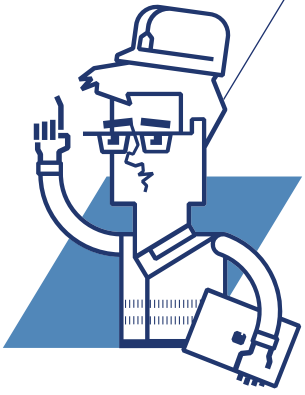
ARPANEL

Technical details

Additional information:

- These technical details are demonstrative material only and do not constitute the only design solution;
- Designer appoints quantity and type of fasteners on the basis of loads, with consideration to type and thickness of a structure, as well as a compartment function;
- For walls of fire protection facilities using ARPANEL S MiWo sandwich panels with mineral wool core, the method of panel fastening to the structure should be consulted with ARPANEL technical department.



Horizontal facade system

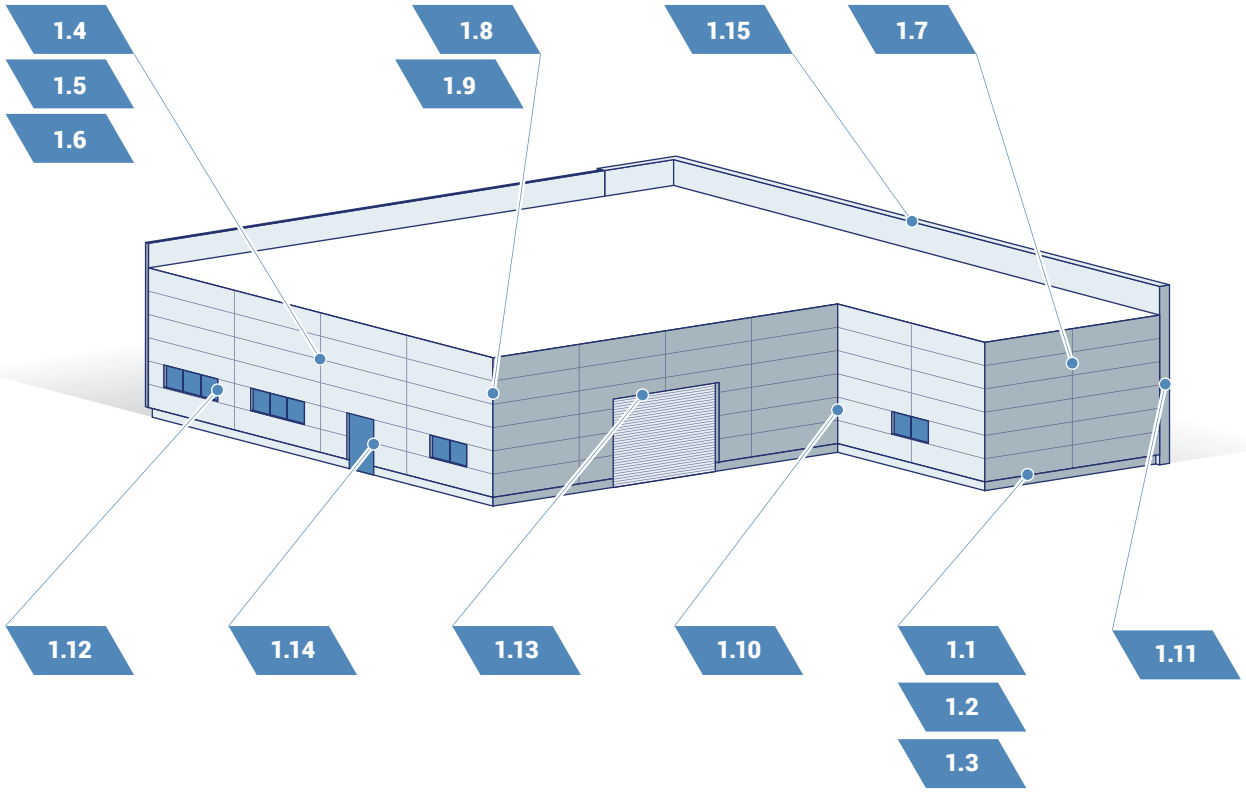


Diagram of placement of exemplary technical details

	Object
1.1	Starting detail - withdrawn plinth, version I
1.2	Starting detail - withdrawn plinth, version II
1.3	Starting detail - extended plinth
1.4	Detail of fastening a panel to a steel construction
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1.8	External corner detail
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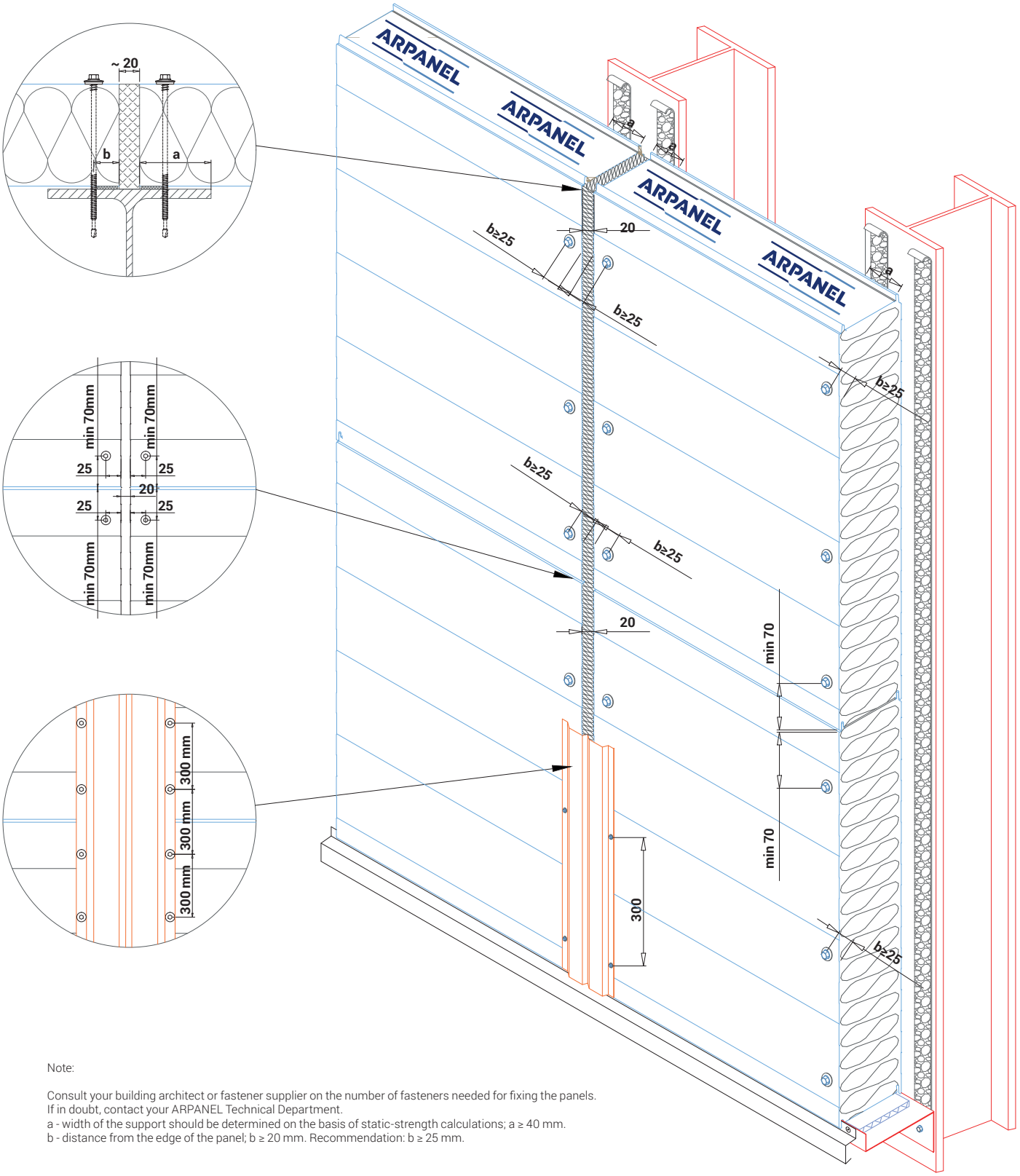
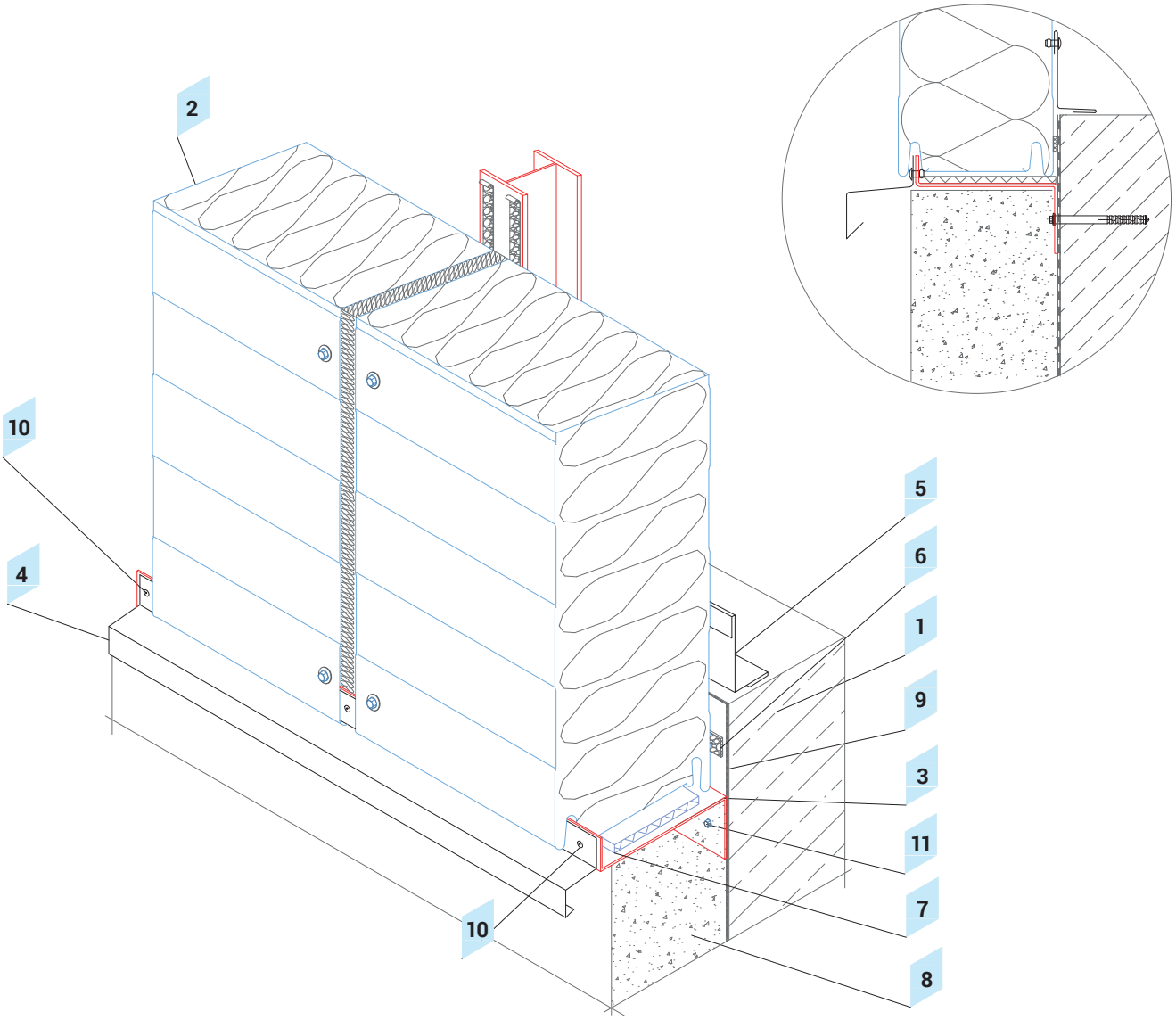


Note:

Consult your building architect or fastener supplier on the number of fasteners needed for fixing the panels.
If in doubt, contact your ARPANEL Technical Department.
a - width of the support should be determined on the basis of static-strength calculations; a ≥ 40 mm.
b - distance from the edge of the panel; b ≥ 20 mm. Recommendation: b ≥ 25 mm.

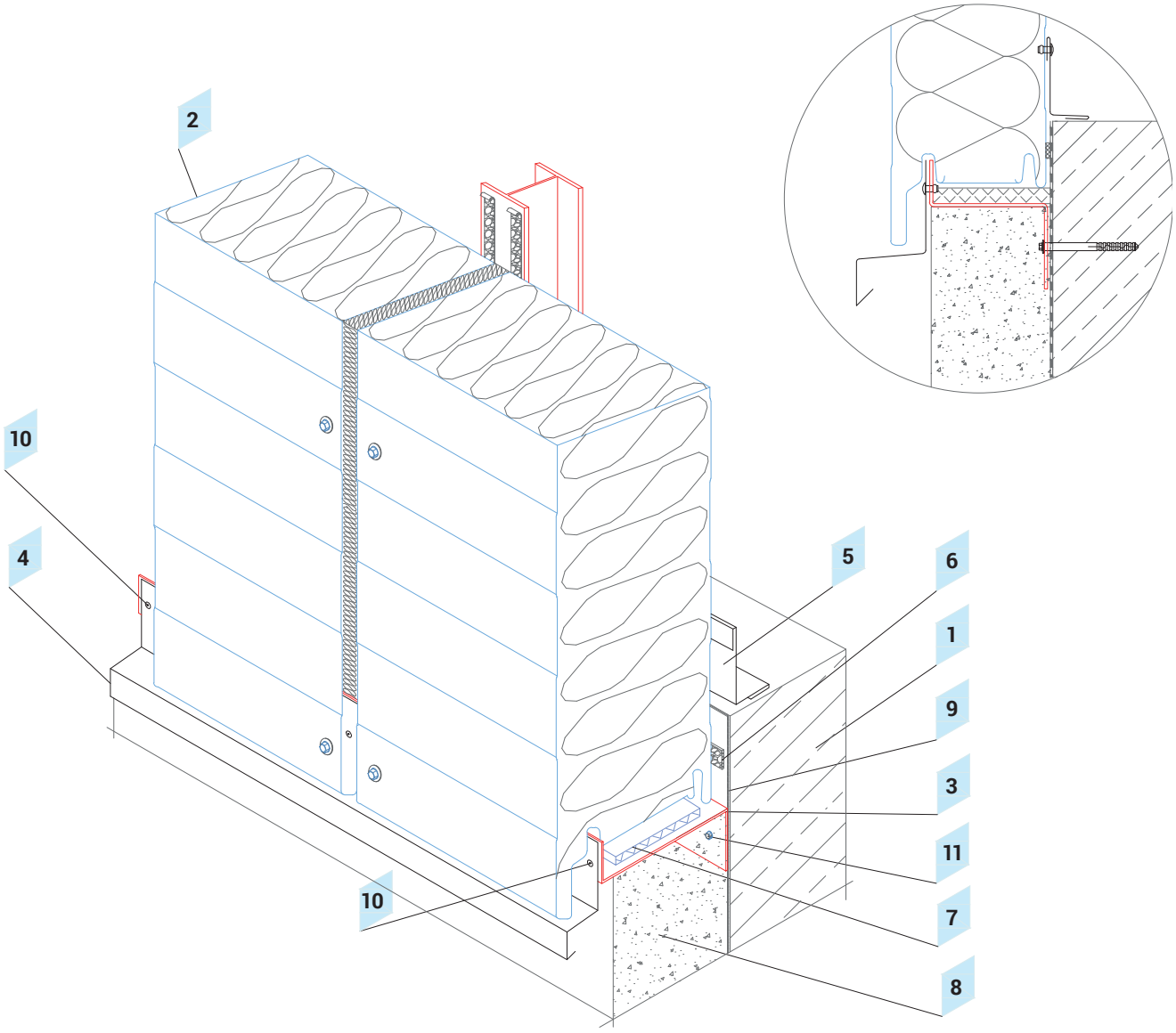
1.0 Detail of panel attachment to the substructure

1. Horizontal facade system



1.1 Starting detail - withdrawn plinth, version I

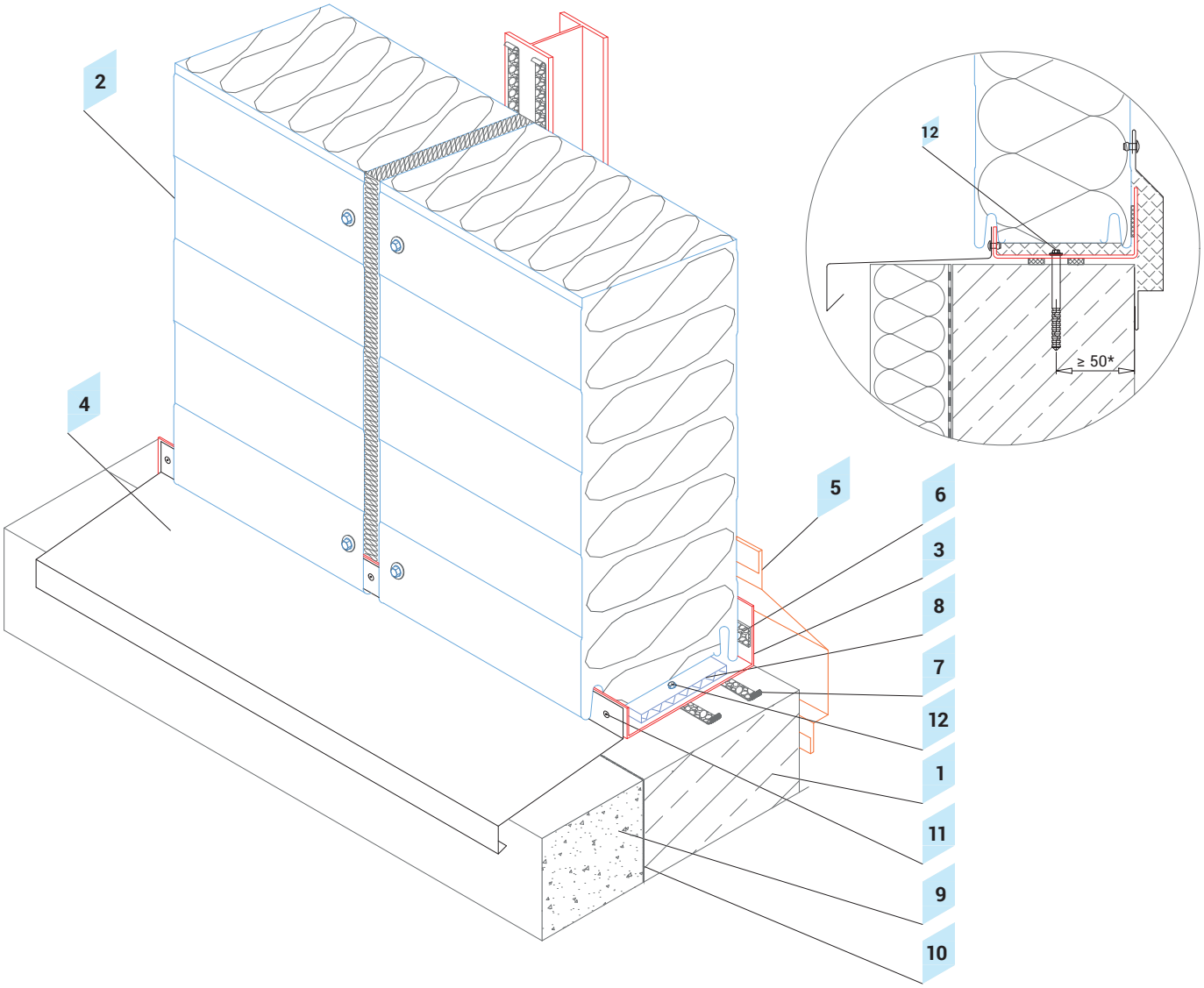
	Object	Product code
1	Substructure acc. to the structure design	
2	ARPANEL wall sandwich panel	ARPANEL S, CH
3	Continuous or point fixing profile (L=120mm - MiWo 2 pc/m, S/CH PIR 1 pc/m)	LS-1
4	Eaves flashing	OBPZ-1
5	Internal mask flashing	OBPZ-16
6	Expanding gasket PURS	US-05
7	Thermal insulation	
8	Thermal insulation of the substructure	
9	Anti-moisture insulation acc. to the architectural design	
10	Tight rivet or sheet metal screw (every 300–600 mm)	NT
11	Fastener acc. to the structure design	



1.2 Starting detail - withdrawn plinth, version II

	Object	Product code
1	Substructure acc. to the structure design	
2	ARPANEL SU wall sandwich panel	ARPANEL SU
3	Continuous or point fixing profile (L=120mm - MiWo 2 pc/m, S/CH PIR 1 pc/m)	LS-2 or LS-4
4	Eaves flashing	OBPZ-2
5	Internal mask flashing	OBPZ-16
6	Expanding gasket PURS	US-05
7	Thermal insulation	
8	Thermal insulation of the substructure	
9	Anti-moisture insulation acc. to the architectural design	
10	Tight rivet or sheet metal screw (every 300–600 mm)	NT
11	Fastener acc. to the structure design	

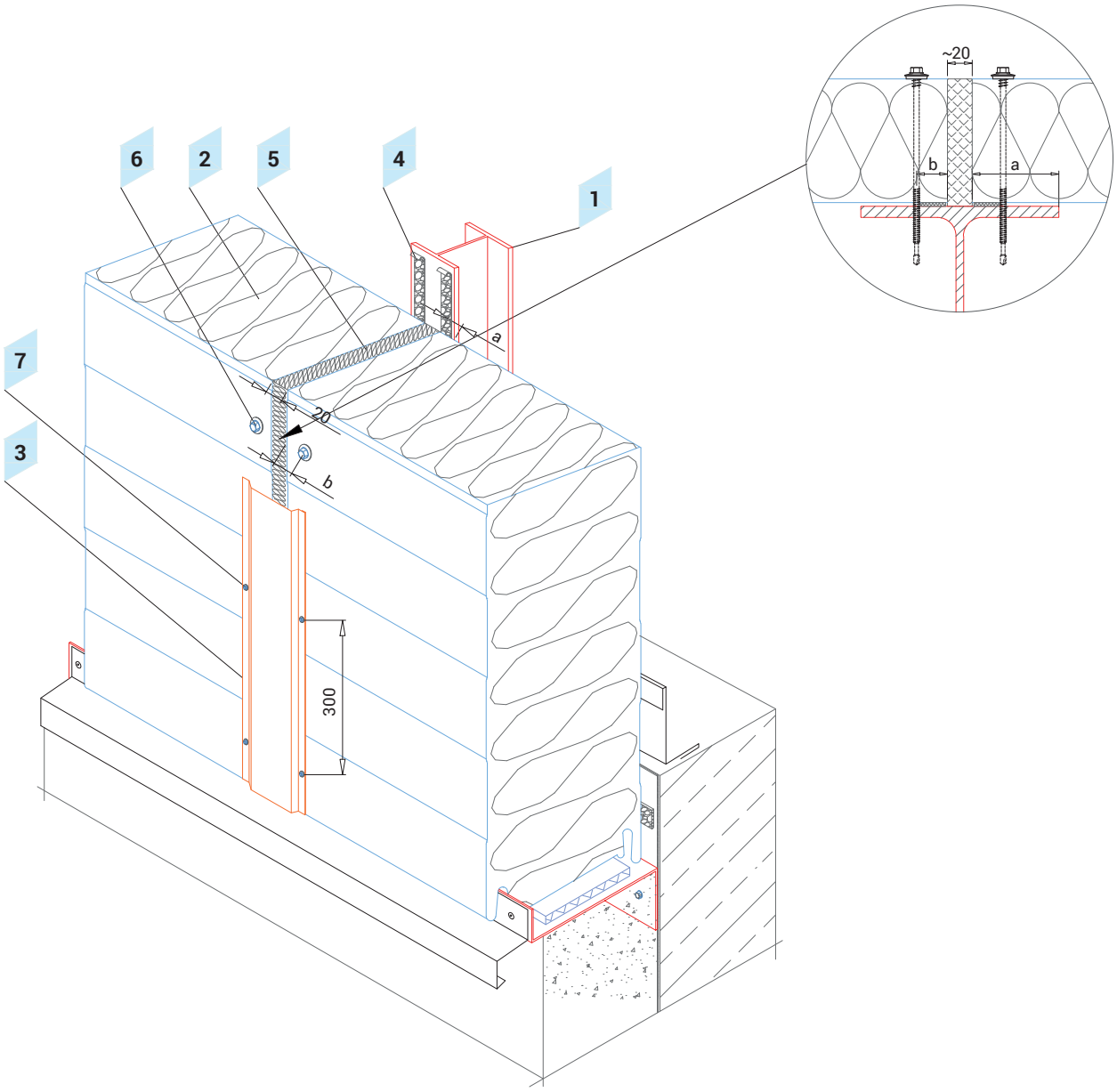
1. Horizontal facade system



* The minimum distance from the edge can be reduced if it is allowed by the mounting parameters of the fastener (item 12).

1.3 Starting detail - extended plinth

	Object	Product code
1	Substructure acc. to the structure design	
2	ARPANEL wall sandwich panel	ARPANEL S, CH
3	Continuous or point fixing profile (L=120mm - MiWo 2 pc/m, S/CH PIR 1 pc/m)	LS-3
4	Eaves flashing	OBPZ-3
5	Internal mask flashing	OBPZ-17
6	Acoustic and insulating gasket PES	US-02
7	Expanding gasket PURS	US-05
8	Thermal insulation	
9	Thermal insulation of the substructure	
10	Anti-moisture insulation acc. to the architectural design	
11	Tight rivet or sheet metal screw (every 300–600 mm)	NT
12	Fastener acc. to the structure design max. every 800 mm	

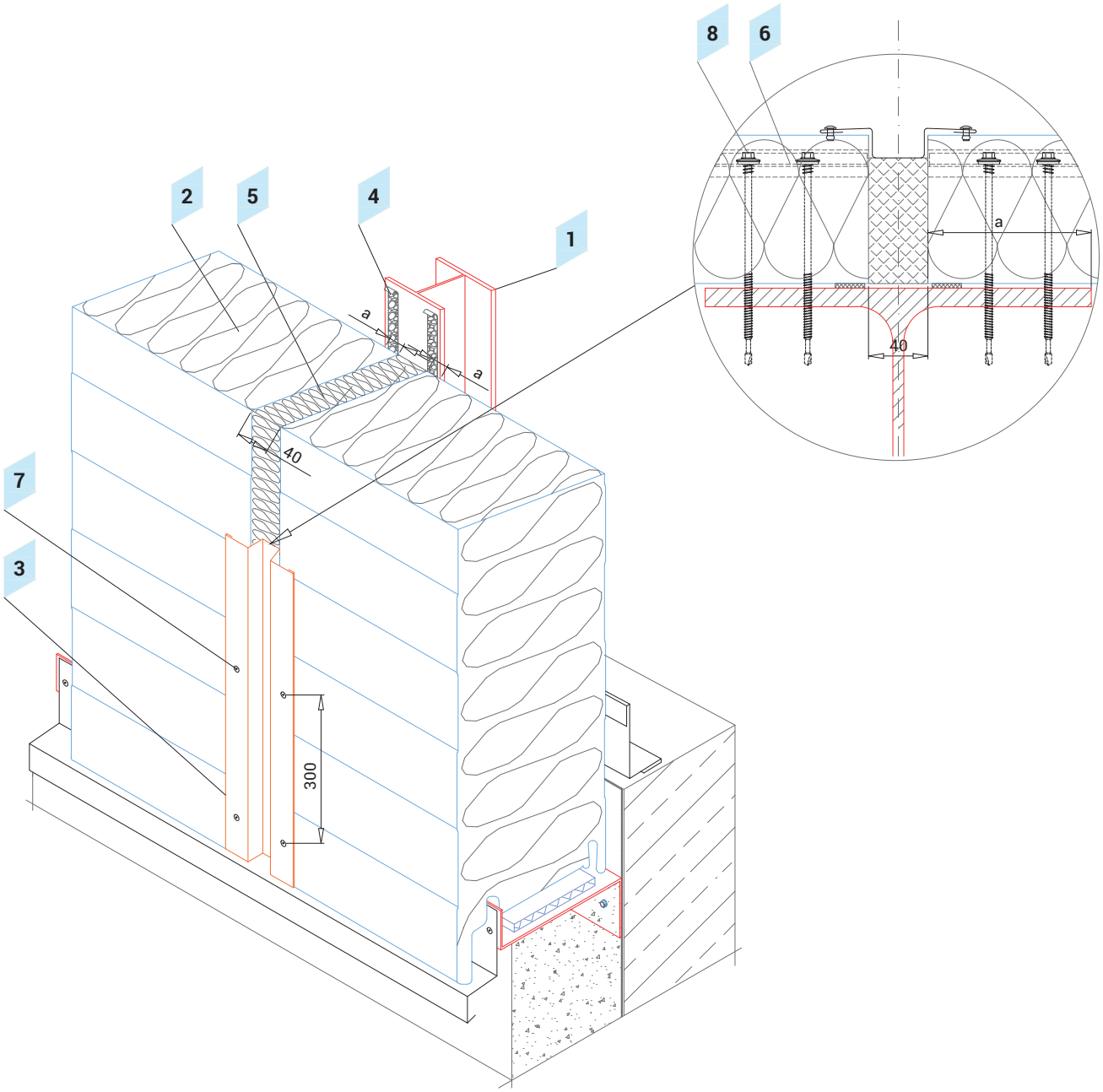


a - width of the support should be determined on the basis of static-strength calculations; a ≥ 40 mm.
b - distance from the edge of the panel; b ≥ 20 mm. Recommendation: b ≥ 25 mm.

