

INSTALLATION MANUAL FOR ALURON AS 178 HS LIFT AND SLIDE DOORS

Aluminum profiles, details, filling elements, glass, windows, and doors can be transported by any means of transport, provided they are protected against dirt, dust, and the possibility of damage during transportation.

Mounting guidelines on site

To maintain high operational parameters and the long life of aluminum structures, including windows and doors, it is necessary to ensure the correct installation of elements into the building walls. The following activities affect the proper installation of the structure:

1. Preparation of the opening in the building wall

The prepared opening in the wall intended for window or door installation should have dimensions larger than the external dimensions of the frame. The width of the opening should be 2 cm wider than the width of the frame. The height of the window opening should be 6-8 cm higher than the height of the window (clearance 1 cm above the window and 5-7 cm below the window, depending on the window sill). For doors, an 1 cm clearance above the doors is required, ensuring the proper foundation of the threshold. The opening should guarantee 90° corner angles, and its diagonals should not differ by more than 1 cm. Failure to maintain appropriate clearances may hinder the use of the systemic sealing method of aluminum structures or lead to the deformation of the frame's geometry.

2. Setting the frame in the wall

Install the window on a properly prepared windowsill using a specially selected insulating plastic threshold. The window's position should align with the 10°C isotherm plane. This will prevent condensation of water vapor on the inner surface of the window under normal usage conditions. In the case of a multilayer wall with mineral wool or styrofoam insulation, the isotherm runs in the insulation strip. In insulated walls on the external side, it is recommended to install windows near this insulation strip. Windows and doors must be precisely leveled, maintaining a as even as possible gap between the wall and the aluminum structure.

3. Fixing the frame in the wall

It is recommended to fix using systemic steel dowels or galvanized or stainless steel anchors. The installation method must provide compensation for the thermal expansion of the structure and compensate for any movements of the building walls relative to the aluminum structure.

The structure should be attached to the building walls using:

- a) Steel expansion bolts through insulating washers. The bolts are screwed through drilled holes in the frame. It is recommended to use a minimum of 2 bolts to secure each profile. The distance of the bolt from the corner should be less than 200 mm, and the distance between neighboring bolts should not exceed 400 mm. The anchoring depth of the bolt in the wall should be adapted to the type of wall, not less than 40 mm.
- b) Anchors made of galvanized steel sheet, mounted in the grooves of the frame profiles and screwed to the walls using expansion bolts. This method of installation eliminates mounting holes in the frame. Installation with anchors also allows for compensation of the object's expansion. The distance between the anchors and the anchor to the corner should be the same as in the case of expansion bolts. Installation should be carried out following the guidelines of the systemic catalog and the anchor manufacturer's recommendations.

4. Insulation of the product

The presented AS 178HS system is equipped with modern solutions that greatly facilitate the proper installation and allow achieving high insulation and sealing parameters. These solutions include:

Depending on needs or building requirements, these solutions can be supplemented with mineral wool, foam, polyethylene seals, silicone masses, vapor-permeable and vapor-tight foils. Insulation should be carried out very carefully, maintaining its continuity around the entire perimeter.

Address

Office and headquarters ul. Kartuska 354AA, 80-125 Gdańsk, Poland
Factory ul. Zremiesłnicza 56, 83-304 Ząbże, Poland

Company

Firma Budowlana „Szach-Mat” Robert Szachnowski
NIP: 597 14 00 696 | REGON: 193098450

Contact

windows@szach-mat.eu
+48 500 100 883

WWW

www.szach-mat.eu

5. Maintenance

Decorative surfaces of aluminum profiles should be wiped with a soft cloth using mild detergents. When cleaning anodized surfaces, the use of preparations containing alkaline compounds is not allowed, as they cause damage to oxide coatings.

ATTENTION!

