Continuous support systems

DEXTER

Secondary school Mont d'Hor, St Thierry (France) - Architect(s): J.P. Thomas, O. Fassio, J.B. Viaud - Contractor(s): Gayet

- Aesthetics of transverse in-line or offset joints
- Exclusive assembly system requiring no power tools
- Full range of pre-formed accessories for standard flashing.

A Umicore brand

Description of the system

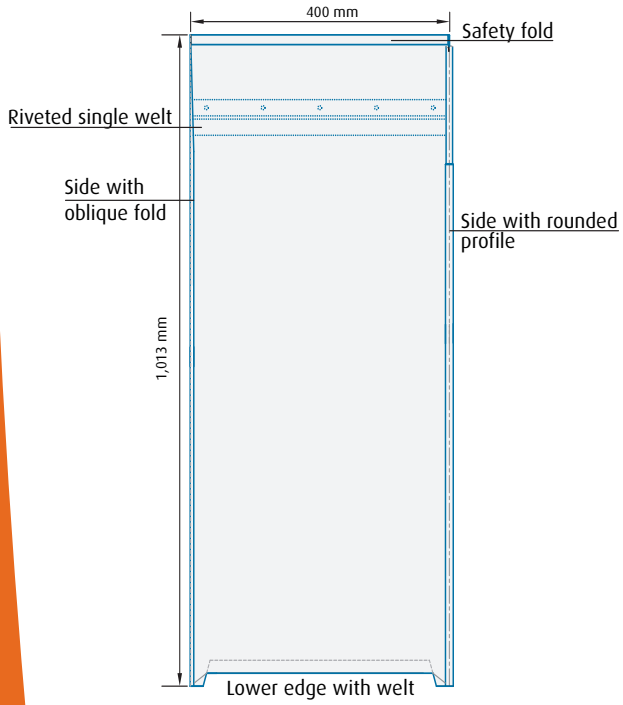
DEXTER, the VM ZINC® patented pre-formed system, is quickly and easily installed. It is recommended for straight-pitch with slopes of 15% (9°) or more. Only 3 DEXTER panels are needed to cover 1 m². Assembly (no mechanical tools necessary) is easy and reduces zinc-laying time. The DEXTER system also includes an extensive range of accessories designed for fitting ridges, eaves, verges, edges and valleys.

All DEXTER panels are made of VM ZINC PLUS in 0.7 mm thickness. The panels are assembled longitudinally with a centre-to-centre distance of 400 mm by simply interlocking the sides into one another.

The left side of each panel has an oblique fold and the right side a rounded profile. The height of the joint formed on interlocking is 35 mm.

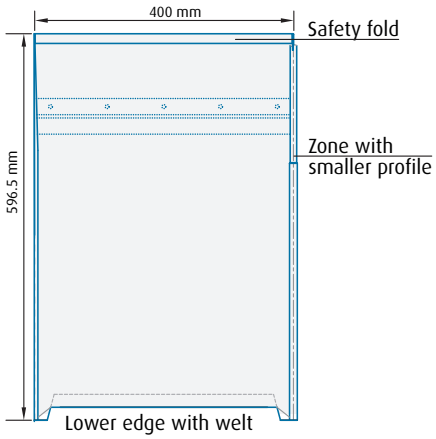
VM ZINC® DEXTER

Overall dimensions: 400 x 1013 mm
Useful dimensions: 400 x 835 mm



VM ZINC® 1/2 DEXTER

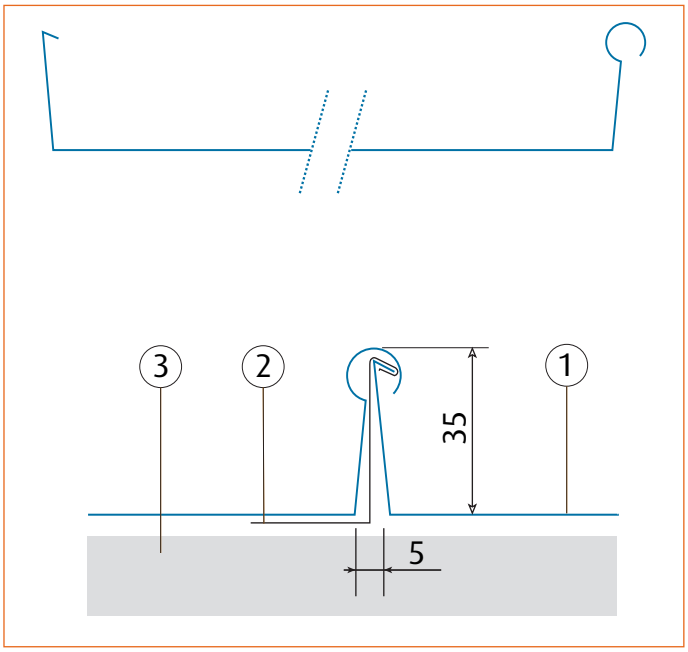
Overall dimensions : 400 x 597 mm
Useful dimensions: 400 x 436 mm