1.4 Detail of fastening a panel to a steel construction

	Object	Product code
1	Column acc. to the structure design	
2	ARPANEL wall sandwich panel	ARPANEL S, CH
3	Mask flashing	OBPZ-6
4	Acoustic and insulating gasket PES	US-02
5	Thermal insulation	
6	Self-drilling fastener	Z-01
7	Sheet metal screw or NT tight rivet (every 300–600 mm)	Z-03

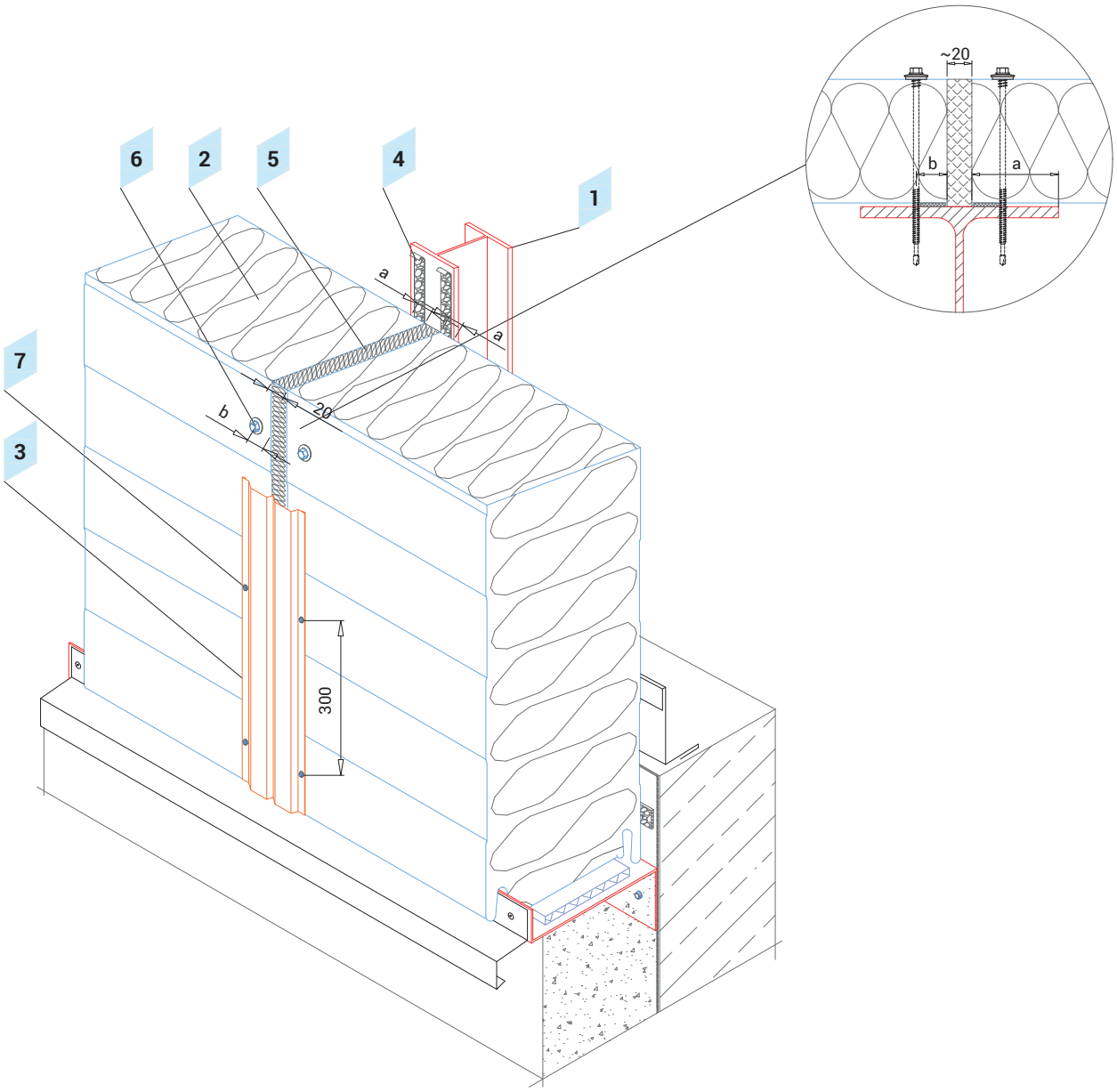
1. Horizontal facade system



a - width of the support should be determined on the basis of static-strength calculations and the parameters of the chosen pressure distributor plate; a ≥ 60 mm

1.5 Detail of fastening a panel to a steel construction - omega profile

	Object	Product code
1	Column acc. to the structure design	
2	ARPANEL SU wall sandwich panel	ARPANEL SU
3	Mask flashing	OBPZ-7
4	Acoustic and insulating gasket PES	US-02
5	Thermal insulation	
6	Pressure distributor plate	RN-200
7	Tight rivet or sheet metal screw (every 300–600 mm)	NT
8	Self-drilling fastener	Z-01

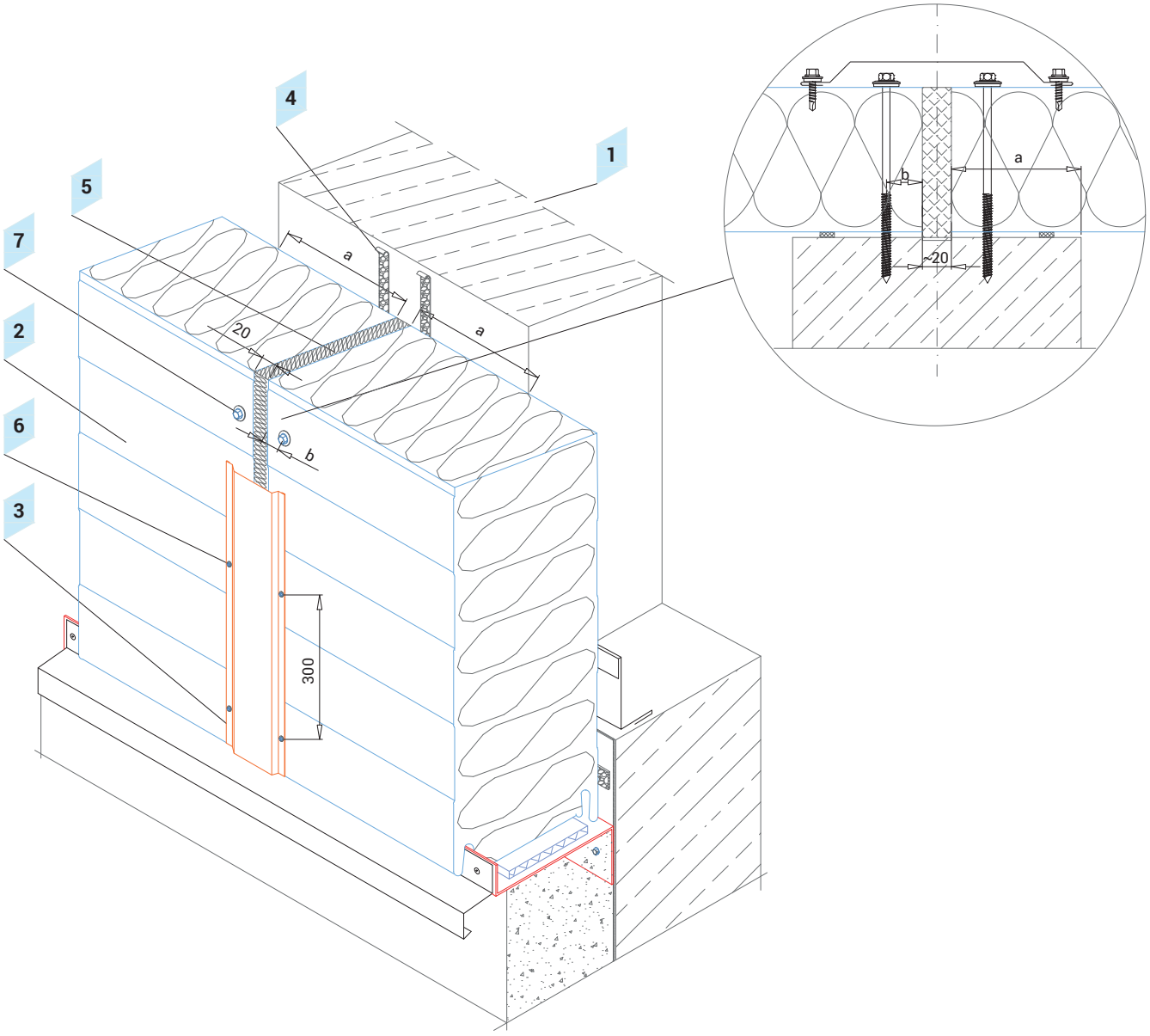


a - width of the support should be determined on the basis of static-strength calculations; a ≥ 40 mm.
b - distance from the edge of the panel; b ≥ 20 mm. Recommendation: b ≥ 25 mm.

1.6 Panel to panel junction – steel construction

	Object	Product code
1	Column acc. to the structure design	
2	ARPANEL wall sandwich panel	ARPANEL S, CH
3	Mask flashing	OBPZ-8
4	Acoustic and insulating gasket PES	US-02
5	Thermal insulation	
6	Self-drilling fastener	Z-01
7	Sheet metal screw or NT tight rivet (every 300–600 mm)	Z-03

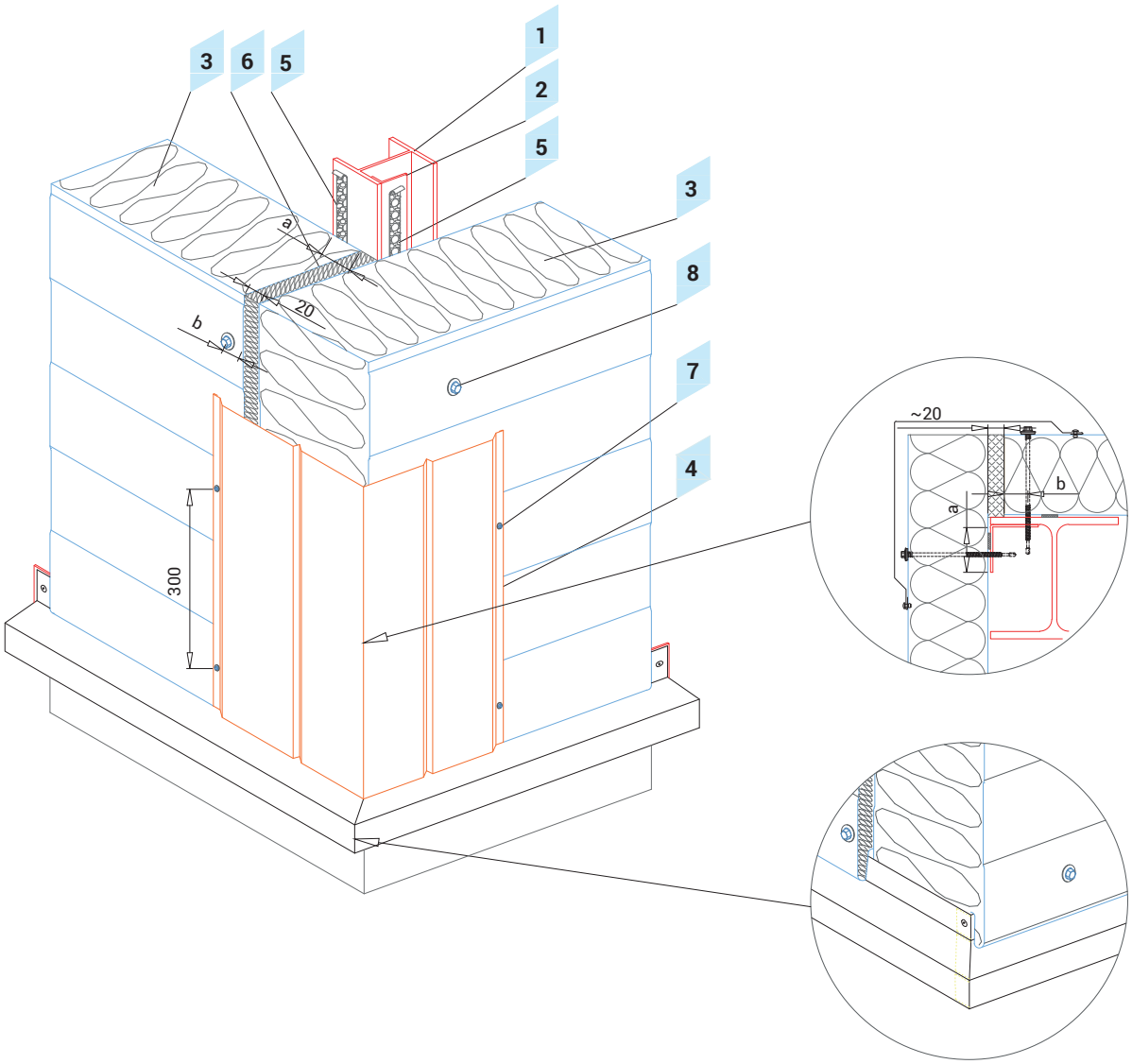
1. Horizontal facade system



a - width of the support should be determined on the basis of static-strength calculations, taking into account the mounting parameters of fasteners.
b - distance from the edge of the panel; b ≥ 20 mm. Recommendation: b ≥ 25 mm.

1.7 Panel to panel junction – reinforced concrete structure

	Object	Product code
1	Column acc. to the structure design	
2	ARPANEL wall sandwich panel	ARPANEL S, CH
3	Mask flashing	OBPZ-6
4	Expanding gasket PURS	US-05
5	Thermal insulation	
6	Sheet metal screw or NT tight rivet (every 300–600 mm)	Z-03
7	Fastener	Z-05

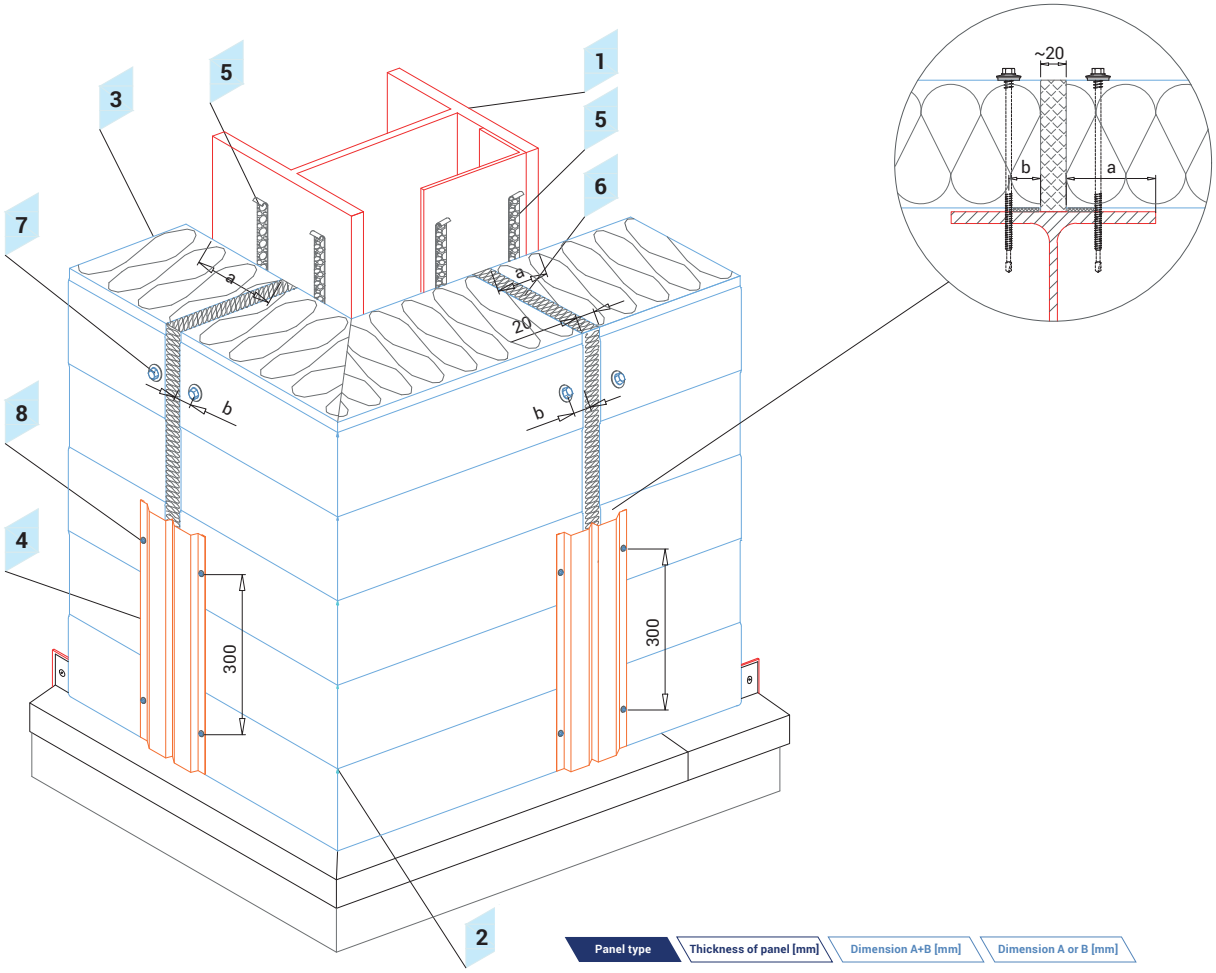


a - width of the support should be determined on the basis of static-strength calculations; a ≥ 40 mm.
b - distance from the edge of the panel; b ≥ 20 mm. Recommendation: b ≥ 25 mm.

1.8 External corner detail

	Object	Product code
1	Column acc. to the structure design	
2	Angle bar acc. to the structure design	
3	ARPANEL wall sandwich panel	ARPANEL S, CH
4	Corner flashing	OBPZ-18 or OBPZ-18a
5	Acoustic and insulating gasket PES	US-02
6	Thermal insulation	
7	Tight rivet or Z-03 sheet metal screw (every 300–600 mm)	NT
8	Self-drilling fastener	Z-01

1. Horizontal facade system

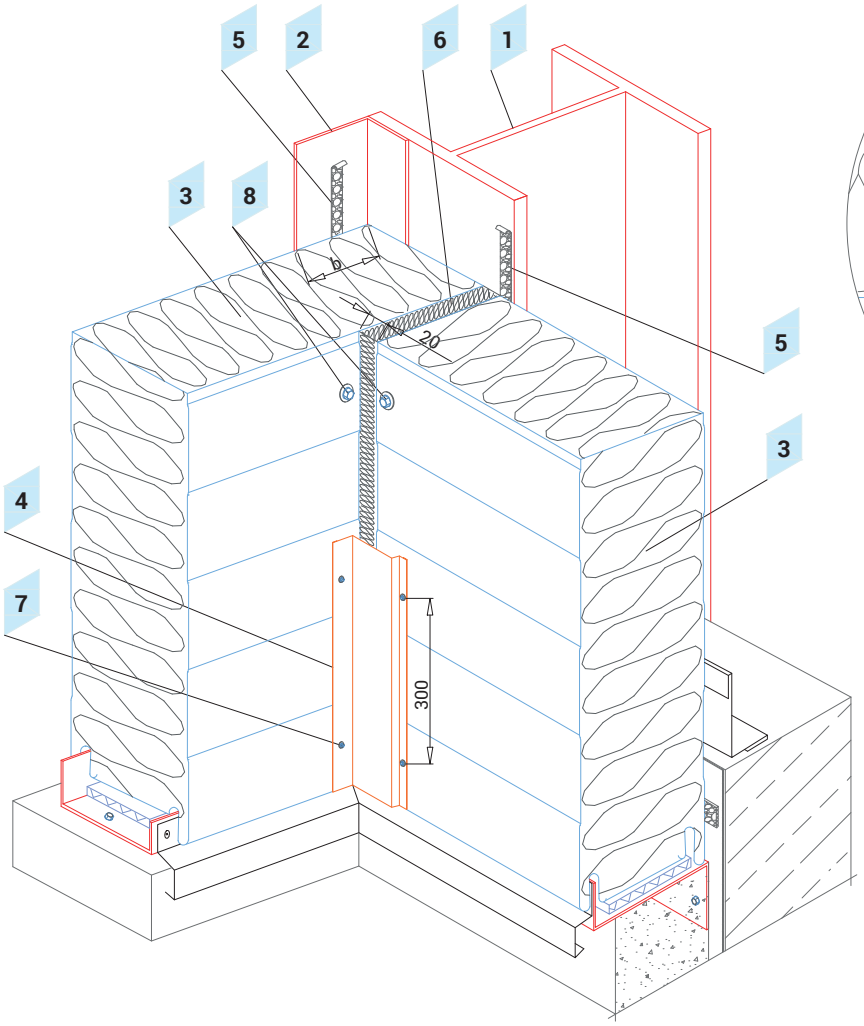


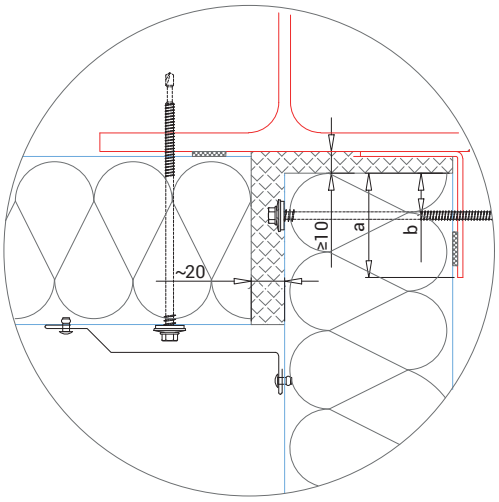
Panel type	Thickness of panel [mm]	Dimension A+B [mm]	Dimension A or B [mm]
ARPANEL S MiWo	80, 100	min. 800 max. 3 000	min. 400
	120, 150	min. 800 max. 2 500	
	160, 180, 200	min. 800 max. 2 000	
ARPANEL SU Miwo	100	min. 800 max. 3 000	
	120,150	min. 800 max. 2 500	
	200	min. 800 max. 2 000	
ARPANEL S PIR	60, 80, 100	min. 800 max. 4 000	
ARPANEL SU PIR	60, 80, 100	min. 800 max. 4 000	
	120	min. 800 max. 3 000	
ARPANEL CH PIR	120, 140, 160, 200	min. 800 max. 3 000	

a - width of the support should be determined on the basis of static-strength calculations; a ≥ 40 mm.
b - distance from the edge of the panel; b ≥ 20 mm. Recommendation: b ≥ 25 mm.

1.9 Panel corner element detail

	Object	Product code
1	Column acc. to the structure design	
2	ARPANEL corner sandwich panel	
3	ARPANEL wall sandwich panel	ARPANEL S, CH
4	Mask flashing	OBPZ-6 or OBPZ-8
5	Acoustic and insulating gasket PES	US-02
6	Thermal insulation	
7	Self-drilling fastener	Z-01
8	Sheet metal screw or NT tight rivet (every 300–600 mm)	Z-03



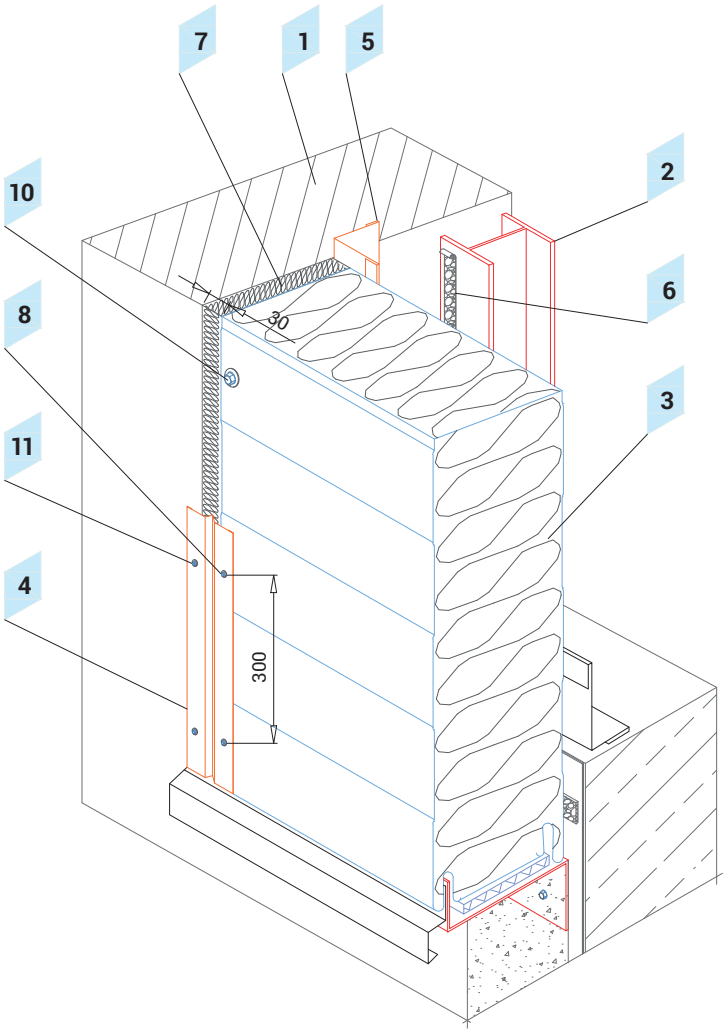


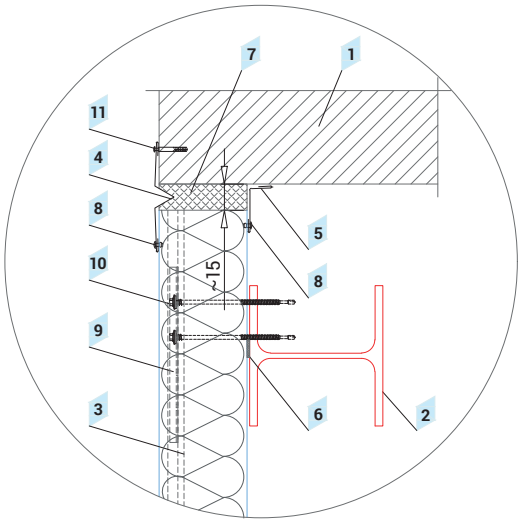
a - width of the support should be determined on the basis of static-strength calculations; a ≥ 40 mm.
b - distance from the edge of the panel; b ≥ 20 mm. Recommendation: b ≥ 25 mm.

1.10 Internal corner detail

	Object	Product code
1	Column acc. to the structure design	
2	Angle bar acc. to the structure design	
3	ARPANEL wall sandwich panel	ARPANEL S, CH
4	Internal mask flashing	OBPZ-10
5	Acoustic and insulating gasket PES	US-02
6	Thermal insulation	
7	Tight rivet or Z-03 sheet metal screw (every 300–600 mm)	NT
8	Self-drillling fastener	Z-01

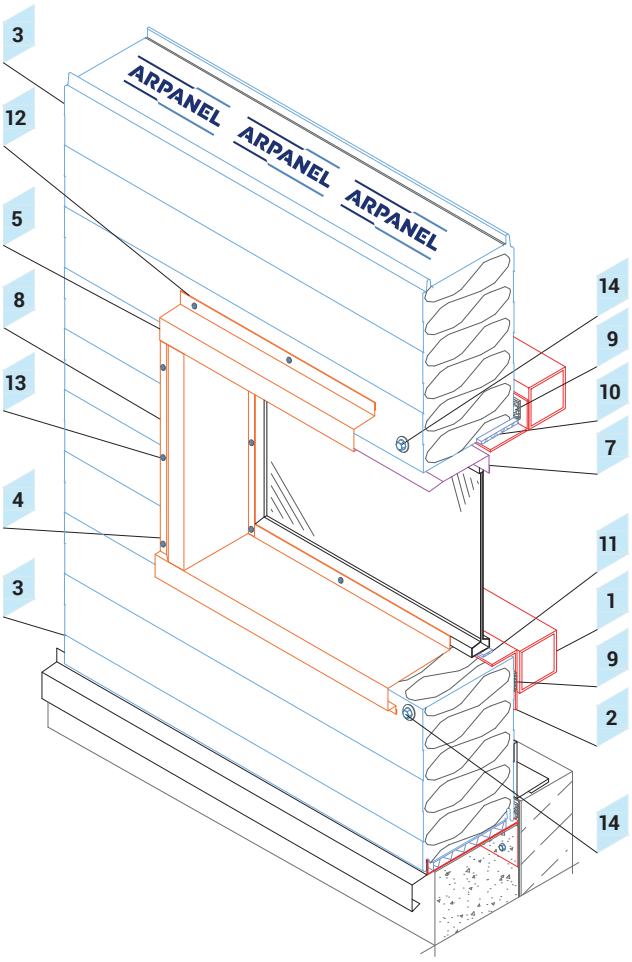
1. Horizontal facade system

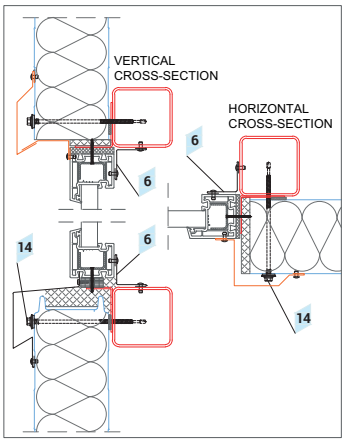




1.11 Panel connection to brick wall detail

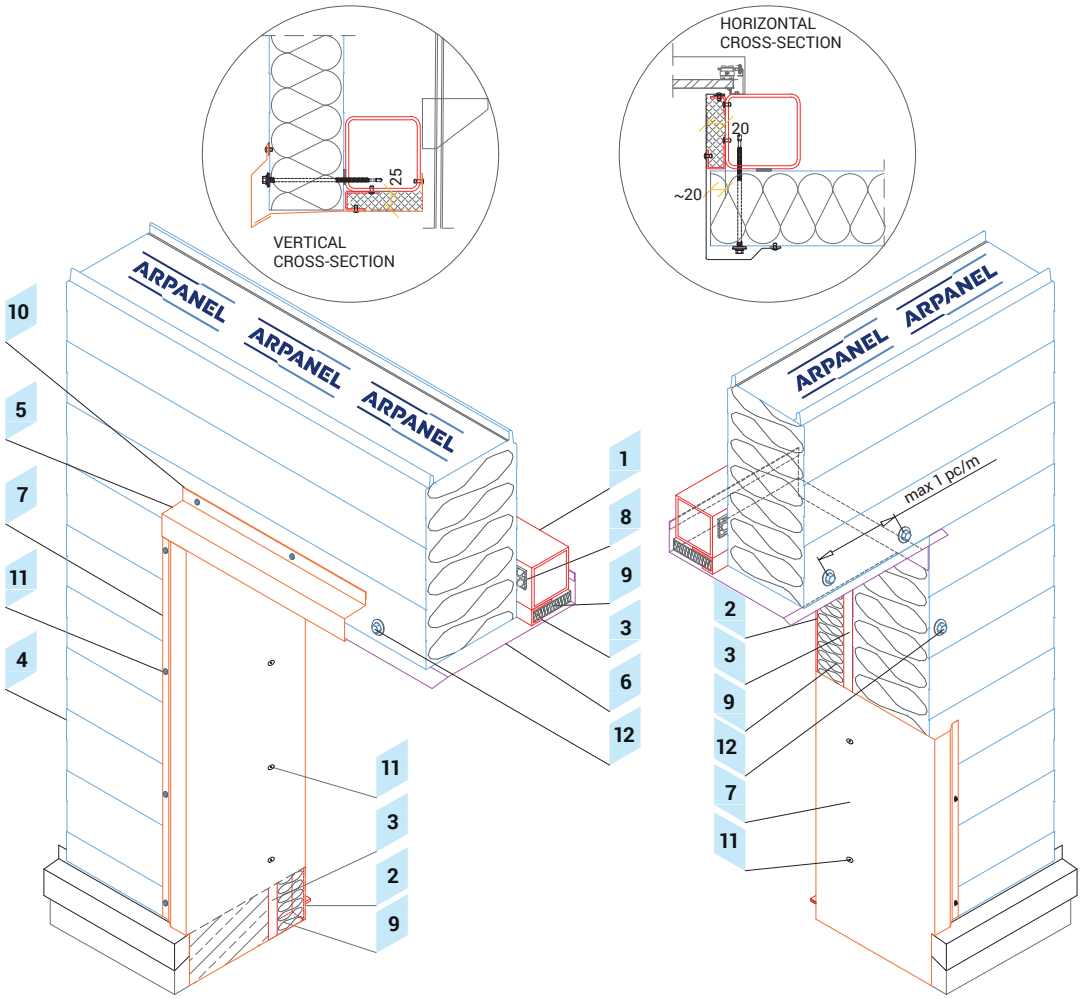
	Object	Product code
1	Brick wall acc. to the structure design	
2	Column acc. to the structure design	
3	ARPANEL SU wall sandwich panel	ARPANEL SU
4	Dilatation flashing	OBPZ-9
5	Internal mask flashing	OBPZ-16
6	Acoustic and insulating gasket PES	US-02
7	Thermal insulation	
8	Tight rivet or Z-03 sheet metal screw (every 300–600 mm)	NT
9	Pressure distributor plate	RN-200
10	Self-drillling fastener	Z-01
11	Expansion fastener	





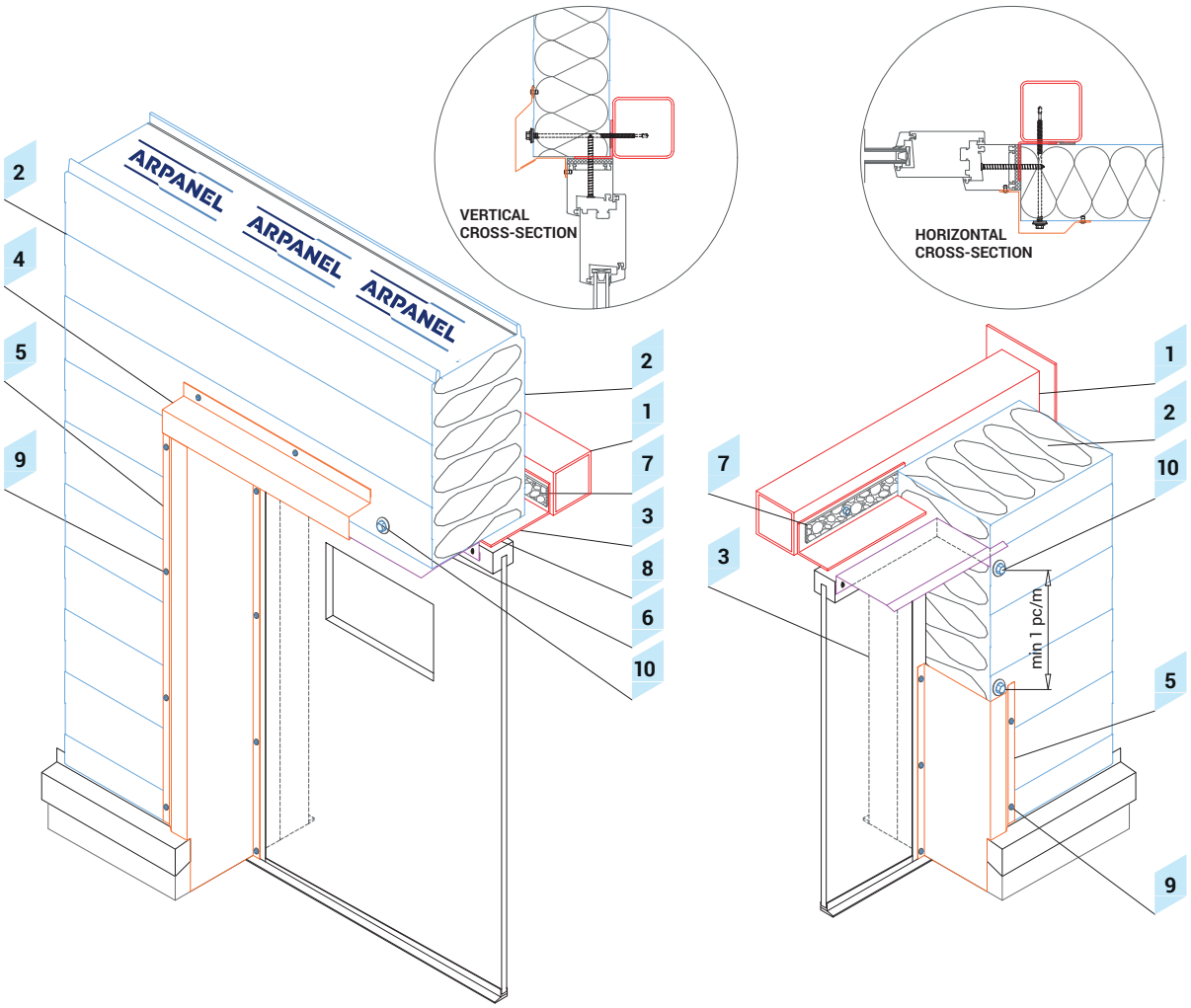
1.12 Window detail

	Object	Product code
1	Supporting structure acc. to the structure design	
2	Continuous or point angle bar acc. to the structure design	
3	ARPANEL wall sandwich panel	ARPANEL S, CH
4	Window sill flashing	OBPZ-4
5	Eaves flashing	OBPZ-5
6	Internal corner flashing	OBPZ-11
7	Lintel flashing	OBPZ-12
8	Window flashing	OBPZ-14
9	Acoustic and insulating gasket PES	US-02
10	Thermal insulation	
11	Mounting foam	
12	Permanent elastic sealing compound	
13	Tight rivet or sheet metal screw (every 300–600 mm)	NT
14	Self-drillling fastener	Z-01