Cement, lime, alkaline substances used in construction, and cleaning agents have a very harmful effect on the decorative surfaces of aluminum profiles. Therefore, during necessary finishing works, aluminum structures should be properly protected, and caution should be exercised. In case harmful substances come into contact with the aluminum surface, they should be immediately washed off to prevent damage. Due to the occurrence of electrochemical oxidation of aluminum, all contact points between aluminum profiles and other metals must be properly isolated.

Address

Office and headquarters ul. Kartuska 354AA, 80-125 Gdańsk, Poland
Factory ul. Rzemieślnicza 56, 83-304 Ząbże, Poland

Company

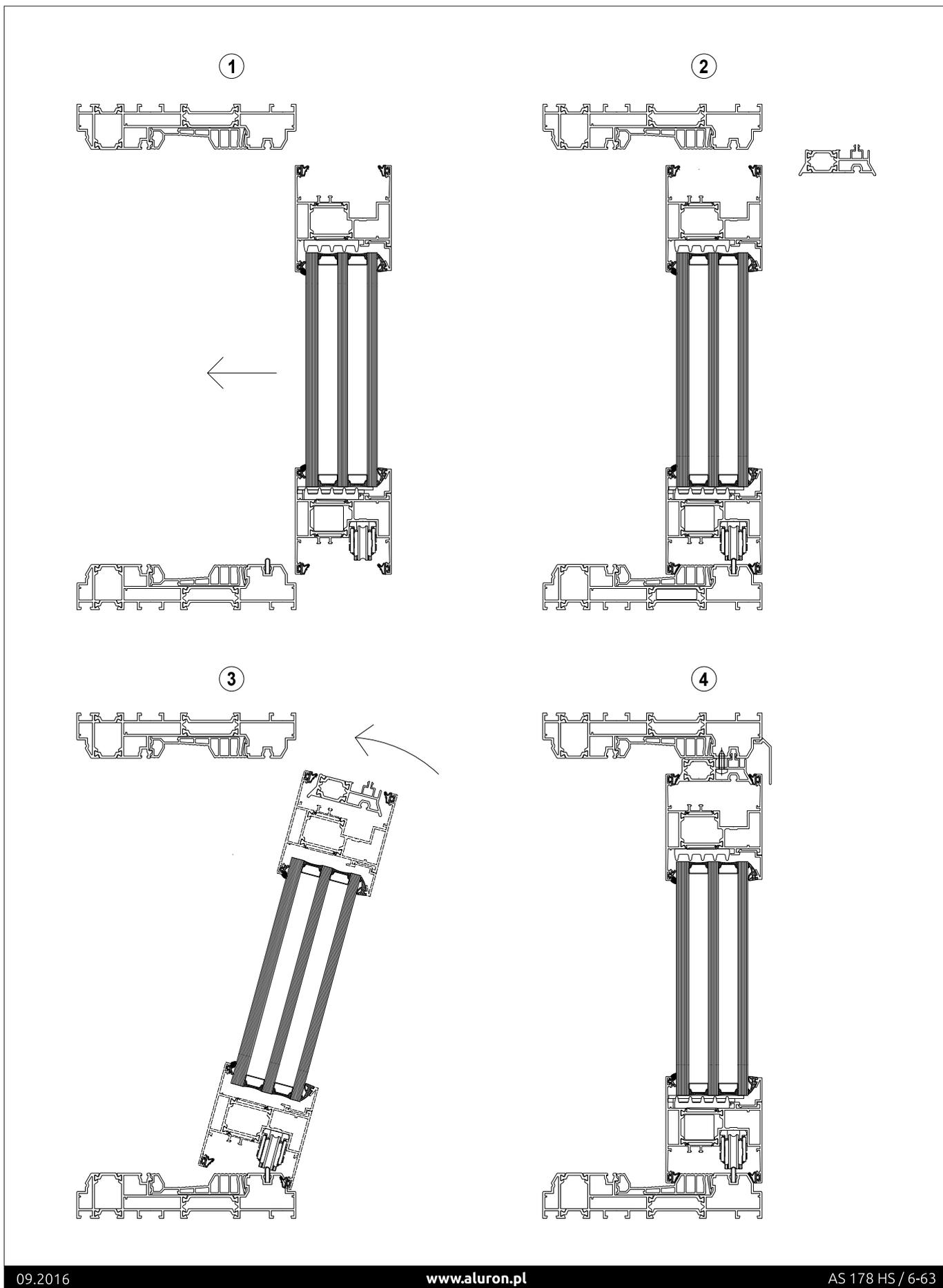
Firma Budowlana „Szach-Mat” Robert Szachnowski
NIP: 597 14 00 696 | **REGON:** 193098450