Surface Aspects	QUARTZ-ZINC ANTHRA-ZINC
Thickness	0.7 mm
Centre-to-centre	400 mm
Weight kg/m²	7.6 kg/m²
No. elements/m²	3
Packaging	6 DEXTER/box
	20 boxes/pallet

Fixing

Side clips (stainless steel)	2 clips on upstand with oblique fold
VM ZINC® sheet clips	For fixing at the top on the support



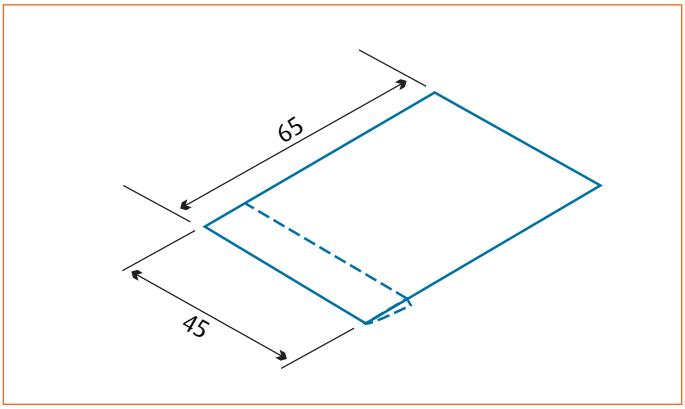
DEXTER 1
Side clip 2
Continuous support 3

Recommended fixings

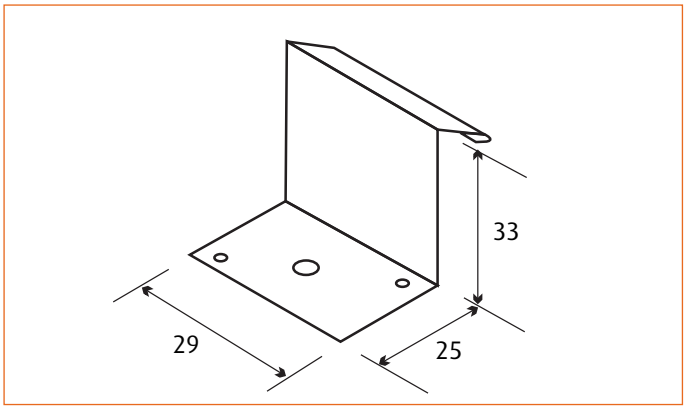
The DEXTER panels are fixed at the top by one sheet clip and by 2 side clips which are placed along the side at the oblique fold. When placed in position, each DEXTER needs to be immediately fixed at the top by a sheet clip inserted into the centre of the safety fold. The side clips are put in place during or after the laying of a complete vertical row. They are fixed along the side with the oblique fold every 417 mm for 2 clips, and 278 mm for 3 clips*. At the eaves, the spacing between the first two clips is 352 mm for 2 clips, and 212 mm for 3 clips*.
The first side clip is positioned at the eaves 185 mm from the base of the first DEXTER.

* The figures for 3 side clips per panel may be required in situations of high wind. See table on windload resistance.

Sheet clip



Side clip



Area of application

Type of roof and façade

Flat roofs and facades.

Climates

Low altitudes: no restriction. All windy regions.
Mountain areas: supplementary waterproofing necessary.
For buildings higher than 30 meters with high windload, please consult VM ZINC®.

Pitches

Minimum pitch > or = 9° (15%). In particularly exposed locations or locations at an altitude of 900 m or more, the minimum slope is 15° (25%).

Support

It must be rigid and continuous for all parts where DEXTER is installed: under sheets as well as under all box gutters, flashing. There should be no more than a 5 mm difference in height (flush tolerance) between its components at their junction.
There should be no protruding elements on the support, e.g., screws or nails that could damage the underside of the zinc.
The support must also meet loading requirements in compliance with the national code of practice, have a minimum pull-out strength of 50 daN for each of the fixing systems, provided that the entire support transmit the cumulated load to the structure.