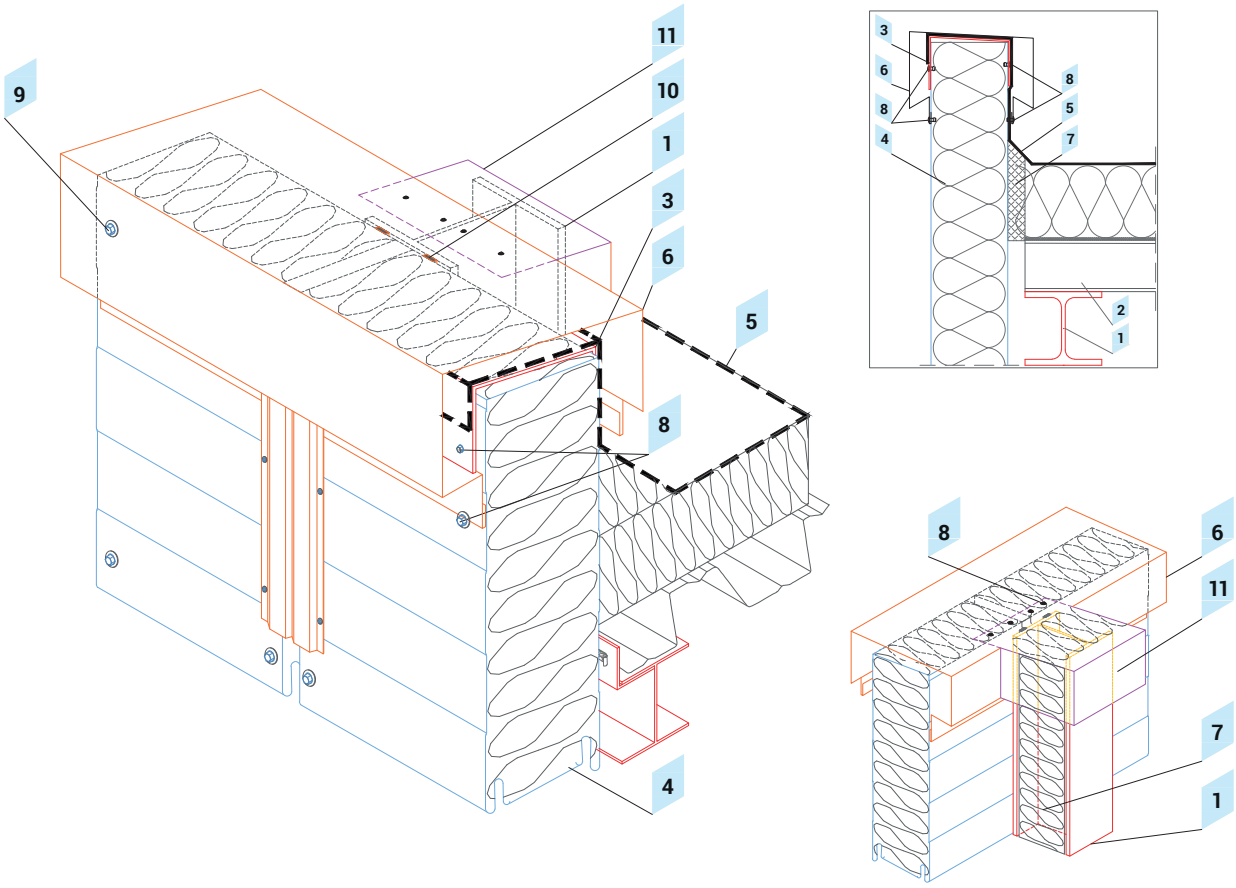
1.13 Gate detail

	Object	Product code
1	Supporting structure acc. to the structure design	
2	Continuous or point angle bar acc. to the structure design	
3	Profile acc. to the structure design	
4	ARPANEL wall sandwich panel	ARPANEL S, CH
5	Eaves flashing	OBPZ-5
6	Gate flashing	OBPZ-13
7	Side flashing	OBPZ-15
8	Acoustic and insulating gasket PES	US-02
9	Thermal insulation	
10	Permanent elastic sealing compound	
11	Tight rivet or sheet metal screw (every 300–600 mm)	NT
12	Self-drillling fastener	Z-01



1.14 Doors detail

	Object	Product code
1	Supporting structure acc. to the structure design	
2	ARPANEL S wall sandwich panel	ARPANEL S
3	Continuous or point angle bar acc. to the structure design	
4	Eaves flashing	OBPZ-1
5	Window flashing	OBPZ-14
6	Lintel flashing	OBPZ-19
7	Acoustic and insulating gasket PES	US-02
8	Thermal insulation	
9	Tight rivet or sheet metal screw (every 300–600 mm)	NT
10	Self-drillling fastener	Z-01



1.15 Attic detail

	Object	Product code
1	Purlin acc. the structural design	
2	Spandrel beam acc. the structural design	
3	Parapet cap support	OBPZ-21
4	ARPANEL S and CH wall panel	ARPANEL S and CH
5	Roofing	
6	Attic flashing	OBPZ-20
7	Thermal insulation	
8	Tight rivet or sheet metal screw (every 300–600 mm)	NT
9	Self-drillling fastener	Z-01
10	Acoustic and insulating gasket PES	US-02
11	Individual flashing	

Vertical facade system

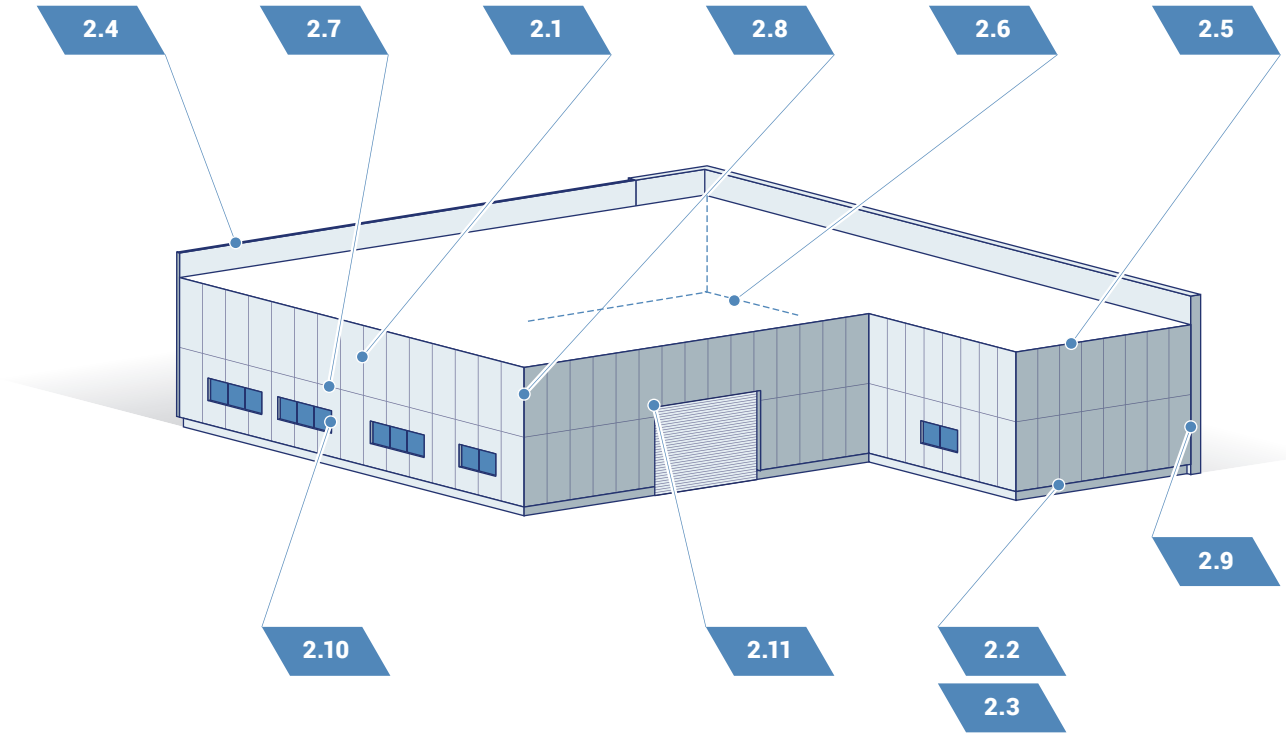
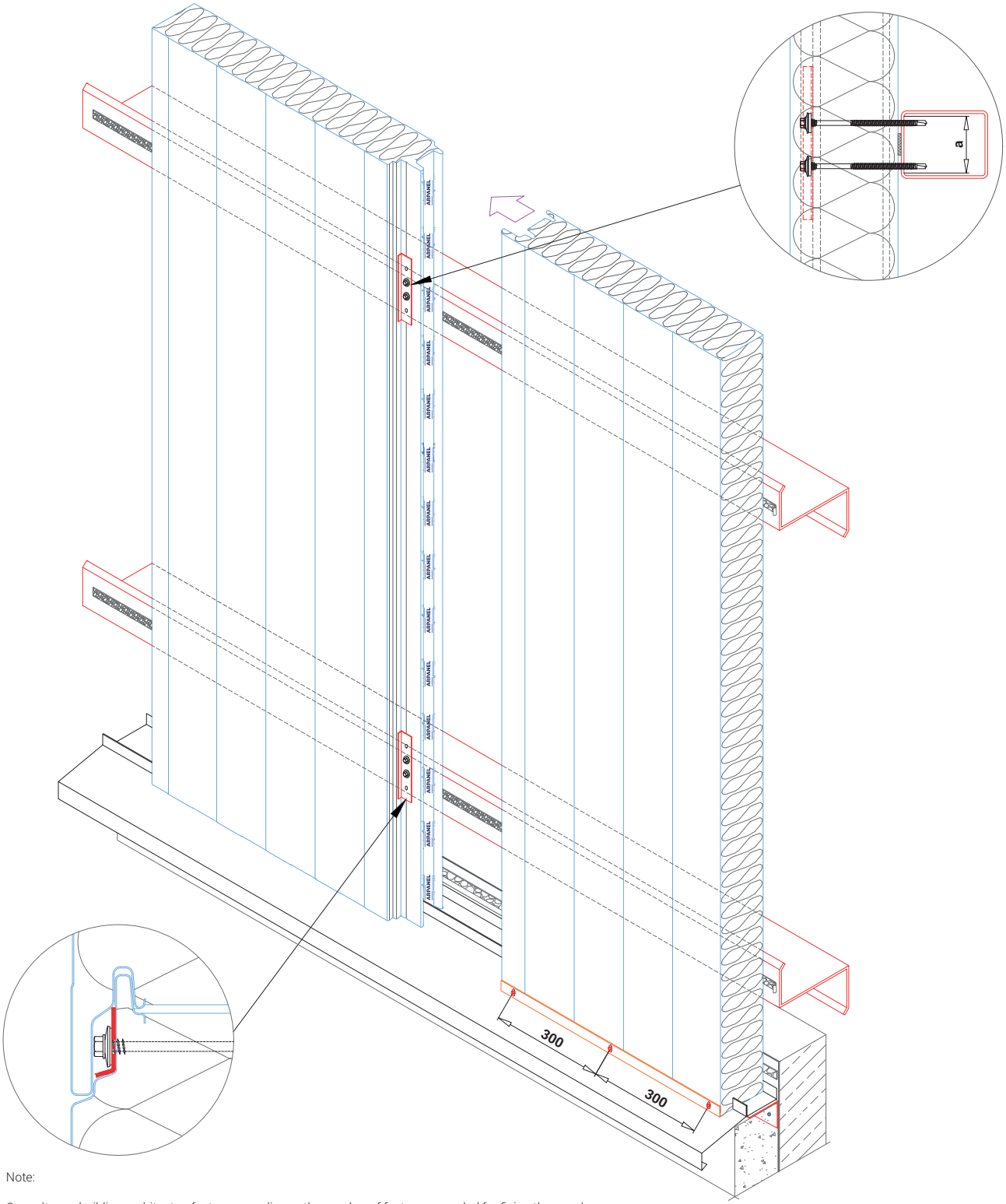


Diagram of placement of exemplary technical details

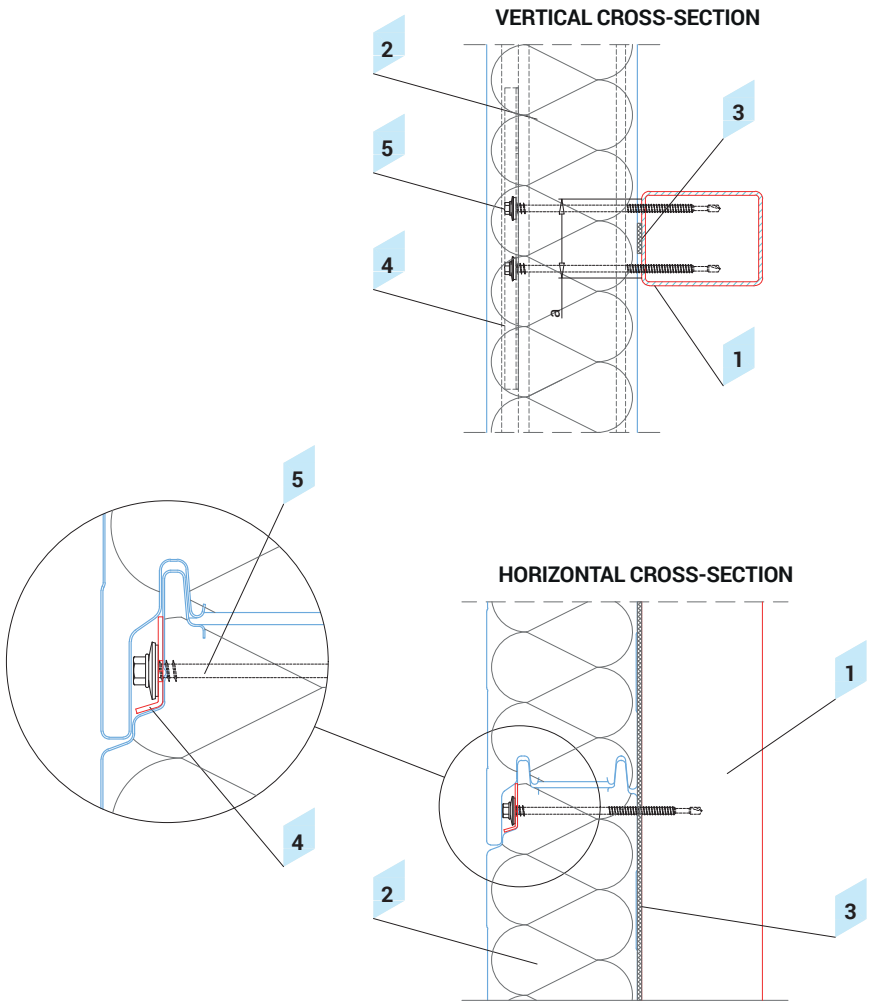
	Object
2.1	Panels connection detail
2.2	Panels connection detail before the substructure - withdrawn plinth
2.3	Panels connection detail on the substructure - extended plinth
2.4	Attic detail
2.5	Wall and roof panels connection detail at the gable wall
2.6	Detail of fastening panels to the floor
2.7	Prolongation panels detail
2.8	External corner detail
2.9	Panel junction to brick wall detail
2.10	Window detail
2.11	Gate detail



Note:

Consult your building architect or fastener supplier on the number of fasteners needed for fixing the panels.
If in doubt, contact your ARPANEL Technical Department.
a - width of the support should be determined on the basis of static-strength calculations and the parameters of the chosen pressure distributor plate; a ≥ 60 mm.

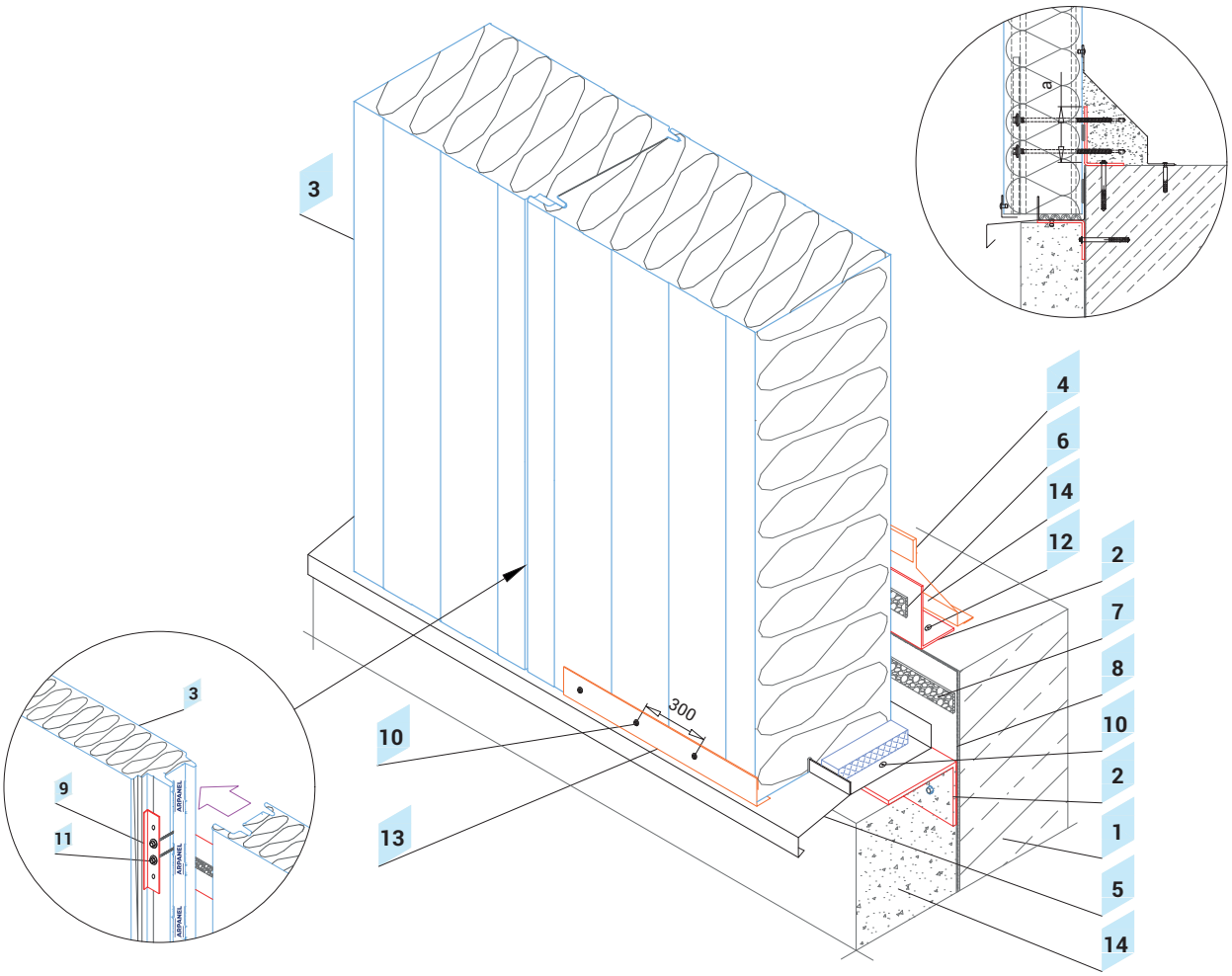
2.0 Detail of panel attachment to the substructure



a - width of the support should be determined on the basis of static-strength calculations and the parameters of the chosen pressure distributor plate; a ≥ 60 mm.

2.1 Panels connection detail

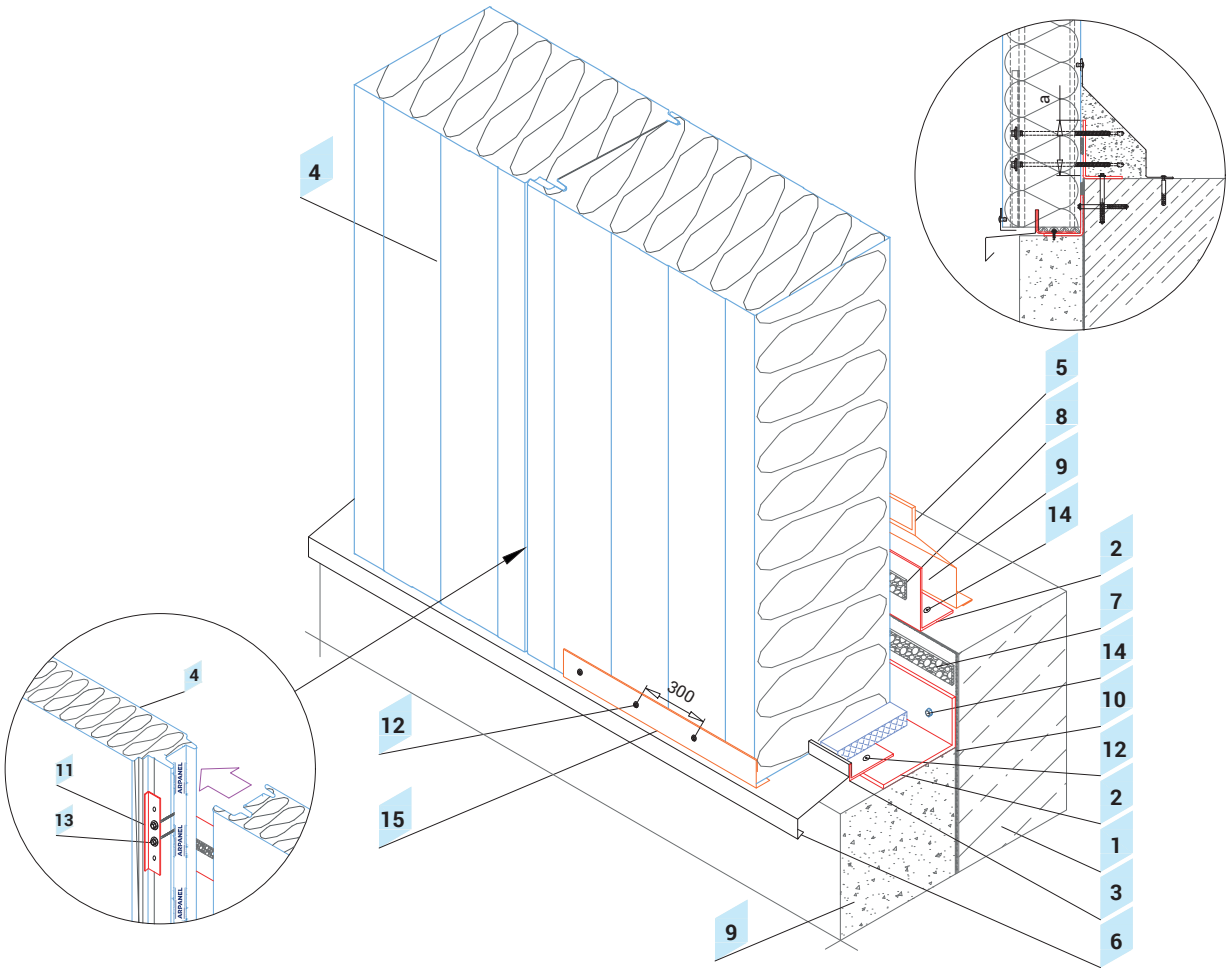
	Object	Product code
1	Spandrel beam acc. the structural design	
2	ARPANEL SU wall panel	ARPANEL SU
3	Acoustic and insulating gasket PES	US-02
4	Pressure distributor plate	RN-200
5	Self-drilling fastener	Z-01



a - width of the support should be determined on the basis of static-strength calculations and the parameters of the chosen pressure distributor plate; a ≥ 40 mm.

2.2 Panels connection detail before the substructure – withdrawn plinth

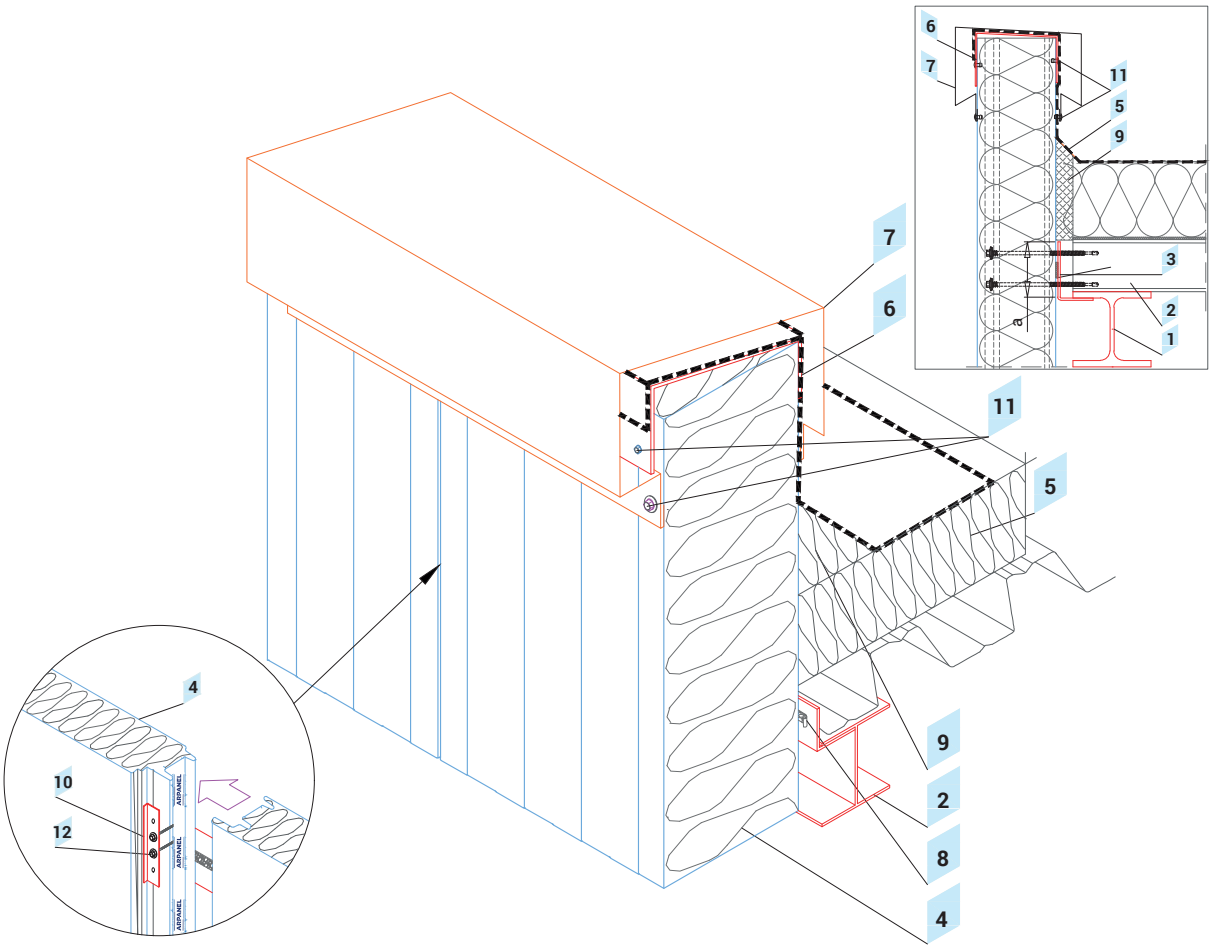
	Object	Product code
1	Substructure acc. the structural design	
2	Angle bar acc. the structural design	
3	ARPANEL SU wall panel	ARPANEL SU
4	Internal shield flashing	OBPI-1
5	Eaves flashing	OBPI-2 or OBPI-20
6	Acoustic and insulating gasket PES	US-02
7	Acoustic and insulating gasket PES	US-03
8	Anti-moisture insulation acc. to the architectural design	
9	Pressure distributor plate	RN-200
10	Tight rivet or sheet metal screw (every 300–600 mm)	NT
11	Self-drilling fastener	Z-01
12	Fastener acc. the structural design	
13	Panel edge sight flashing	OBPI-21
14	Thermal insulation	



a - width of the support should be determined on the basis of static-strength calculations and the parameters of the chosen pressure distributor plate; a ≥ 60 mm.

2.3 Panels connection detail on the substructure - extended plinth

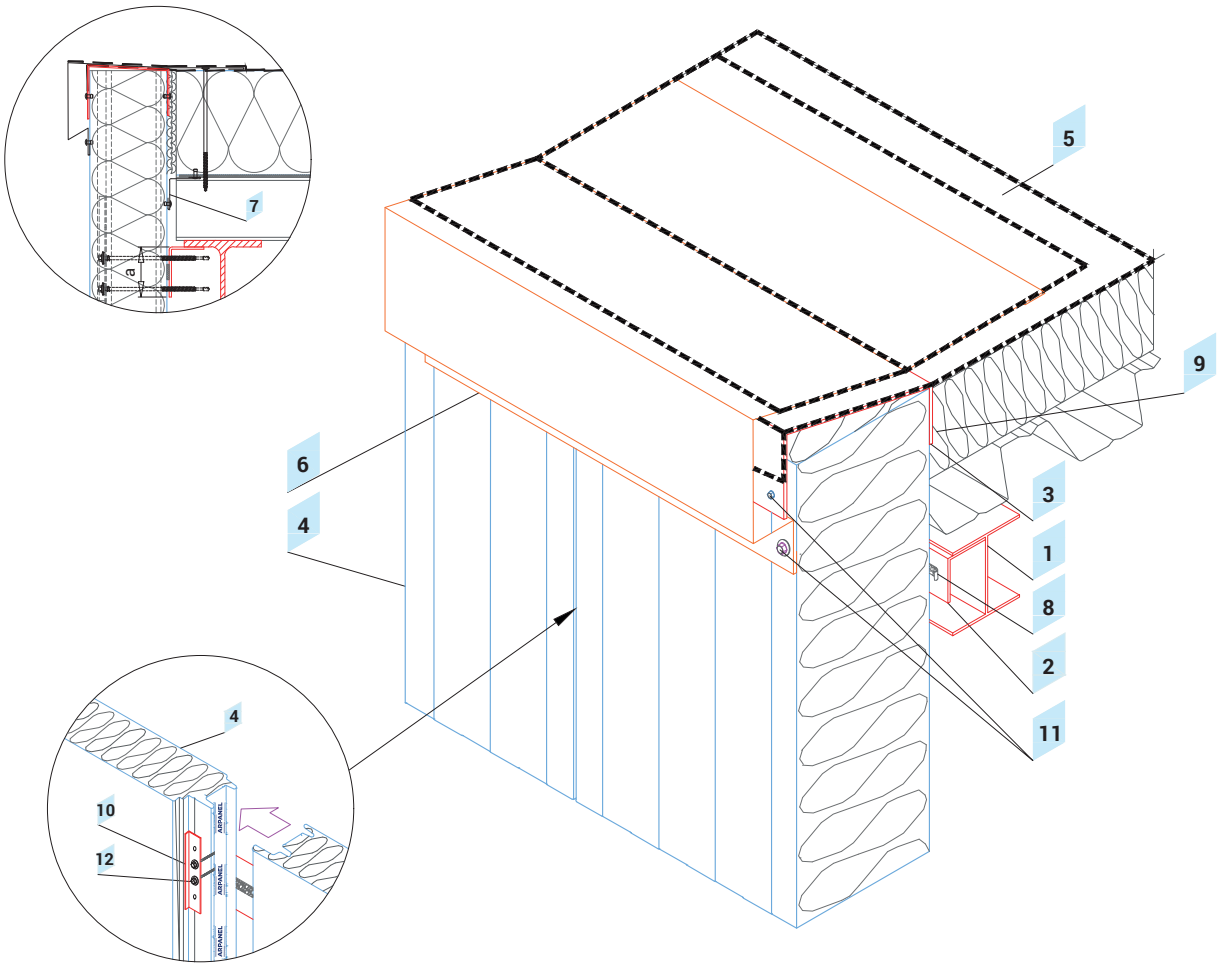
	Object	Product code
1	Substructure acc. the structural design	
2	Angle bar acc. the structural design	
3	Window sill angle bracket pointwise (L 120mm, 1 pc/m)	OBPI-22
4	ARPANEL SU wall panel	ARPANEL SU
5	Internal shield flashing	OBPI-1
6	Plinth flashing	OBPI-6
7	Acoustic and insulating gasket PES	US-02
8	Acoustic and insulating gasket PES	US-03
9	Thermal insulation	
10	Anti-moisture insulation acc. to the architectural design	
11	Pressure distributor plate	RN-200
12	Tight rivet or sheet metal screw (every 300–600 mm)	NT
13	Self-drilling fastener	Z-01
14	Fastener acc. the structural design	
15	Panel edge sight flashing	OBPI-21



a - width of the support should be determined on the basis of static-strength calculations and the parameters of the chosen pressure distributor plate; a ≥ 60 mm.