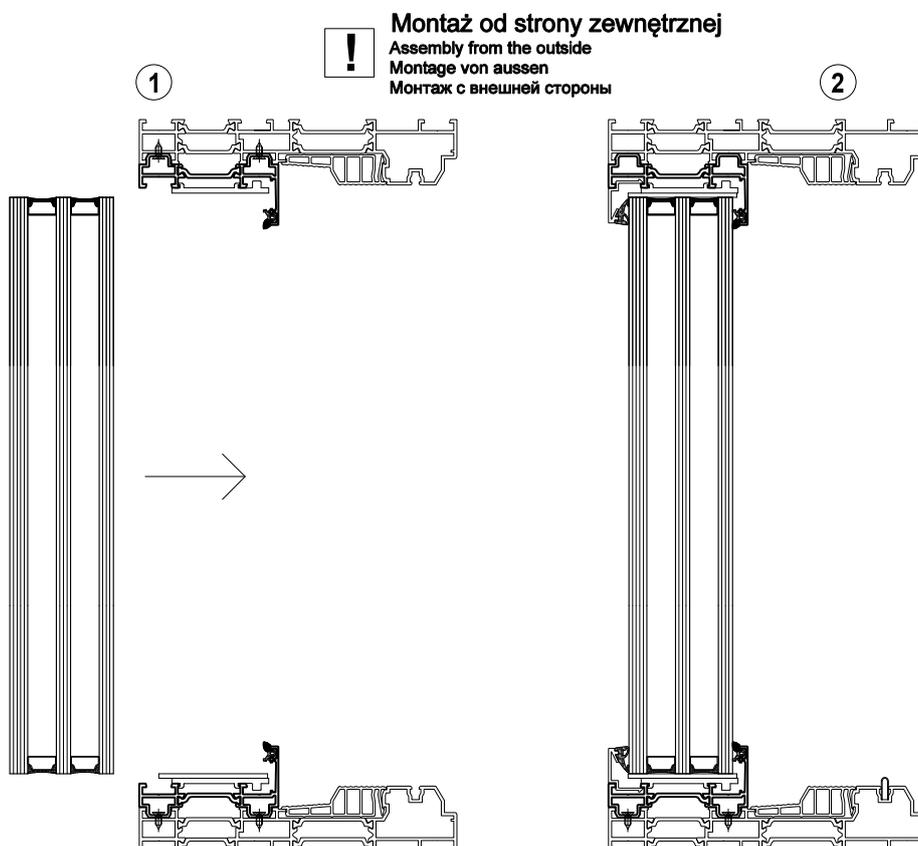
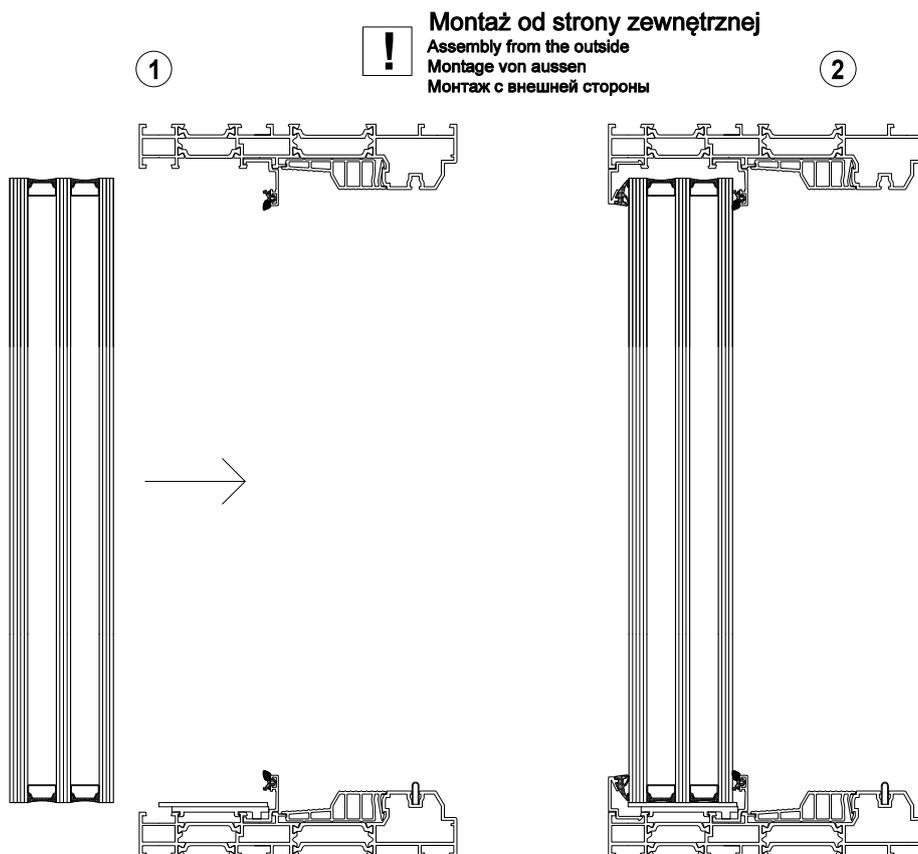
Contact