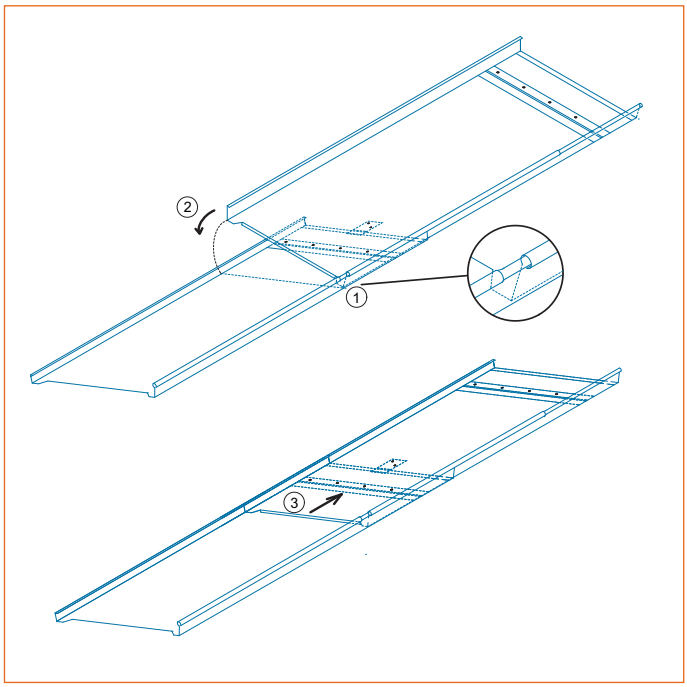
Admissible resistance in N/m²

The amount of stress calculated must take into account the characteristics of the roof or facade (height, slope, local stress at the edges, corners and eaves, exposure) and must be lower than the admissible resistance of the DEXTER system.
For high windload, please consult VM ZINC®.

Windload resistance N/m²

Number of clips		2	3
Methods of laying	Aligned joints	1,333	1,875
	Staggered joints	1,533	2,156

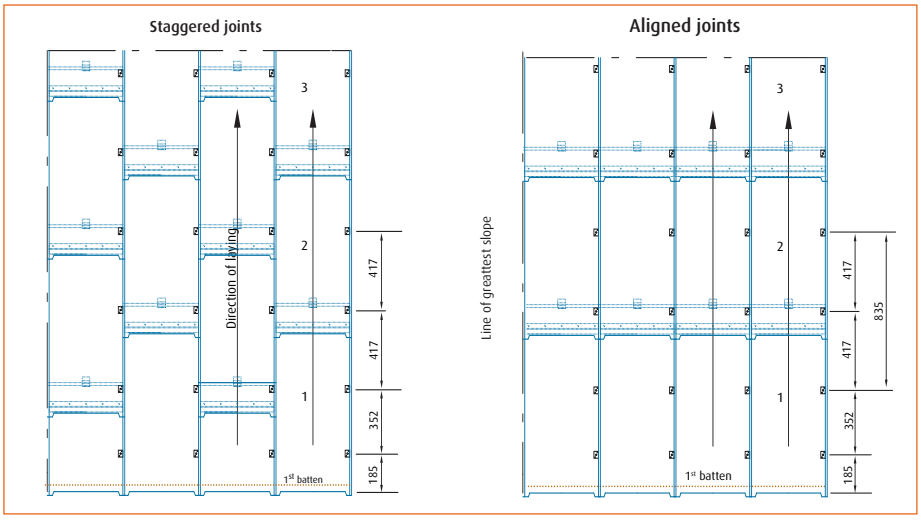
Installation



When the eaves flashing is installed and the marking is done, DEXTER panels are laid as follows:

Installation from eaves to ridge

- Install and fix the first panel on the right side of the eaves according to your chalk lines.
- Place the side with the rounded profile onto the side of the lower DEXTER panel.
- Lay down the DEXTER and snap down the side with the oblique fold of the DEXTER panel.
- Insert the fold at the base of the upper DEXTER into the single welt of the lower DEXTER and push upwards. Interlocking should not be continued all the way because a play of approximately 3 mm should be left between the 2 successive DEXTER panels. This allows the zinc to expand and contract with variations in temperature.