2.4 Attic detail

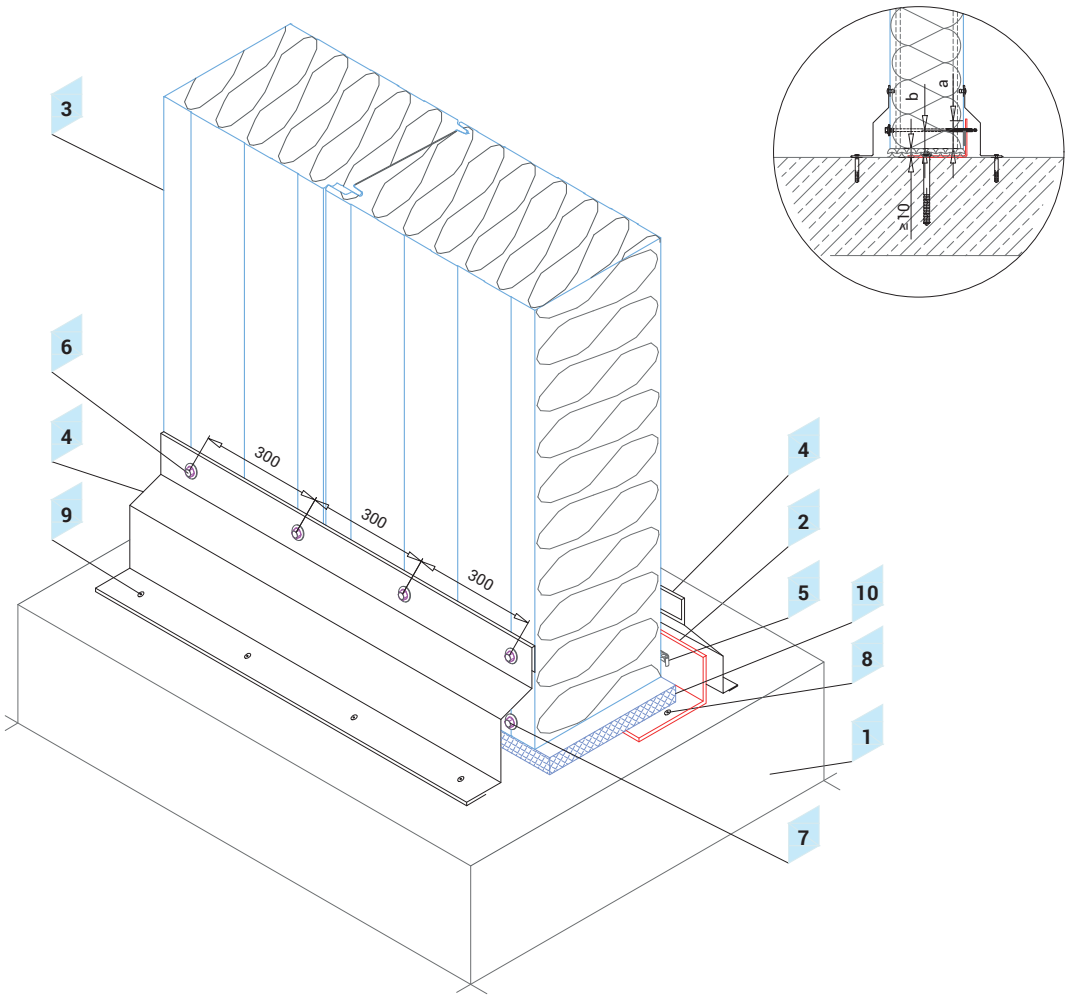
	Object	Product code
1	Purlin acc. the structural design	
2	Spandrel beam acc. the structural design	
3	Angle bar acc. the structural design	
4	ARPANEL SU wall panel	ARPANEL SU
5	Roofing	
6	Parapet cap support	OBPI-23
7	Attic belt flashing	OBPI-7
8	Acoustic and insulating gasket PES	US-02
9	Thermal insulation	
10	Pressure distributor plate	RN-200
11	Tight rivet or sheet metal screw (every 300–600 mm)	NT
12	Self-drilling fastener	Z-01



a - width of the support should be determined on the basis of static-strength calculations and the parameters of the chosen pressure distributor plate; a ≥ 60 mm.

2.5 Wall and roof panels connection detail at the gable wall

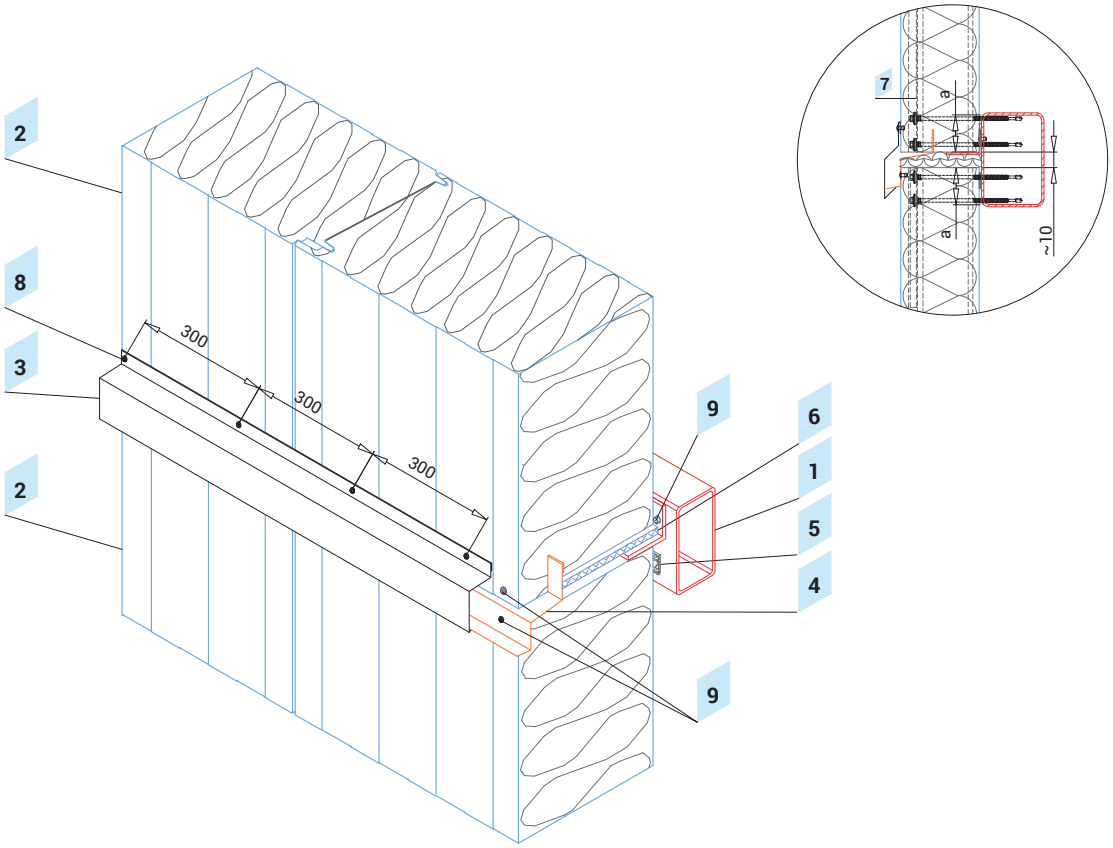
	Object	Product code
1	Purlin acc. the structural design	
2	Spandrel beam acc. the structural design	
3	Parapet cap support	OBPI-23
4	ARPANEL SU wall panel	ARPANEL SU
5	Roofing	
6	Side wind flashing	OBPI-9
7	Internal corner flashing	OBPI-15
8	Acoustic and insulating gasket PES	US-02
9	Thermal insulation	
10	Pressure distributor plate	RN-200
11	Tight rivet or sheet metal screw (every 300–600 mm)	NT
12	Self-drilling fastener	Z-01



a - width of the support should be determined on the basis of static-strength calculations a ≥ 40 mm.
b - distance from the edge of the panel; b ≥ 25 mm.

2.6 Detail of fastening panels to the floor

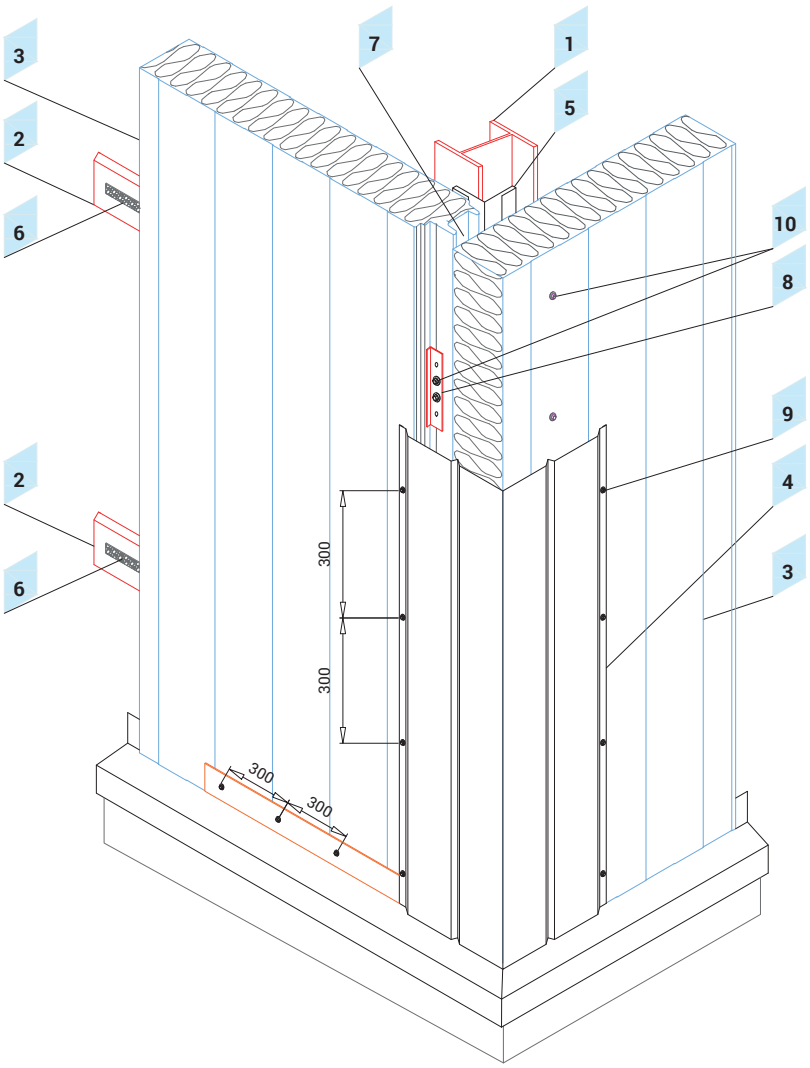
	Object	Product code
1	Floor acc. the structural design	
2	Fixing profile acc. the structural design	
3	ARPANEL wall panel	ARPANEL S, SU, CH
4	Mask flashing	OBPI-11
5	Acoustic and insulating gasket PES	US-02
6	Tight rivet or sheet metal screw (every 300–600 mm)	NT
7	Self-drilling fastener	Z-01
8	Fastener acc. the structural design	
9	Expansion fastener	
10	Thermal insulation	

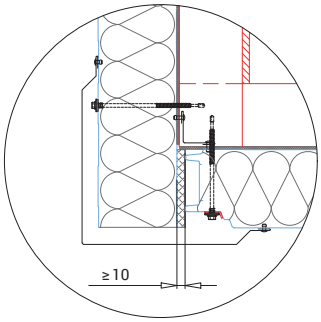


a - width of the support should be determined on the basis of static-strength calculations and the parameters of the chosen pressure distributor plate; a ≥ 40 mm.

2.7 Prolongation panels detail

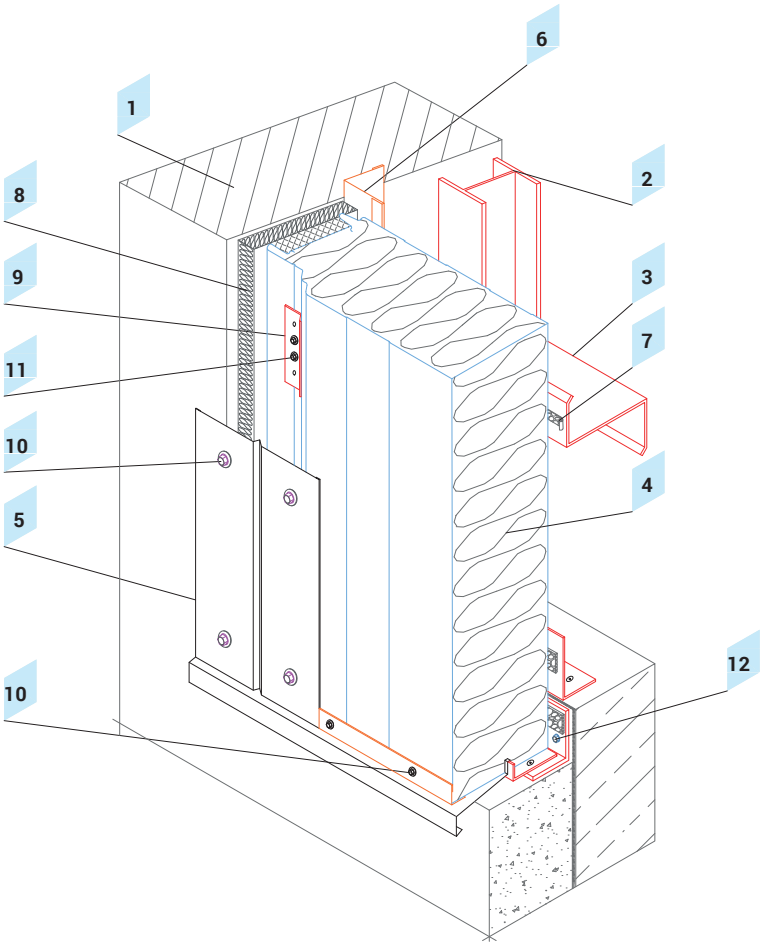
	Object	Product code
1	Wall spandrel beam acc. the structural design	
2	ARPANEL SU wall panel	ARPANEL SU
3	Eaves flashing	OBPI-3
4	Mask flashing	OBPI-12
5	Acoustic and insulating gasket PES	US-02
6	Thermal insulation	
7	Pressure distributor plate	RN-200
8	Tight rivet or sheet metal screw (every 300–600 mm)	NT
9	Self-drilling fastener	Z-01

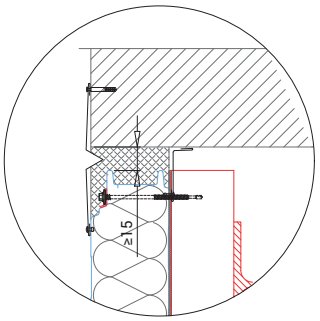




2.8 External corner detail

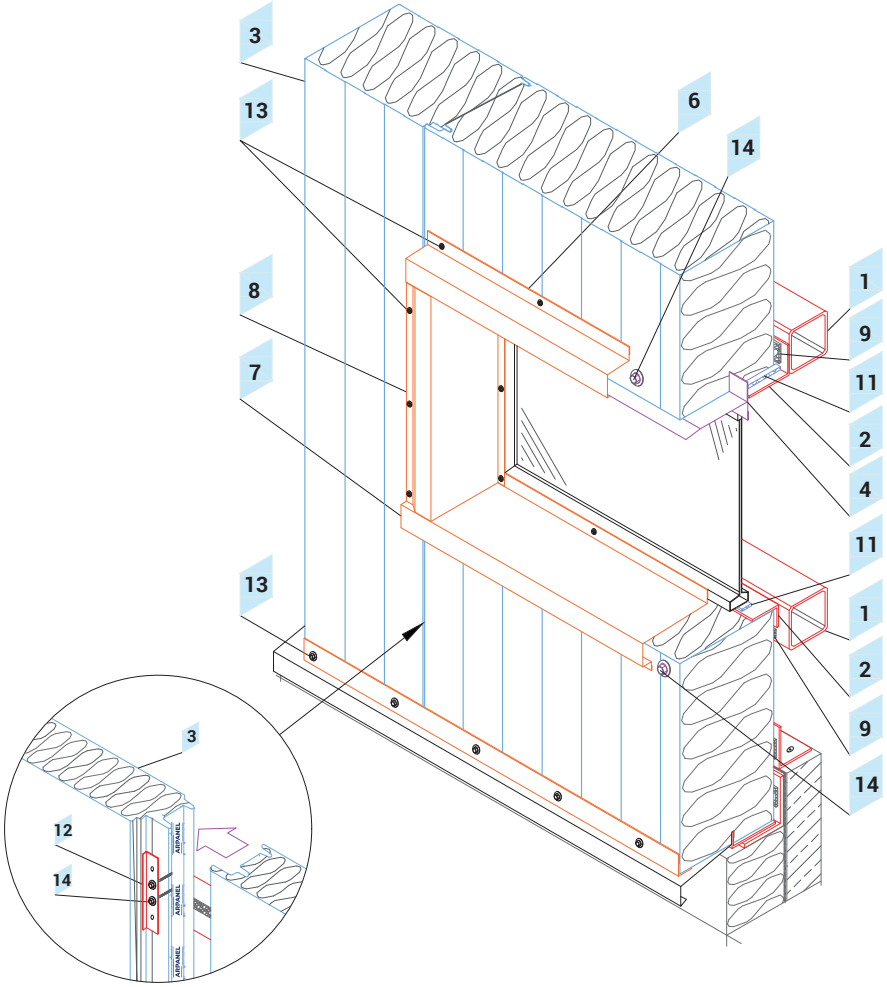
	Object	Product code
1	Column acc. the structural design	
2	Wall spandrel beam acc. the structural design	
3	ARPANEL SU wall panel	ARPANEL SU
4	Corner flashing	OBPI-13 or OBPI-13a
5	Internal corner flashing	OBPI-15
6	Acoustic and insulating gasket PES	US-02
7	Thermal insulation	
8	Pressure distributor plate	RN-200
9	Tight rivet or sheet metal screw (every 300–600 mm)	NT
10	Self-drilling fastener	Z-01

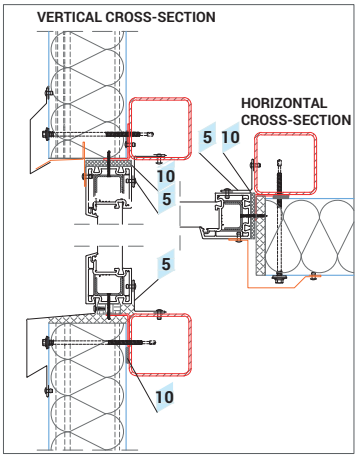




2.9 Panel junction to brick wall detail

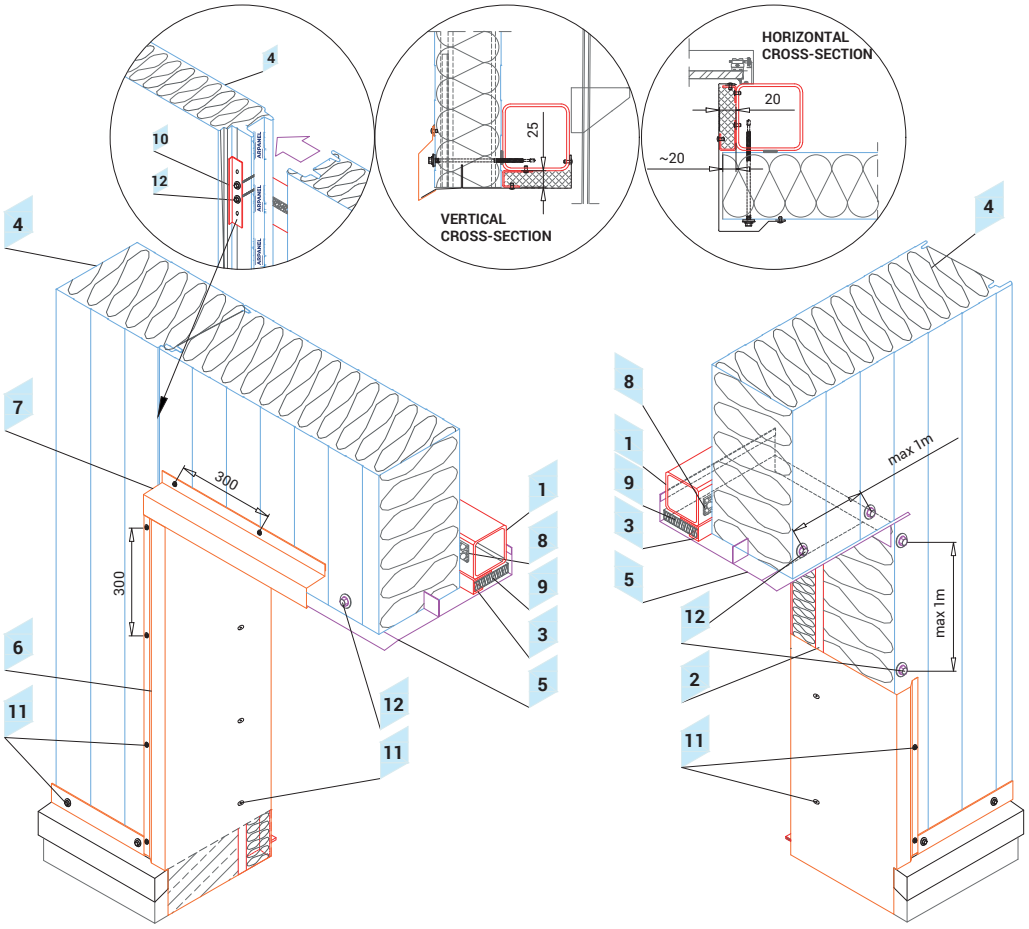
	Object	Product code
1	Brick wall	
2	Column acc. the structural design	
3	Wall spandrel beam acc. the structural design	
4	ARPANEL SU wall panel	ARPANEL SU
5	Dilatation flashing	OBPI-14
6	Internal mask flashing	OBPI-19
7	Acoustic and insulating gasket PES	US-02
8	Thermal insulation	
9	Pressure distributor plate	RN-200
10	Tight rivet or sheet metal screw (every 300–600 mm)	NT
11	Self-drilling fastener	Z-01
12	Expansion fastener	





2.10 Window detail

	Object	Product code
1	Supporting structure acc. the structural design	
2	Angle bar acc. the structural design	
3	ARPANEL SU wall panel	ARPANEL SU
4	Lintel flashing	OBPI-4
5	Internal corner flashing	OBPI-15
6	Lintel flashing	OBPI-16
7	Window sill flashing	OBPI-17
8	Window flashing	OBPI-18
9	Acoustic and insulating gasket PES	US-02
10	Thermal insulation	
11	Mounting foam	
12	Pressure distributor plate	RN-200
13	Tight rivet or sheet metal screw (every 300–600 mm)	NT
14	Self-drilling fastener	Z-01



2.11 Gate detail

	Object	Product code
1	Supporting structure acc. the structural design	
2	Angle bar acc. the structural design	
3	Profile acc. the structural design	
4	ARPANEL SU wall panel	ARPANEL SU
5	Gate flashing	OBPI-5
6	Side flashing	OBPI-10
7	Lintel flashing	OBPI-16
8	Acoustic and insulating gasket PES	US-02
9	Thermal insulation	
10	Pressure distributor plate	RN-200
11	Tight rivet or sheet metal screw (every 300–600 mm)	NT
12	Self-drilling fastener	Z-01

Roof cladding system

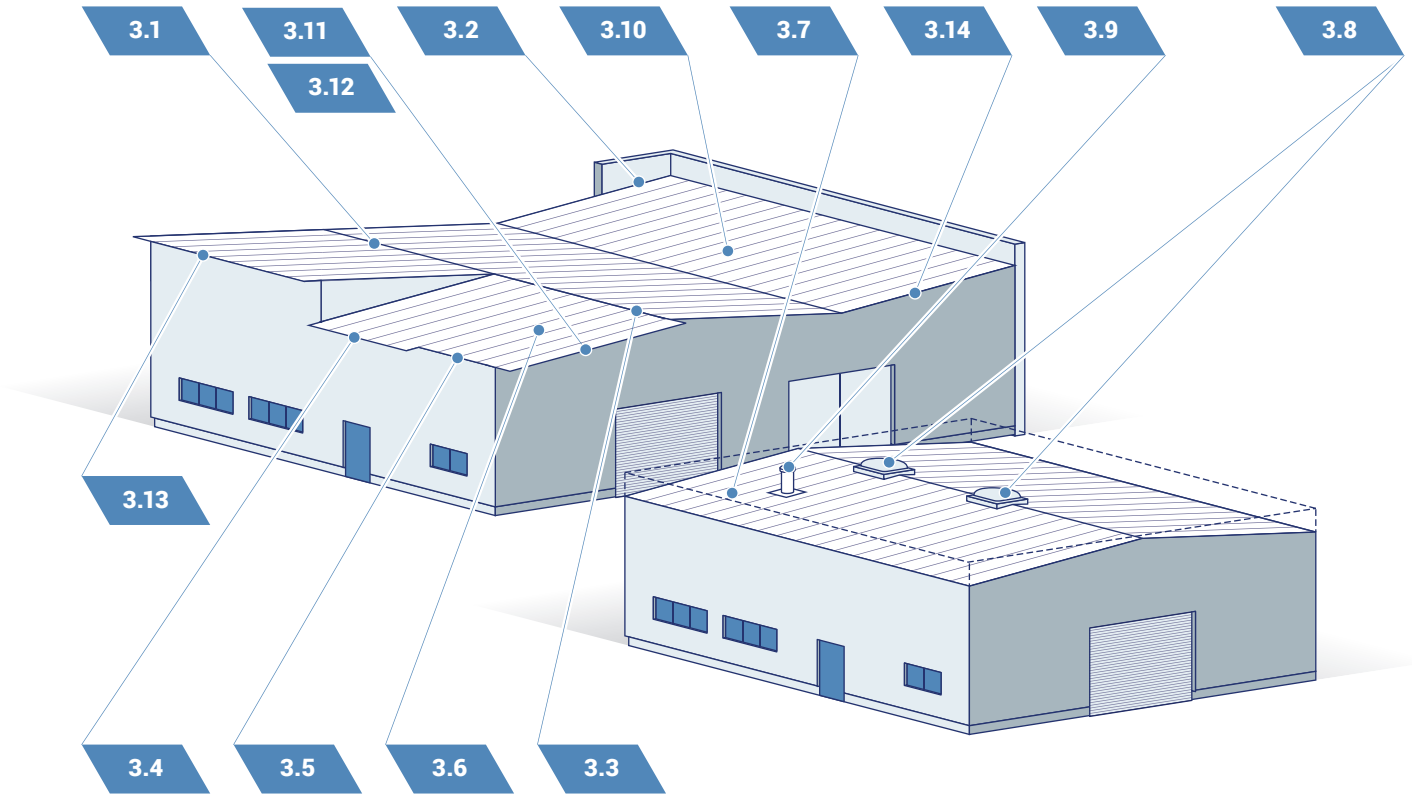
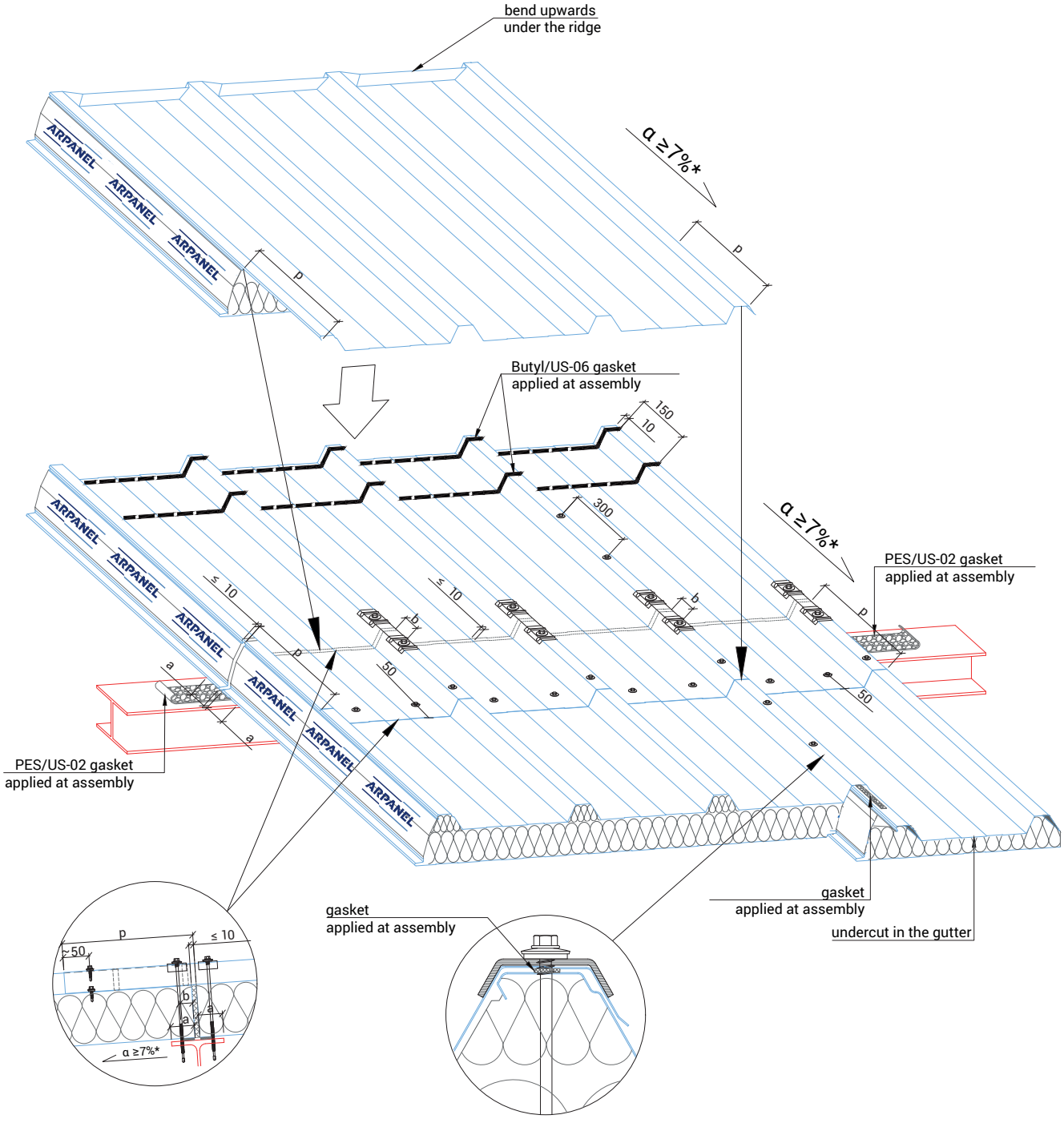


Diagram of placement of exemplary technical details

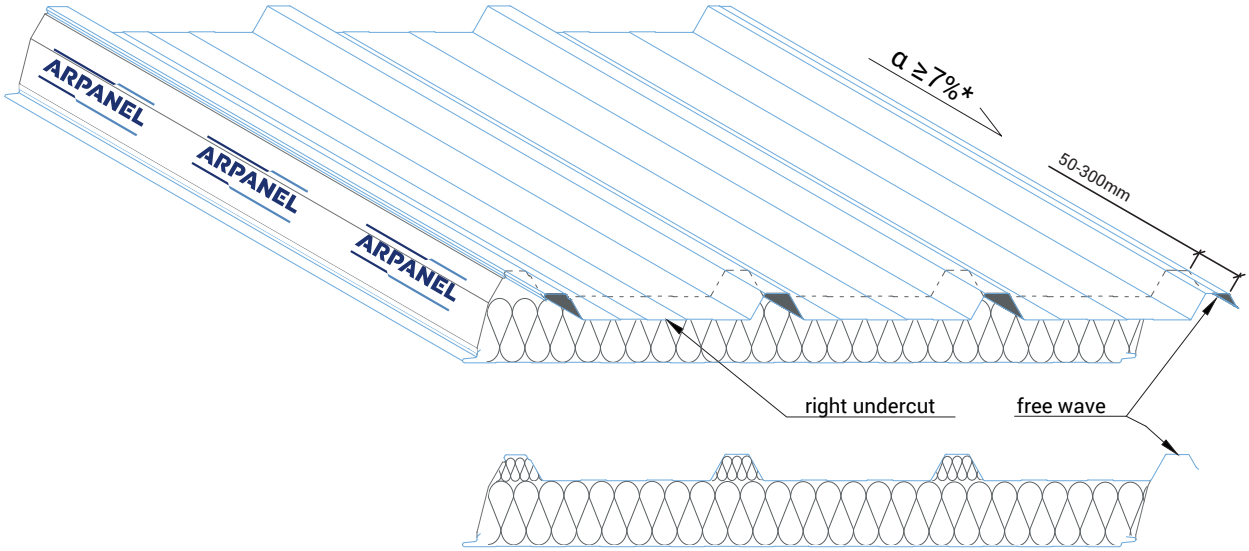
	Object
3.1	Roof panels junction detail
3.2	Roof panels junction to brick wall
3.3	Ridge detail
3.4	Gutter to roof panels junction detail
3.5	Gutter to wall junction detail
3.6	Snow guard junction detail
3.7	Internal gutter detail
3.8	Detail of junction the panels with continuous rooflight at the ridge
3.9	Flange sealing detail
3.10	Dilatation detail
3.11	Detail of fastening the roof panels to the gable wall - roof with the eaves
3.12	Detail of fastening the roof panels to the gable wall - roof without the eaves
3.13	Mono-pitch roofs, with the eaves
3.14	Mono–pitch roofs, without the eaves



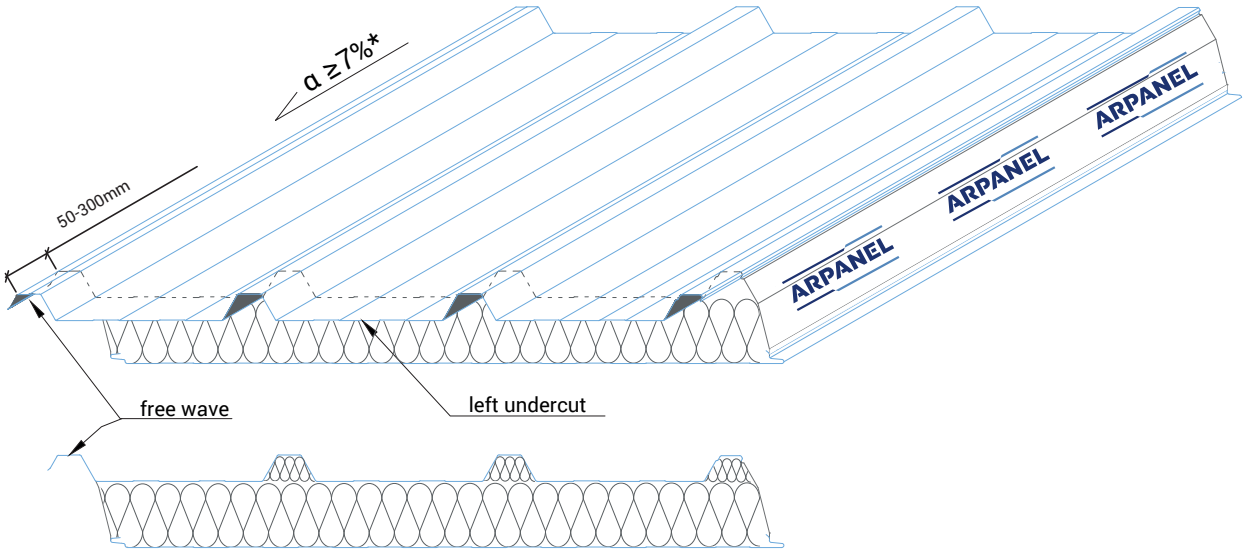
Note:

a - width of the support should be determined on the basis of static-strength calculations; a ≥ 40 mm.
b - distance from the edge of the panel; b ≥ 20 mm. Recommendation: b ≥ 25 mm.
p – length of undercut (overlap); p = 200 ÷ 300 mm;
The recommended undercut (overlap) length depends on the roof pitch; α >10% → p ≥ 200 mm, α ≤ 10% → p ≥ 250 mm.
* For roofs without the attachment over length or rooflights, roof slope ≥ 5%.

