

INSTALLATION MANUAL

# TRAPEZOIDAL SHEETS T7-T55

THE POWER OF ROOFS



# Contents

<b>1.</b>	Technical specification of trapezoidal sheets T7-T55	<b>P. 3</b>
<b>2.</b>	Sheet metal working system	<b>P. 6</b>
<b>3.</b>	General recommendations	<b>P. 8</b>
<b>4.</b>	Preparation of the structure	<b>P. 9</b>
<b>5.</b>	Sequence of stacking sheets	<b>P. 10</b>
<b>6.</b>	Installation of trapezoidal sheets	<b>P. 11</b>
<b>7.</b>	Installation of flashings and ridge tiles	<b>P. 12</b>
<b>8.</b>	Installation of the wind brane	<b>P. 13</b>
<b>9.</b>	Installation of the wall flashing	<b>P. 14</b>

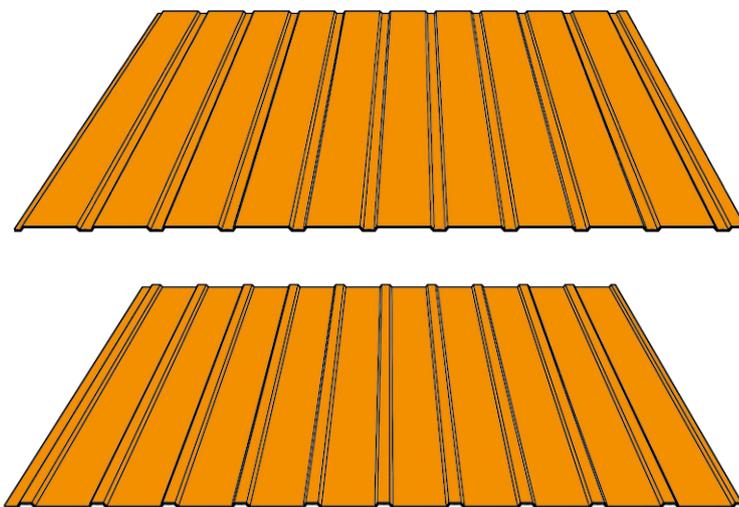
**THIS MANUAL IS ILLUSTRATIVE AND DOES NOT RELEASE CONTRACTORS FROM THE OBLIGATION TO FOLLOW THE RULES OF THE ROOFING PRACTICE.**

### 1. Technical specification of trapezoidal sheets T7-T55

Trapezoidal elevation sheet T7 (not recommended for roofing).

Technical parameters [in mm]	
Effective width	1177
Total width	~1210
Profile height	7,0
Thickness of steel sheet	0,5-1,0
Max. length of sheet	6000

**T7**

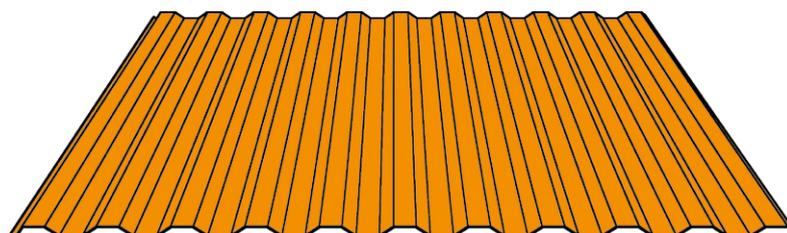


Trapezoidal elevation sheet T14 (E), can be used for roofing (D).

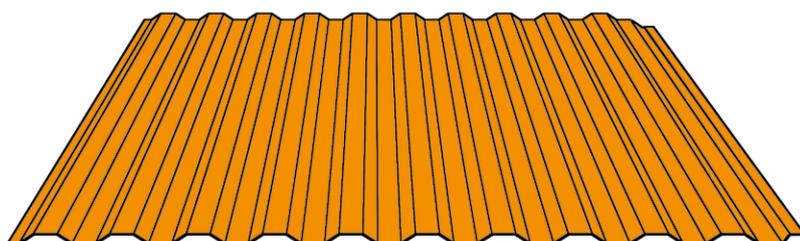
Technical parameters [in mm]	
Effective width	1100
Total width	~1161
Profile height	13
Thickness of steel sheet	0,5-1,0
Max. length of sheet	8000

**T14**

**D**



**E**

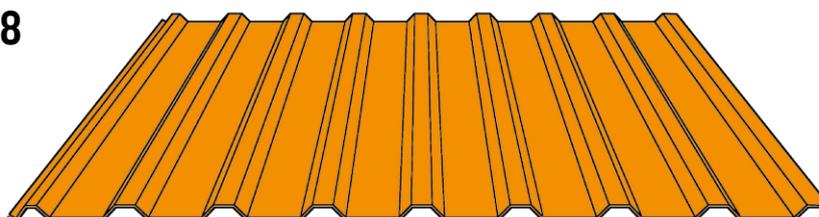


T18 trapezoidal sheet  
D - roof version  
E - facade version

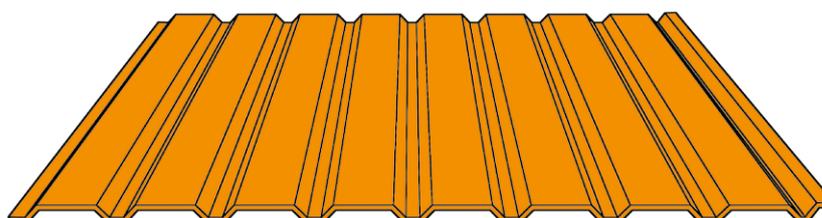
Technical parameters [in mm]	
Effective width	1075
Total width	~1125
Profile height	17
Thickness of steel sheet	0,5-1,0
Max. length of sheet	12 000

**T18**

**D**



**E**



T18ECO trapezoidal sheet

D - roof version

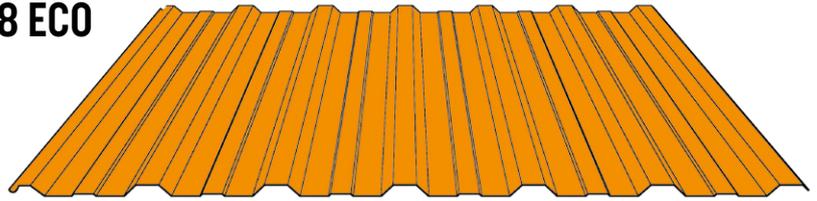
E - facade version

Technical parameters [in mm]