Installation from right to left

Once the first vertical row has been laid, the adjacent rows are completed according to the same principle.When DEXTER is laid horizontally with staggered joints, the row at the eaves consists of alternating a DEXTER with a half DEXTER panel (starting piece) in order to create a misalignment of half a panel between the vertical rows.

Junction

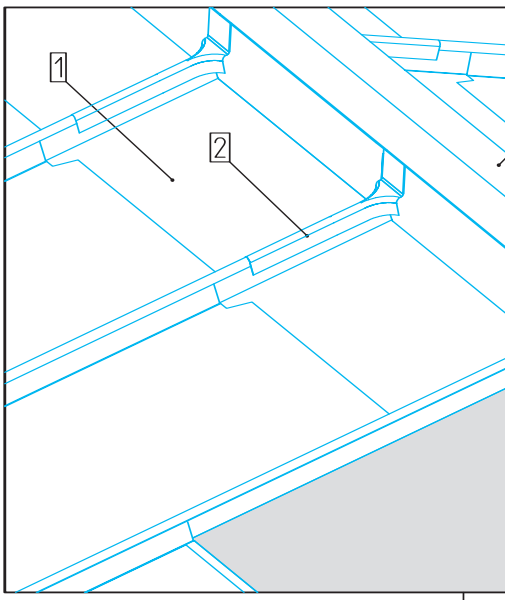
The panels are assembled longitudinally by simply locking the sides of the panels into one another. Transversally, the panels are assembled using double-welt joints. The transverse joints overlap by 158 mm and the side with the rounded profile has a 200-mm zone where the profile narrows so that it facilitates overlapping. The DEXTER system is laid from the right end to the left end like roofing tiles. The transverse joints can be staggered or aligned.

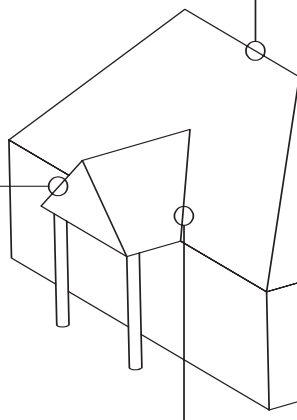
Apartments, Glebe, Harbour (Australia)
Architect(s): Adam Haddow & John Pradel, SJB Architects
Contractor(s): Robert Pradolin