3.0 Detail of a roof panel joint

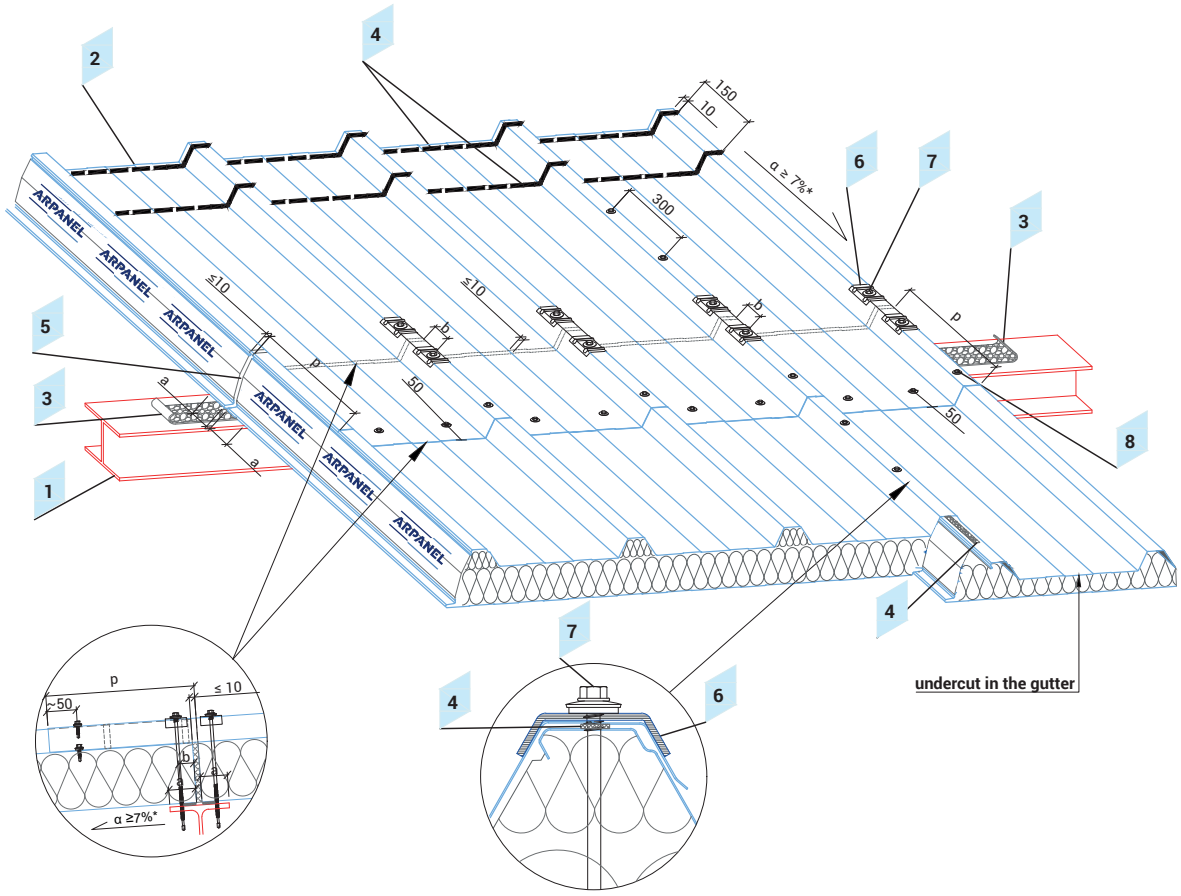


Right panels – install from right to left



Left panels – install from left to right

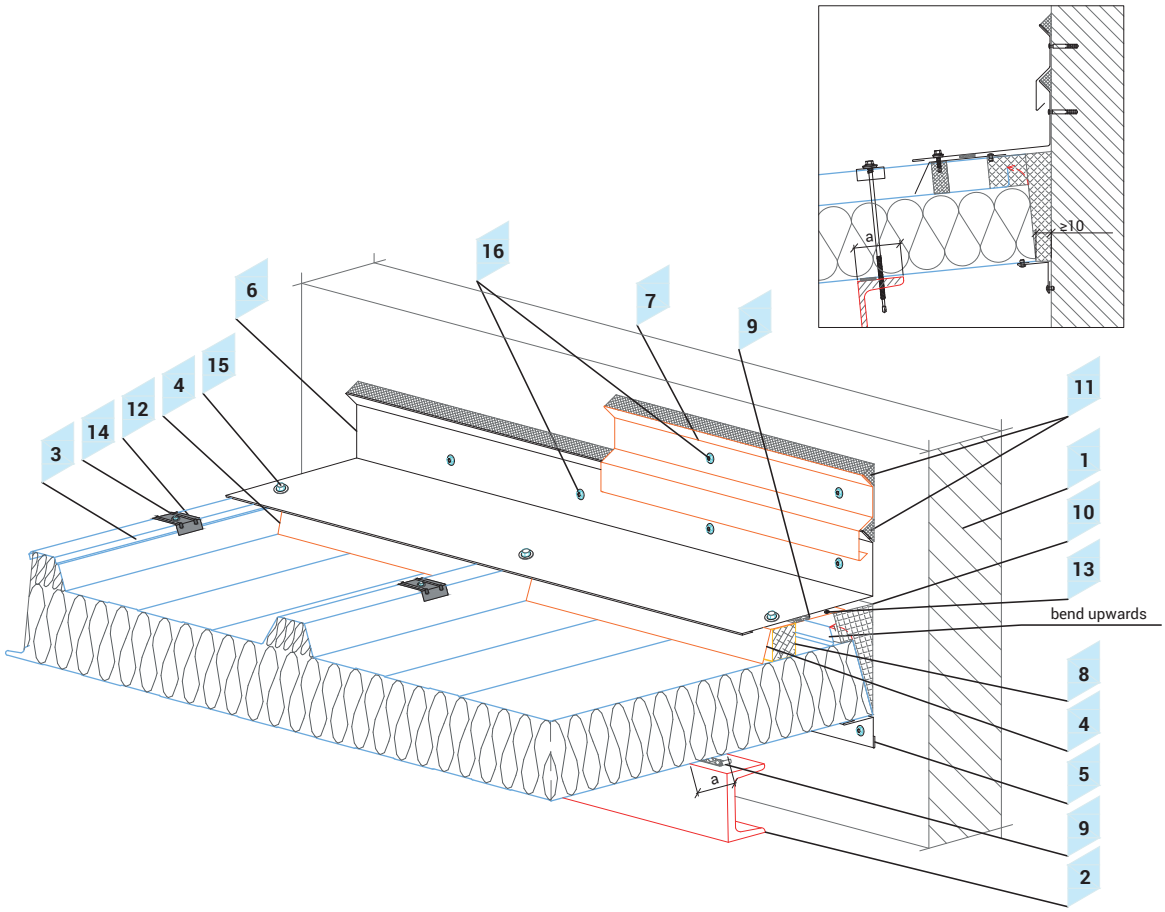
3.0 Detail of a roof panel joint



a – width of the support should be determined on the basis of static-strength calculations; a ≥ 40 mm.
b – distance from the edge of the panel; b ≥ 20 mm. Recommended: b ≥ 25 mm.
p – length of undercut (overlap); p = 200 ÷ 300 mm;
The recommended undercut (overlap) length depends on the roof pitch; α >10% → p ≥ 200 mm, α ≤ 10% → p ≥ 250 mm.
* For roofs without the attachment over length or rooflights, roof slope ≥ 5%.

3.1 Roof panels junction detail

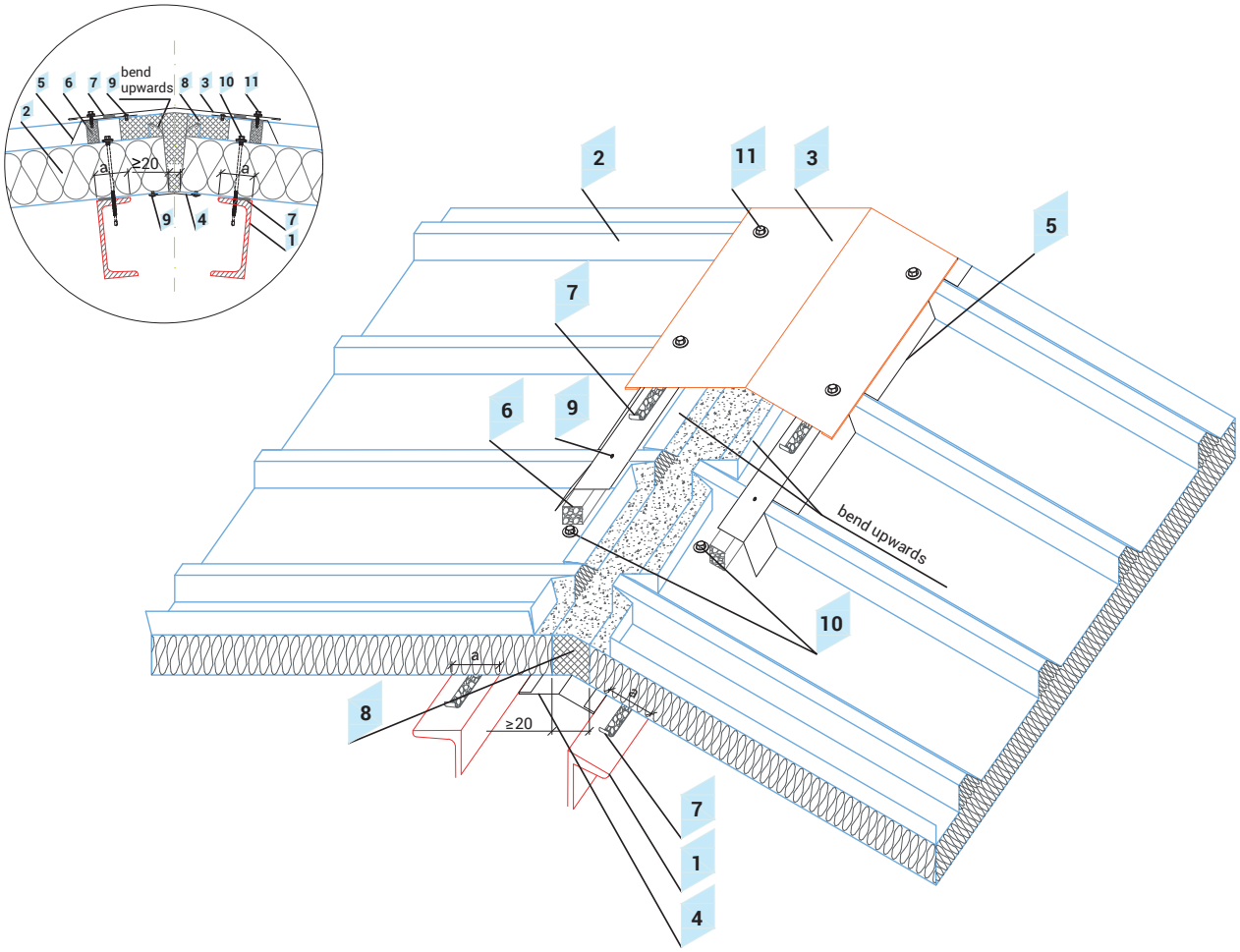
	Object	Product code
1	Purlin acc. the structural design	
2	ARPANEL D roof panel	ARPANEL D
3	Acoustic and insulating gasket PES	US-02
4	Butyl gasket	US-06
5	Thermal insulation	
6	Calotte	KLT
7	Self-drilling fastener	Z-01
8	Sheet metal screw	Z-03



a – width of the support should be determined on the basis of static-strength calculations; a ≥ 60 mm.

3.2 Roof panels junction to brick wall

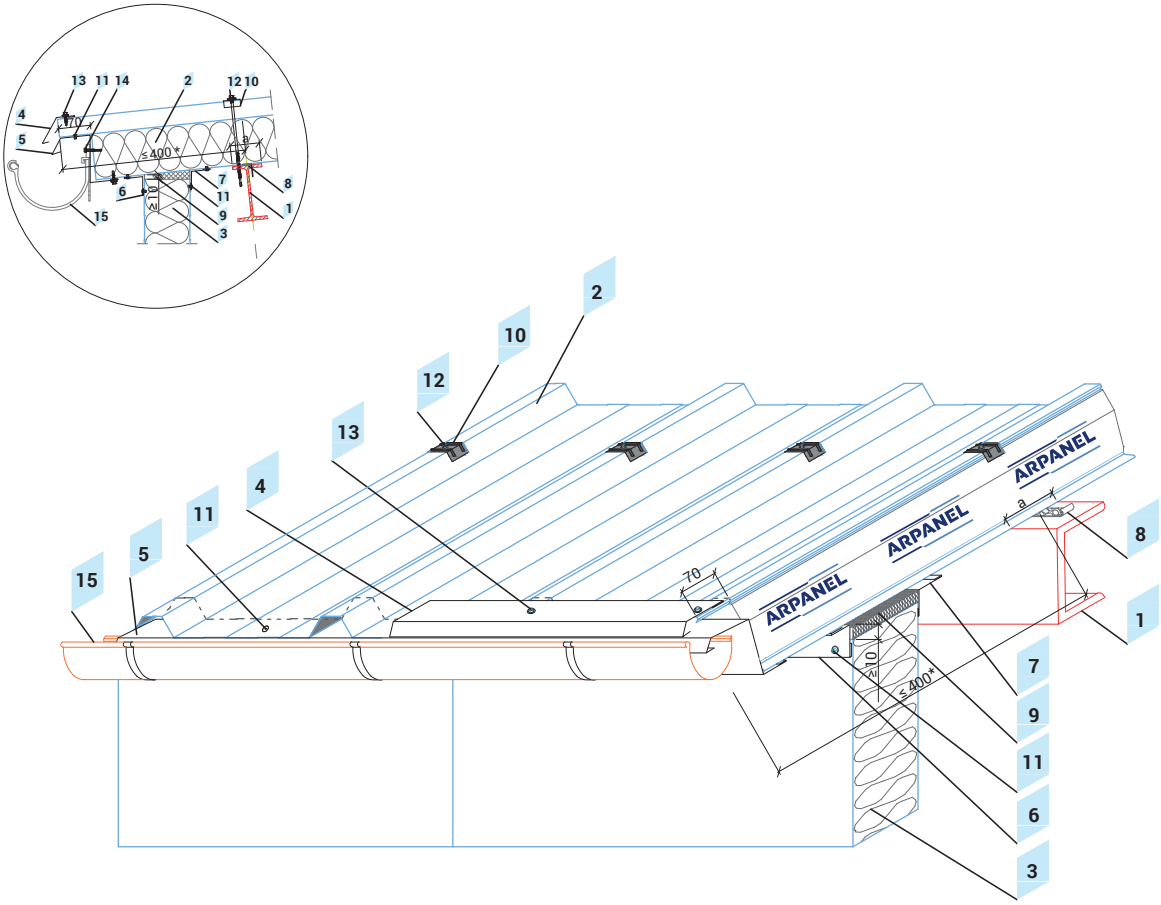
	Object	Product code
1	Brick wall	
2	Purlin acc. the structural design	
3	ARPANEL D roof panel	ARPANEL D
4	Mask flashing, so called "comb"	OBD-3
5	Internal corner flashing	OBD-25
6	Wall flashing	OBD-8
7	Upper wall flashing	OBD-20
8	Profiled gasket	US-01
9	Acoustic and insulating gasket PES	US-02
10	Thermal insulation	
11	Butyl sealing mass	
12	Calotte	KLT
13	Tight rivet or sheet metal screw (every 300–600 mm)	NT
14	Self-drilling fastener	Z-01
15	Sheet metal screw	Z-03
16	Expansion fastener	



a – width of the support should be determined on the basis of static-strength calculations; a ≥ 60 mm.

3.3 Ridge detail

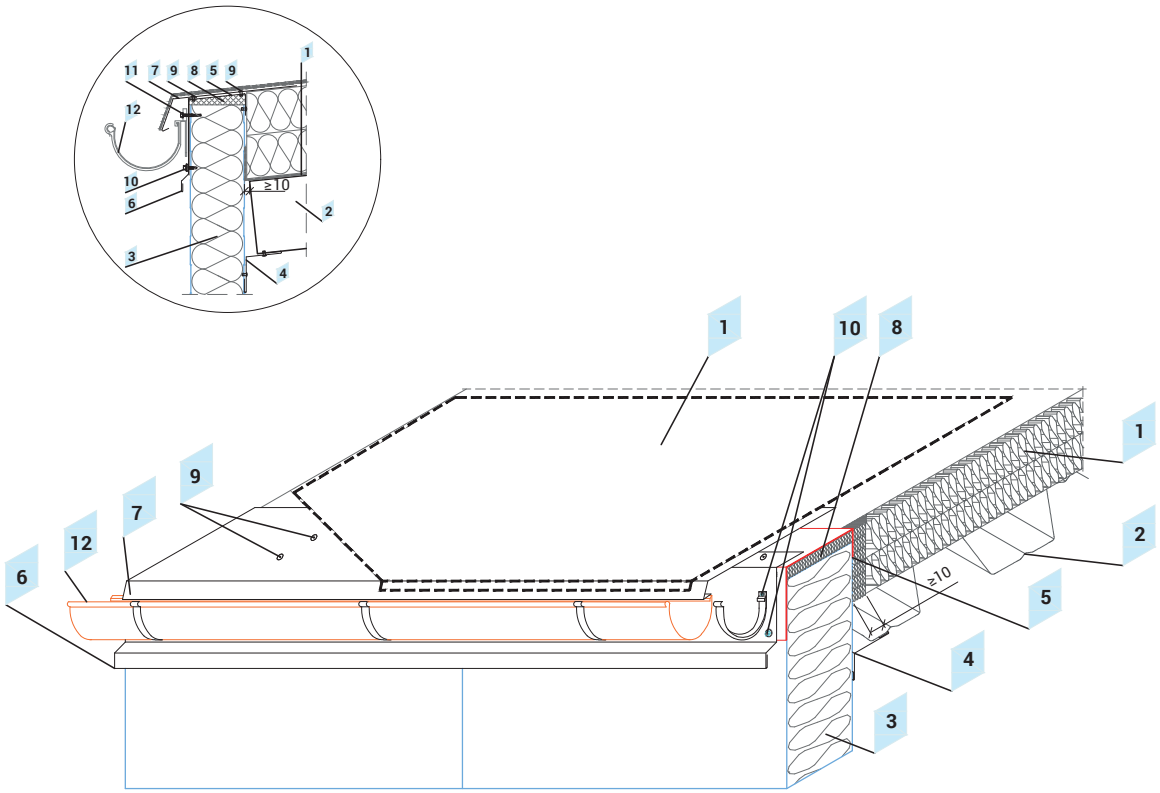
	Object	Product code
1	Purlin acc. the structural design	
2	ARPANEL D roof panel	ARPANEL D
3	External ridge flashing	OBD-1
4	Internal ridge flashing	OBD-2
5	Mask flashing, so called "comb"	OBD-3
6	Profiled gasket	US-01
7	Acoustic and insulating gasket PES	US-02
8	Thermal insulation	
9	Tight rivet (every 300–600 mm)	NT
10	Self-drilling fastener	Z-01
11	Sheet metal screw (on each hump)	Z-03



a – width of the support should be determined on the basis of static-strength calculations; a ≥ 60 mm.
* Longer brackets must be determined in consultation with the ARPANEL design department.

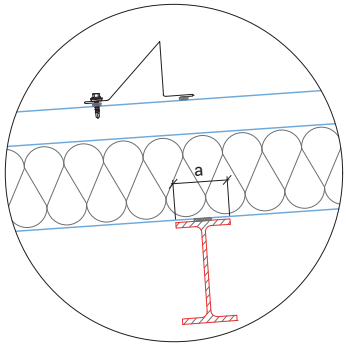
3.4 Gutter to roof panels junction detail

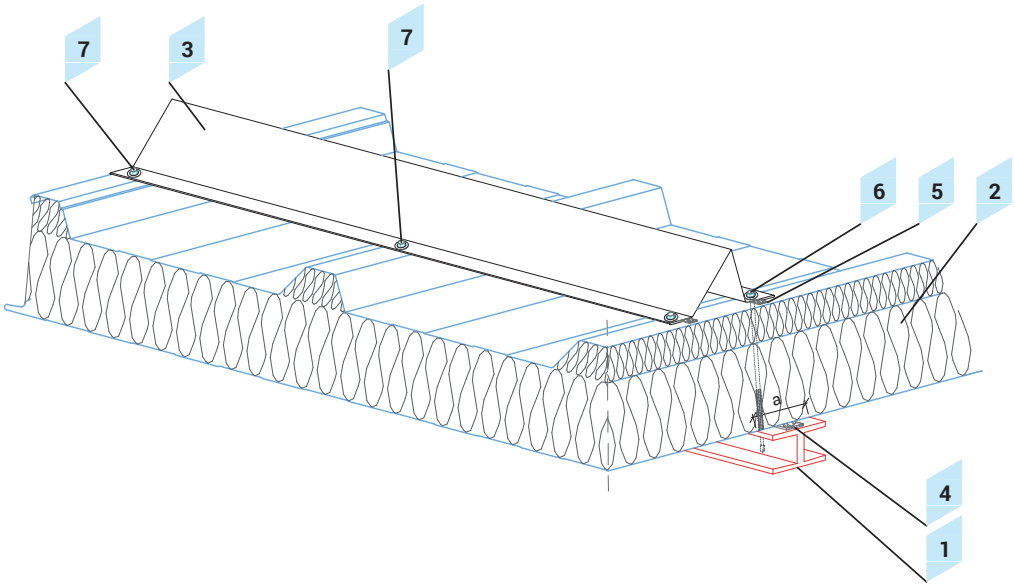
	Object	Product code
1	Purlin acc. the structural design	
2	ARPANEL D roof panel	ARPANEL D
3	ARPANEL S wall panel	ARPANEL S
4	Flashing for completing the roof trapezoid	OBD-4
5	Gutter line flashing, thk: 1.0mm	OBD-5
6	Internal corner flashing	OBD-25
7	Internal corner flashing	OBD-7
8	Acoustic and insulating gasket PES	US-02
9	Thermal insulation	
10	Calotte	KLT
11	Tight rivet or sheet metal screw (every 300–600 mm)	NT
12	Self-drilling fastener	Z-01
13	Sheet metal screw	Z-03
14	Fastener	Z-04
15	Gutter acc. the structural design	



3.5 Gutter to wall junction detail

	Object	Product code
1	Roofing acc. the architectural design	
2	Trapezoidal metal sheet acc. the structural design	
3	ARPANEL S wall panel	ARPANEL S
4	Internal corner flashing	OBD-7
5	Closing flashing, thk. 1.0mm	OBD-9
6	Eaves flashing	OBD-10
7	Eaves flashing	OBD-11
8	Thermal insulation	
9	Tight rivet or sheet metal screw (every 300–600 mm)	NT
10	Sheet metal screw	Z-03
11	Fastener	Z-04
12	Gutter acc. the structural design	

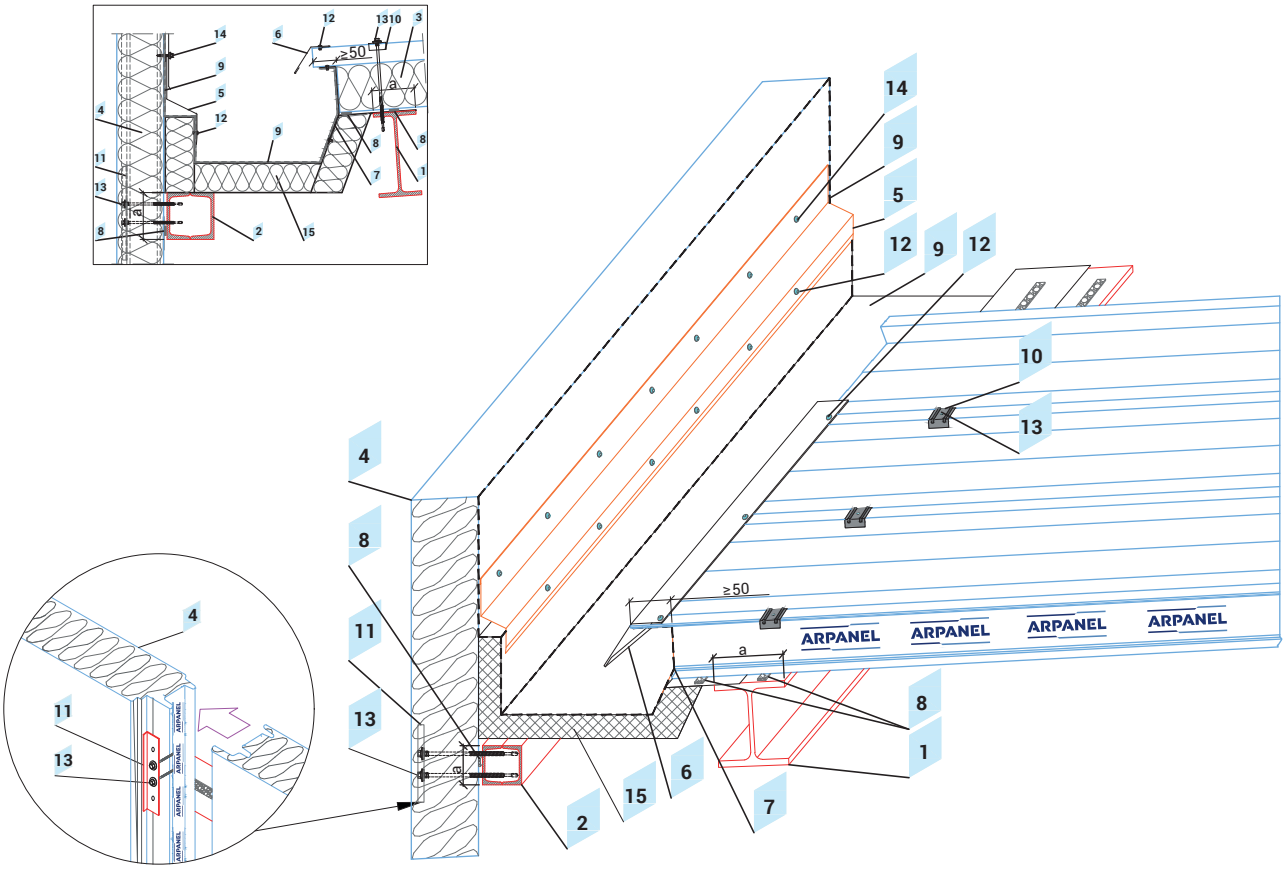




a – width of the support should be determined on the basis of static-strength calculations; a ≥ 60 mm.

3.6 Snow guard junction detail

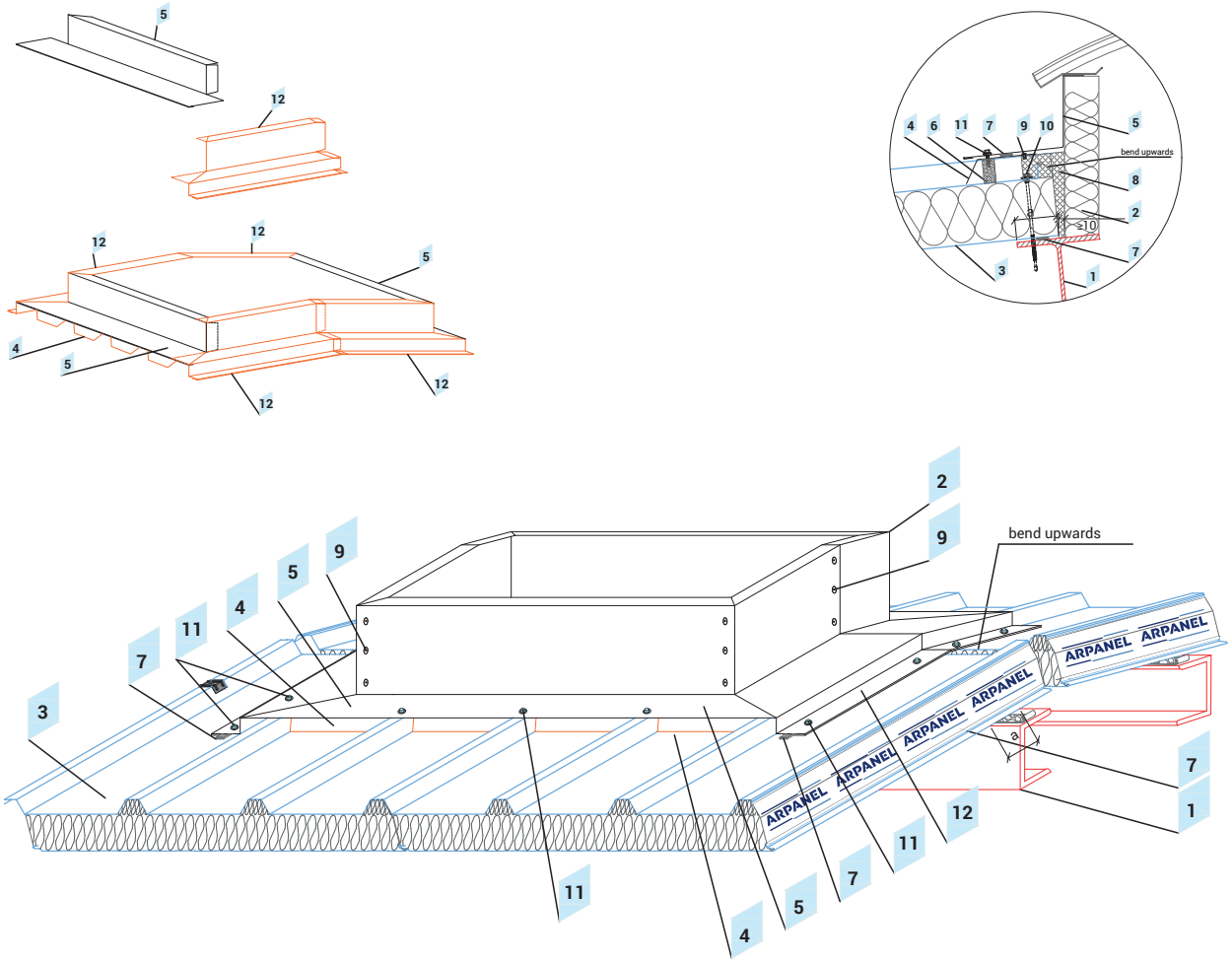
	Object	Product code
1	Purlin acc. the structural design	
2	ARPANEL D roof panel	ARPANEL D
3	Snow guard flashing	OBD-14
4	Acoustic and insulating gasket PES	US-02
5	Butyl gasket	US-06
6	Self-drilling fastener	Z-01
7	Sheet metal screw (on each hump)	Z-03



a - width of the support should be determined on the basis of static-strength calculations a ≥ 60 mm.

