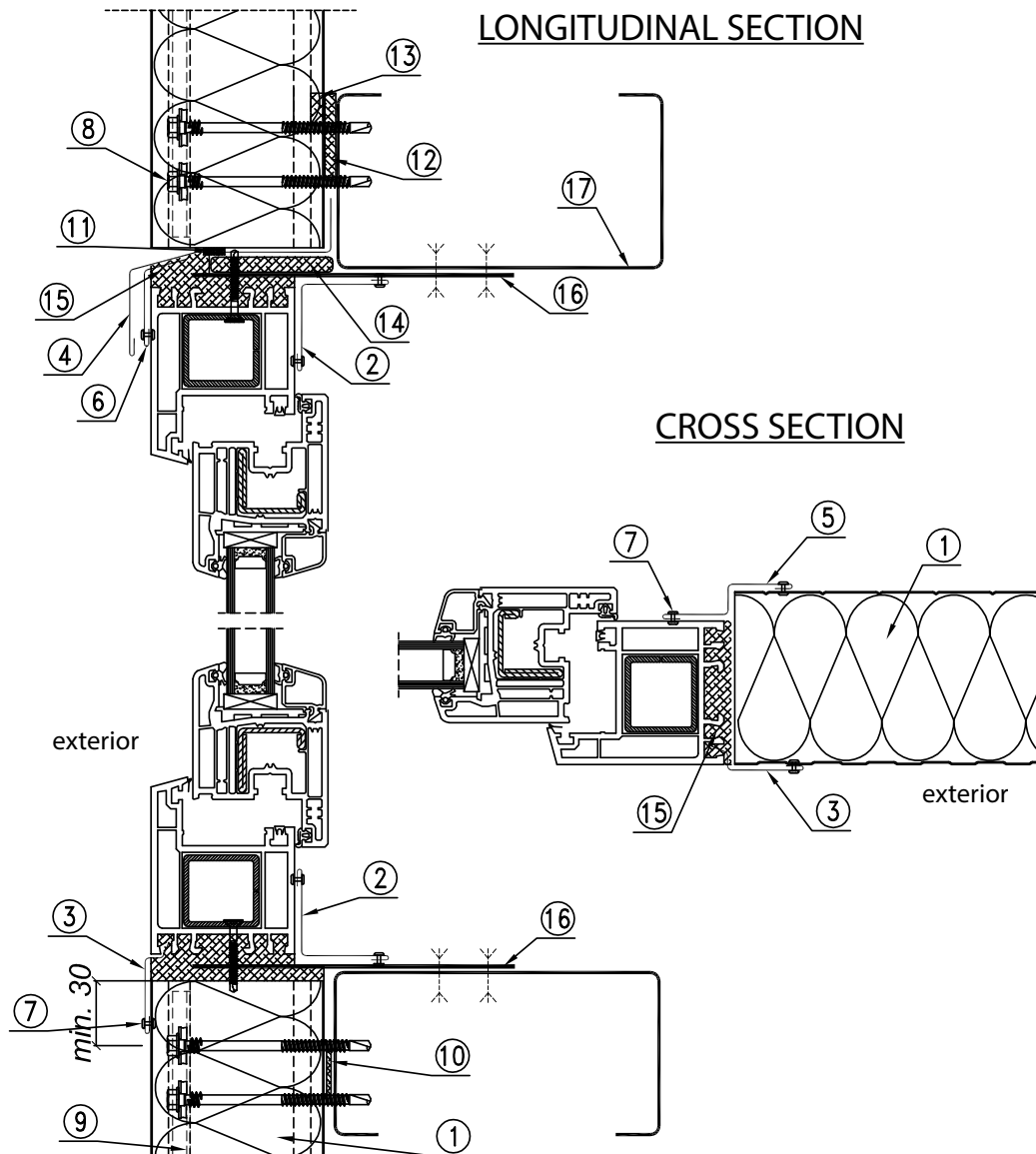


1. MW PLUS sandwich panel
2. LB 1- LB 5 fasteners for fastening sandwich panels
3. LB 25 steel washer under fasteners
4. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
5. Bearing column acc. to the construction design

2.16. MW-W-PL13

Joining panels with window strip

- vertical arrangement of panels - option I

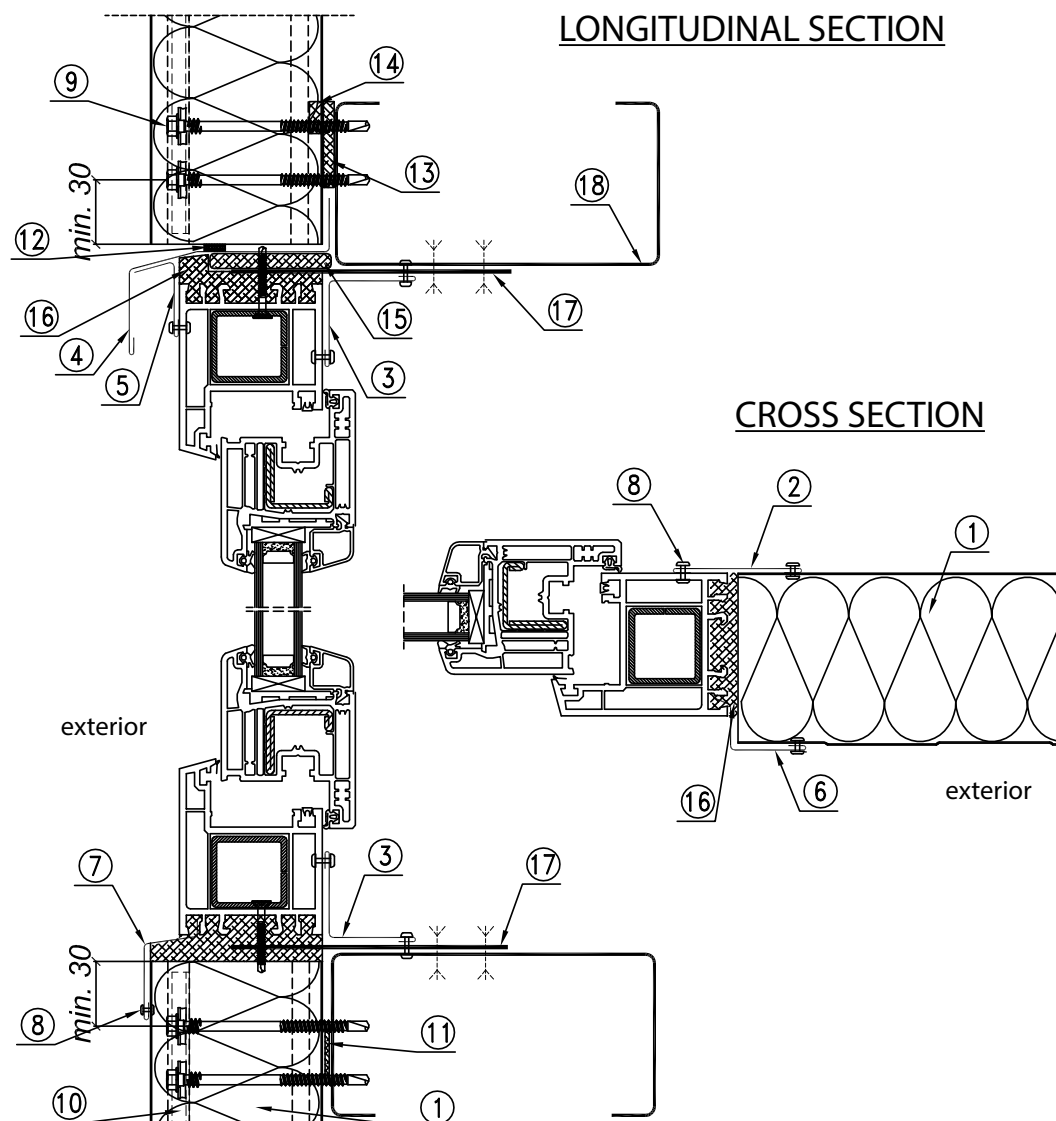


1. MW PLUS sandwich panel
2. OBR 104 flashing or individual flashing
3. OBR 106 flashing or individual flashing
4. OBR 100 flashing or individual flashing
5. Individual flashing
6. Individual flashing
7. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm
8. LB 1- LB 5 fasteners for fastening sandwich panels
9. LB 25 steel washer under fasteners
10. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
11. Butyl sealing tape (recommended)
12. PUS 5x40 self-adhesive sealing tape or equivalent
13. Sealing compound in the panel joint area
14. Impregnated polyurethane gasket 10 mm thick or equivalent
15. Mineral wool
16. Flat bar for fastening a window
17. Bearing lock acc. to the construction design

2.17. MW-W-PL14

Joining panels with window strip

- vertical arrangement of panels - option II

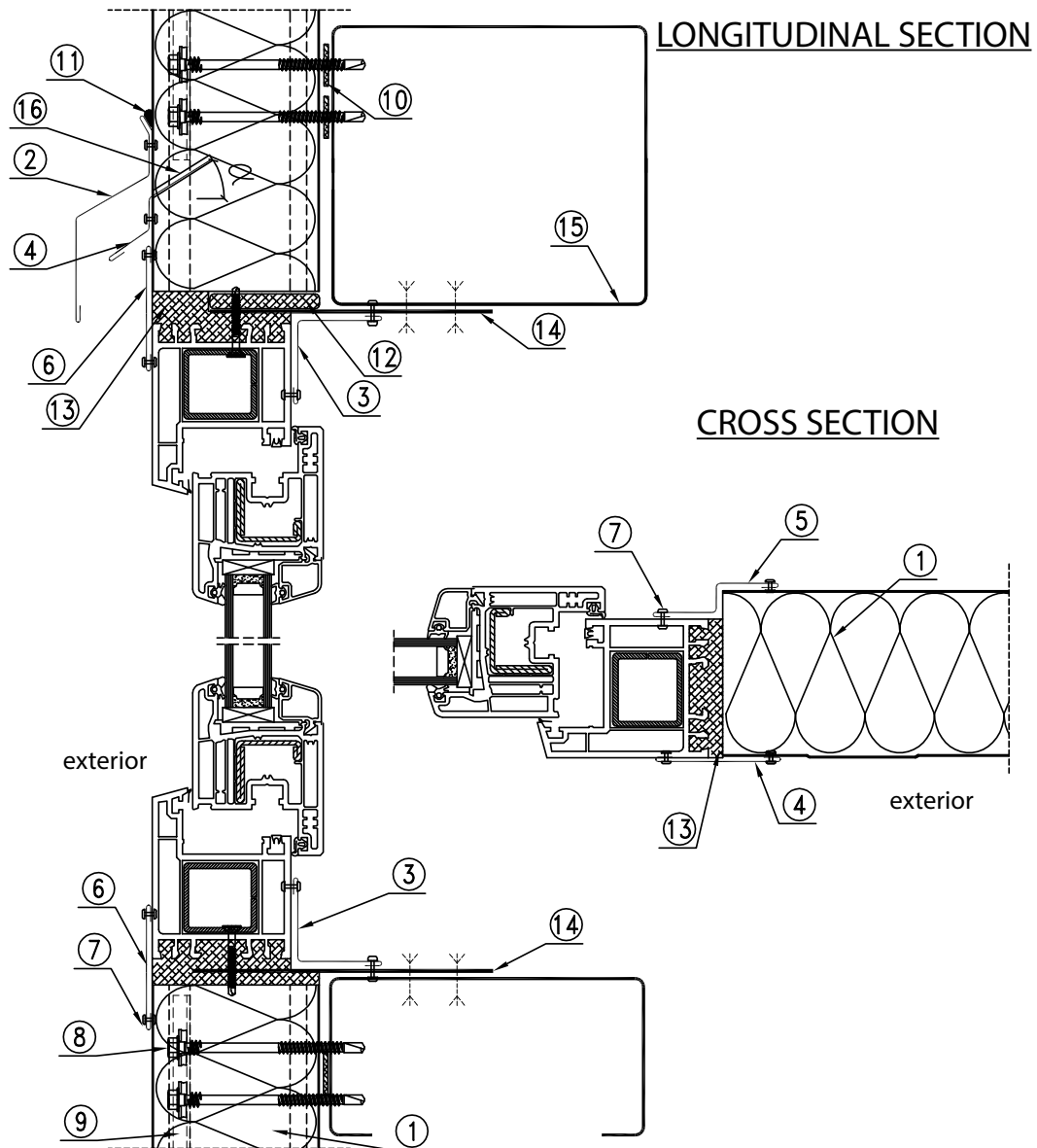


1. MW PLUS sandwich panel
2. OBR 106 flashing or individual flashing
3. OBR 104 flashing or individual flashing
4. OBR 100 flashing or individual flashing
5. Individual flashing
6. Individual flashing
7. Individual flashing
8. Self-drilling fastener or AL/Fe blind rivet every 300 mm
9. LB 1- LB 5 fasteners for fastening sandwich panels
10. LB 25 steel washer under fasteners
11. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
12. Butyl sealing tape (recommended)
13. PUS 5x40 self-adhesive sealing tape or equivalent
14. Sealing compound in the panel joint area
15. Impregnated polyurethane gasket 10 mm thick or assembly foam
16. Mineral wool
17. Flat bar for fastening a window
18. Bearing lock acc. to the construction design