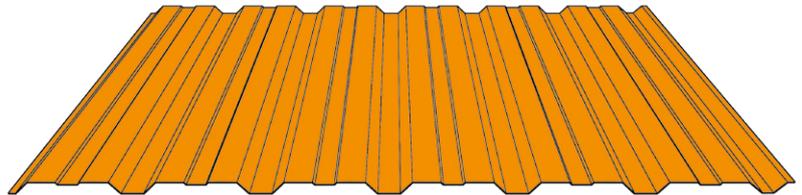
Effective width	1125
Total width	~1173
Profile height	17
Thickness of steel sheet	0,5-1,0
Max. length of sheet	12 000

**T18 ECO**

D



E



T35 trapezoidal sheet

D - roof version

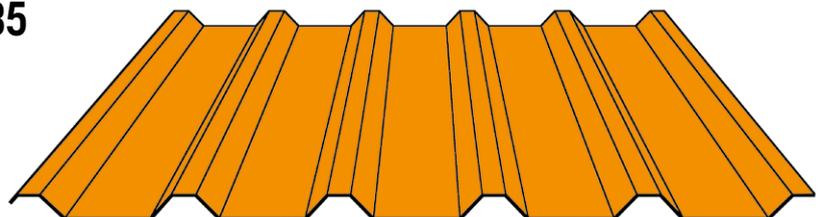
E - facade version

Technical parameters [in mm]

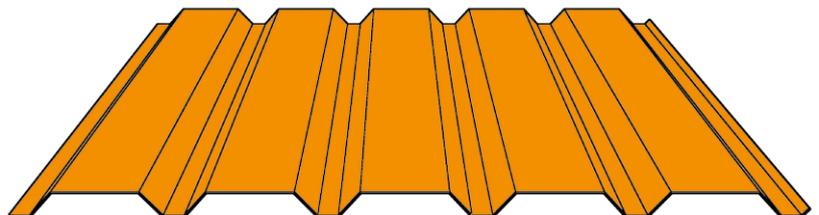
Effective width	1065
Total width	~1106
Profile height	34
Thickness of steel sheet	0,5-1,0
Max. length of sheet	12 000

**T35**

D



E



T35ECO trapezoidal sheet

D - roof version

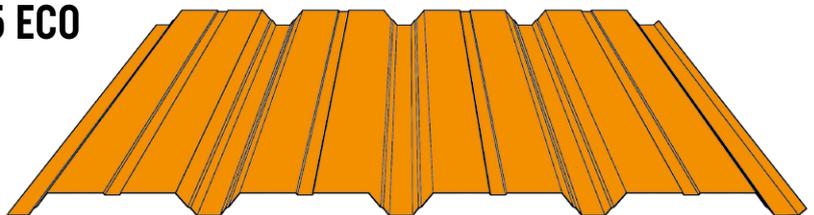
E - facade version

Technical parameters [in mm]

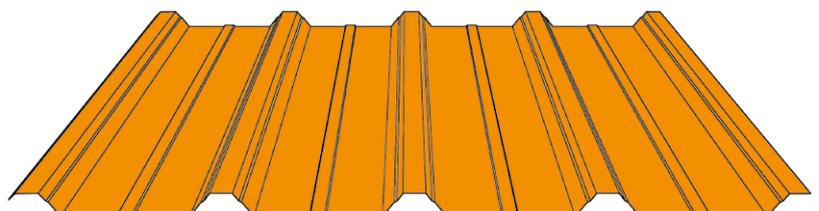
Effective width	1080
Total width	~1120
Profile height	34
Thickness of steel sheet	0,5-1,0
Max. length of sheet	12 000

**T35 ECO**

D



E



T50 trapezoidal sheet  
 D - roof version  
 E - facade version

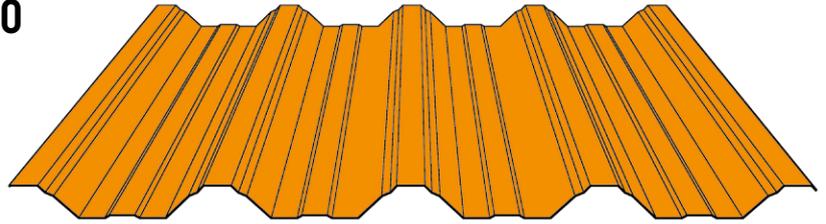
Technical parameters [in mm]	
Effective width	1055
Total width	~1100
Profile height	47
Thickness of steel sheet	0,5-1,0
Max. length of sheet	12 000

T55 trapezoidal sheet  
 D - roof version  
 E - facade version

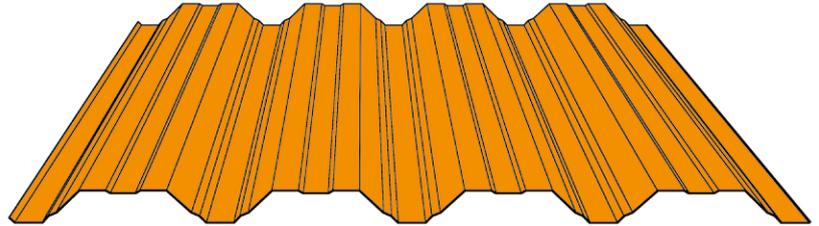
Technical parameters [in mm]	
Effective width	1020
Total width	~1054
Profile height	53
Thickness of steel sheet	0,5-1,0
Max. length of sheet	12 000