3.7 Internal gutter detail

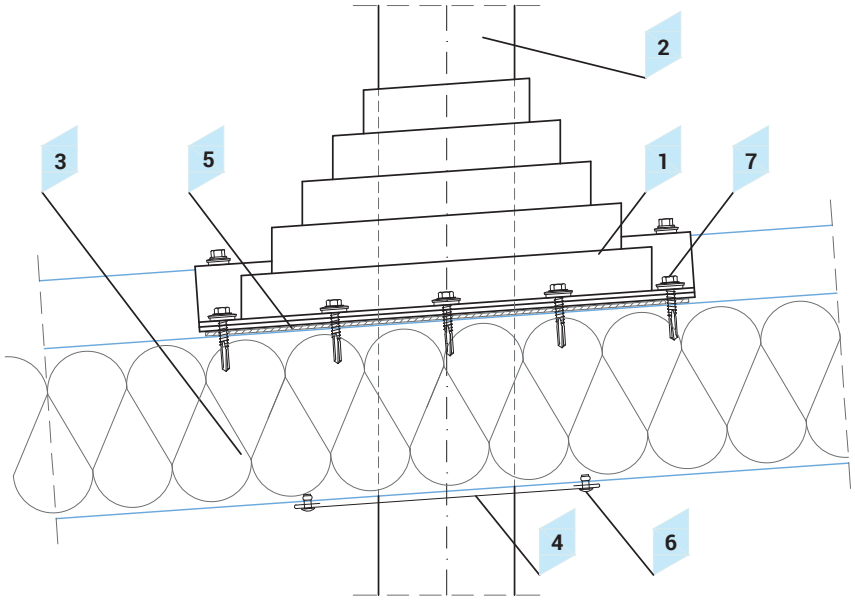
	Object	Product code
1	Purlin acc. the structural design	
2	Wall spandrel beam acc. the structural design	
3	ARPANEL D roof panel	ARPANEL D
4	ARPANEL SU wall panel	ARPANEL SU
5	Eaves flashing	OBD-12
6	Eaves flashing	OBD-13
7	Shield flashing	OBD-15
8	Acoustic and insulating gasket PES	US-02
9	Membrane	
10	Calotte	KLT
11	Pressure distributor plate	RN-200
12	Tight steel rivet or sheet metal screw (every 300–600 mm)	NT
13	Self-drilling fastener	Z-01
14	Sheet metal screw	Z-03
15	Internal gutter acc. the architectural design	

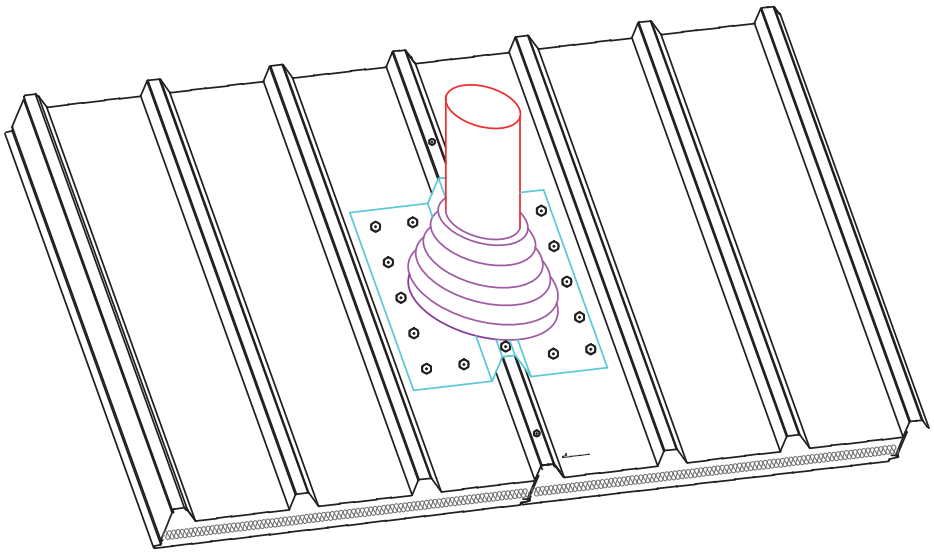


a – width of the support should be determined on the basis of static-strength calculations; a ≥ 40 mm.

3.8 Detail of junction the panels with continuous rooflight at the ridge

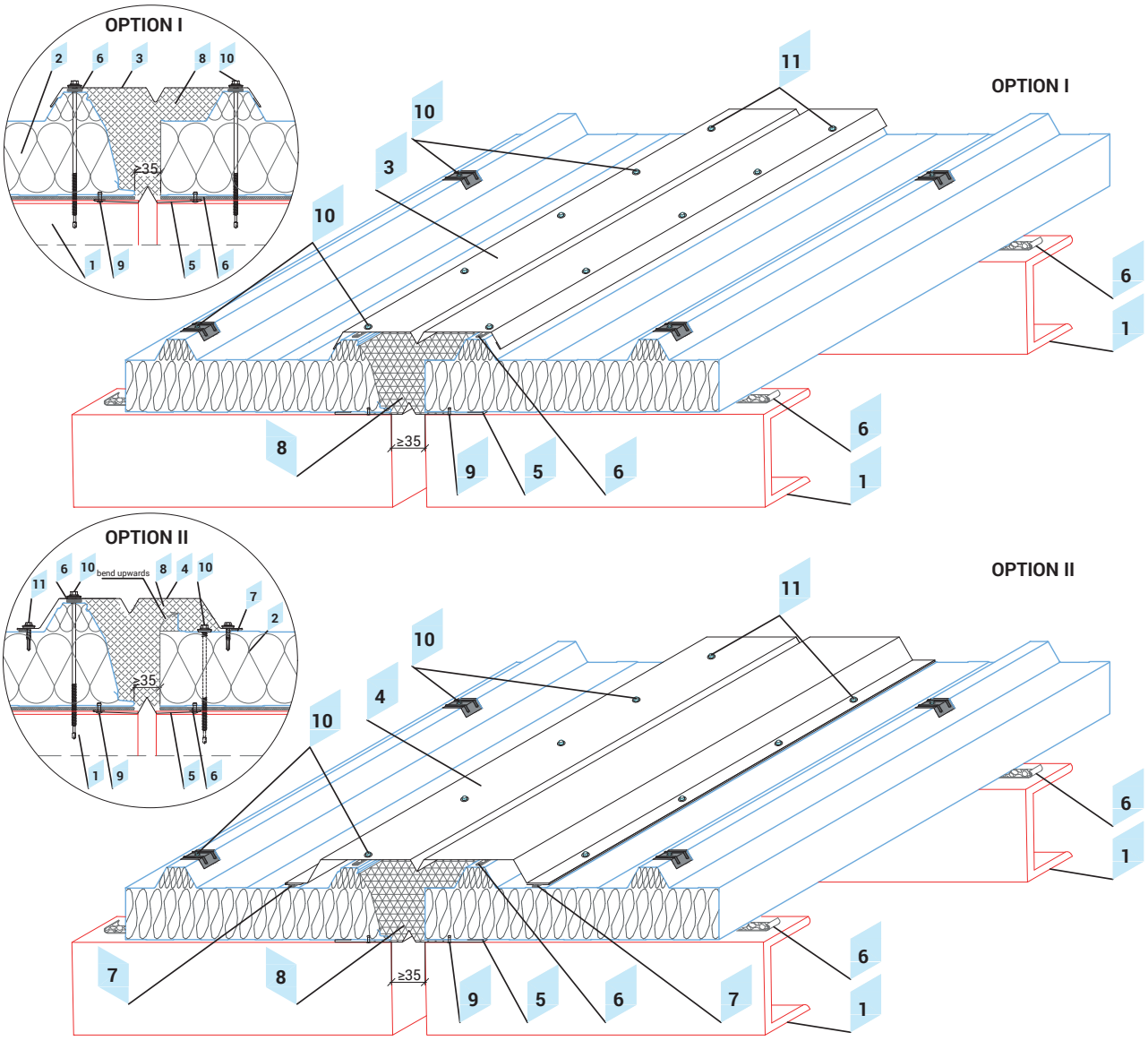
	Object	Product code
1	Purlin acc. the structural design	
2	Skylight with base	
3	ARPANEL D roof panel	ARPANEL D
4	Mask flashing, so called "comb"	OBD-3
5	Shield flashing	OBD-16
6	Profiled gasket	US-01
7	Acoustic and insulating gasket PES	US-02
8	Thermal insulation	
9	Tight rivet (every 300–600 mm)	NT
10	Self-drilling fastener	Z-01
11	Sheet metal screw (on each hump)	Z-03
12	Side shield flashing	OBD-26





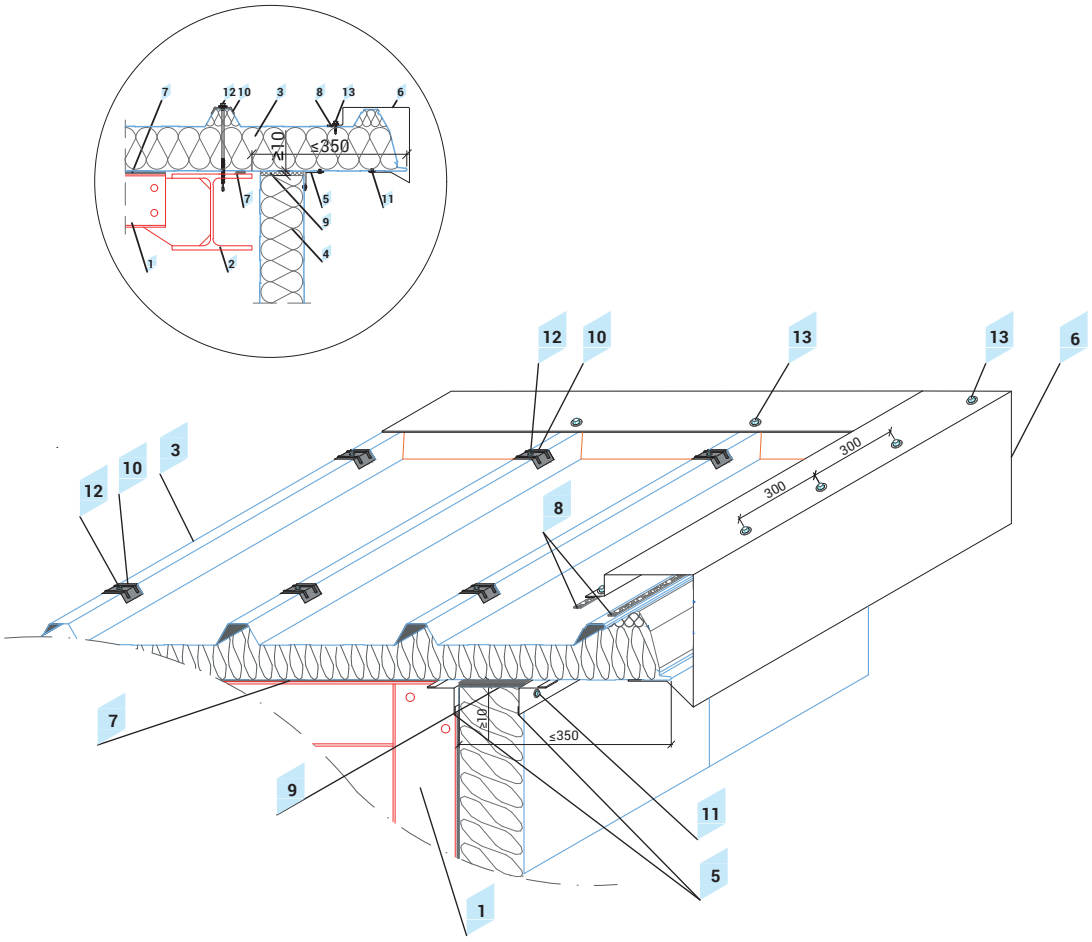
3.9 Flange sealing detail

	Object	Product code
1	Sealing flange	
2	Duct pipe	
3	ARPANEL D roof panel	ARPANEL D
4	Individual flashing	
5	Sealing putty	
6	Tight rivet (every 300–600 mm)	NT
7	Sheet metal screw	Z-03



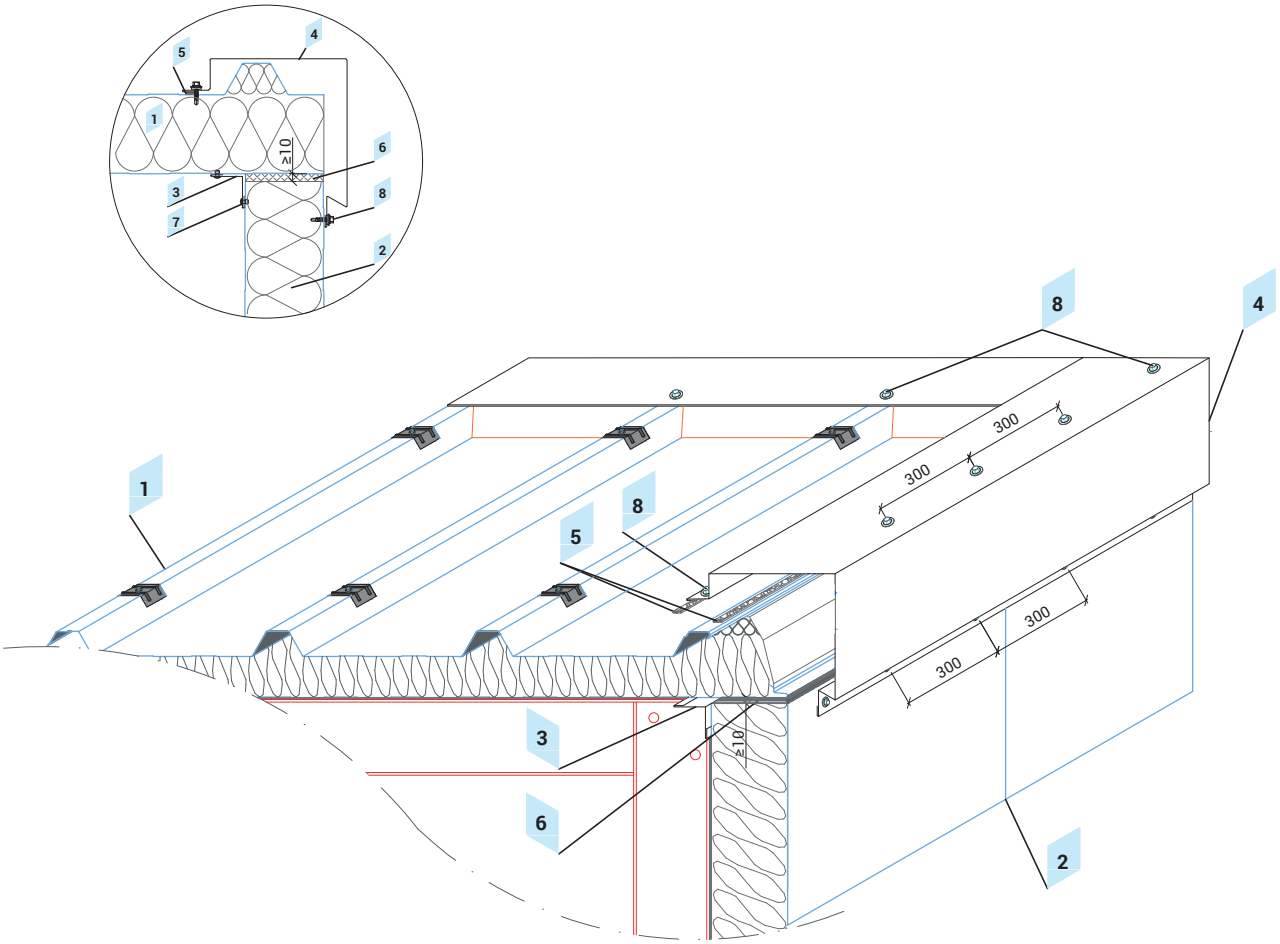
3.10 Dilatation detail

	Object	Product code
1	Purlin acc. the structural design	
2	ARPANEL D roof panel	ARPANEL D
3	Dilatation flashing	OBD-17
4	Dilatation flashing	OBD-18
5	Internal dilatation flashing	OBD-19
6	Acoustic and insulating gasket PES	US-02
7	Butyl gasket	US-06
8	Thermal insulation	
9	Tight rivet (every 300–600 mm)	NT
10	Self-drilling fastener	Z-01
11	Sheet metal screw (every 300 mm)	Z-03



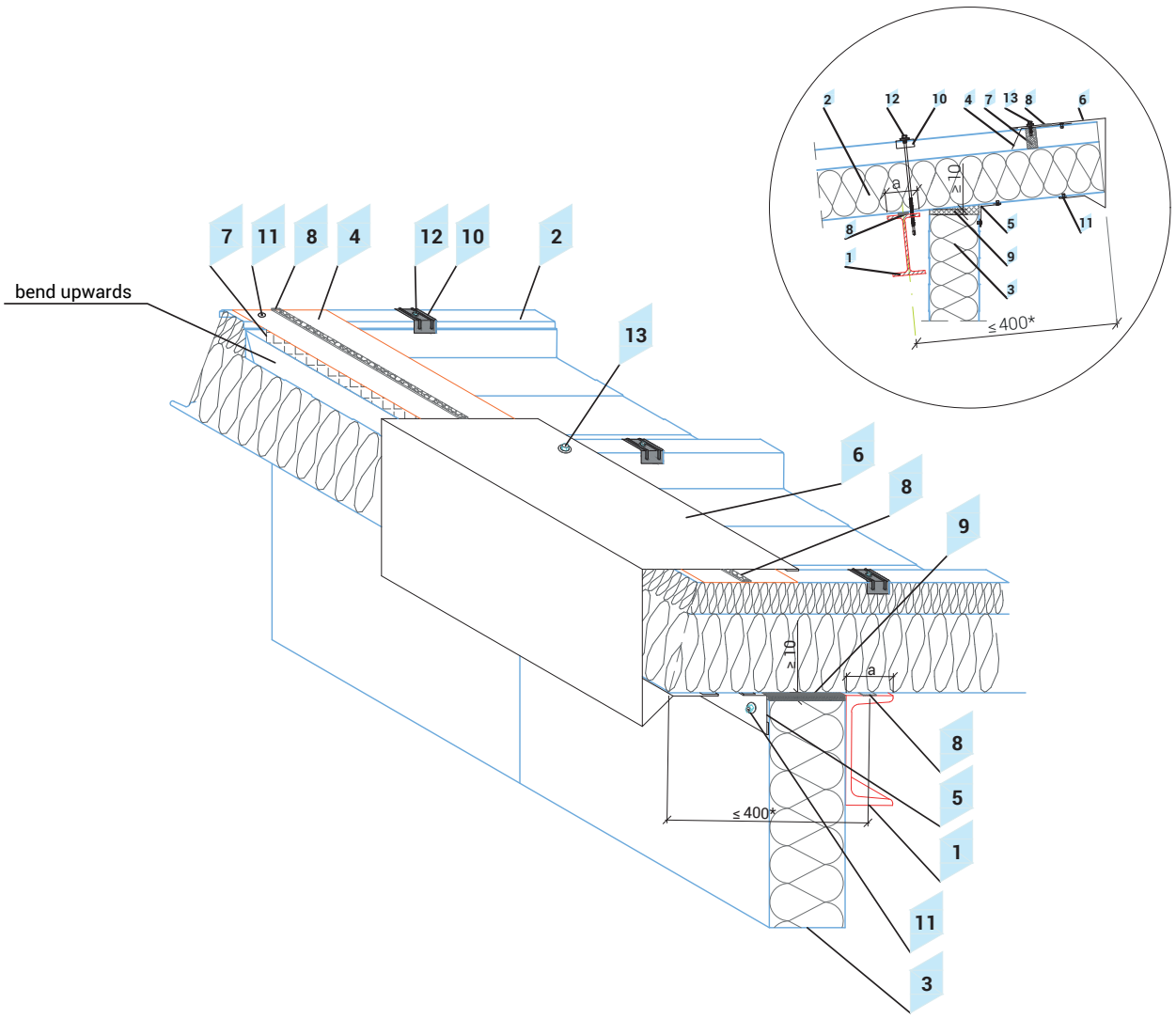
3.11 Detail of fastening the roof panels to the gable wall - roof with the eaves

	Object	Product code
1	Purlin acc. the structural design	
2	Spandrel beam acc. the structural design	
3	ARPANEL D roof panel	ARPANEL D
4	ARPANEL S wall panel	ARPANEL S
5	Internal corner flashing	OBD-6
6	Eaves flashing	OBD-21
7	Acoustic and insulating gasket PES	US-02
8	Butyl gasket	US-06
9	Thermal insulation	
10	Calotte	KLT
11	Tight rivet or sheet metal screw (every 300–600 mm)	NT
12	Self-drilling fastener	Z-01
13	Sheet metal screw (every 300-600 mm)	Z-03



3.12 Detail of fastening the roof panels to the gable wall - roof without the eaves

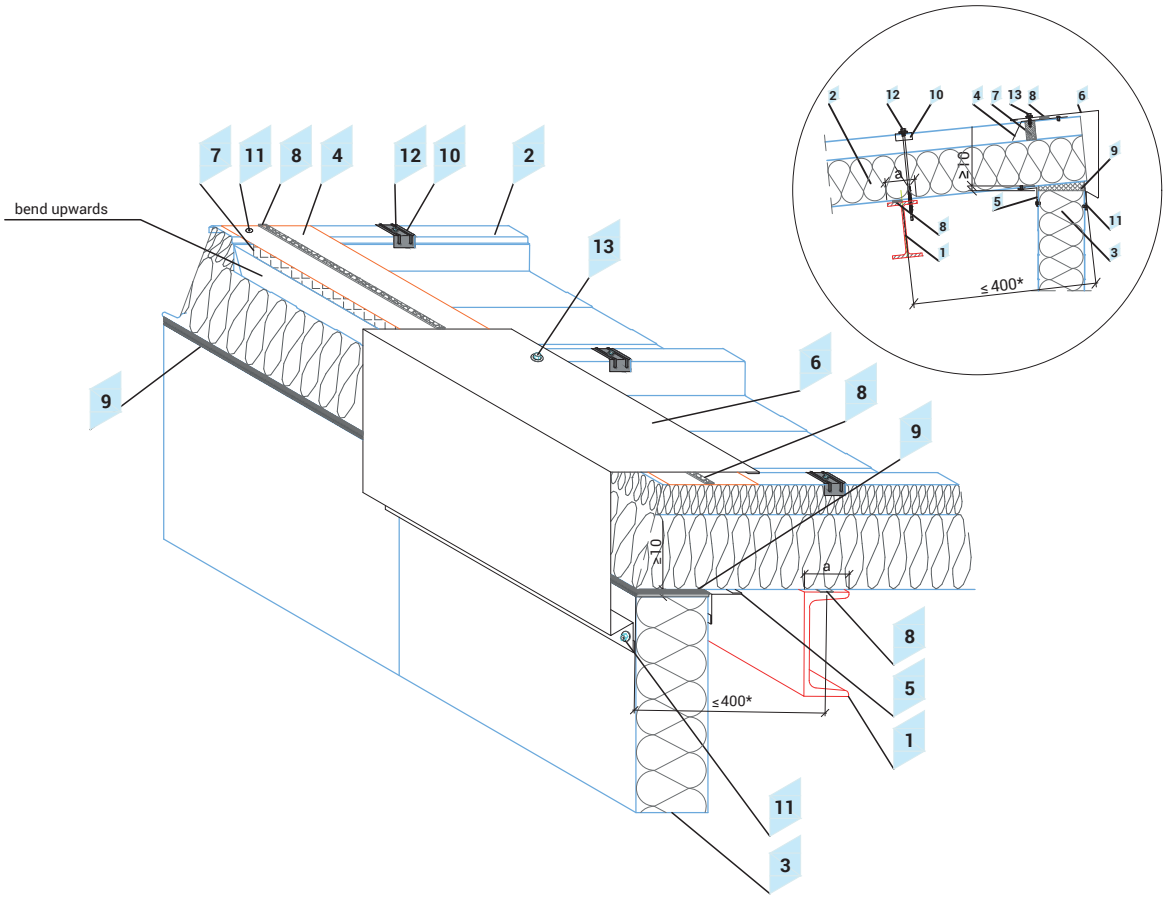
	Object	Product code
1	ARPANEL D roof panel	ARPANEL D
2	ARPANEL S wall panel	ARPANEL S
3	Internal corner flashing	OBD-6
4	Eaves flashing	OBD-22
5	Butyl gasket	US-06
6	Thermal insulation	
7	Tight rivet or sheet metal screw (every 300–600 mm)	NT
8	Sheet metal screw	Z-03



a – width of the support should be determined on the basis of static-strength calculations; a ≥ 60 mm.
* Longer brackets must be determined in consultation with the ARPANEL design department.

3.13 Mono-pitch roofs, with the eaves

	Object	Product code
1	Purlin acc. the structural design	
2	ARPANEL D roof panel	ARPANEL D
3	ARPANEL S wall panel	ARPANEL S
4	Mask flashing, so called "comb"	OBD-3
5	Internal corner flashing	OBD-7
6	Eaves flashing	OBD-23
7	Profiled gasket	US-01
8	Acoustic and insulating gasket PES	US-02
9	Thermal insulation	
10	Calotte	KLT
11	Tight rivet or sheet metal screw (every 300–600 mm)	NT
12	Self-drilling fastener	Z-01
13	Sheet metal screw	Z-03



a – width of the support should be determined on the basis of static-strength calculations; a ≥ 60 mm.
* Longer brackets must be determined in consultation with the ARPANEL design department.

3.14 Mono–pitch roofs, without the eaves

	Object	Product code
1	Purlin acc. the structural design	
2	ARPANEL D roof panel	ARPANEL D
3	ARPANEL S wall panel	ARPANEL S
4	Mask flashing, so called "comb"	OBD-3
5	Internal corner flashing	OBD-25
6	Eaves flashing	OBD-24
7	Profiled gasket	US-01
8	Acoustic and insulating gasket PES	US-02
9	Thermal insulation	
10	Calotte	KLT
11	Tight rivet or sheet metal screw (every 300–600 mm)	NT
12	Self-drilling fastener	Z-01
13	Sheet metal screw	Z-03

Cladding system for cold store objects

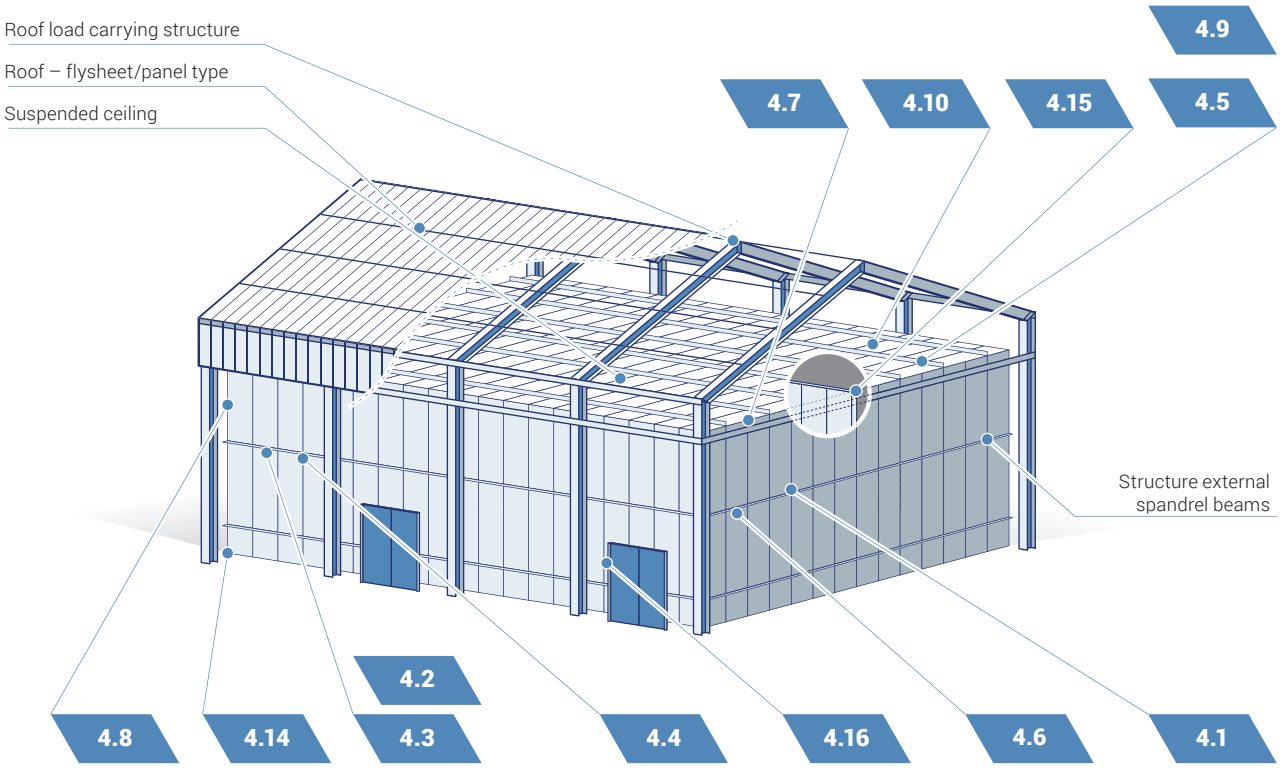
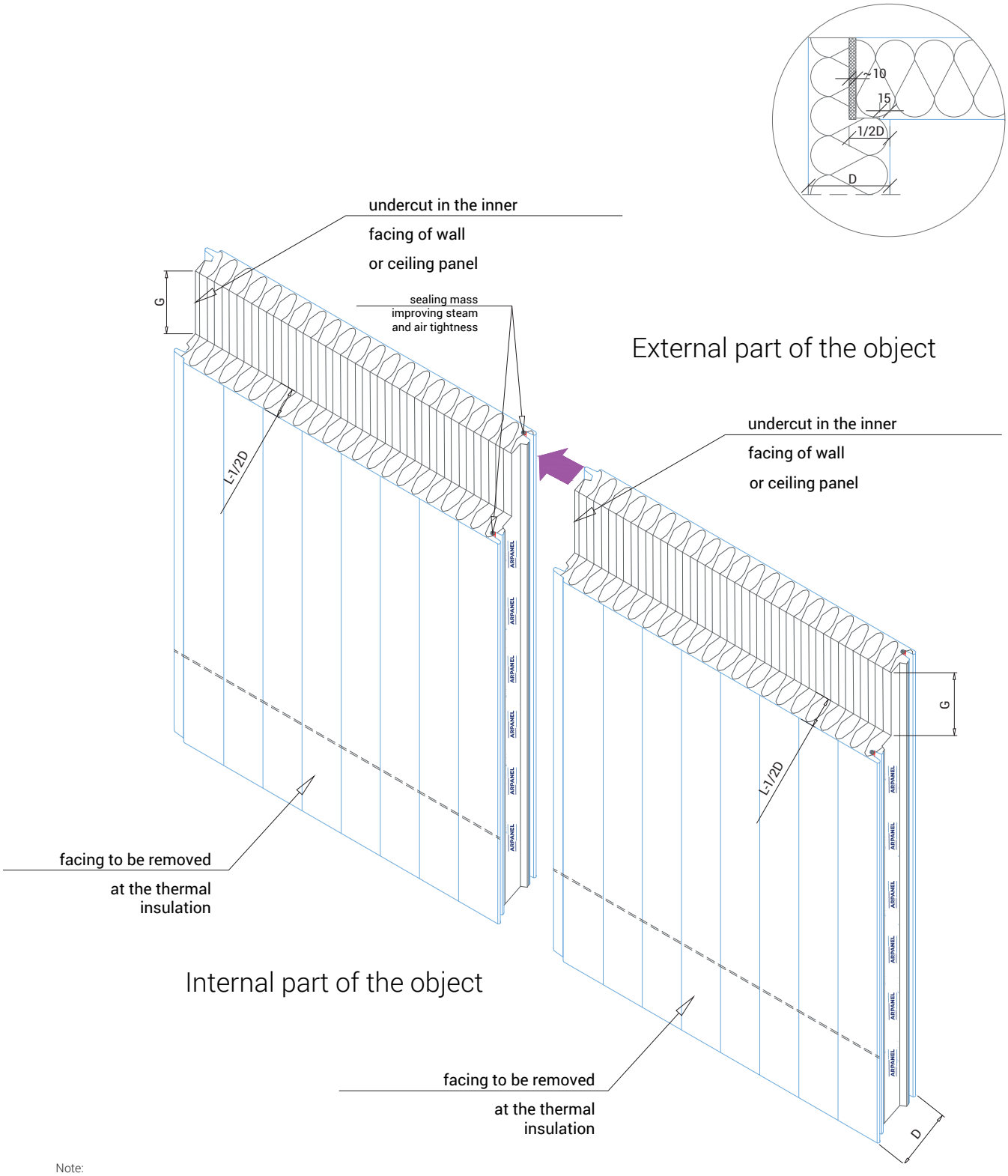