2.18. MW-W-PL15

Joining panels with window strip

- vertical arrangement of panels - option III

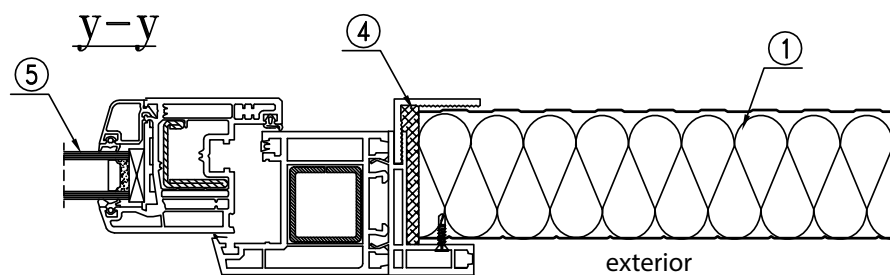
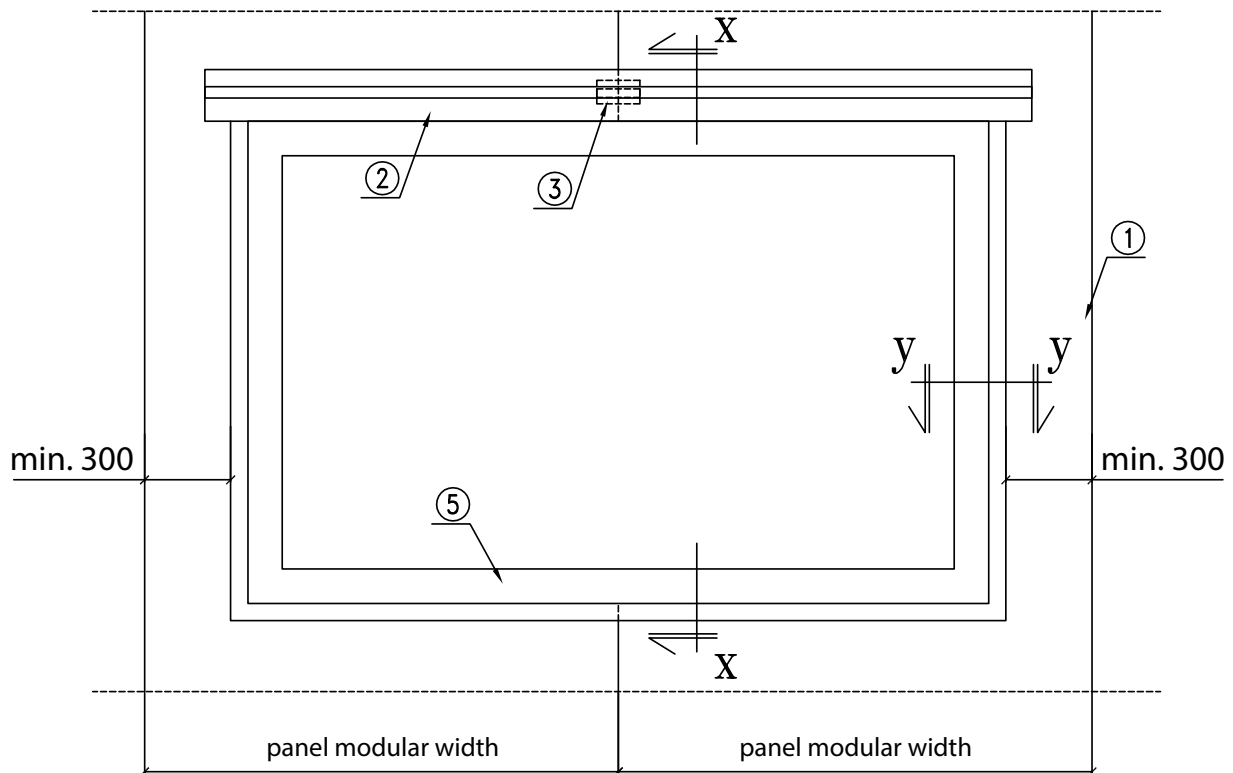


1. MW PLUS sandwich panel
2. OBR 107 flashing or individual flashing
3. OBR 104 flashing or individual flashing
4. Individual flashing
5. Individual flashing
6. Individual flashing
7. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm
8. LB 1- LB 5 fasteners for fastening sandwich panels
9. LB25 steel washer under fasteners
10. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
11. Butyl sealing compound
12. Impregnated polyurethane gasket 10 mm thick or equivalent
13. Mineral wool
14. Flat bar for fastening a window
15. Bearing lock acc. to the construction design
16. Groove in the panel joint area at OBR110 $\alpha=35^{\circ}-45^{\circ}$

2.19. MW-W-PL16/1

Joining panels with PVC windows

- vertical or horizontal arrangement of panels

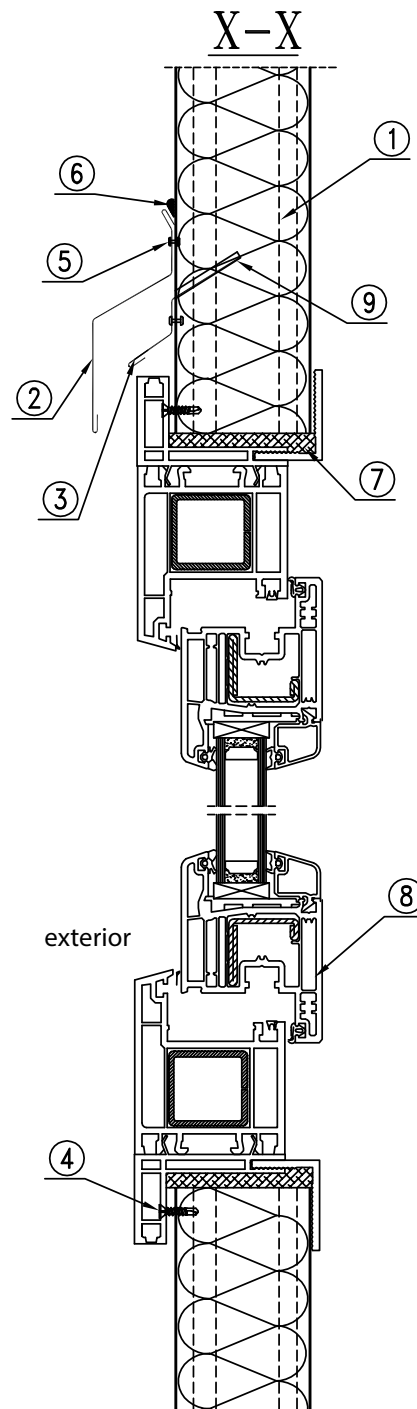


1. MW PLUS sandwich panel
2. OBR 107 or individual flashing
3. OBR 108 flashing (in the panel joint area – for the vertical arrangement of panels only) or individual flashing
4. Polyurethane gasket or mineral wool
5. PVC window

2.20. MW-W-PL16/2

Joining panels with PVC windows

- vertical or horizontal arrangement of panels

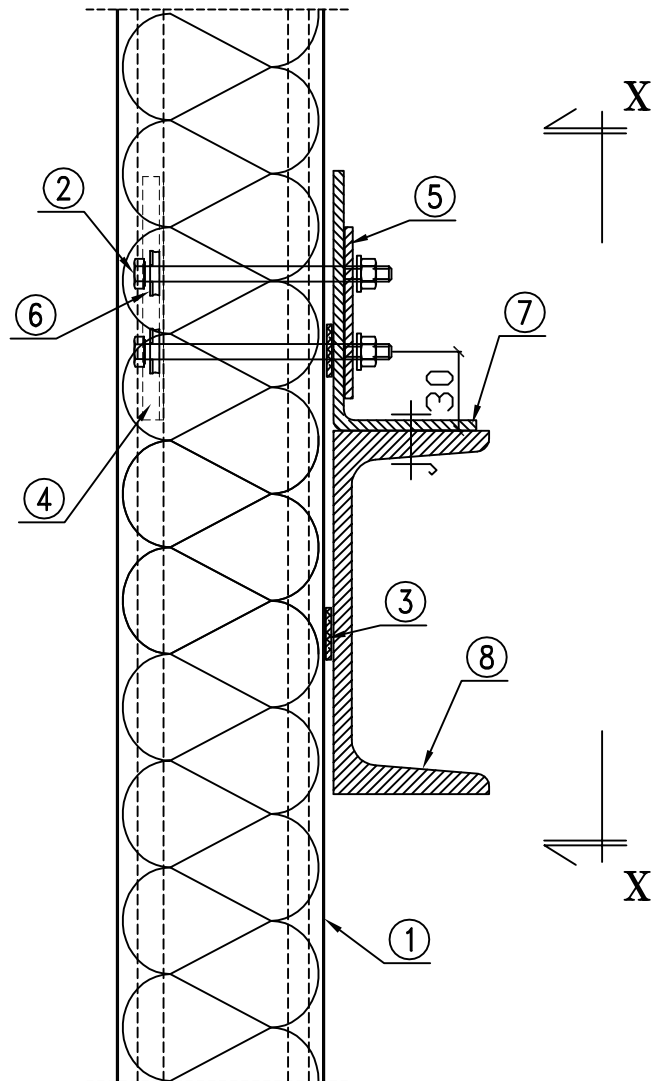


1. MW PLUS sandwich panel
2. OBR 107 or individual flashing
3. Individual flashing (in the panel joint area – for the vertical arrangement of panels only)
4. Self-drilling fastener for fastening a window every 300 mm
5. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm
6. Sealing compound
7. Polyurethane gasket or mineral wool
8. PVC window
9. Groove in the panel joint area (for the vertical arrangement of panels only)