**T50**

**D**

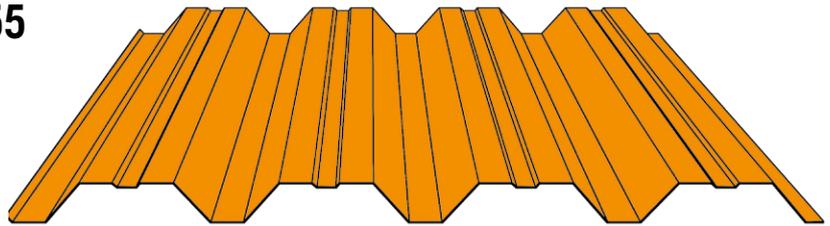


**E**

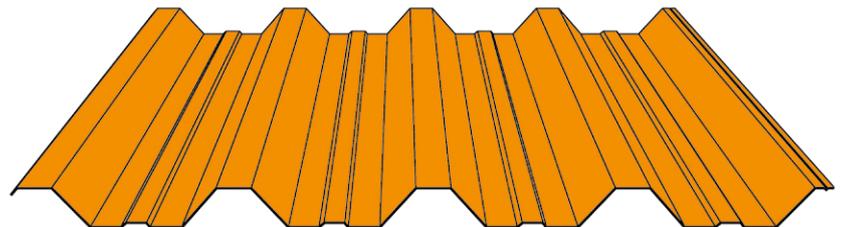


**T55**

**D**

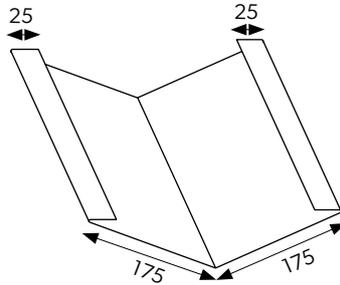


**E**

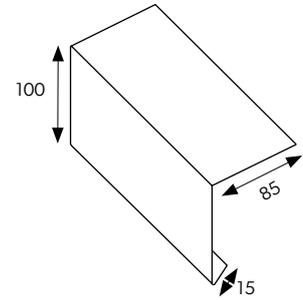


2. Sheet metal working system

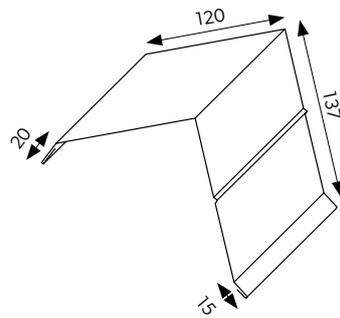
The flashings are made of sheets characterized by the same palette of coatings and colors as our metal roof tiles, trapezoidal sheets and roof panels.



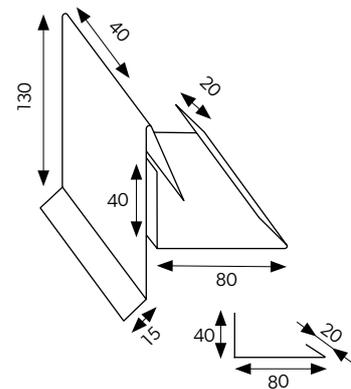
GUTTER BASKET



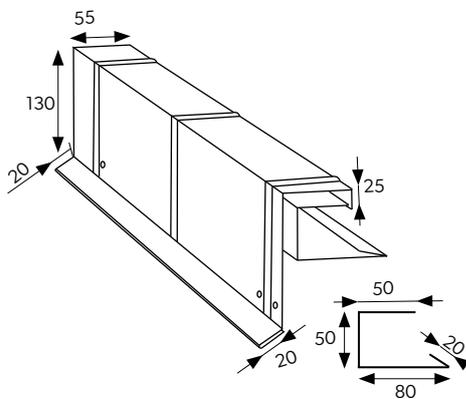
OVER-GUTTER STRIP



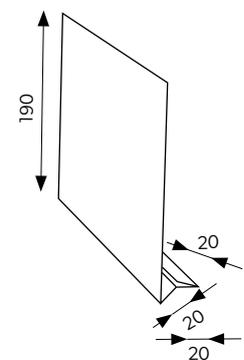
WIND BRACE I



WIND BRACE II



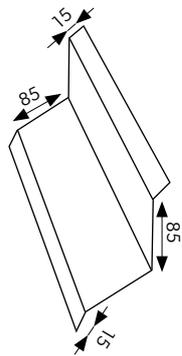
WIND BRACE III



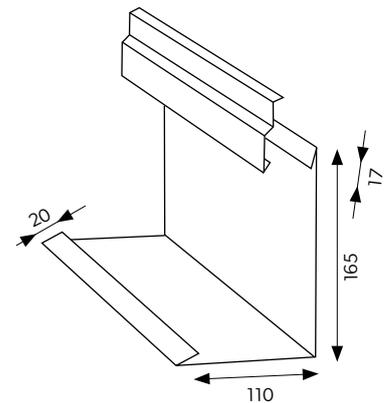
UNIVERSAL VERGE TRIM/  
WIND BRACE EXTENSION



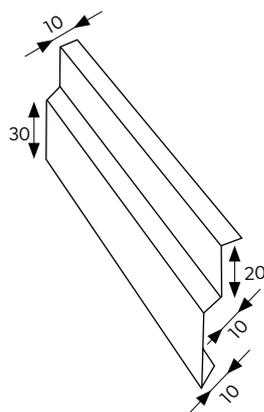
We offer standard flashings with a length of 2 m and a thickness of 0.5 mm as well as non-standard flashings up to a length of 8 m and a thickness of 2 mm.



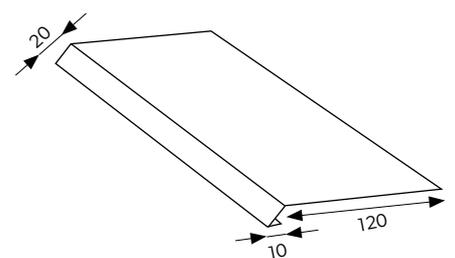
NEAR WALL FLASHING I



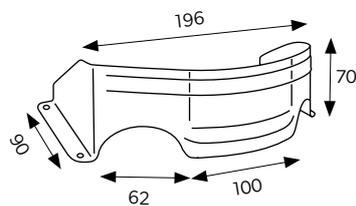
WALL FLASHING WITH EXPANSION STRIP



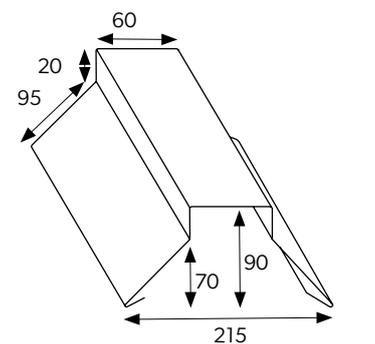
EXPANSION STRIP



EAVES STRIP



SNOW GUARDS



TRAPEZOID RIDGE TILE

The flashings are made of sheets characterized by the same palette of coatings and colors as our metal roof tiles, trapezoidal sheets and roof panels.