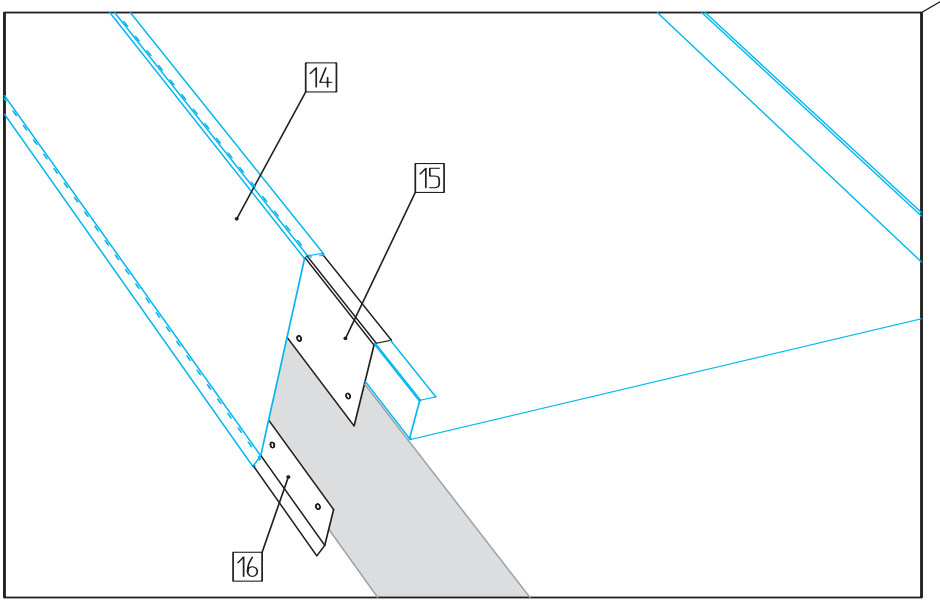
Details

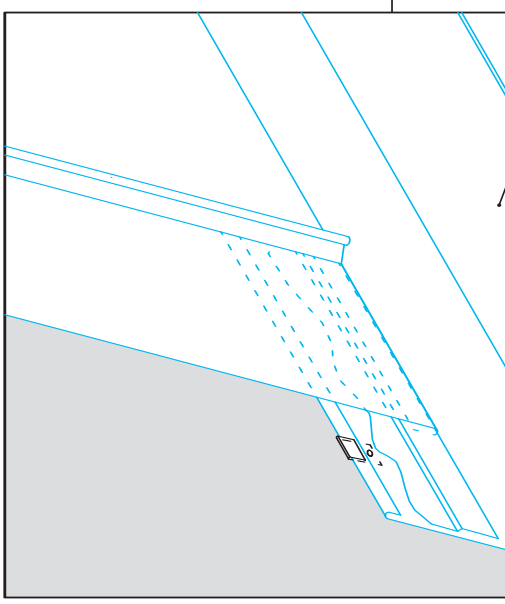
Roofing

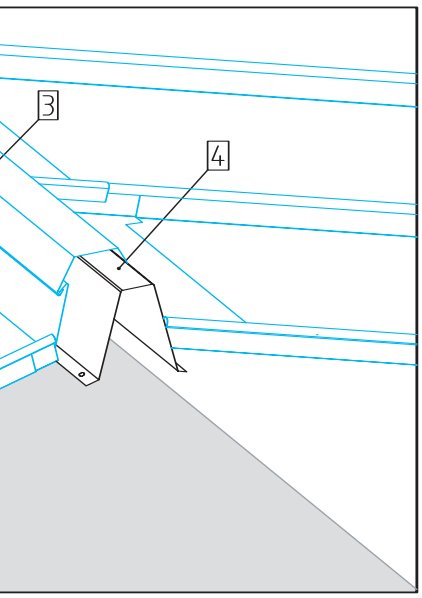
1. DEXTER top ridge panel
2. DEXTER top panel seam flashing
3. VM ZINC® top ridge flashing
4. Galvanized steel ridge flashing
5. VM ZINC® top flat hip slider
6. Hip capping
7. Flashing strip
8. Fillet support
9. Securing clip
10. Eave flashing
11. Galvanized steel stiffener
12. Soldered VM ZINC® fixing strip
13. Valley
14. VM ZINC® edge flashing
15. Galvanized steel fixing strip
16. Galvanized strip







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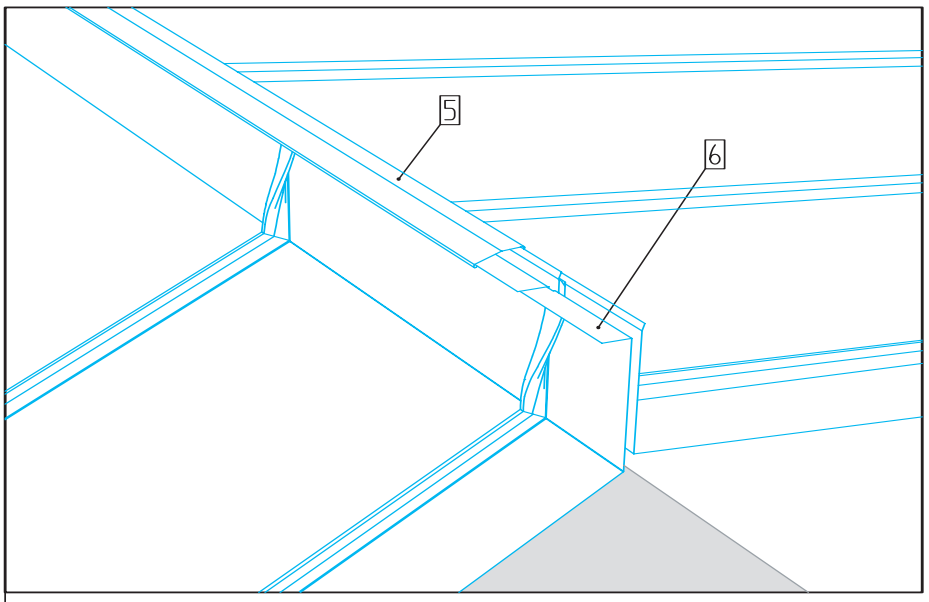
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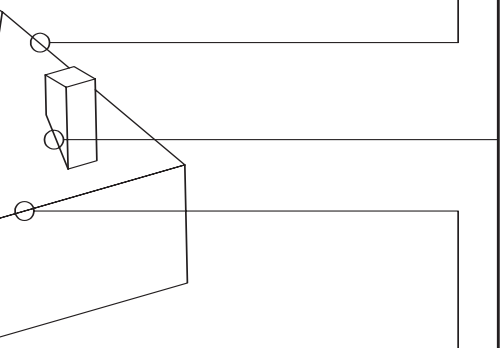