2.21. MW-W-PL17/1

Fastening panel - sliding joint

- vertical arrangement of panels



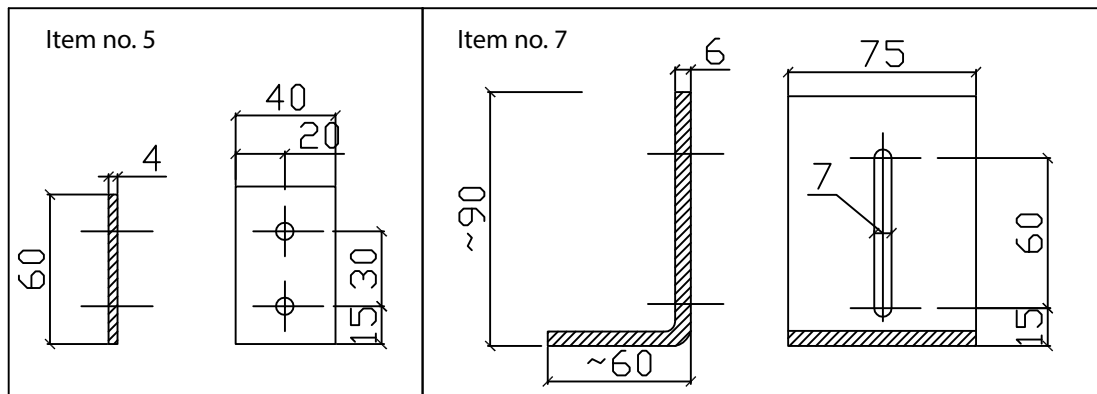
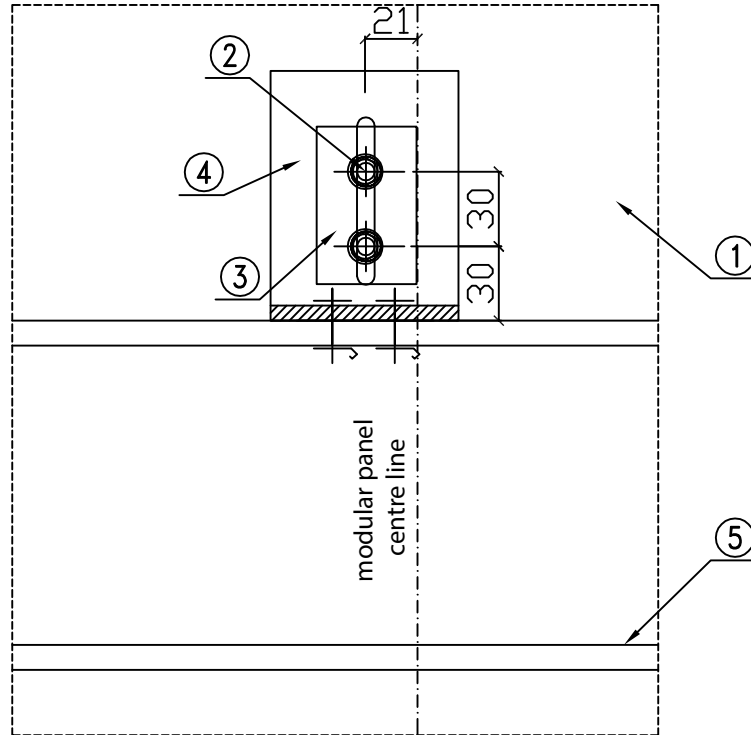
1. MW PLUS sandwich panel
2. M 6 screw with a self-locking nut
3. PES 3x20 self-adhesive sealing tape (recommended)
4. System steel washer LB25
5. Steel washer - individual
6. Washer with cured EPDM (recommended T19/3/6,7 by SFS) or equivalent
7. Angle acc. to the construction design
8. Transom acc. to the construction design

2.22. MW-W-PL17/2

Fastening panel - sliding joint

- vertical arrangement of panels - X-X section

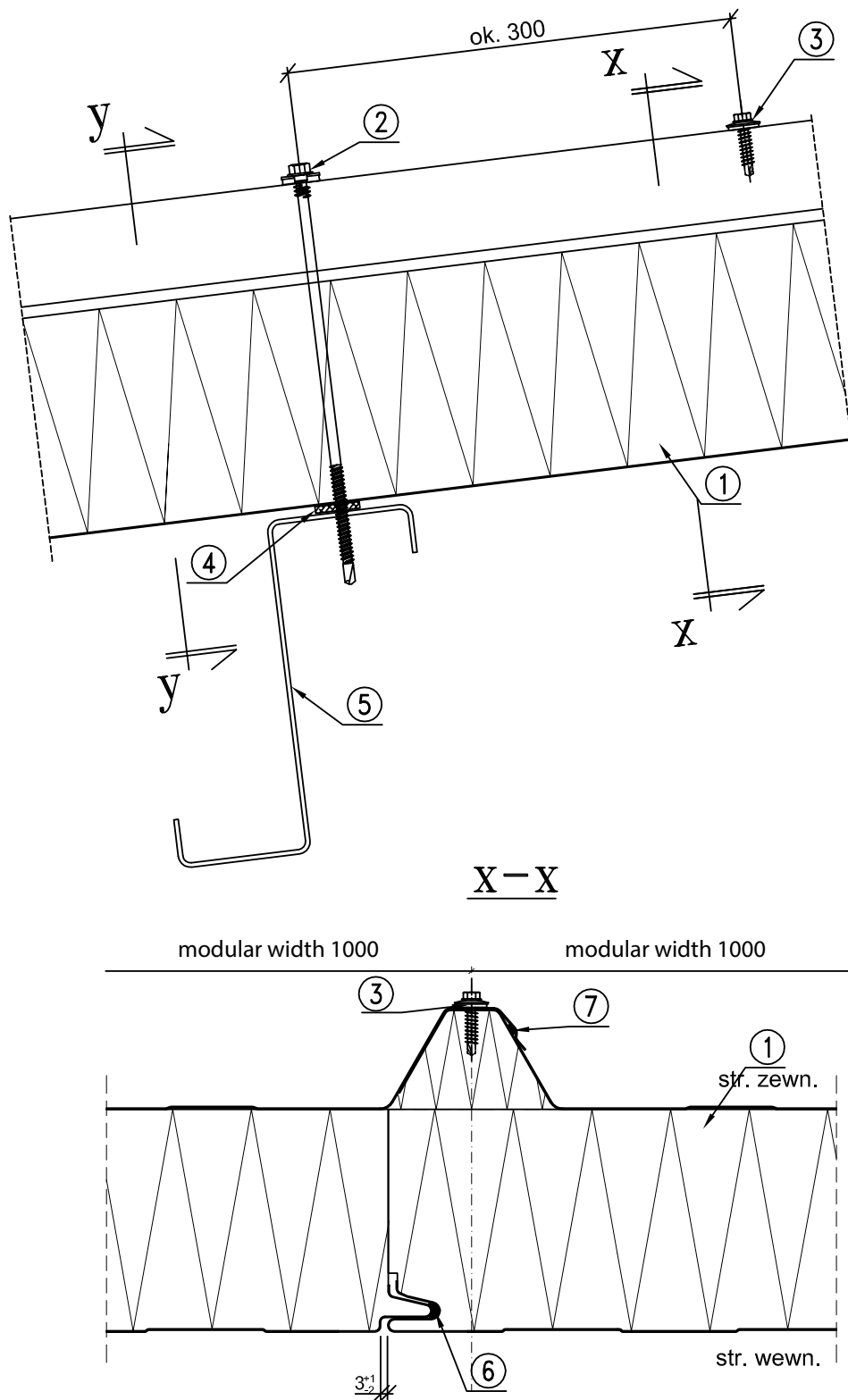
X-X



1. MW PLUS sandwich panel
2. M 6 screw with a self-locking nut
3. Steel washer - individual
4. Angle acc. to the construction design
5. Transom acc. to the construction design

3.2. MW-R02/1

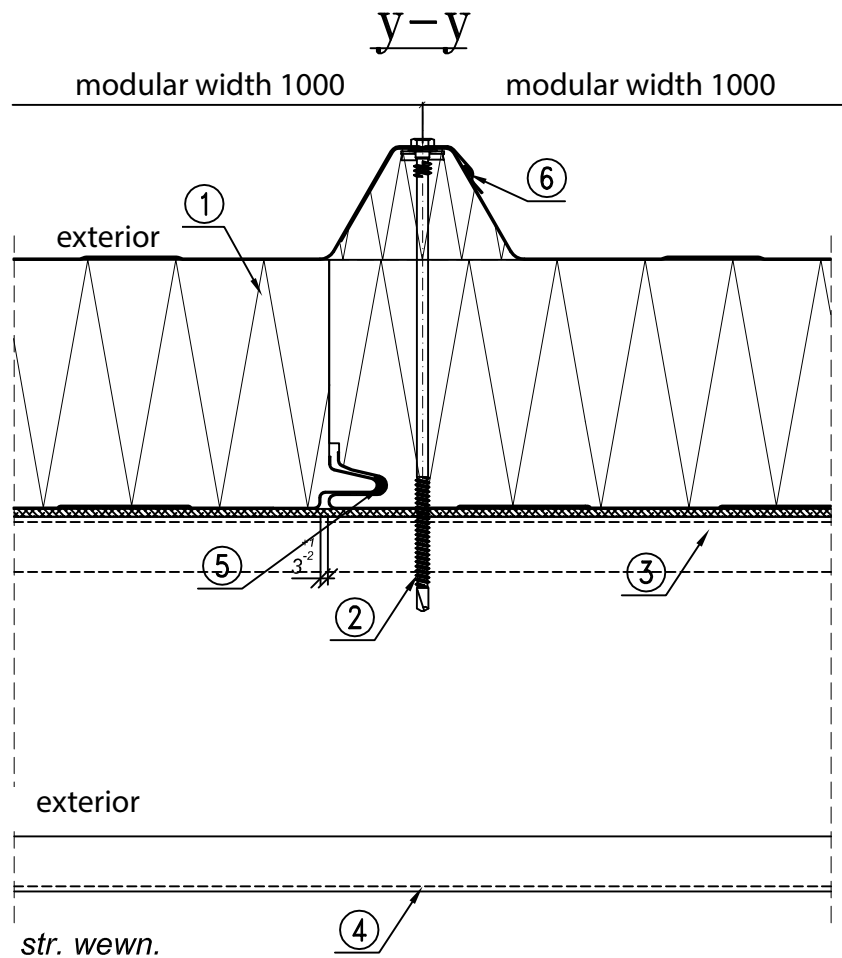
Fastening panel to a steel purlin



1. MW ROOF sandwich panel
2. Connector fixing the panel to LB1 - LB5 purlins
3. LB6 self-drilling connector or AL/Fe tight blind rivet approx. every 430 mm
4. PES 3x20 adhesive sealing tape (recommended) or equivalent
5. Cold bent, hot rolled, wooden etc. steel bearing purlin acc. to the construction design
6. Sealing compound (butyl is recommended) applied on site or gasket applied during production
7. Butyl mass or tape

3.3. MW-R02/2

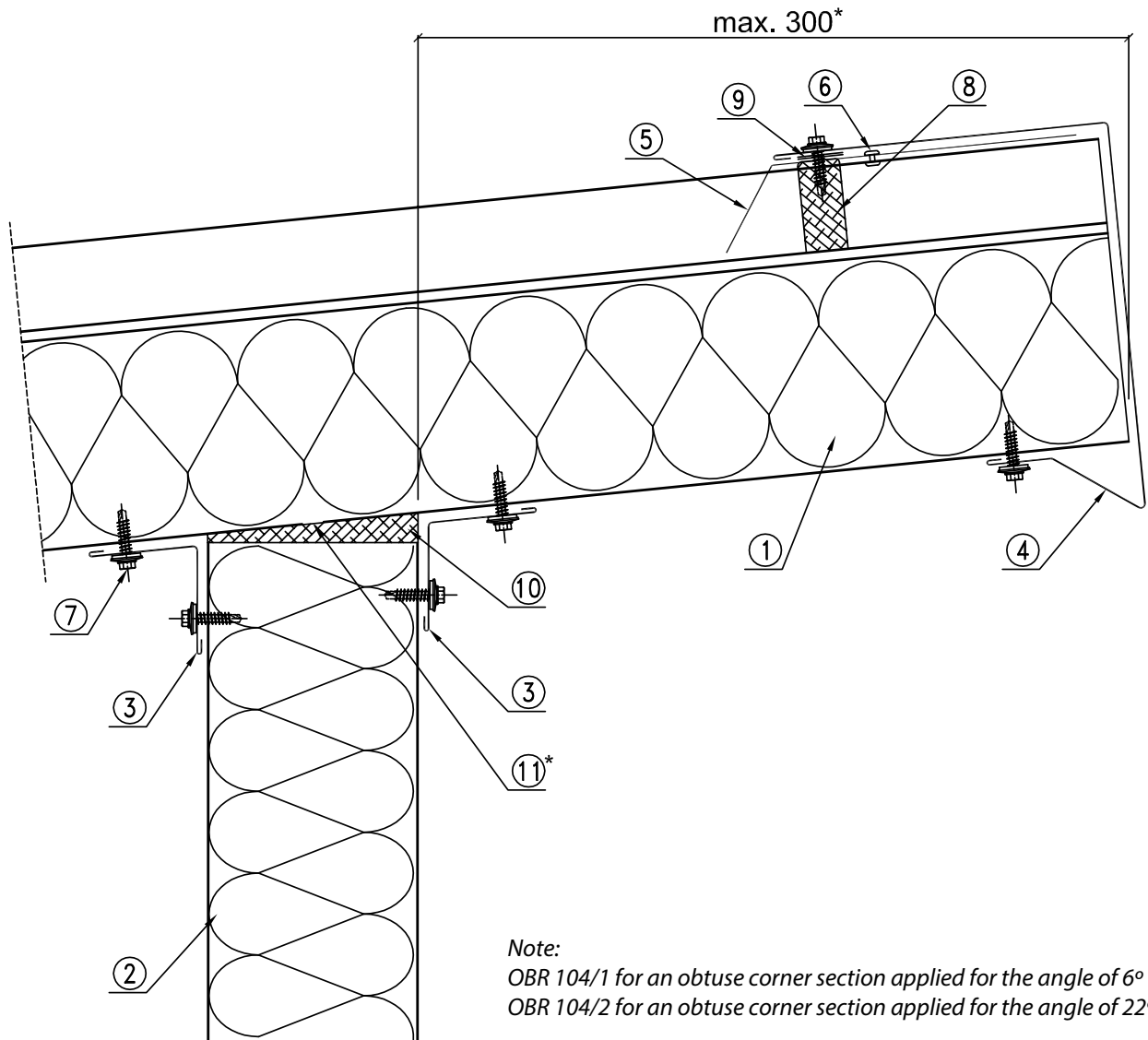
Fastening panel to a steel purlin - Y-Y section