We offer standard flashings with a length of 2 m and a thickness of 0.5 mm as well as non-standard flashings up to a length of 8 m and a thickness of 2 mm.

### 3. General recommendations

#### Application

Trapezoidal sheets can be used for roofs with a slope of at least 6 ° (10%) for profiles <35 mm and 4 ° for profiles ≥ 35 mm. Cutting sheets to size does not include bevelling. The maximum recommended length of sheets in one section is given in the technical specification of each profile. If the length of the slope exceeds the recommended sections, the sheets are joined together, the required length, e.g. 15.58 m, should be divided more or less in half before ordering, with an overlap appropriate to the profile height and slope inclination: > 14 ° (25%) min. 150 mm, ≤ 14 ° (25%) min. 200 mm. A 100 mm transverse overlap is used on the facades. With a roof slope of ≤ 14 ° (25%), it is recommended to waterproof transverse and longitudinal laps.



**The manufacturer is not responsible for differences in the color of the shade, the appearance of the coating and dimensional deviations (within the tolerances that are allowed by the standards appropriate for a given product) between individual orders. Trapezoidal sheets are manufactured in accordance with PN-EN 1090-4.**

#### Storage

Aluzinc and coated sheets cannot be stored in original packaging for more than 3 weeks from the production date. After this time, cut the packaging, remove the protective foil (if any) from the sheets, and put thin spacers between the sheets. Galvanized sheets may only be stored in dry and well-ventilated rooms. If the transported goods are exposed to moisture build-up, immediately separate the sheets and dry them - otherwise white corrosion will occur. The total storage time cannot be longer than 5 months from the production date.

**Sheets without organic coatings yet with metallic coatings of thicknesses Z200, AZ150 and ZA255 can be used inside buildings in environments with corrosivity categories C1 and C2 according to PN-EN ISO 12944-2: 2001.**

#### Transport

When moving the sheets during manual unloading, the number of people should be selected in such a way as to prevent the sheets from one after another. When unloading with a forklift, particular attention should be paid to the side of the decorative coating, and the fork span should be adapted appropriately to the length of the sheets

#### Sheet metal cutting

It is unacceptable to use tools causing a thermal effect (sudden temperature increase) to cut metal sheets, e.g. an angle grinder. This damages the organic and zinc coating, and, as a result, the corrosion begins, which is accelerated by hot filings melting into the surface of the sheet. Tools suitable for cutting metal sheets are Nibbler vibratory shears or hand scissors for small sections.



**Note - one of the warranty conditions is to use varnish to protect the bare cut edges of the coated sheet.**

#### Maintenance

In the case of damage to the coating caused during transport, assembly and processing, treat it with varnish exactly in the area of damage, first cleaning the surface of dirt and grease.



The coatings may delaminate on cut edges that are not protected with varnish. It is a natural phenomenon and does not constitute grounds for filing a complaint about the material. It is recommended that the roof be inspected annually in order to perform necessary maintenance procedures.

#### 4. Preparation of the structure

Before installation, check the correctness of the construction, i.e. diagonals, flatness and air gap between the sheet and foil or roofing felt. The spacing of the support points should result from the technical design or calculations made based on the manufacturer's load tables.

FIG.1

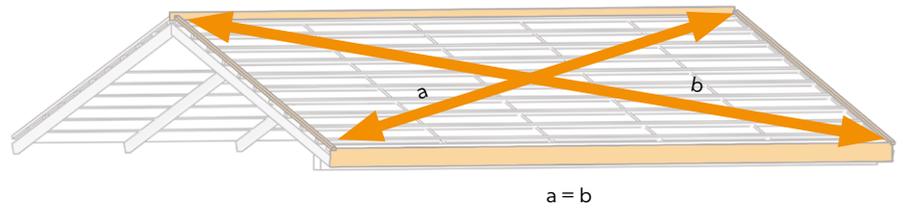
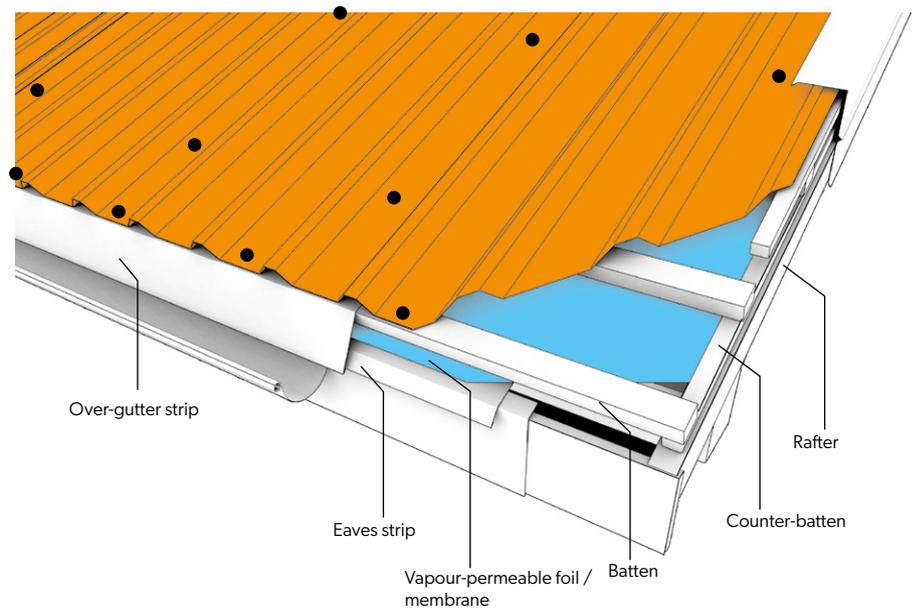