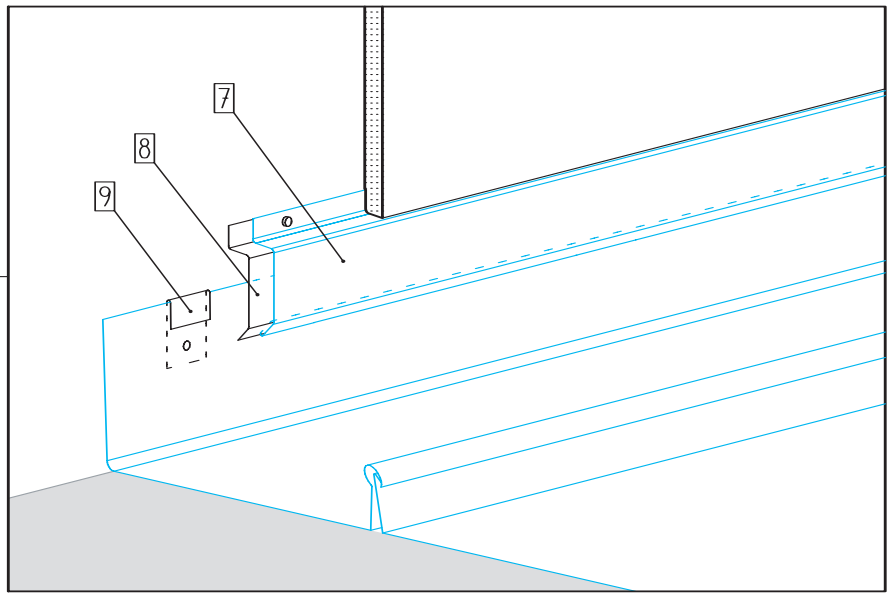
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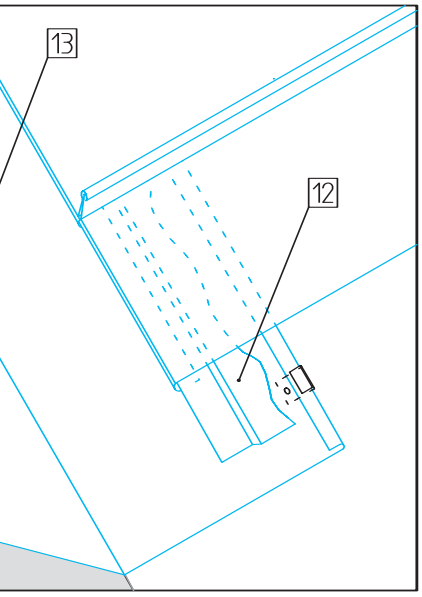
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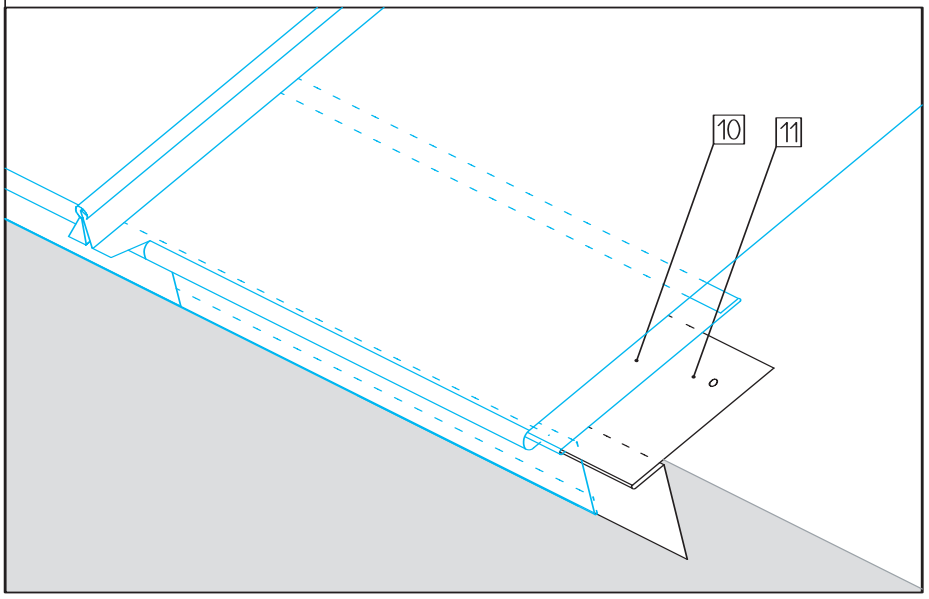