1. MW ROOF sandwich panel
2. Connector fixing the panel to LB1 - LB5 purlins
3. PES 3x20 adhesive sealing tape (recommended) or equivalent
4. Cold bent, hot rolled, wooden etc. steel purlin acc. to the construction design
5. Butyl mass or tape
6. Sealing compound (butyl is recommended) applied on site or gasket applied during production

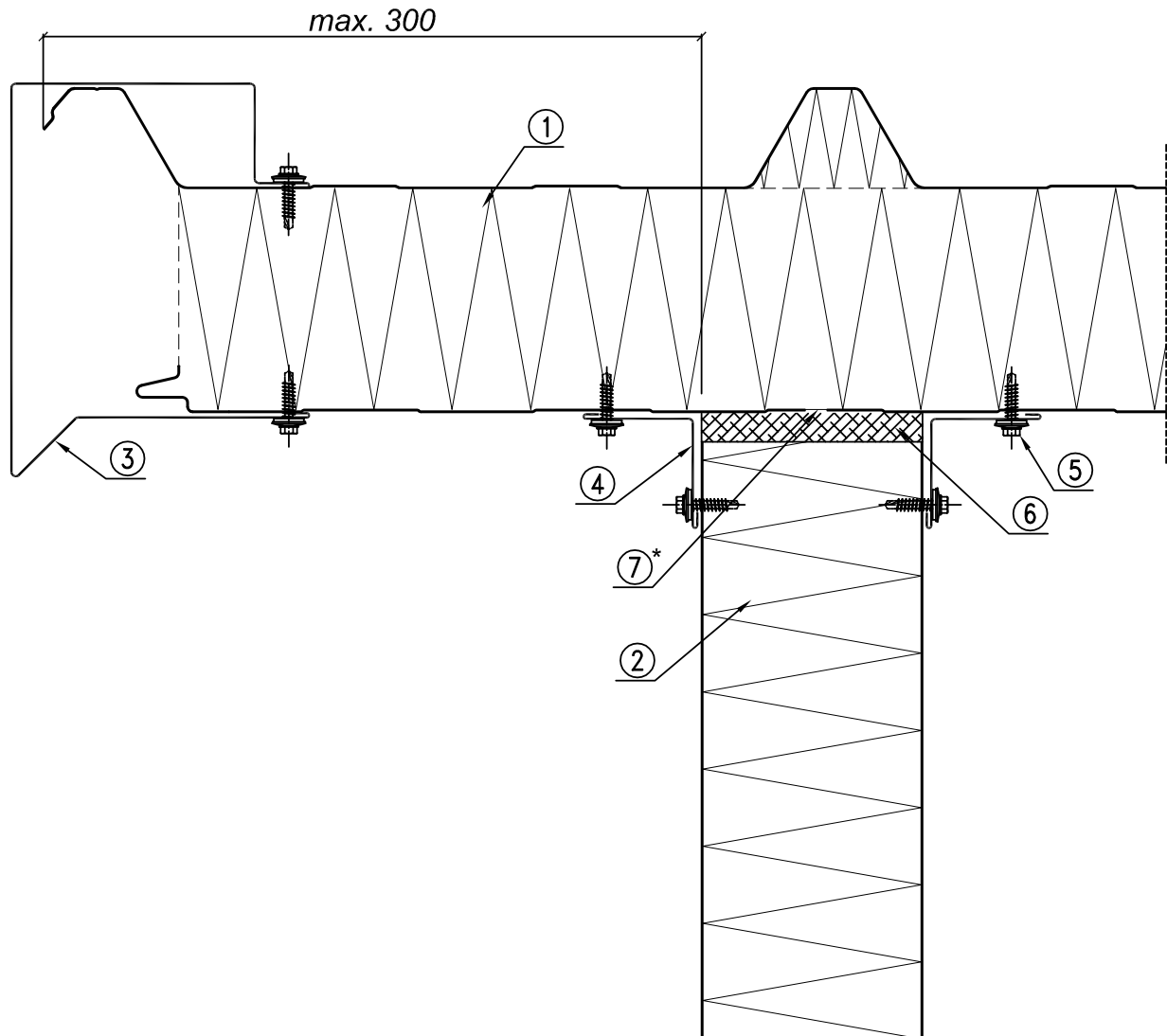
3.4. MW-R03

Panel ending for a monopitch roof



1. MW ROOF sandwich panel
 2. MW STANDARD, MW DEFENDER, MW LIGHT or MW PLUS sandwich panel
 3. OBR 104 flashing or individual flashing
 4. OBR 200 flashing or individual flashing
 5. OBR 210 flashing or individual flashing
 6. AL/Fe assembly blind rivet between sinusoid tops every 1000 mm
 7. LB 1 self-drilling fastener or AL/Fe blind rivet every 300 mm (a tight rivet on the external roof cladding)
 8. TUN 45 sealing tape
 9. Butyl sealing tape
 10. Mineral wool sealing applied during assembly
 11. Cladding with a 10mm wide gap (throat distance of the support max 300 mm)
- *recommended to improve thermal insulation efficiency

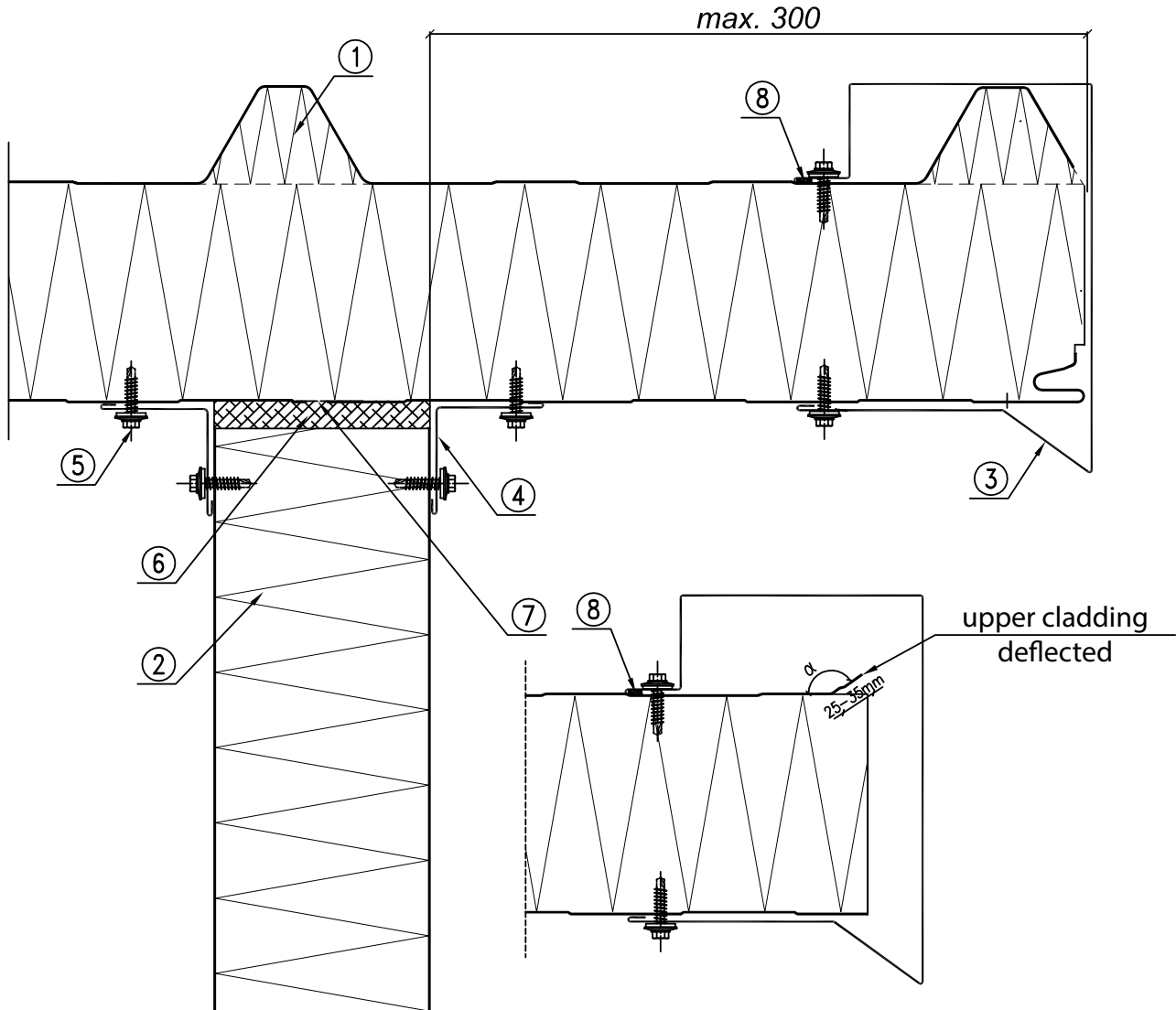
3.5. MW-R04/1 Gable-end roof edge



1. MW ROOF sandwich panel
2. MW STANDARD, MW DEFENDER, MW LIGHT or MW PLUS sandwich panel
3. OBR 202 flashing or individual flashing
4. OBR 104 flashing or individual flashing
5. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm (a tight rivet on the external roof cladding)
6. Mineral wool sealing applied during assembly
7. Cladding with a 10 mm wide gap, recommended to improve thermal insulation efficiency (throat distance of the support max 300 mm)