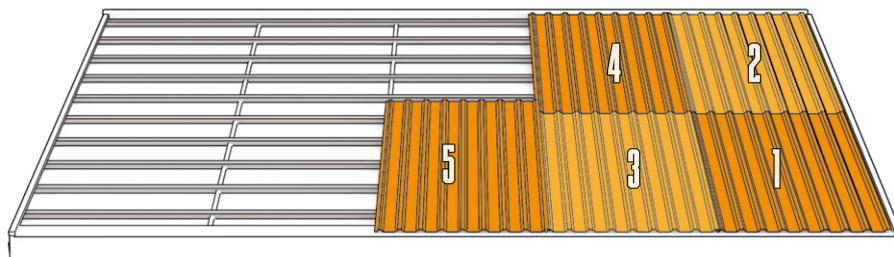
FIG.2



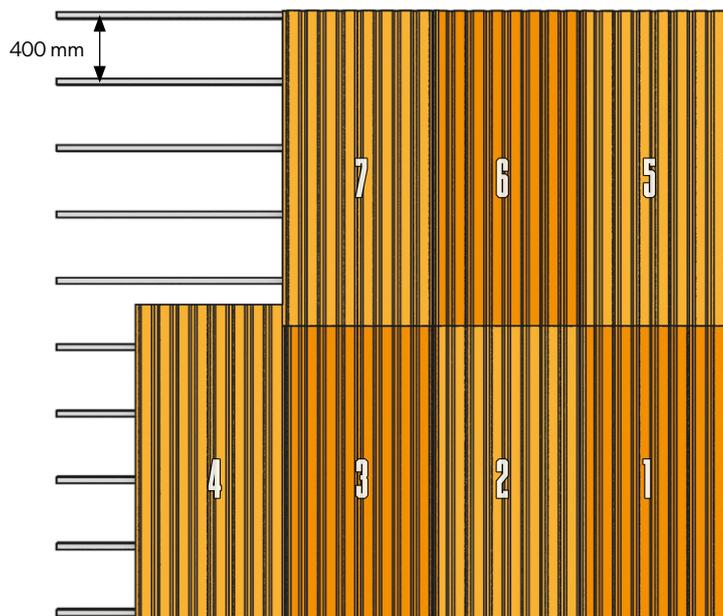
### 5. Sequence of stacking sheets

The order of laying sheets on the roof is shown in **fig. 3**, on the facade - **fig. 4**, while the direction of laying should always be opposite to the dominant direction of the wind in a given area. Maintaining due diligence when installing the first sheets (right angle to the eaves) will prevent both the sheet from sliding towards / away from the gutter, as well as the so-called „teething“. If we use a gutter strip, we must remember to install it in a way that allows any condensation to drain from the foil into the gutter.

**FIG.3**



**FIG.4**



## 6. Installation of trapezoidal sheets

For the installation of the T-14 profile, it is recommended to use roofing nails (3.7 x 60 mm) beaten up the wave (Fig. 5).

For the remaining farmer screws (4.8 x 35 mm, Fig. 6) or self-drilling screws (5.5 x 35 mm, Fig. 7), depending on the type of construction, twisted down the wave. We fasten every second wave at the eaves, ridge and transverse joint, and every third wave on intermediate battens (roof and façade). Fasten the edge of the outermost sheets on each batten in the last wave. Depending on the needs, use 2 - 3 fasteners (screw / rivet) per 1 running meter of the overlap in the longitudinal overlap.

The average consumption of nails / screws is approx. 5 - 6 pcs / m<sup>2</sup> (in areas exposed to strong winds, the fixing points should be tightened). The tightness of the connection is guaranteed by connectors with an EPDM gasket, which, when properly (perpendicularly) hammering the nail / tightening the screw, should go slightly beyond the washer.



**Note - before fixing the sheet, always remove the protective foil, otherwise the gasket does not ensure proper fit and tightness!**