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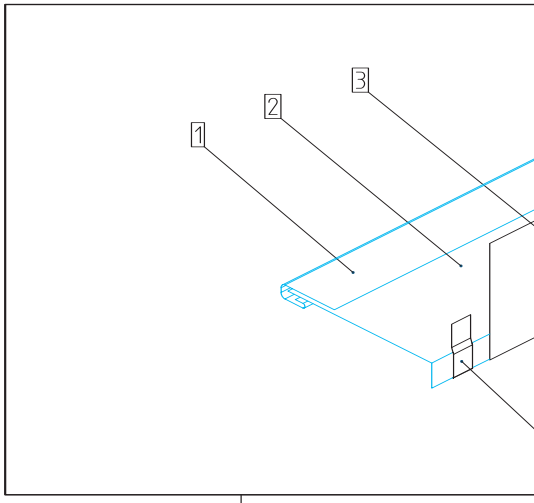
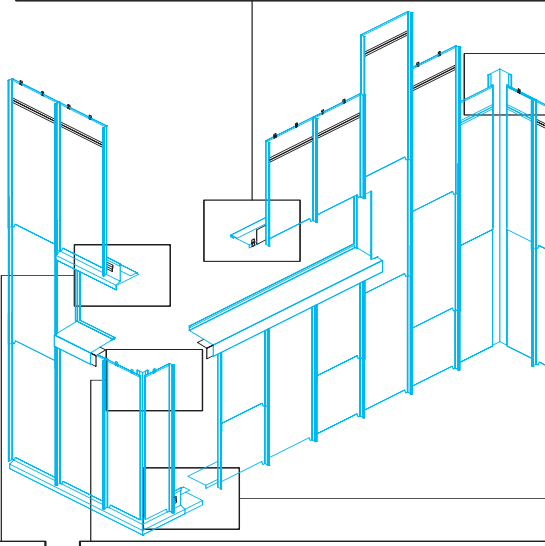
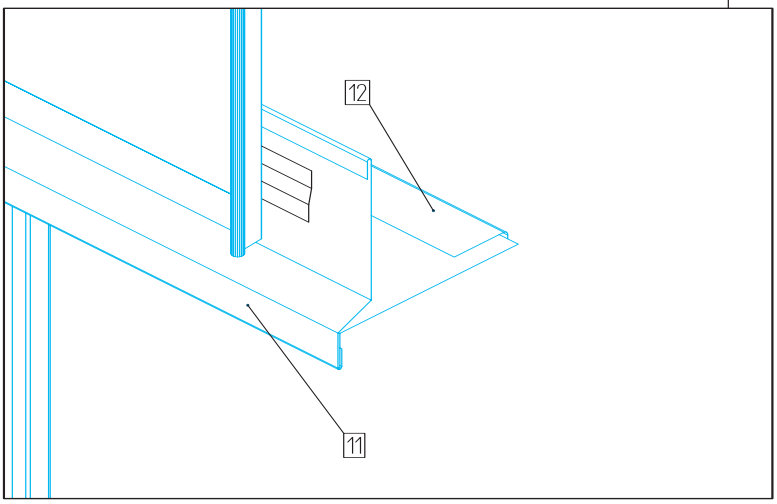
Details