3.6. MW-R04/2

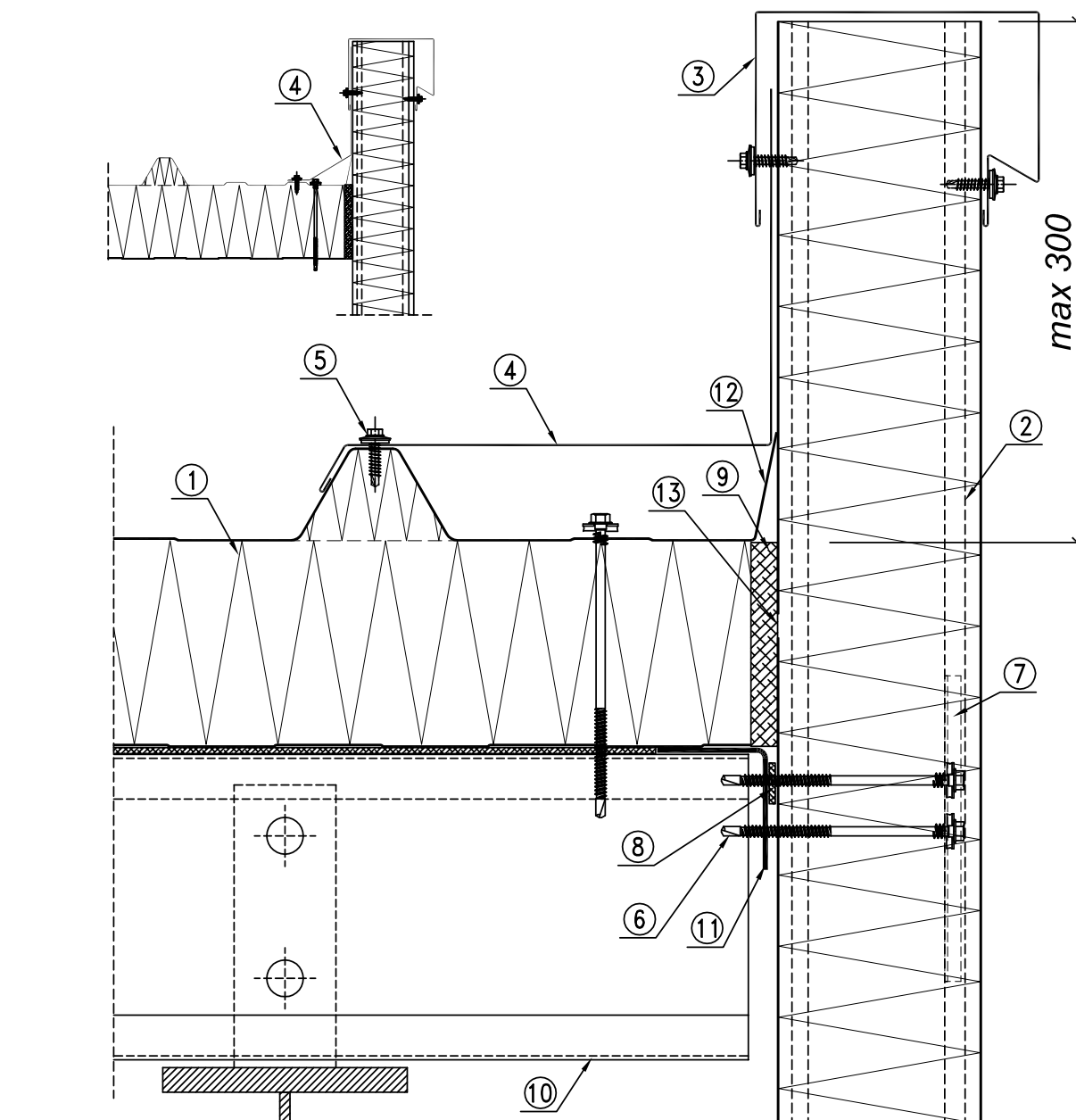
Gable-end roof edge



1. MW ROOF sandwich panel
2. MW STANDARD, MW DEFENDER, MW LIGHT or MW PLUS sandwich panel
3. OBR 202 flashing or individual flashing
4. OBR 104 flashing or individual flashing
5. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm (a tight rivet on the external roof cladding)
6. Mineral wool sealing applied during assembly
7. Facing with a 10 mm wide gap, recommended to improve thermal insulation efficiency (throat distance of the support max 300 mm)
8. Butyl mass - recommended

3.7. MW-R05

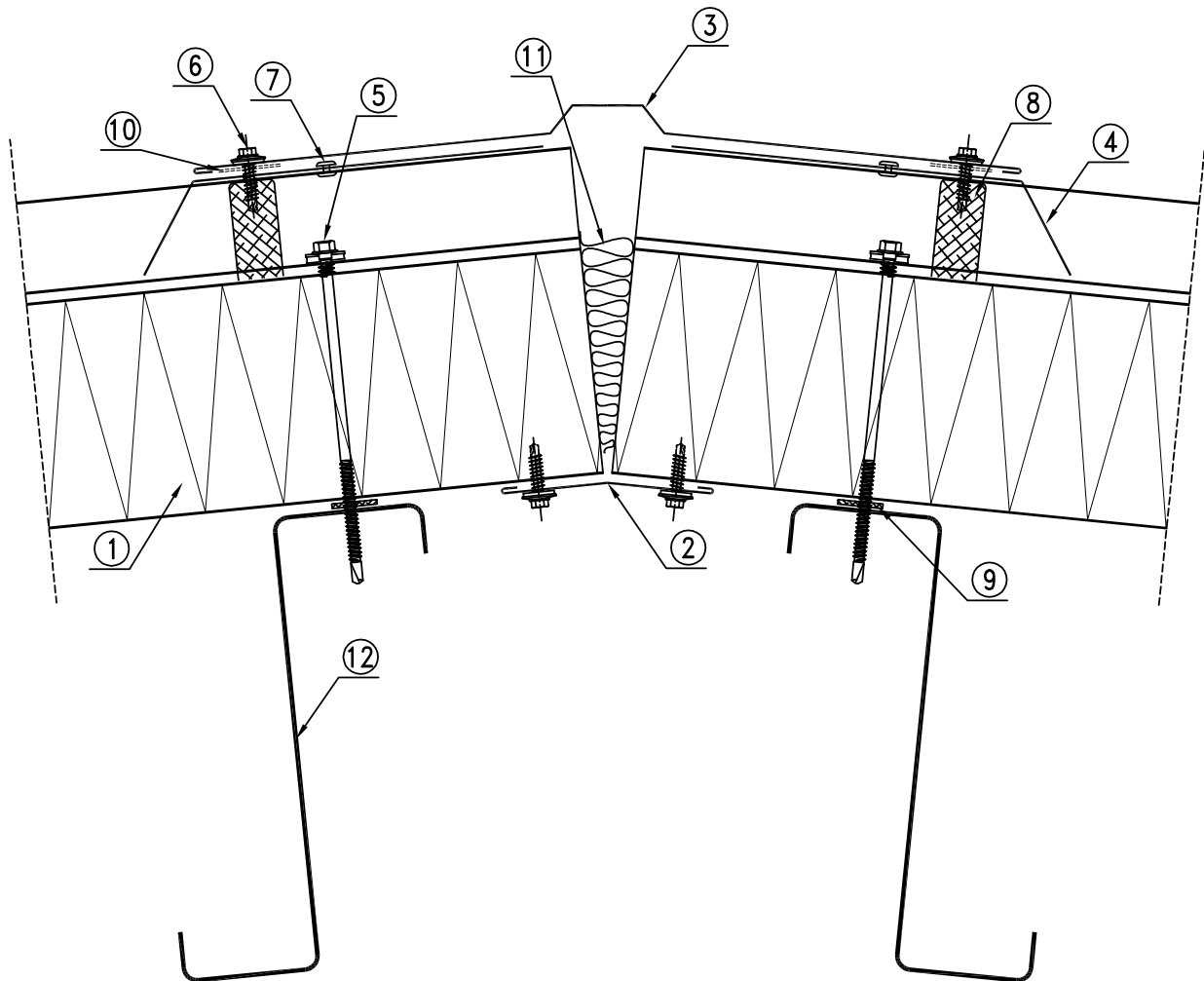
Joint of panels with a wall panel by the attic



1. MW ROOF sandwich panel
2. MW STANDARD, MW DEFENDER, MW LIGHT or MW PLUS sandwich panel
3. OBR 112 flashing or individual flashing
4. Individual flashing
5. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm (a tight rivet on the external roof cladding)
6. LB 1- LB 5 fasteners for fastening sandwich panels
7. LB 25 steel washer under fasteners
8. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
9. Mineral wool sealing applied during assembly
10. Purlin acc. to the construction design
11. Angle fastened to a purlin acc. to the construction design
12. Deflected upper cladding
13. Facing with a 10 mm wide gap, to improve thermal insulation efficiency (throat distance of the support max 300 mm)

3.8. MW-R06

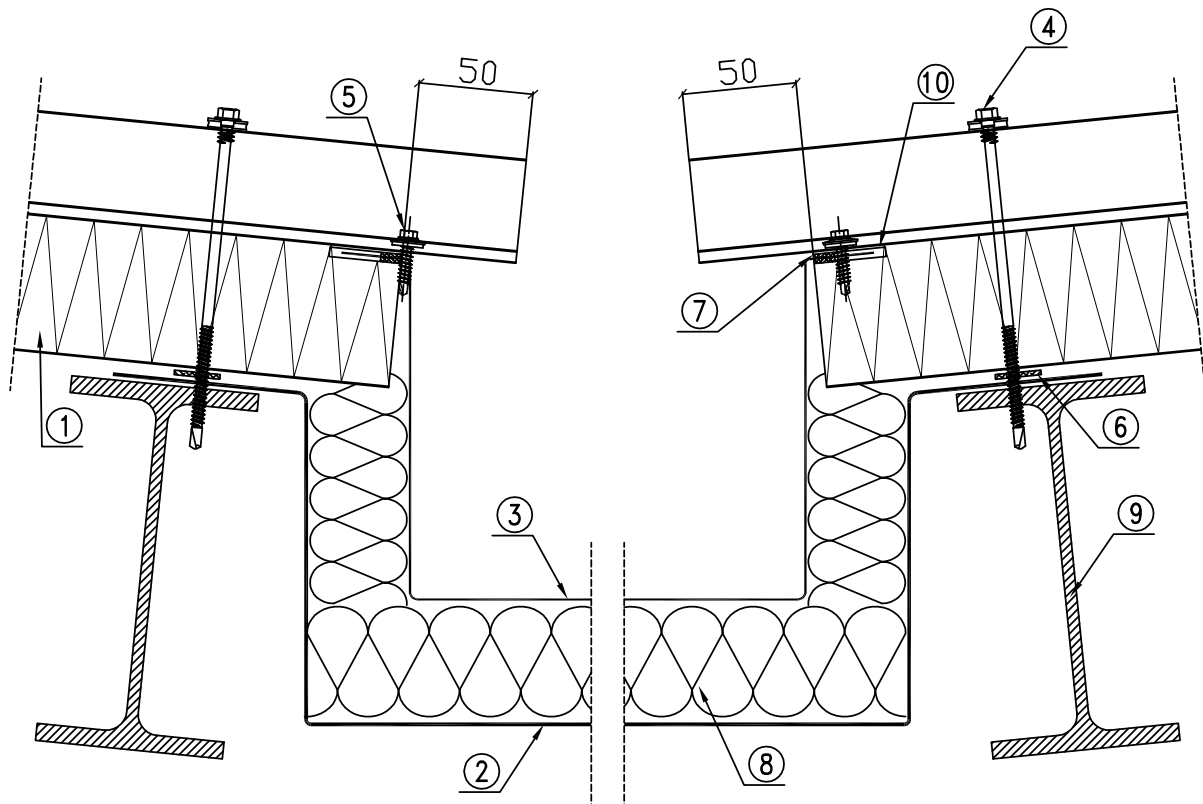
Joint of panels at the roof ridge



1. MW ROOF sandwich panel
2. OBR 104 flashing or individual flashing
3. OBR 52 or OBR 205 flashing or individual flashing
4. OBR 201 flashing or individual flashing
5. LB 1- LB 5 fasteners for fastening sandwich panels
6. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm (a tight rivet on the external roof cladding)
7. AL/Fe assembly blind rivet every 1000 mm
8. TUN 45 sealing tape
9. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
10. Butyl sealing tape
11. Mineral wool sealing applied during assembly
12. Cold bent, hot rolled, wooden etc. steel purlin acc. to the construction design