Diagram of placement of exemplary technical details

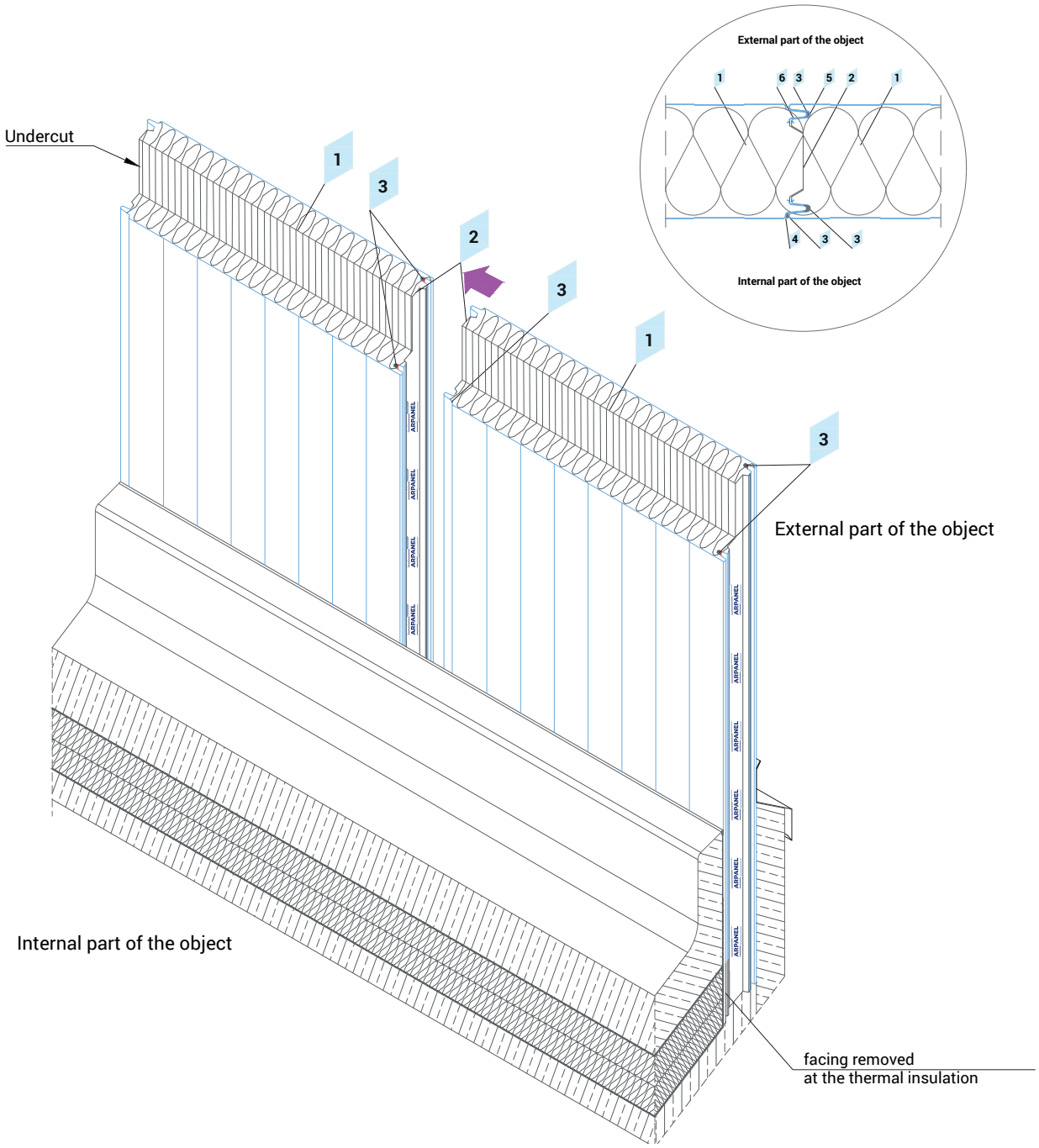
	Object
4.1	Longitudinal junction
4.2	Detail of cold store panels fastening with PVC fasteners
4.3	Detail of panels fastening with insulating nuts
4.4	Detail of panels fastening in junction with a spandrel beam
4.5	Detail of ceiling suspension with insulating nuts
4.6	Detail of cold store panels attachment over length
4.7	Detail of fastening wall panels and ceiling panels at the corner
4.8	Detail of cold store panels attachment in a corner
4.9	Suspension of panels at the ceiling with the profile
4.10	Suspension of panels at the ceiling with an Omega profile
4.11	Detail of a partition wall-to-external wall joint
4.12	Detail of an internal wall-to-concrete plinth joint
4.13	Detail of an internal wall-to-PVC plinth joint
4.14	Detail of an external wall-to-floor and concrete plinth joint
4.15	Detail of a partition wall-to-ceiling joint
4.16	Detail of an external wall-to-door frame joint



Note:

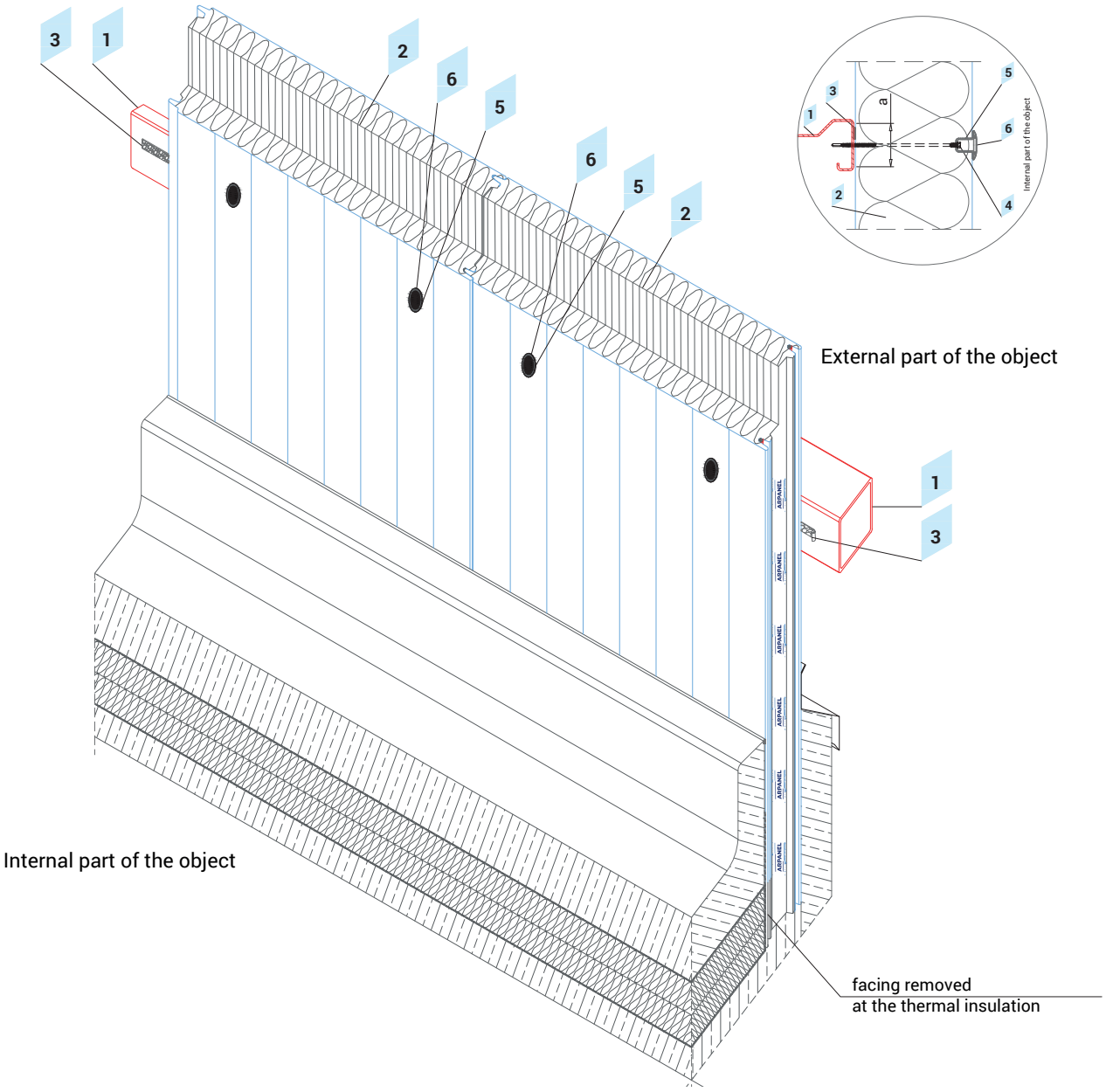
D – thickness of wall or ceiling panel.
G – undercut height from 50mm to 300mm.
L – 1/2 D undercut depth for 100mm minimum panel.
Undercuts are not possible for stainless steel (Inox) and Corten facing panels.

4.0 Undercut



4.1 Longitudinal junction

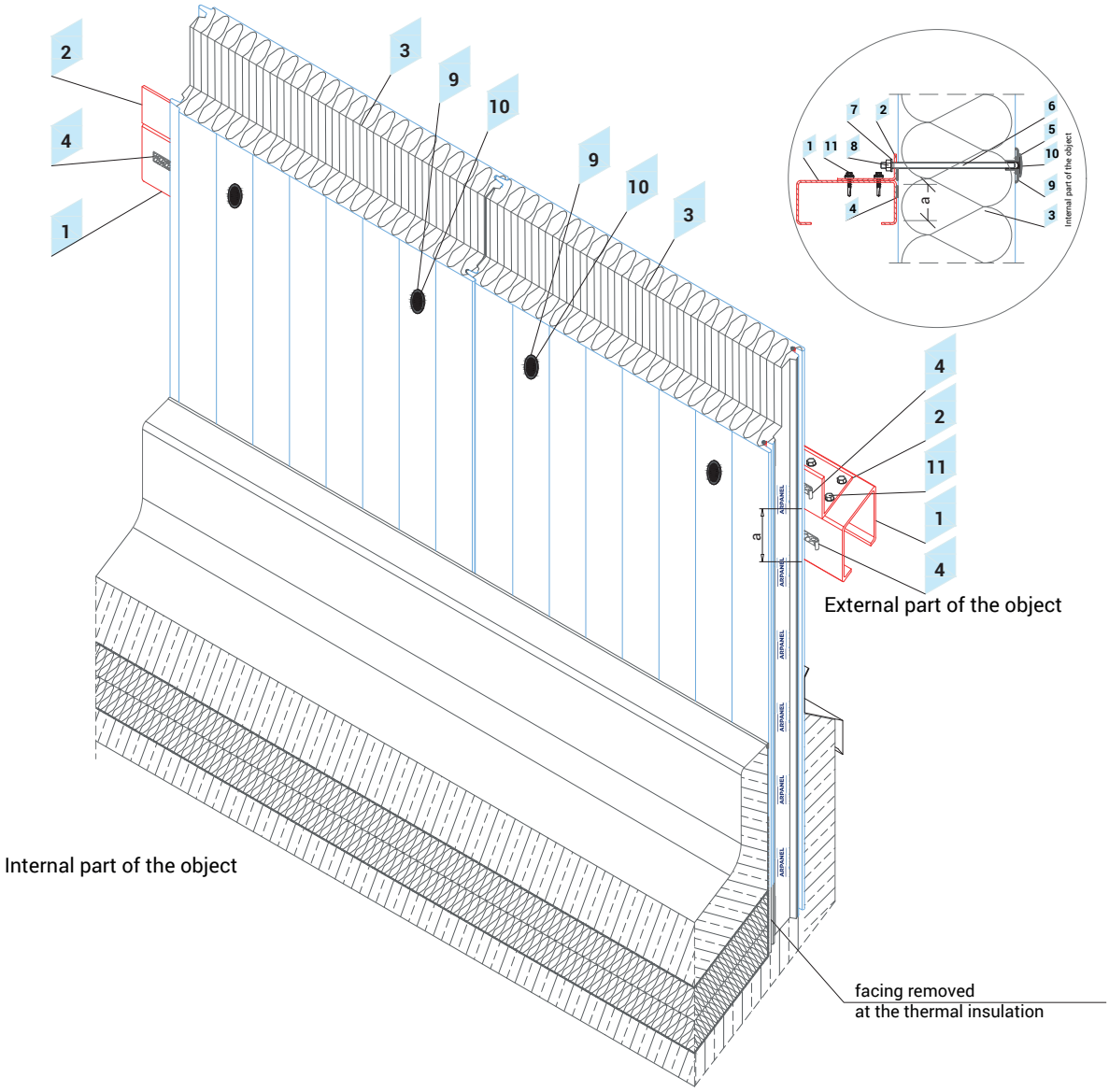
	Object	Product code
1	ARPANEL CH cold store panel	ARPANEL CH
2	Tongue-and-groove milled joint to cancel thermal bridge	
3	Sealing mass improving steam and air tightness	
4	Gap enabling application of sealing plastic masses	
5	Double-side shape of the panel junction as a double lock	
6	Conical inclination of panel joint to facilitate assembly	



a – width of the support should be determined on the basis of static-strength calculations; a ≥ 60 mm.

4.2 Detail of cold store panels fastening with PCV fasteners

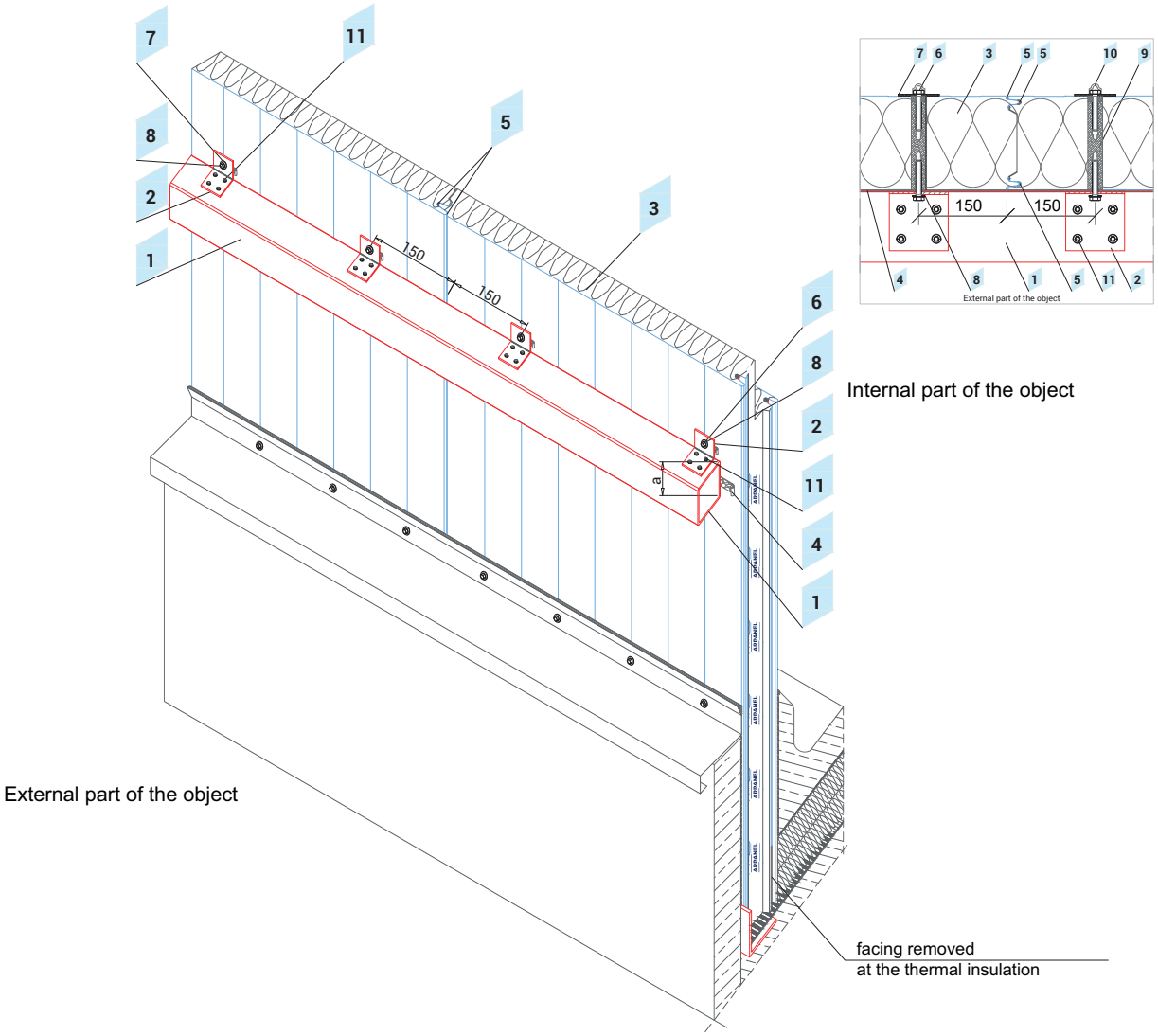
	Object	Product code
1	Wall spandrel beam acc. the structural design	
2	ARPANEL CH cold store panel	ARPANEL CH
3	Acoustic and insulating gasket PES	US-02
4	Self-drilling fastener	Z-01
5	PVC bushing	
6	PVC plug	



a – width of the support should be determined on the basis of static-strength calculations; a ≥ 60 mm.

4.3 Detail of panels fastening with insulating nuts

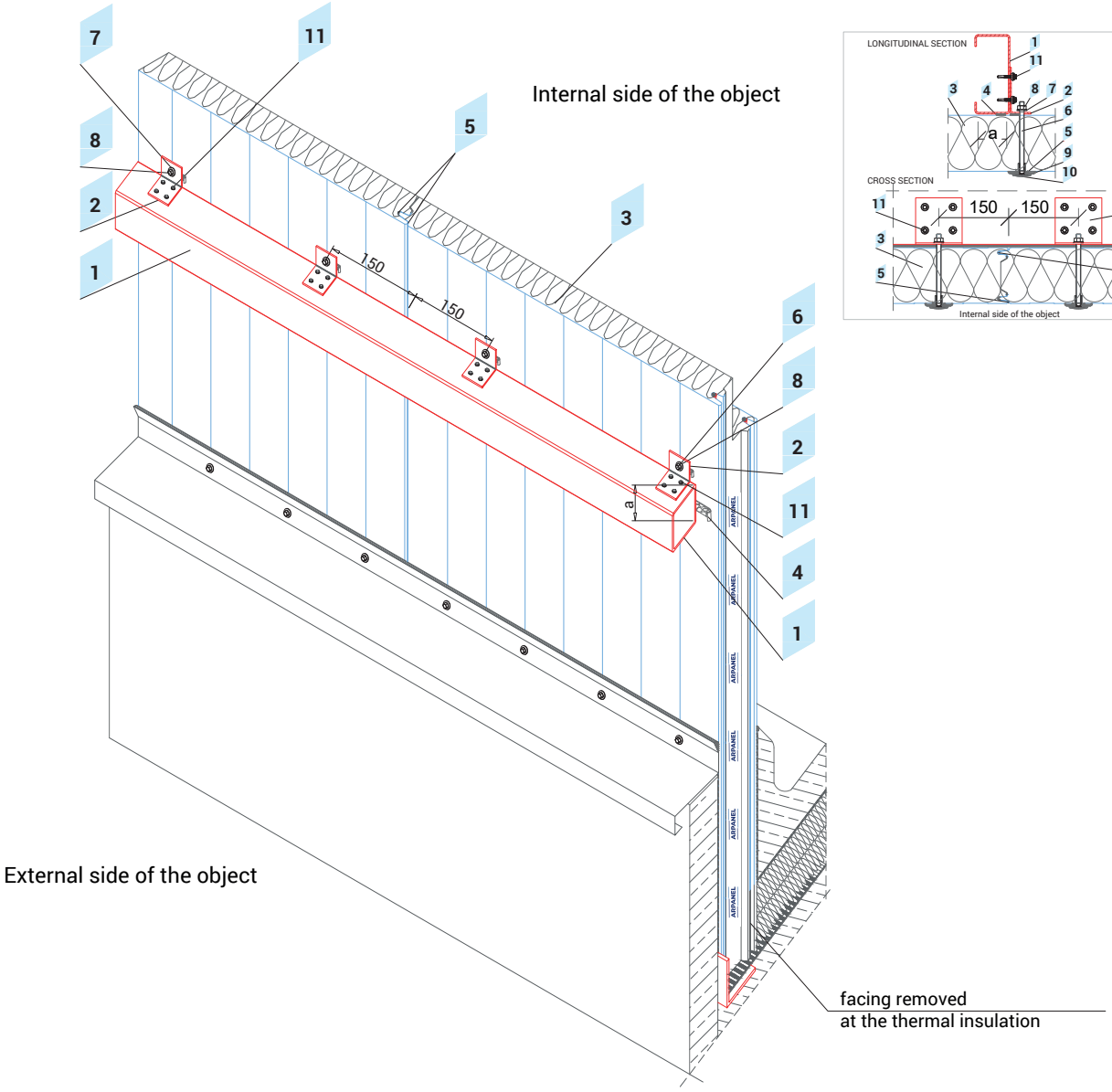
	Object	Product code
1	Wall spandrel beam acc. the structural design	
2	Mounting angle bar acc. the structural design	
3	ARPANEL CH cold store panel	ARPANEL CH
4	Acoustic and insulating gasket PES	US-02
5	Permanently plastic, sealing mass	
6	Threaded rod	
7	Washer	
8	Nut	
9	PVC washer	
10	PVC insulating nut with steel insert	
11	Fastener acc. the structural design	



a – width of the support should be determined on the basis of static-strength calculations; a ≥ 60 mm.

4.4 Detail of panels fastening in junction with a spandrel beam

	Object	Product code
1	Wall spandrel beam acc. the structural design	
2	Mounting angle bar acc. the structural design	
3	ARPANEL CH cold store panel	ARPANEL CH
4	Acoustic and insulating gasket PES	US-02
5	Sealing mass improving steam and air tightness	
6	Bolt	
7	Carrier washer	
8	Washer	
9	Polyamide bush	
10	Protecting hood	
11	Fastener acc. the structural design	

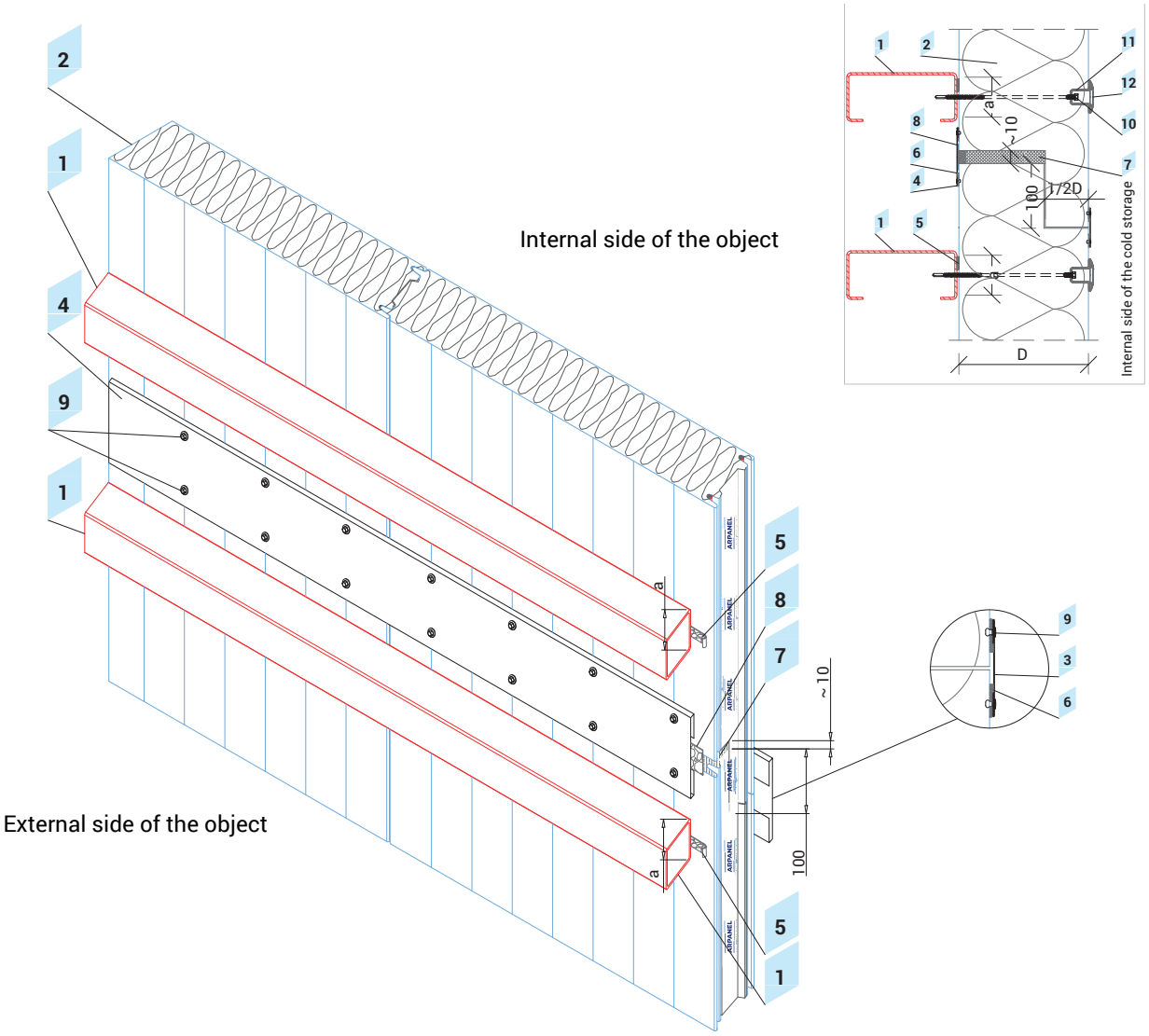


a – width of the support should be determined on the basis of static-strength calculations; a ≥ 60 mm.

4.5 Detail of ceiling suspension with insulating nuts

	Object	Product code
1	Purlin acc. the structural design	
2	Mounting angle bar acc. the structural design	
3	ARPANEL CH cold store panel	ARPANEL CH
4	Acoustic and insulating gasket PES	US-02
5	Permanently plastic, sealing mass	
6	Threaded rod	
7	Washer	
8	Nut	
9	PVC washer	
10	PVC insulating nut with steel insert	
11	Fastener acc. the structural design	

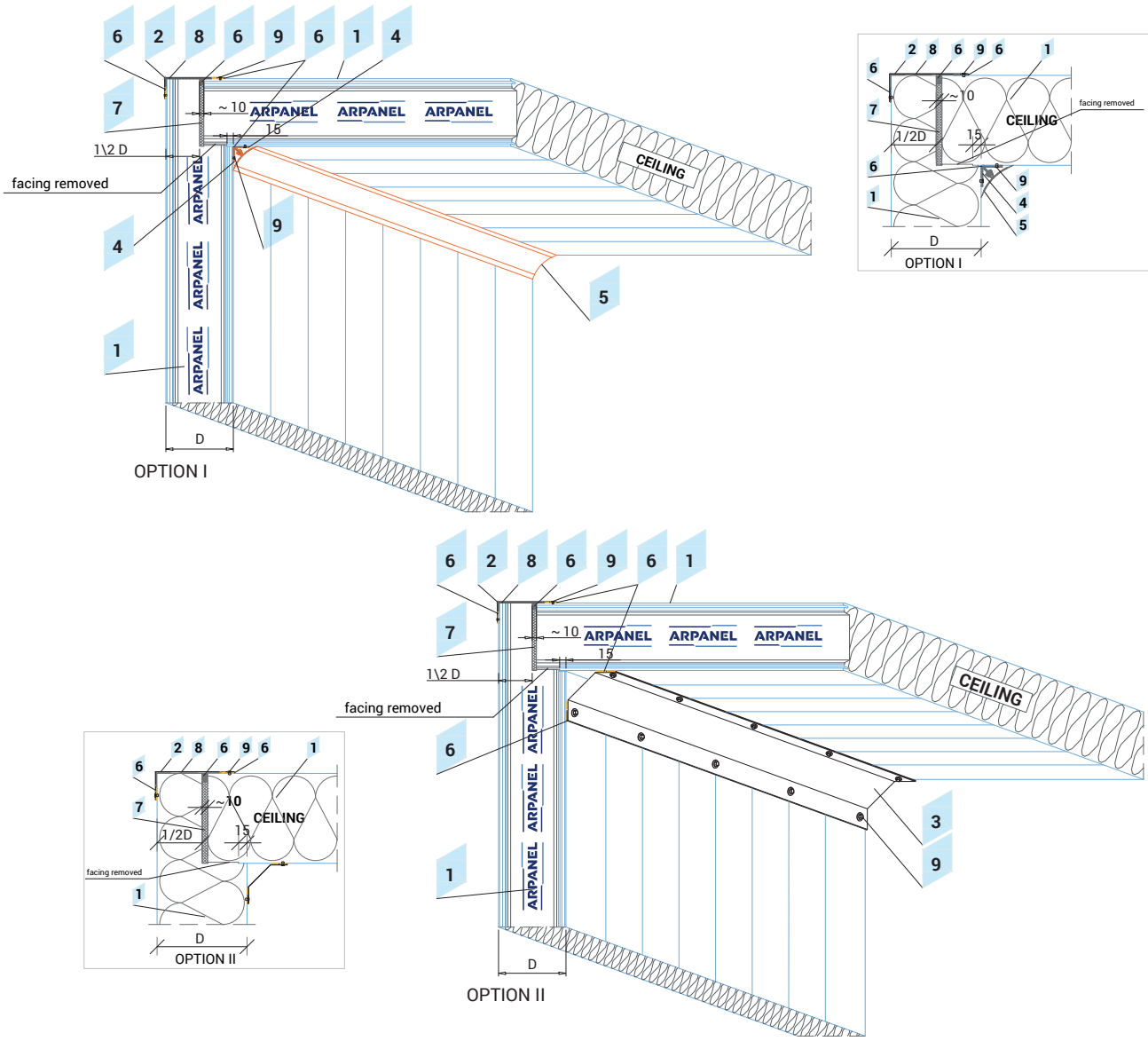
4. Cladding system for cold store objects



a – width of the support should be determined on the basis of static-strength calculations; a ≥ 40 mm.
D – panel thickness.

4.6 Detail of cold store panels attachment over length

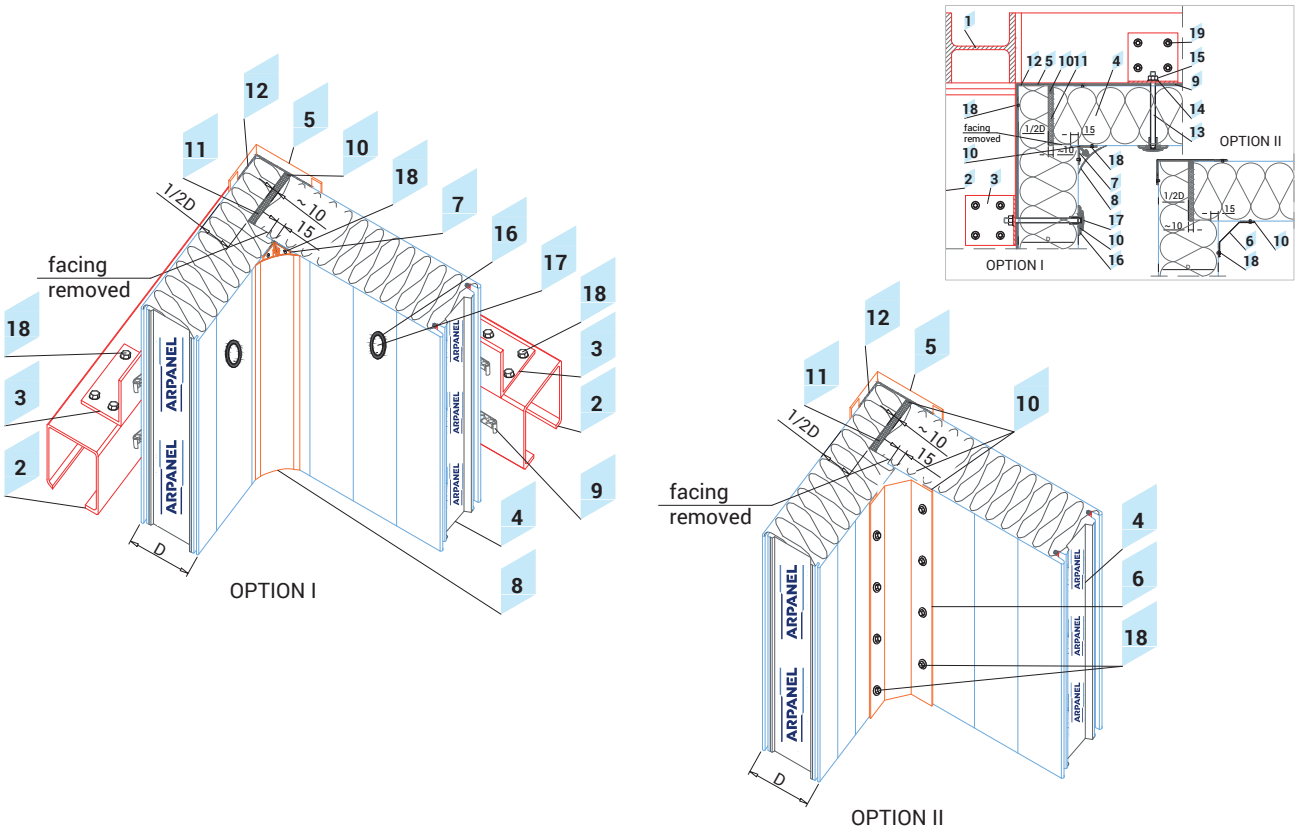
	Object	Product code
1	Wall spandrel beam acc. the structural design	
2	ARPANEL CH cold store panel	ARPANEL CH
3	Flat mask flashing	OBCH-4
4	Flat mask flashing	OBCH-5
5	Acoustic and insulating gasket PES	US-02
6	Permanently plastic, sealing mass	
7	Polyethylene fitting foam	
8	Sealing tape with bituminous binder	
9	Tight rivet or sheet metal screw (every 300 mm)	NT
10	Self-drilling fastener	Z-01
11	PVC bushing	
12	PVC plug	



D – panel thickness.