FIG.5

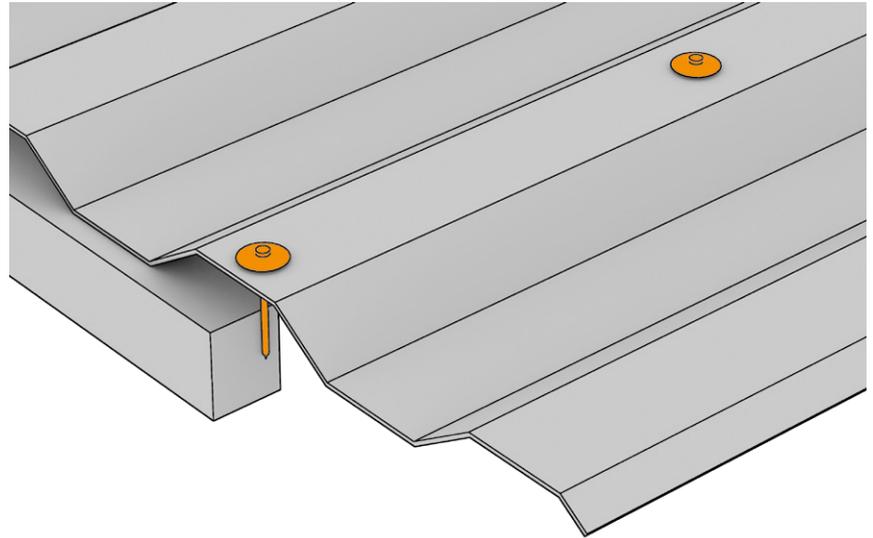


FIG.6

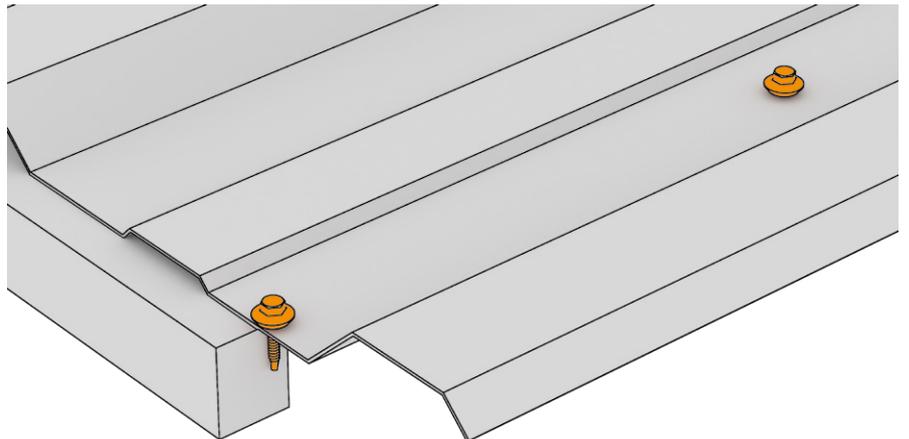
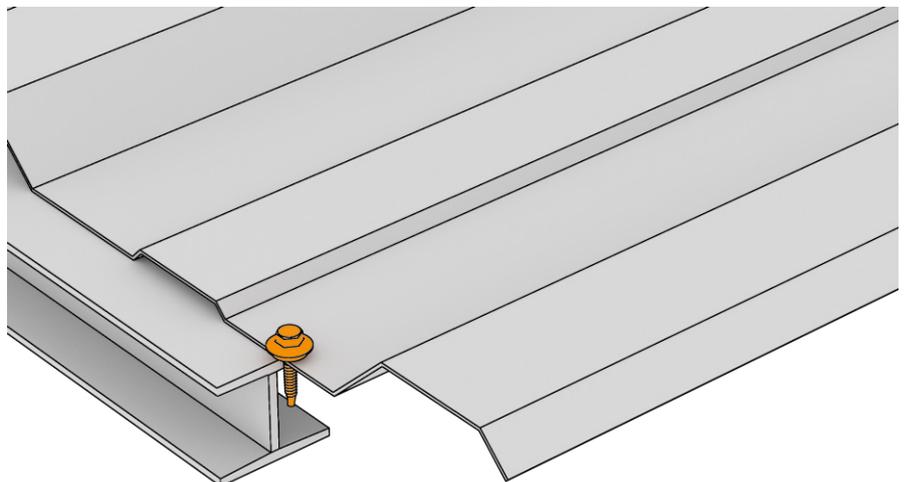


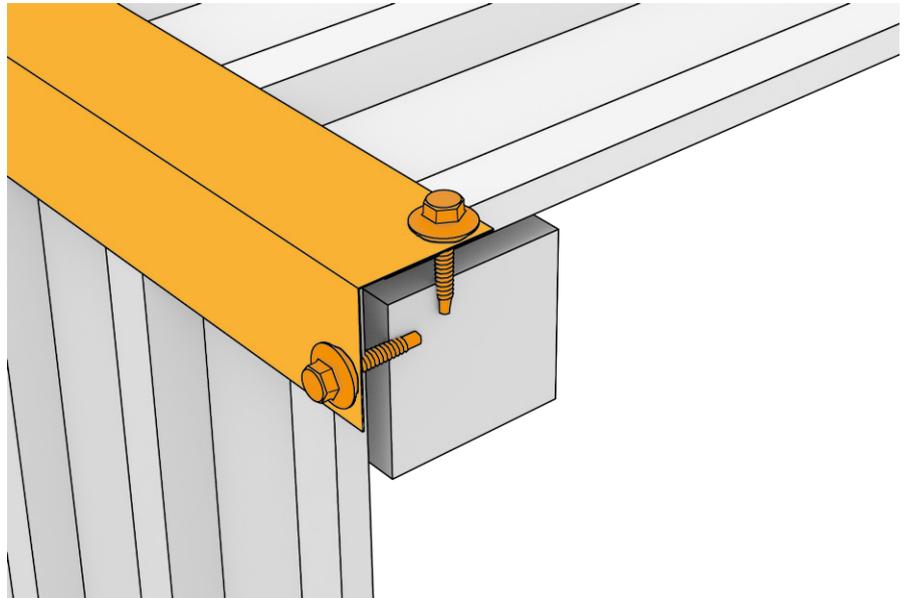
FIG.7



## 7. Installation of flashings and ridge tiles

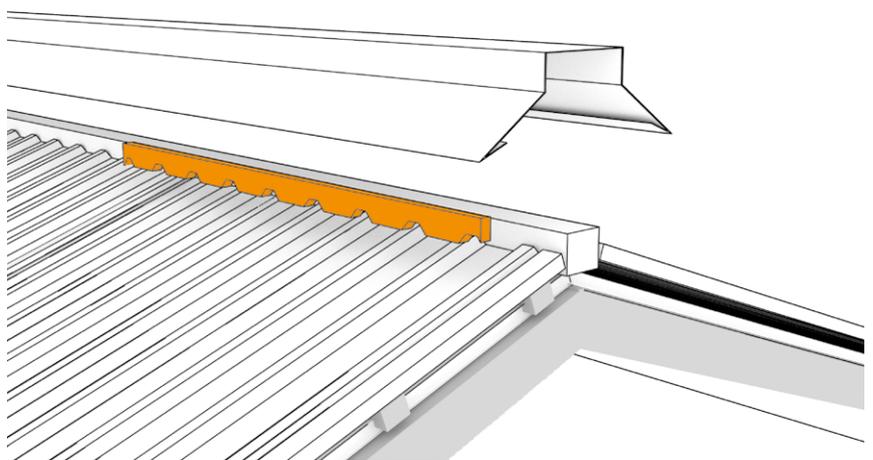
For the installation of flashings, we recommend farmer screws 4.8 x 35 mm or 4.8 x 20 mm (**Fig. 8**).

**FIG.8**



Fasten the ridge tiles with short screws (20 mm) in „plate with a plate“ manner, at least every 300 mm, using previously profiled, universal gaskets or PURS tape (**fig. 9**).

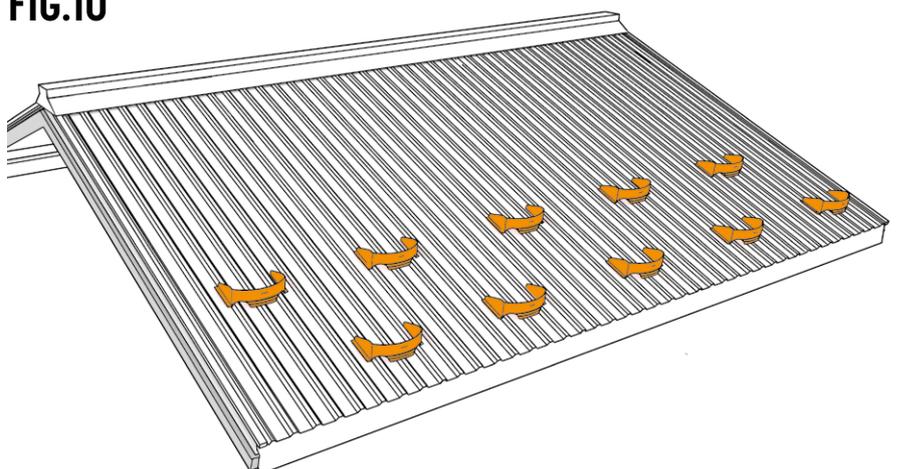
**FIG.9**



The use of our snow guards on roofs with a significant slope (**Fig. 10**) allows to avoid repair / replacement of the gutter system in spring and eliminates the risk of snow sliding onto passersby.