3.9. MW-R07

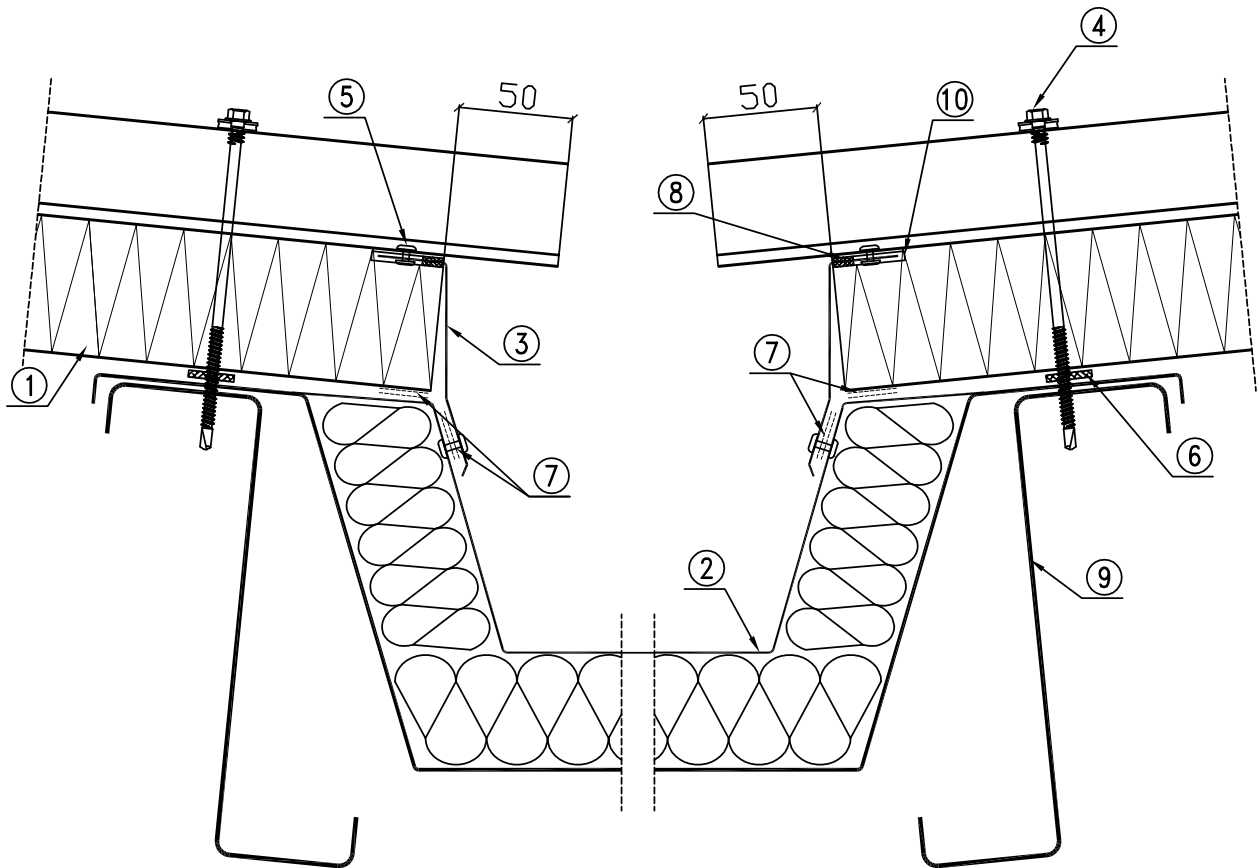
Joint of panels with an internal gutter



1. MW ROOF sandwich panel with undercut core
2. Internal profile of gutter (acc. to a separate, individual architectural specification)
3. External profile of gutter (acc. to a separate, individual architectural specification)
4. LB 1- LB 5 fasteners for fastening sandwich panels
5. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm
6. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
7. Butyl sealing compound or tape
8. Gutter heat-insulating material
9. Cold bent, hot rolled, wooden etc. steel purlin acc. to the construction design
10. Panel core cut to the depth of approx.30 mm

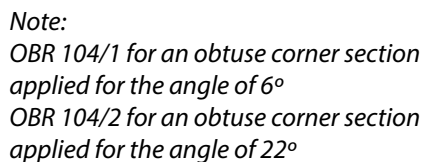
3.10. MW-R08

Joint of panels with a prefabricated internal gutter



1. MW ROOF sandwich panel with undercut core
2. Internal profile of prefabricated gutter (acc. to a separate, individual architectural specification)
3. Individual flashing
4. LB 1- LB 5 fasteners for fastening sandwich panels
5. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm
6. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
7. Butyl sealing compound or tape
8. Gutter heat-insulating material
9. Cold bent, hot rolled, wooden etc. steel purlin acc. to the construction design
10. Panel core cut to the depth of approx. 30 mm

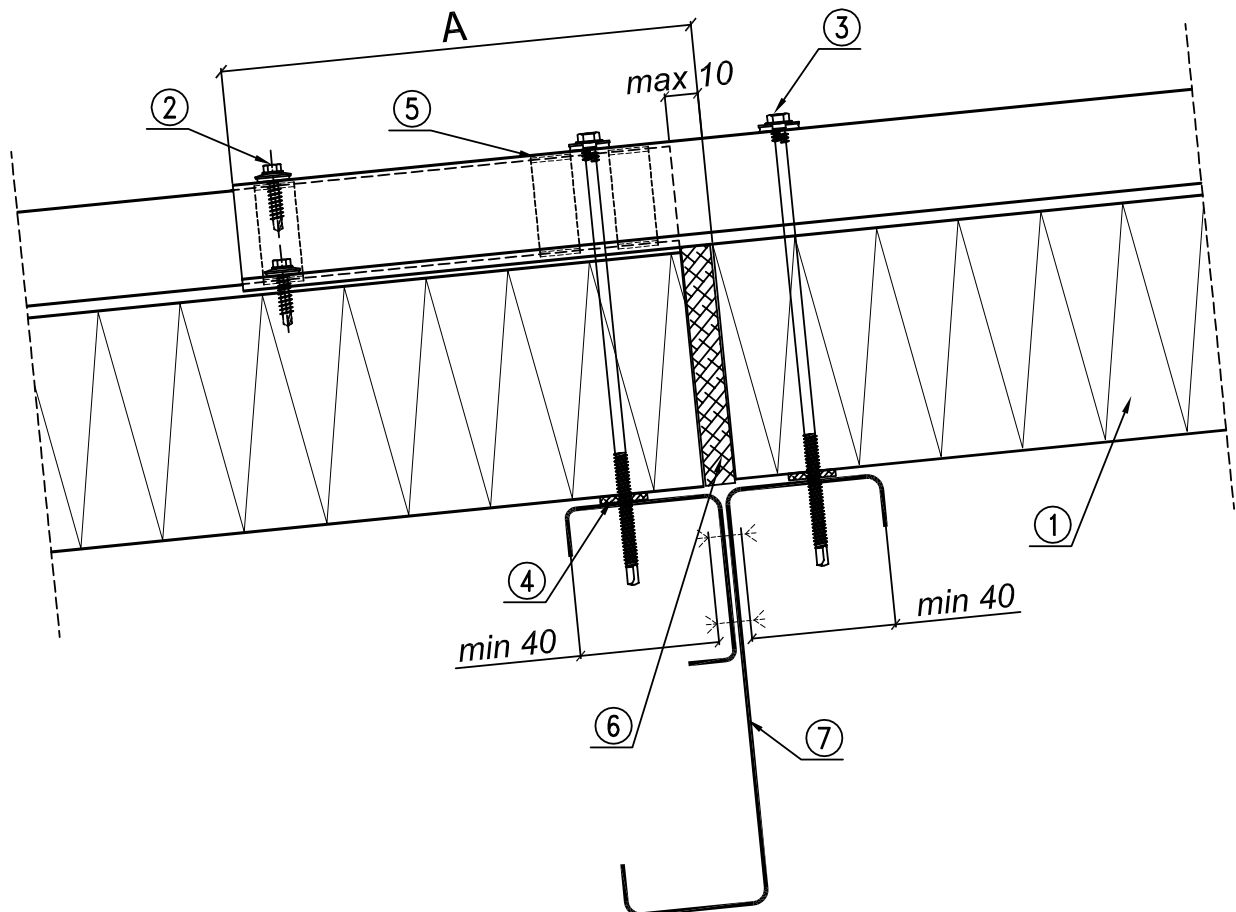
Joint of panels with a wall panel in the eaves



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3.12. MW-R10/1

Joining panels lengthwise ($L > 15\text{m}$)



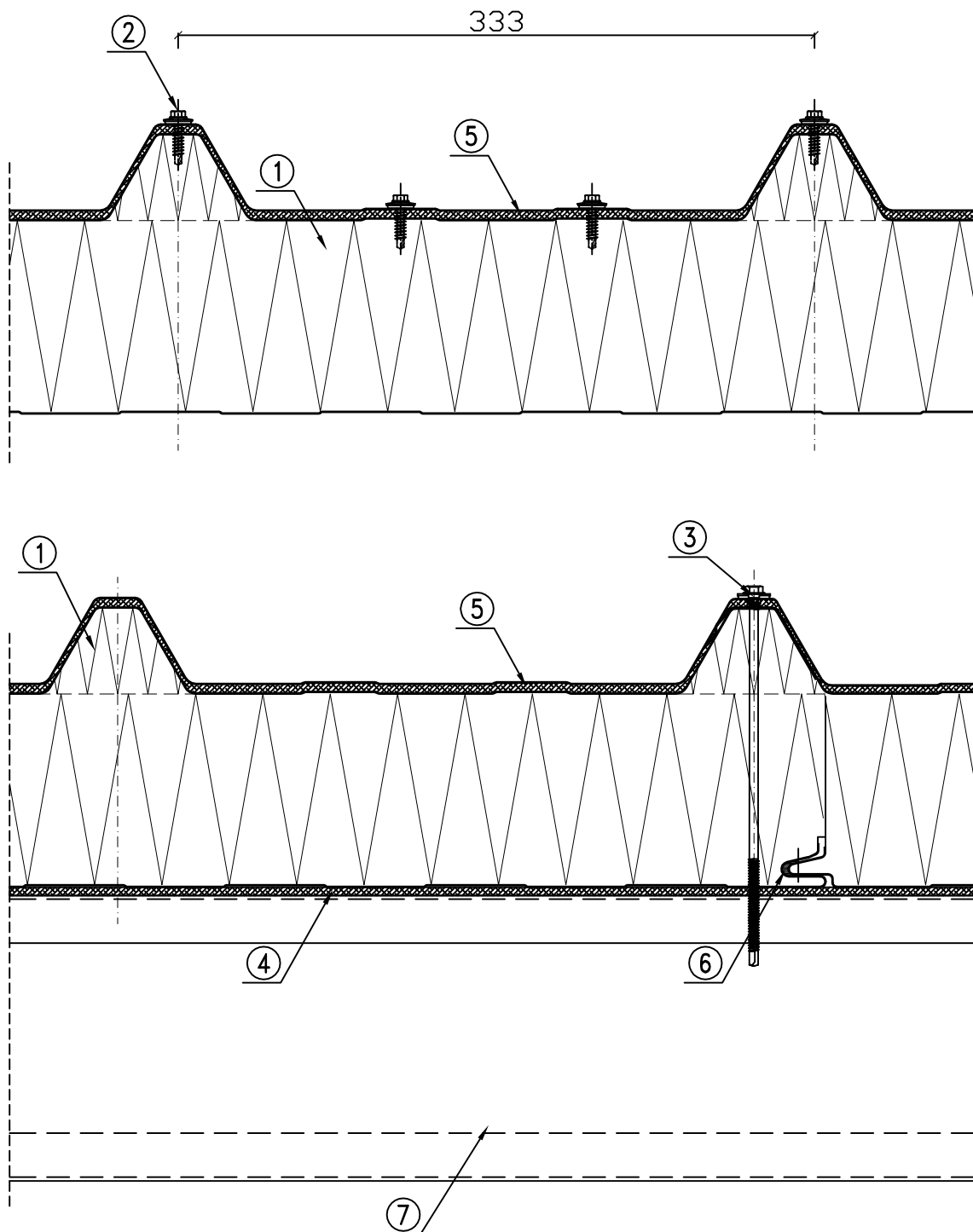
1. MW ROOF sandwich panel with undercut core
2. LB 6 self-drilling fastener or AL/Fe blind rivet in every upper wave
3. LB 1- LB 5 fasteners for fastening sandwich panels
4. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
5. Butyl sealing tape
6. Mineral wool sealing applied during assembly
7. Cold bent, hot rolled, wooden etc. steel purlin acc. to the construction design

Attention !