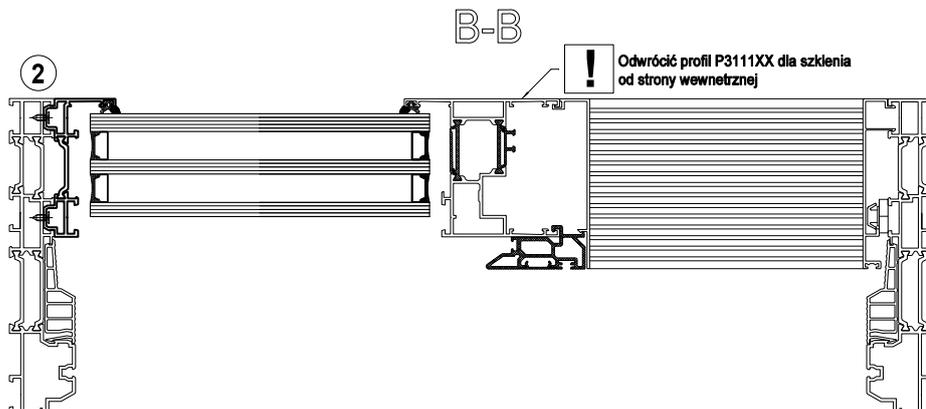
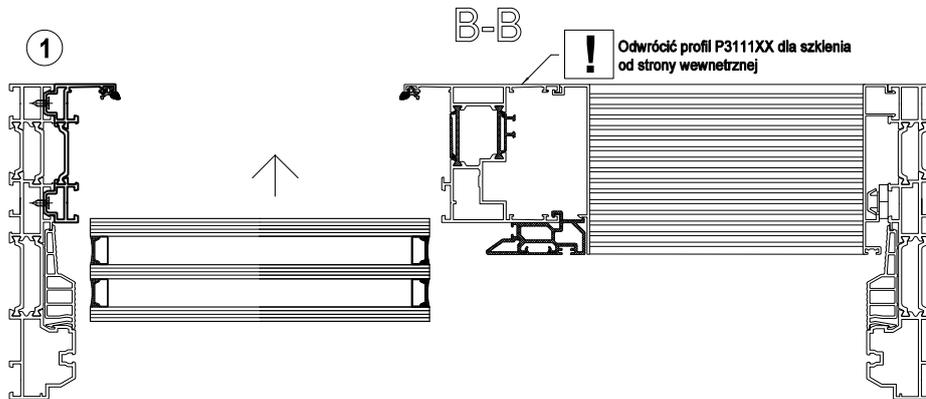