Experienced contractors have individual solutions that can be accepted by the manufacturer.

**FIG.10**



## 8. Installation of the wind brace

Due to the fact that we often deal with a strong influence of the wind at the edge of the roof slope, we must remember to install the wind tie flashing appropriately. In this case, we use the wind tie III. First, install the wind tie tray to the battens (**fig. 11**). This element should be installed with the use of roof valley flashing installation clip both from the side of the slope and from the outer side. Before starting to cover the roof, glue an expansion gasket with expansion of up to 3 cm on the lower surface of the flashing (in accordance with the stamping height of the sheet).

Trapezoidal sheets should be placed on the gable of the wind brace (**Fig. 12**).

For the outer element of the wind tie, farm screws should be used, and if necessary, use a 15-30 mm overlap.

FIG.11

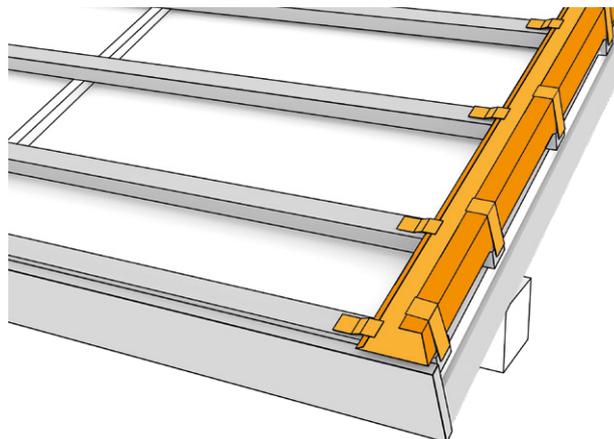


FIG.12

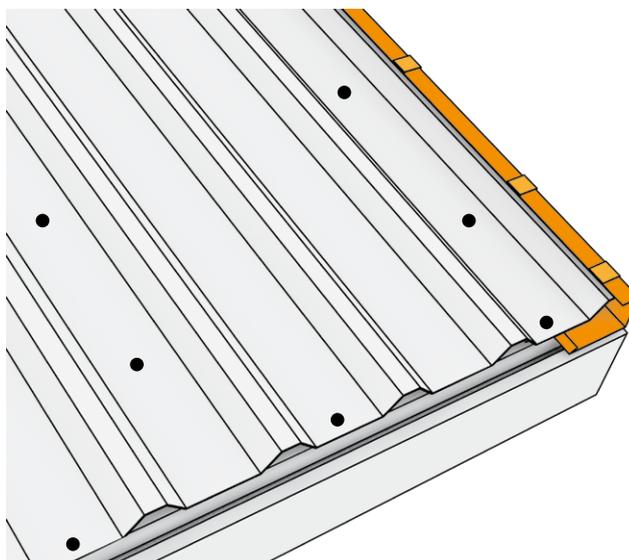
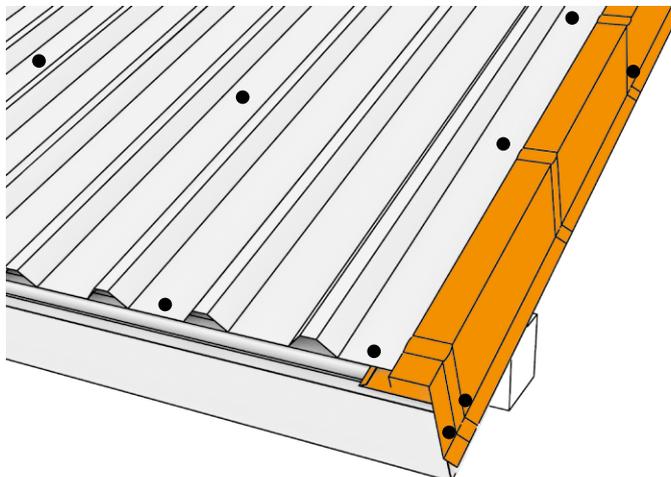


FIG.13



### 9. Installation of the wall flashing

In this manual, we present one of possible solutions.

In the first step it is necessary to equip the roof with holders to attach the extreme sheet. Such holders can be prepared from strips of sheet metal bent at the right angle.

In terms of the discussed solution, the wall flashing is the bending of the extreme sheet against the wall. This fold must be min. 200 mm; therefore, the section of the grip adjacent to the wall should be sufficiently longer than the fold of the extreme sheet so that a connection can be made.

The flashing made of the outermost sheet should be at least 200 mm high. Moreover, its upper edge should be folded up, which will allow for a secure connection, which does not require additional fastenings, with the previously prepared holders.