- Standard $A=50\text{ mm}$ next to the eaves
- Standard $A=150\text{ mm}$ next to the overlap
- max. $A=200\text{ mm}$ next to the overlap
- min. $A=10\text{ mm}$ without any overlap

3.13. MW-R10/2

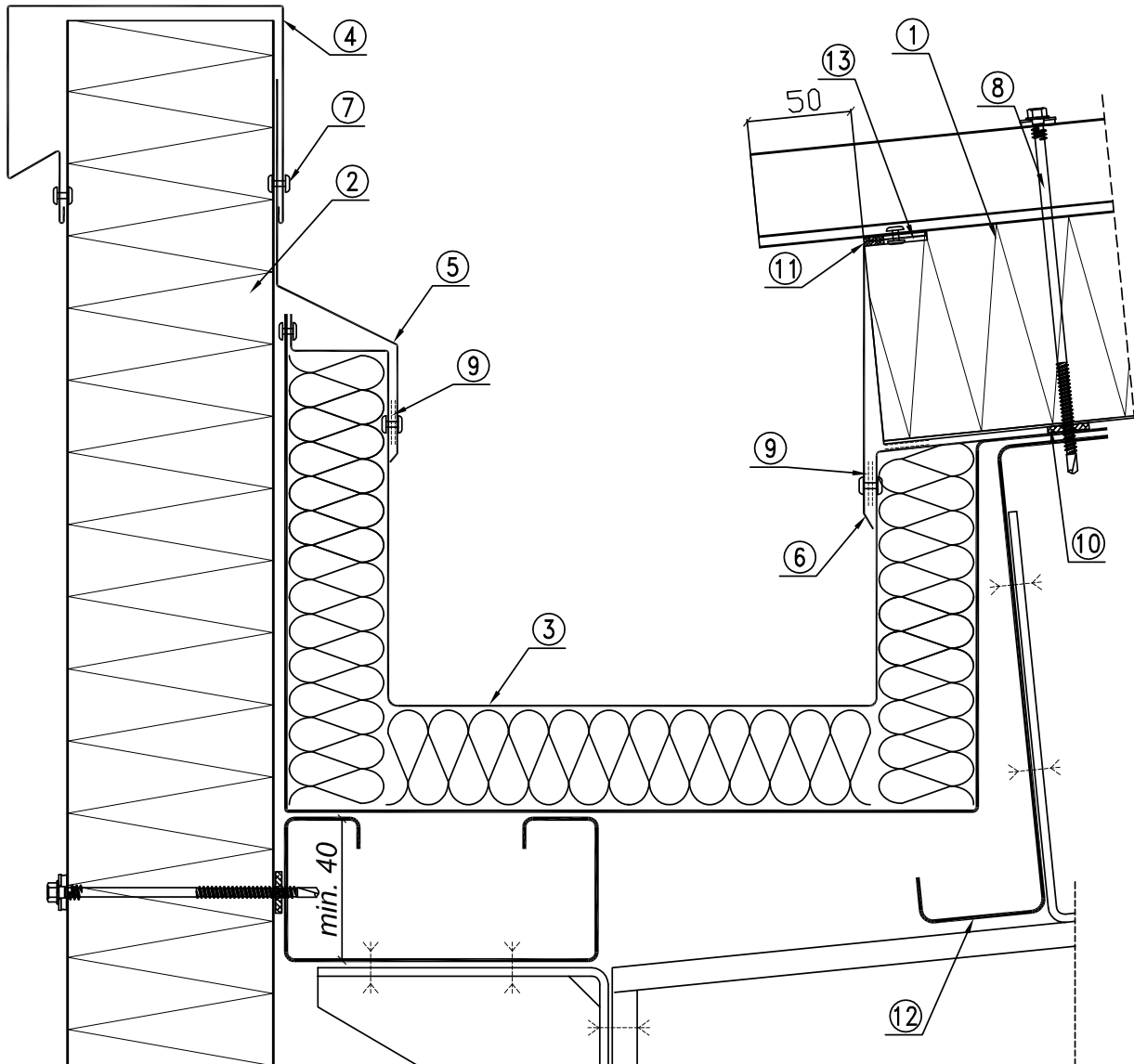
Joining panels lengthwise (L>15m)



1. MW ROOF sandwich panel with undercut core
2. LB 6 self-drilling fastener or AL/Fe blind rivet in every upper wave
3. LB 1- LB 5 fasteners for fastening sandwich panels
4. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
5. Butyl sealing tape or mass
6. Sealing (butyl is recommended) – applied on site or gasket applied during production
7. Cold bent, hot rolled, wooden etc. steel purlin acc. to the construction design

3.14. MW-R11

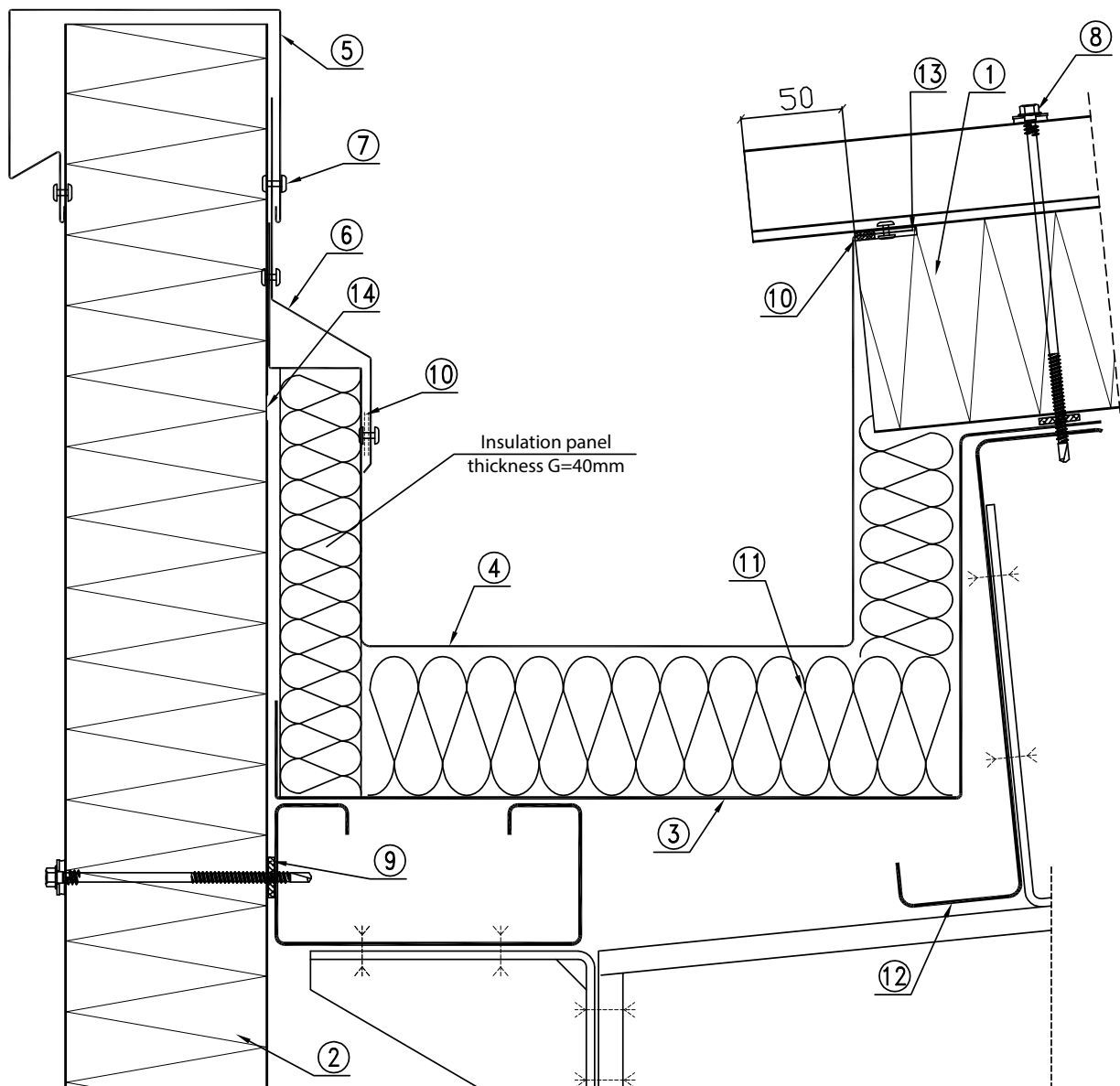
Joint of panels with a prefabricated gutter by the attic



1. MW ROOF sandwich panel with undercut core
2. MW STANDARD, MW DEFENDER, MW LIGHT or MW PLUS sandwich panel
3. Prefabricated gutter acc. to the architecture design (with a slope)
4. OBR 112 flashing or individual flashing
5. Individual flashing
6. Individual flashing
7. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm (a tight rivet on the external roof and gutter cladding)
8. LB 1- LB 5 fasteners for fastening sandwich panels
9. Butyl tape or mass
10. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
11. Butyl sealing compound (recommended)
12. Cold bent, hot rolled, wooden etc. steel purlin acc. to the construction design
13. Panel core cut to the depth of approx. 30 mm

3.15. MW-R12

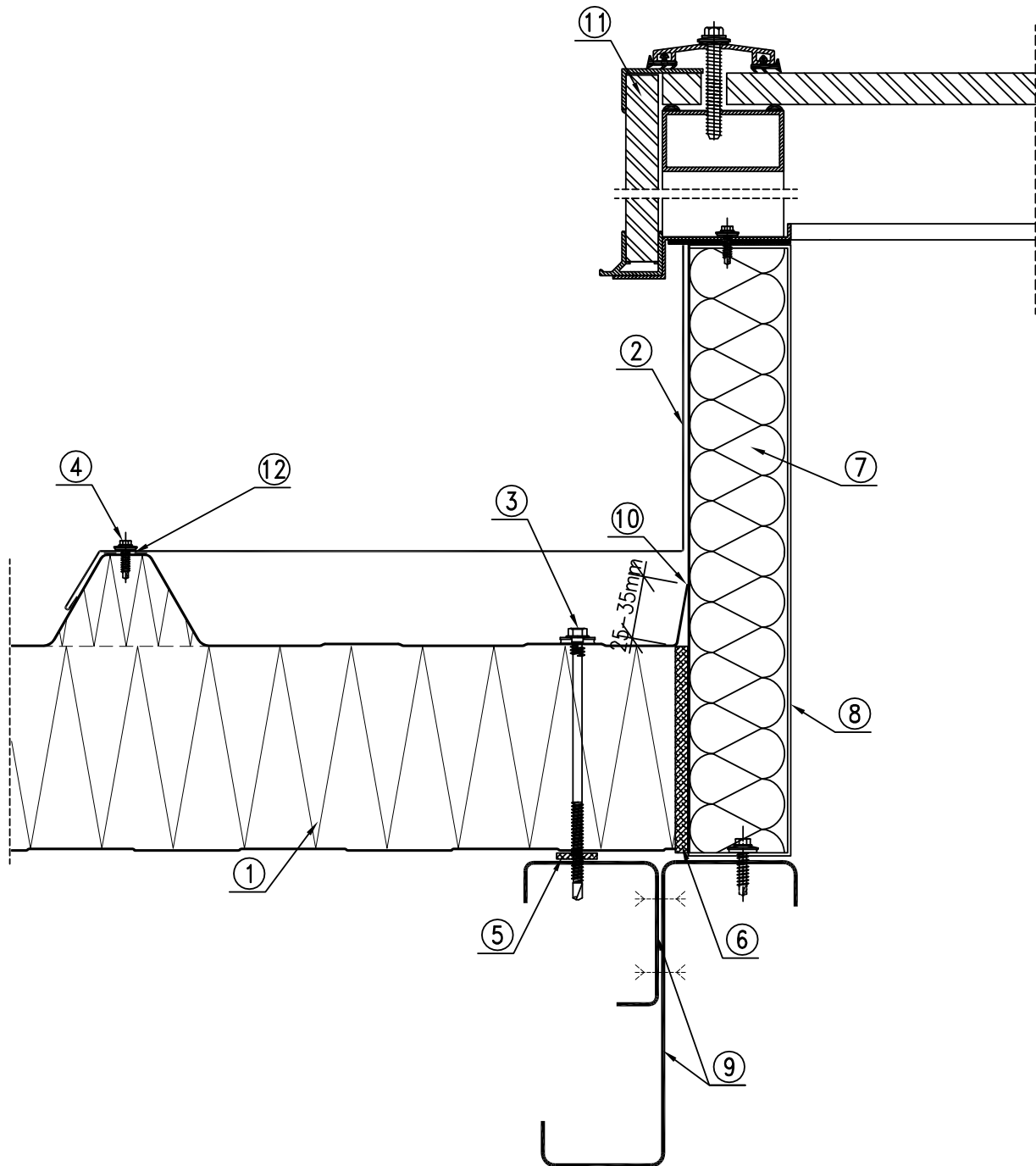
Joint of panels with an internal gutter by the attic