4.7 Detail of fastening wall panels and ceiling panels at the corner

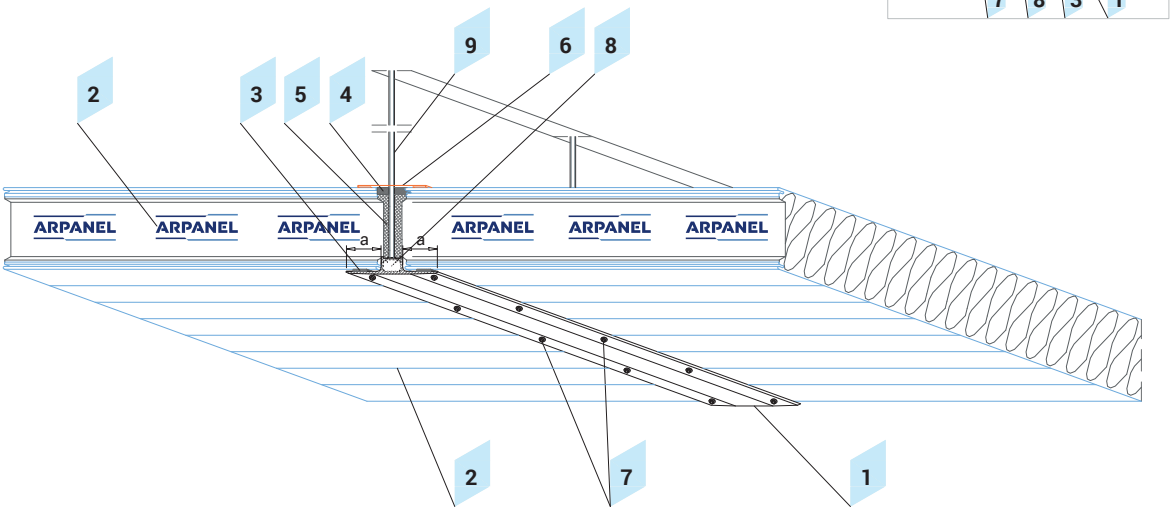
	Object	Product code
1	ARPANEL CH cold store panel	ARPANEL CH
2	External corner flashing	OBCH-1
3	Internal corner flashing	OBCH-3
4	Fastening profile PCV	
5	Corner profile PCV	
6	Permanently plastic, sealing mass	
7	Polyurethane fitting foam	
8	Sealing tape with bituminous binder	
9	Tight rivet or sheet metal screw (every 300 mm)	NT



D – panel thickness.

4.8 Detail of cold store panels attachment in a corner

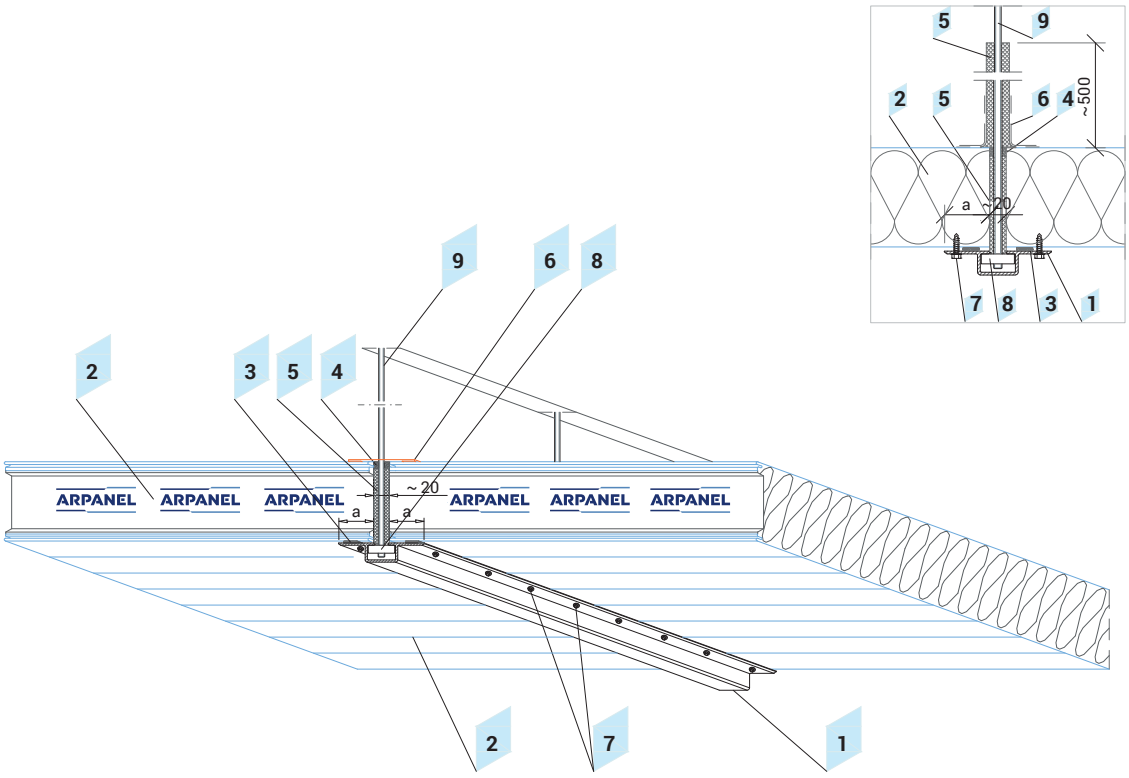
	Object	Product code
1	Column acc. the structural design	
2	Wall spandrel beam acc. the structural design	
3	Mounting angle bar acc. the structural design	
4	ARPANEL CH cold store panel	ARPANEL CH
5	External corner flashing	OBCH-1
6	Internal corner flashing	OBCH-3
7	Fastening profile PCV	
8	Corner profile PCV	
9	Acoustic and insulation gasket PES	US-02
10	Permanently plastic, sealing mass	
11	Polyurethane fitting foam	
12	Sealing tape with bituminous binder	
13	Threaded rod	
14	Washer	
15	Nut	
16	PVC washer	
17	PVC insulating nut with steel insert	
18	Tight rivet or sheet metal screw (every 300 mm)	NT
19	Fastener acc. the structural design	



a – width of the support should be determined on the basis of static-strength calculations; a ≥ 40 mm..

4.9 Suspension of panels at the ceiling with the profile

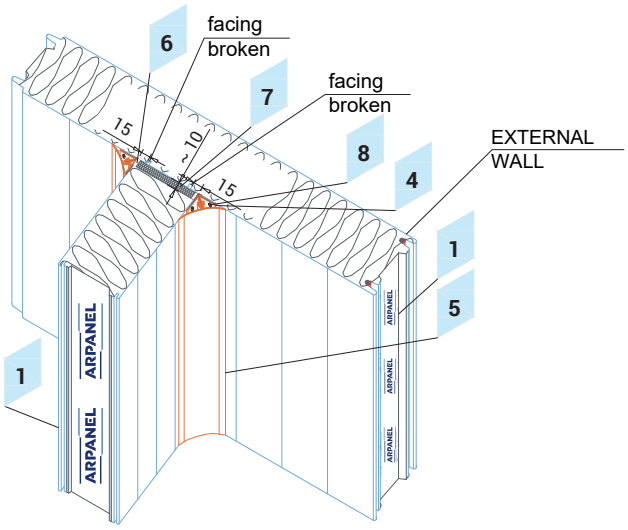
	Object	Product code
1	Aluminium profile	
2	ARPANEL CH cold store panel	ARPANEL CH
3	Acoustic and insulating gasket PES	US-02
4	Permanently plastic, sealing mass	
5	Polyurethane fitting foam	
6	Sheet metal rosette	
7	Sheet metal screw	
8	PVC fastener with steel insert	
9	Threaded screw	



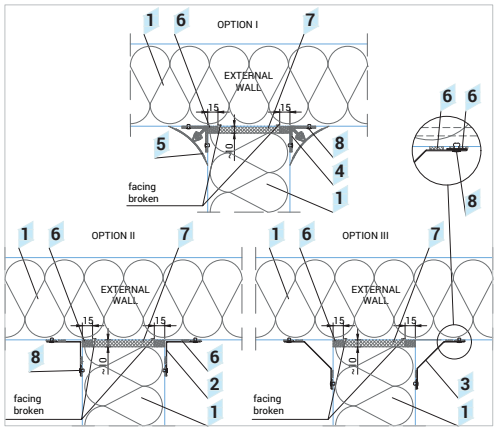
a – width of the support should be determined on the basis of static-strength calculations; a ≥ 60 mm..

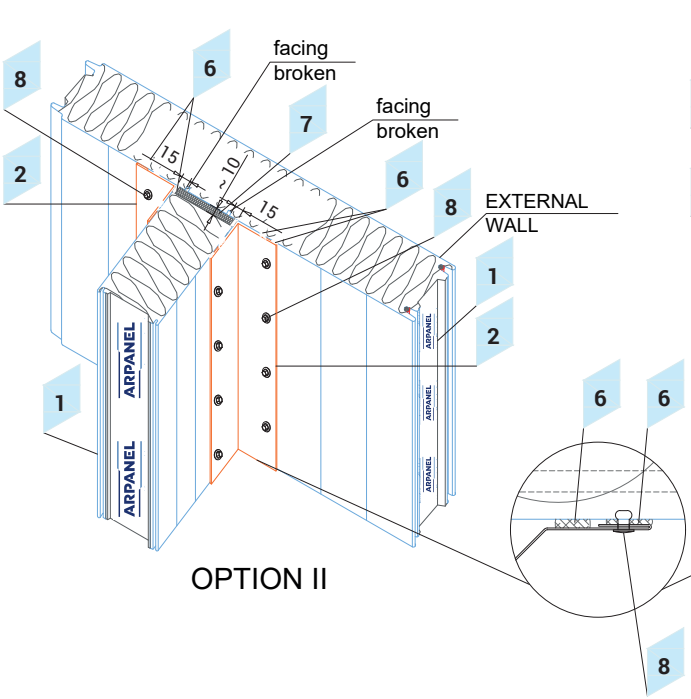
4.10 Suspension of panels at the ceiling with an Omega profile

	Object	Product code
1	Aluminum omega profile	
2	ARPANEL CH cold store panel	ARPANEL CH
3	Acoustic and insulating gasket PES	US-02
4	Permanently plastic, sealing mass	
5	Polyurethane fitting foam	
6	Sheet metal rosette	
7	Sheet metal screw	
8	Steel insert	
9	Threaded screw	

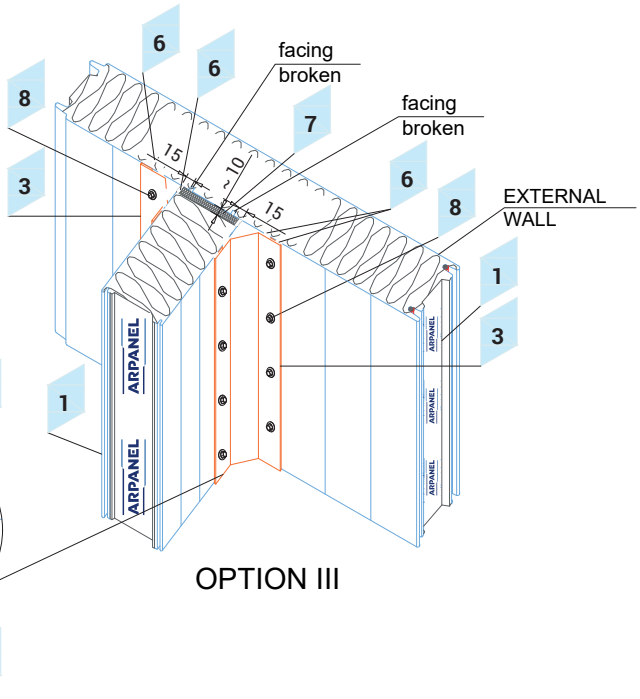


OPTION I





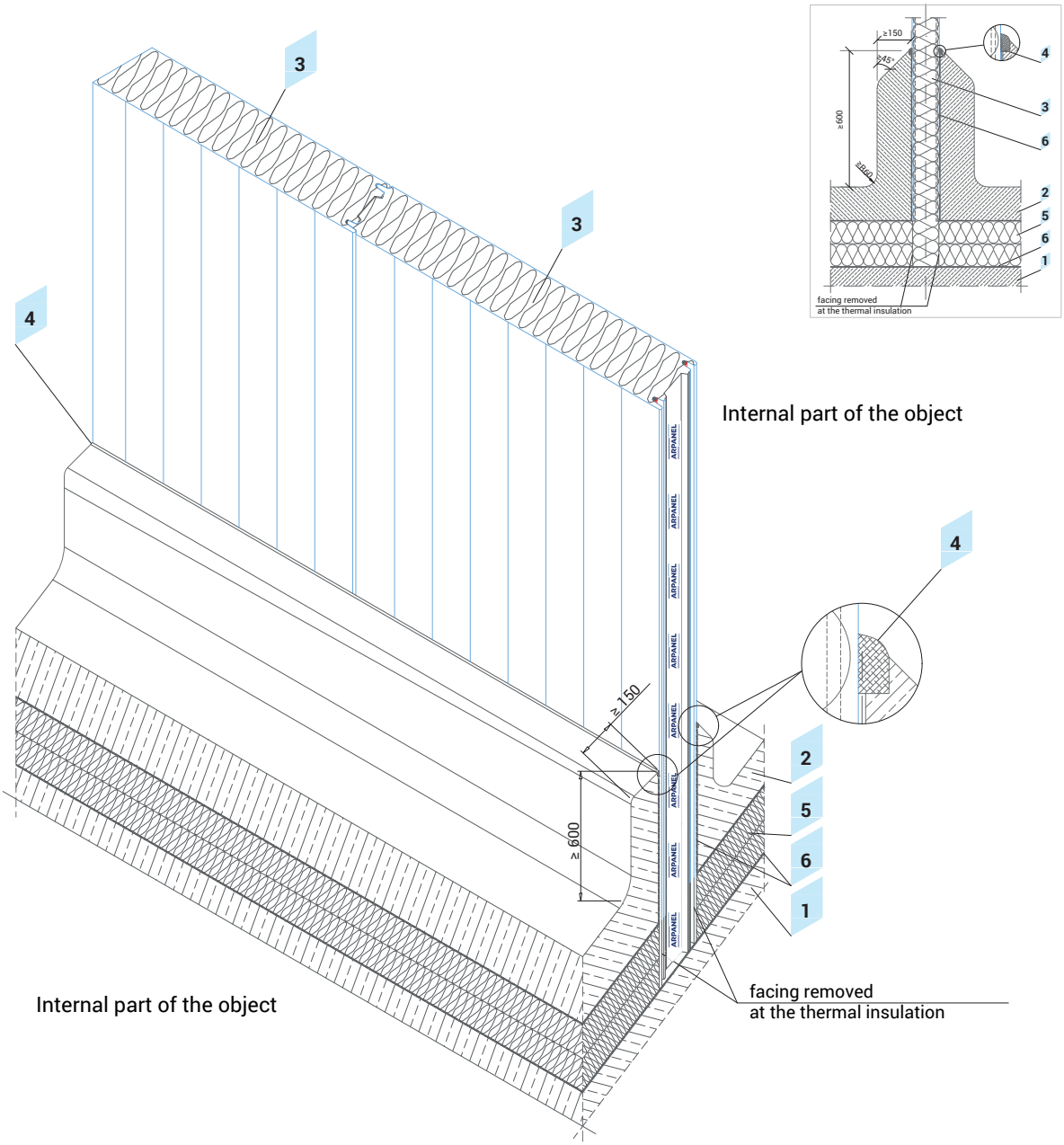
OPTION II



OPTION III

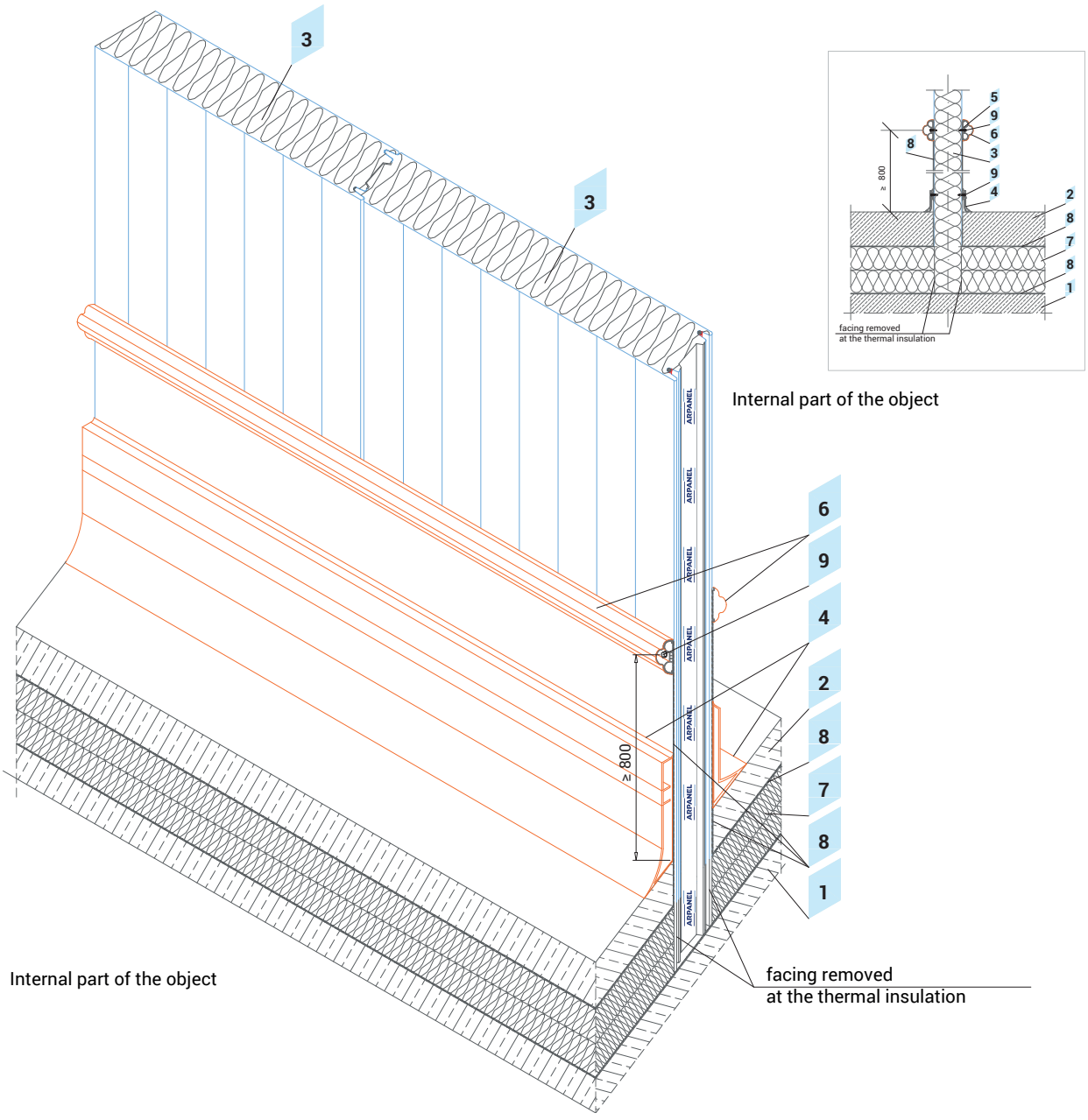
4.11 Detail of a partition wall-to-external wall joint

	Object	Product code
1	ARPANEL CH cold store panel	ARPANEL CH
2	Internal corner flashing	OBCH-2
3	Internal corner flashing	OBCH-3
4	Fastening profile PCV	
5	Corner profile PCV	
6	Permanently plastic, sealing mass	
7	Polyurethane fitting foam	
8	Tight rivet or sheet metal screw (every 300 mm)	NT



4.12 Detail of an internal wall-to-concrete plinth joint

	Object	Product code
1	Concrete slab acc. the structural design	
2	Concrete floor acc. the structural/architectural design	
3	ARPANEL CH cold store panel	ARPANEL CH
4	Permanently plastic, sealing mass	
5	Thermal insulation acc. the architectural design	
6	Moisture insulation acc. to the architectural design	

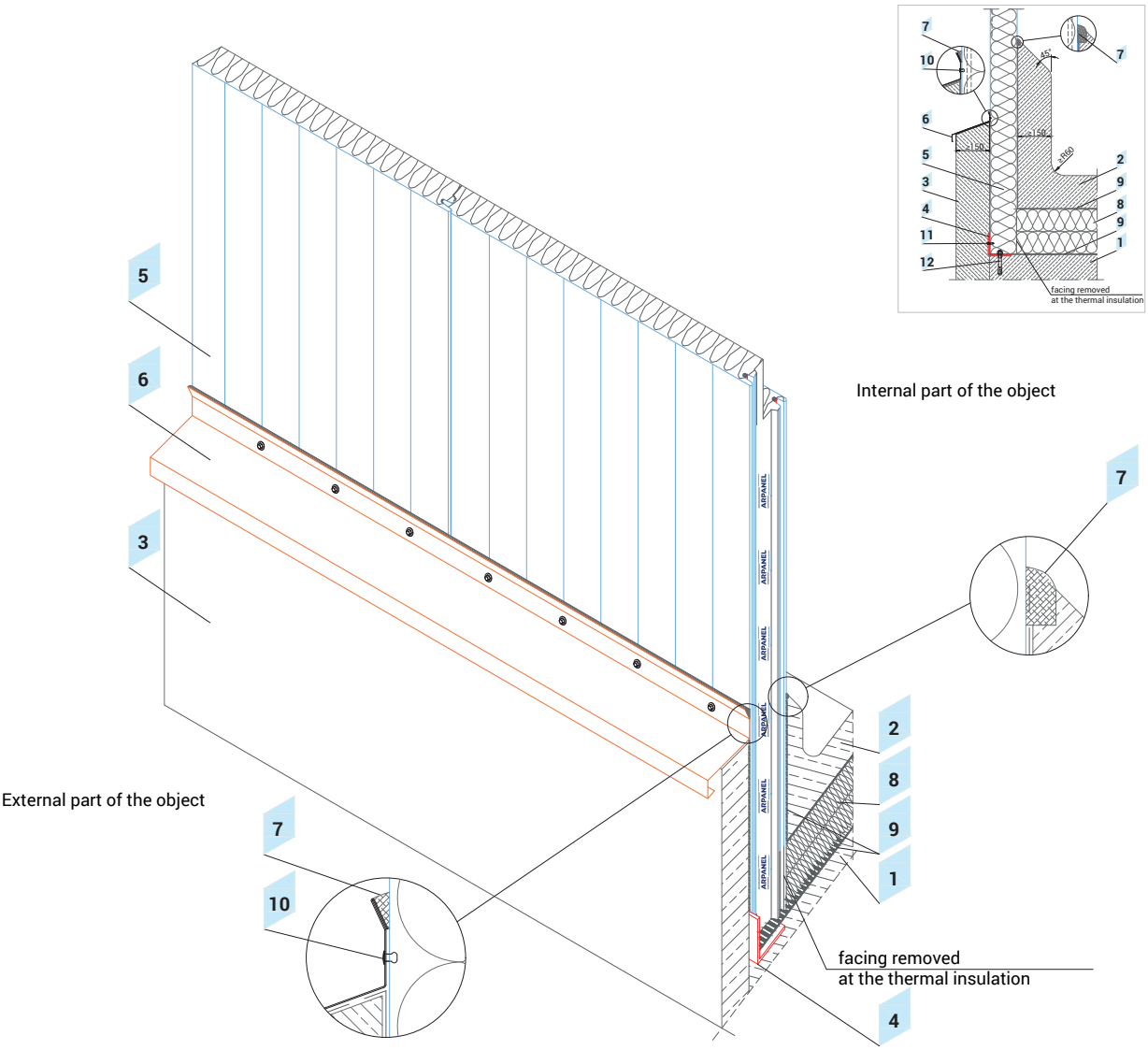


Internal part of the object

facing removed
at the thermal insulation

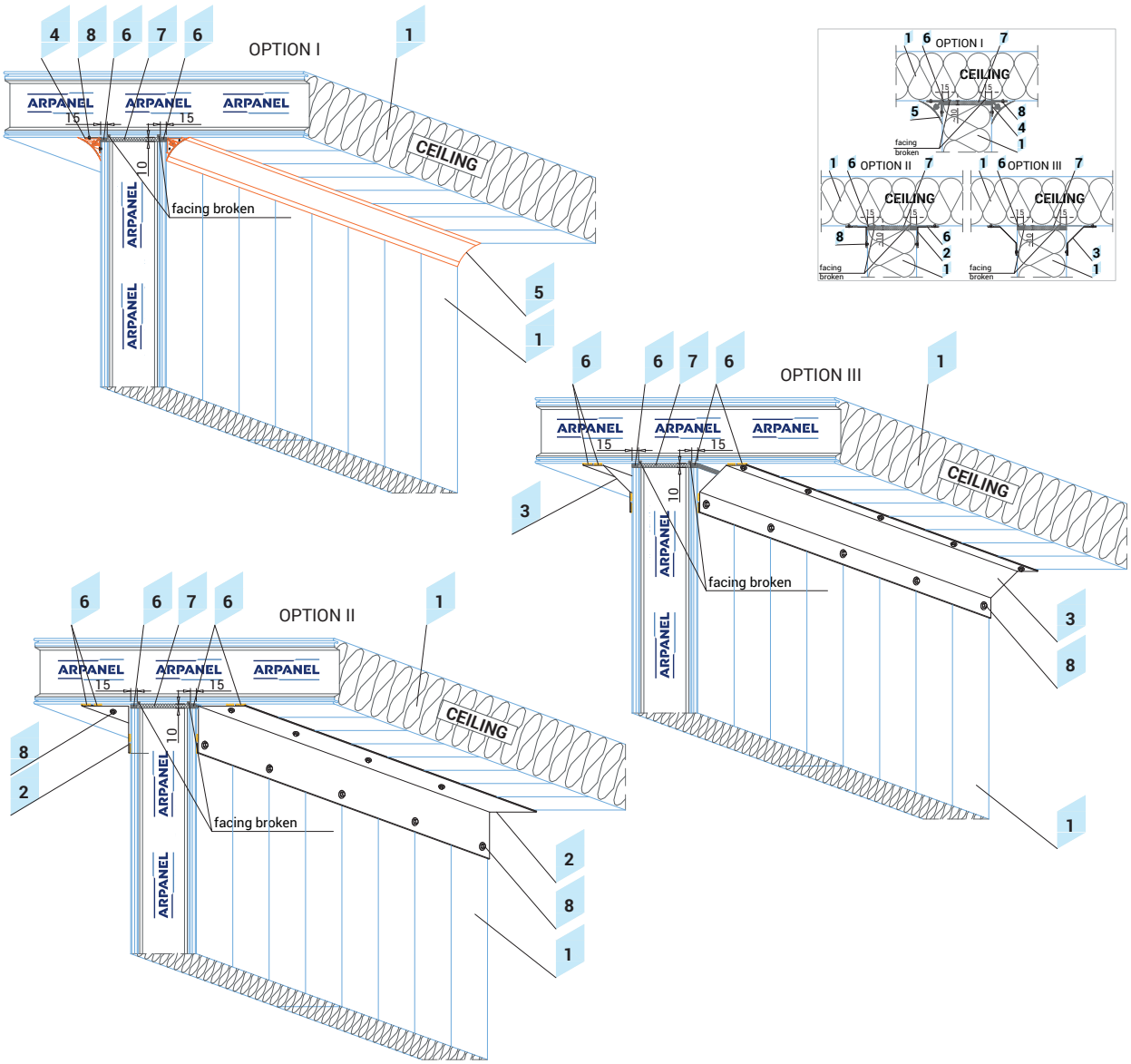
4.13 Detail of an internal wall-to-PCV plinth joint

	Object	Product code
1	Concrete slab acc. the structural design	
2	Concrete floor acc. the structural/architectural design	
3	ARPANEL CH cold store panel	ARPANEL CH
4	PVC plinth	
5	Wall support for the bump rail	
6	Bump rail shield	
7	Thermal insulation acc. the architectural design	
8	Moisture insulation acc. to the architectural design	
9	Sheet metal screw	Z-03



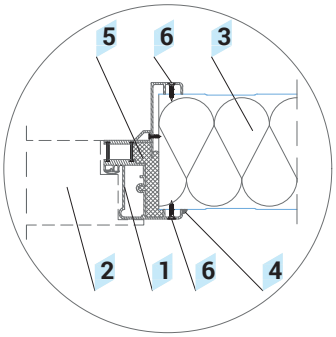
4.14 Detail of an external wall-to-floor and concrete plinth joint

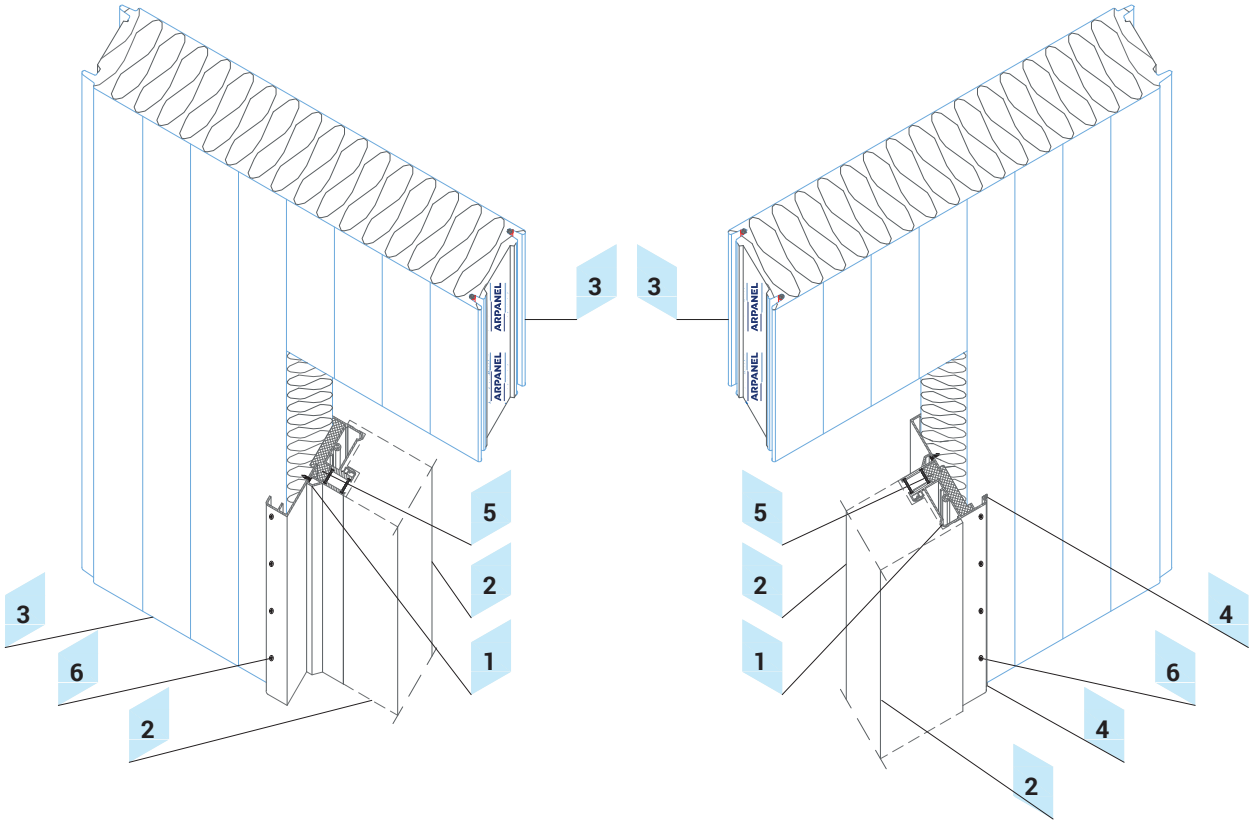
	Object	Product code
1	Concrete slab acc. the structural design	
2	Concrete floor acc. the structural/architectural design	
3	Concrete plinth acc. the structural/architectural design	
4	Angle bar acc. the structural design	
5	ARPANEL CH cold store panel	ARPANEL CH
6	Eaves flashing	OBCH-6
7	Permanently plastic, sealing mass	
8	Thermal insulation acc. the architectural design	
9	Moisture insulation acc. to the architectural design	
10	Tight rivet or sheet metal screw (every 300 mm)	NT
11	Sheet metal screw	Z-03
12	Anchor acc. the structural design	



4.15 Detail of a partition wall-to-ceiling joint

	Object	Product code
1	ARPANEL CH cold store panel	ARPANEL CH
2	Internal corner flashing	OBCH-2
3	Internal corner flashing	OBCH-3
4	Fastening profile PCV	
5	Corner profile PCV	
6	Permanently plastic, sealing mass	
7	Polyurethane fitting foam	
8	Tight rivet or sheet metal screw (every 300 mm)	NT





4.16 Detail of an external wall-to-door frame joint

	Object	Product code
1	Cold store door frame	
2	Cold store door	
3	ARPANEL CH cold store panel	ARPANEL CH
4	Permanently plastic, sealing mass	
5	Polyurethane fitting foam	
6	Sheet metal screw	Z-03

4. Cladding system for cold store objects

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