FIG.14

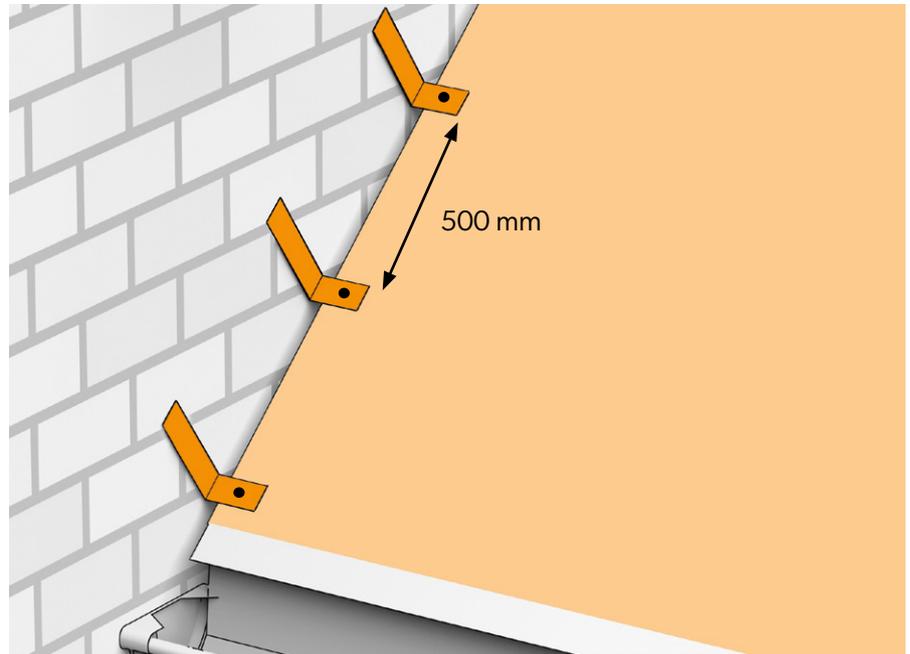


FIG.15

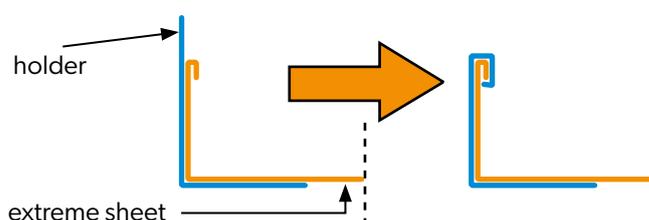
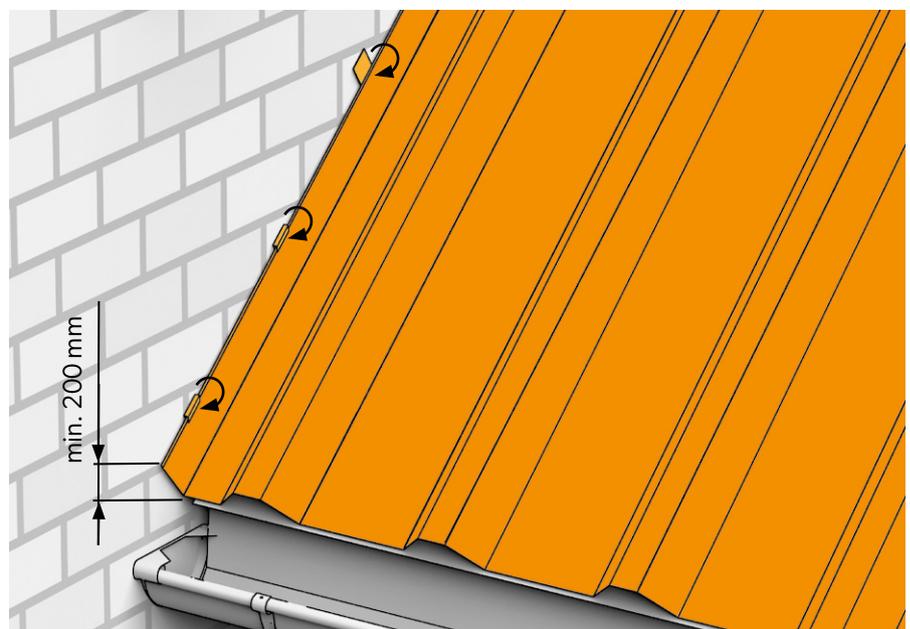
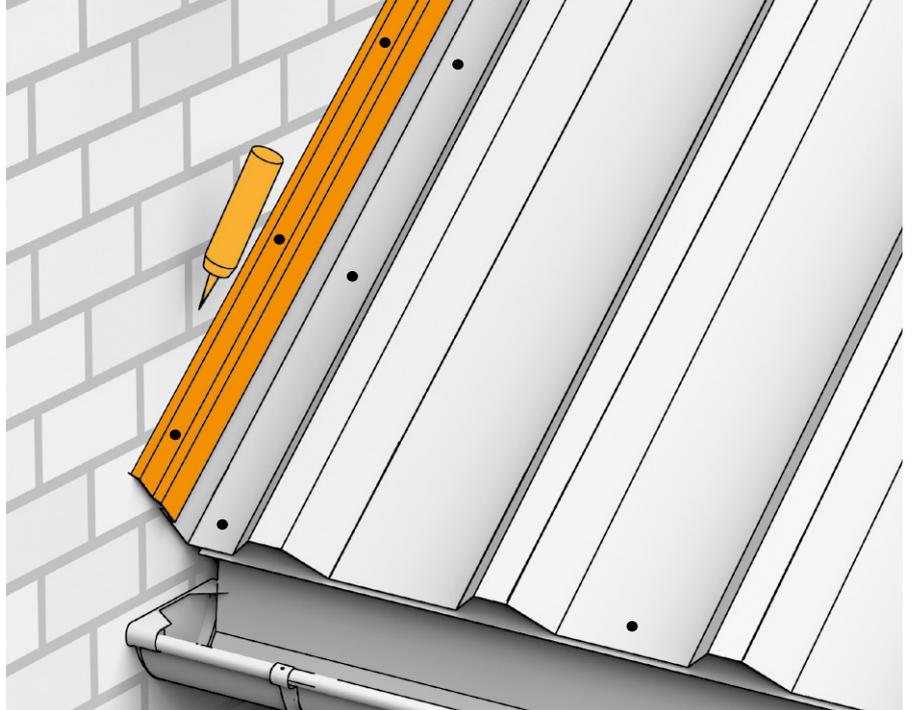


FIG.16

The joint with the wall should be secured with an expansion strip and, if necessary, additionally sealed with roofing sealant.

The expansion strip must be fixed to the wall.





**BLACHPROFIL 2® Sp. z o. o.**

ul. Nadwiślańska 11/139  
30-527 Kraków  
NIP: 6762431701

+48 12 415 55 51  
centrala@bp2.eu  
bp2.eu

**Zakłady produkcyjne:  
Production Plants:**

Grojec, ul. Grojecka 39  
32-566 Alwernia k/Krakowa

ul. Budowlanych 10  
41-303 Dąbrowa Górnicza