1. MW ROOF sandwich panel with undercut core
2. MW STANDARD, MW DEFENDER, MW LIGHT or MW PLUS sandwich panel
3. Internal profile of gutter trough according to a separate specification
4. External profile of gutter trough according to a separate specification
5. OBR 112 flashing or individual flashing
6. Individual flashing
7. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm (a tight rivet on the external roof and gutter cladding)
8. LB 1- LB 5 fasteners for fastening sandwich panels
9. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
10. Butyl sealing compound or tape
11. Gutter thermal insulation material
12. Cold bent, hot rolled, wooden etc. steel purlin acc. to the construction design
13. Panel core cut to the depth of approx. 30 mm
14. Facing with a 10 mm wide gap, to improve thermal insulation efficiency (throat distance of the support max 300 mm)

3.16. MW-R13

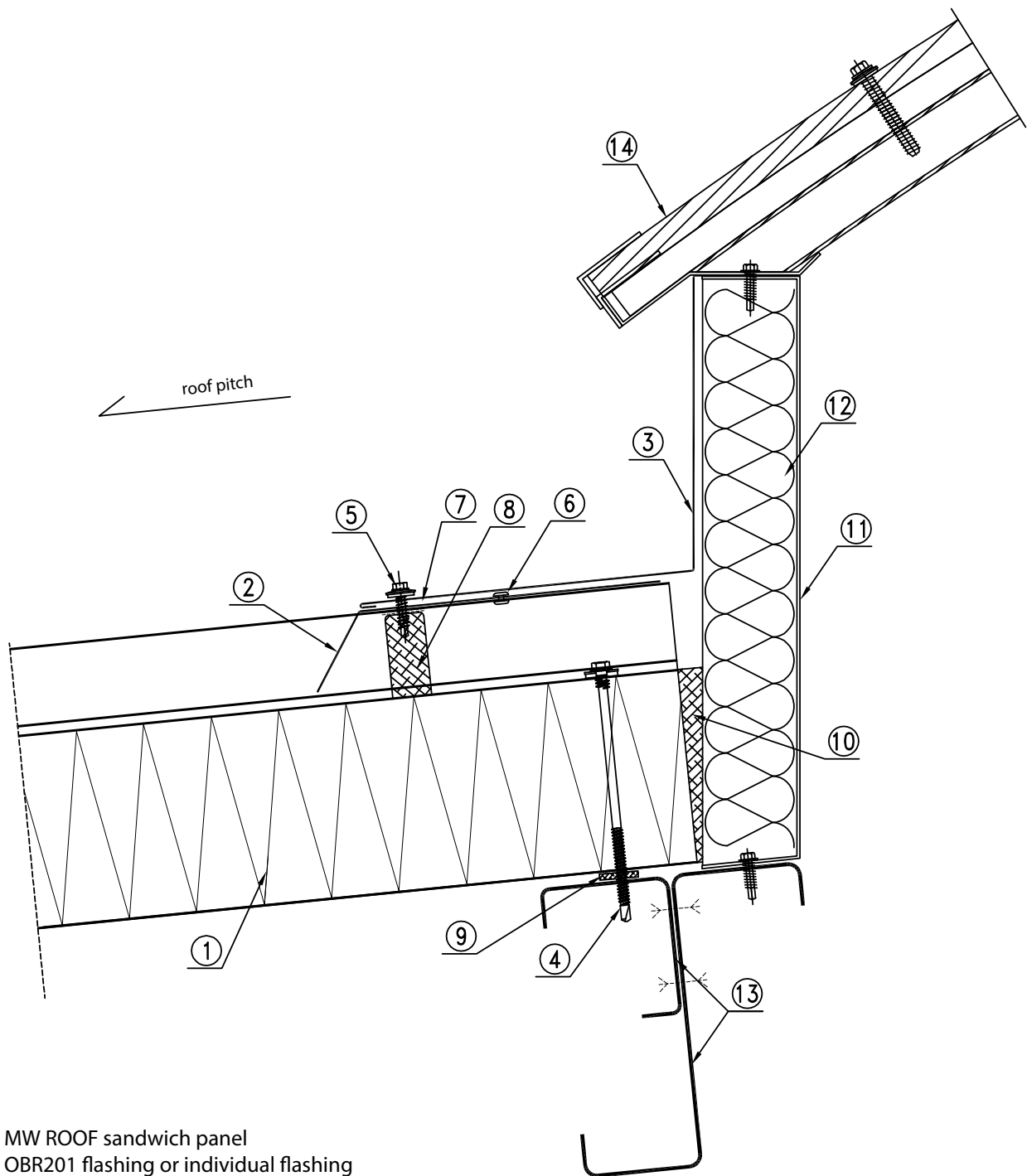
Roof ridge skylight - longitudinal section



1. MW ROOF sandwich panel
2. Individual flashing
3. LB 1- LB 5 fasteners for fastening sandwich panels
4. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm (a tight rivet on the external roof and gutter cladding)
5. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
6. Mineral wool sealing applied during assembly
7. Skylight thermal insulation material
8. Skylight base according to a separate specification of skylight manufacturer
9. Bearing purlin according to the construction design + angle
10. Deflected upper facing
11. Skylight elements according to a separate specification of skylight manufacturer
12. Butyl sealing compound - recommended

3.17. MW-R14

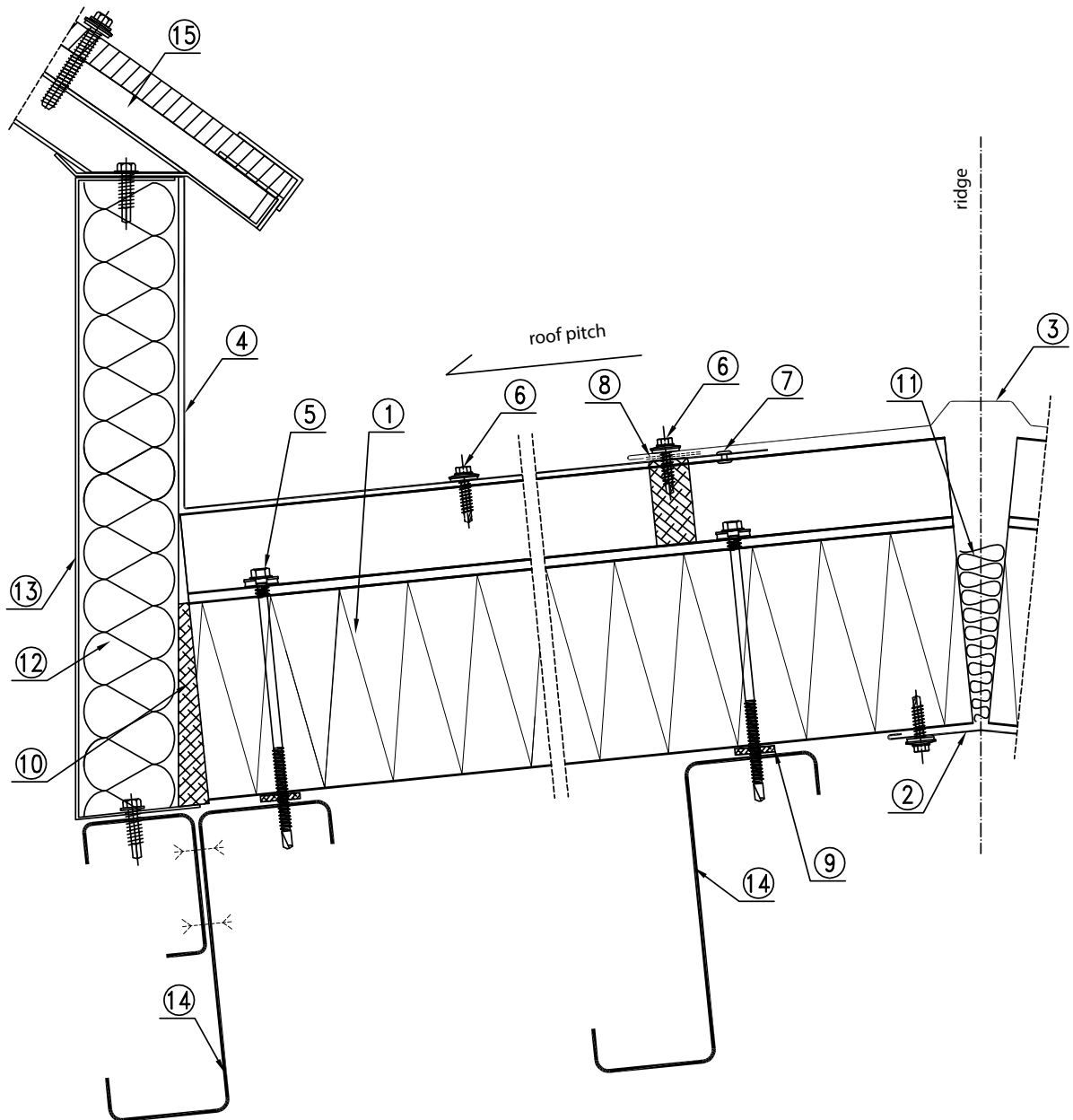
Roof ridge skylight – cross section



1. MW ROOF sandwich panel
2. OBR201 flashing or individual flashing
3. Skylight planking
4. LB 1- LB 5 fasteners for fastening sandwich panels
5. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm (a tight rivet on the external roof cladding)
6. AL/Fe assembly blind rivet approx. every 1000 mm
7. Butyl tape or mass
8. TUN45 sealing tape
9. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
10. Mineral wool sealing applied during assembly
11. Skylight base according to a separate specification of skylight manufacturer
12. Skylight thermal insulation material
13. Bearing purlin + angle according to the construction design
14. Skylight elements according to a separate specification of skylight manufacturer

3.18. MW-R15

Roof ridge skylight – cross section



1. MW ROOF sandwich panel
2. OBR 104 flashing
3. OBR 52 or OBR 205 flashing
Individual flashing – drawn to the roof ridge
5. LB 1- LB 5 fasteners for fastening sandwich panels
6. LB 6 self-drilling fastener or AL/Fe blind rivet every 300 mm (a tight rivet on the external roof cladding)
7. AL/Fe blind rivet approx. every 1000 mm
8. Butyl tape or mass
9. PES 3x20 self-adhesive sealing tape (recommended) or equivalent
10. Mineral wool sealing applied during assembly
11. Mineral wool sealing applied during assembly
12. Skylight thermal insulation material
13. Skylight base according to a separate specification of skylight manufacturer
14. Bearing purlin + angle according to the construction design
15. Skylight elements according to a separate specification of skylight manufacturer

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