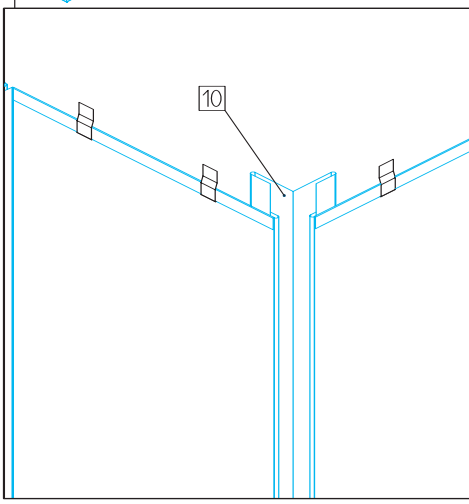
Facade

1. Folded strip
2. VM ZINC® window flashing
3. Galvanized strip
4. Galvanized sheet clip
5. VM ZINC® corner flashing
6. Galvanized sheet clip
7. DEXTER panel
8. VM ZINC® flashing
9. Apron
10. VM ZINC® acute angle corner
11. Lintel in VM ZINC®
12. Folded strip









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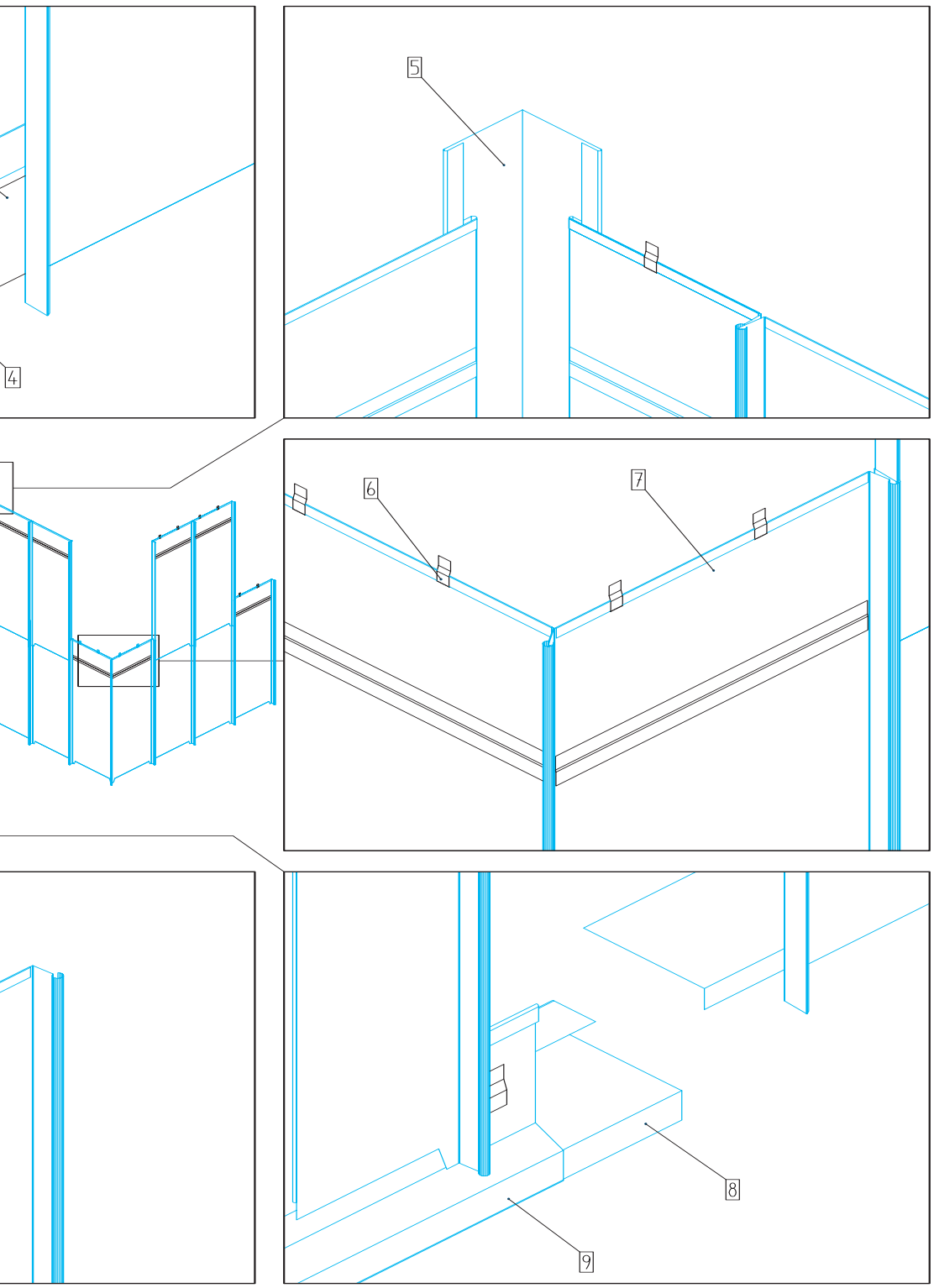

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