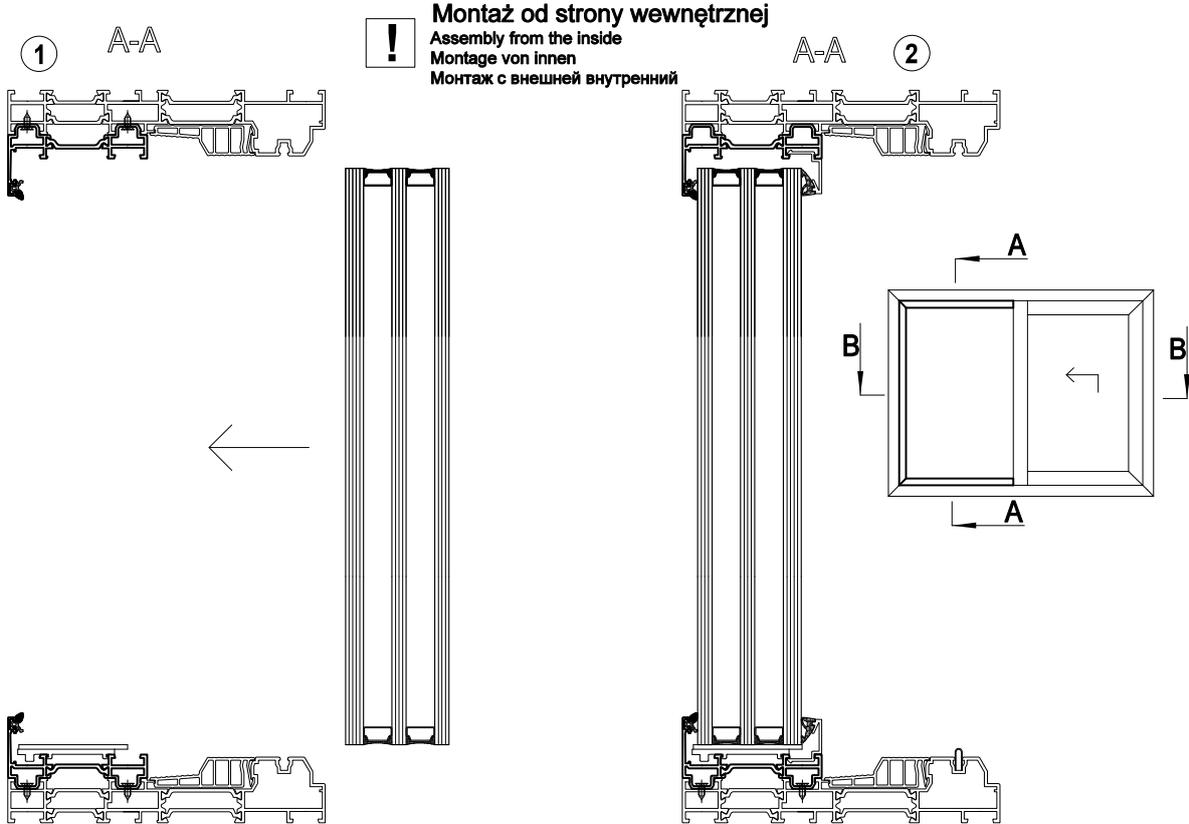
windows@szach-mat.eu
+48 500 100 883

WWW

www.szach-mat.eu



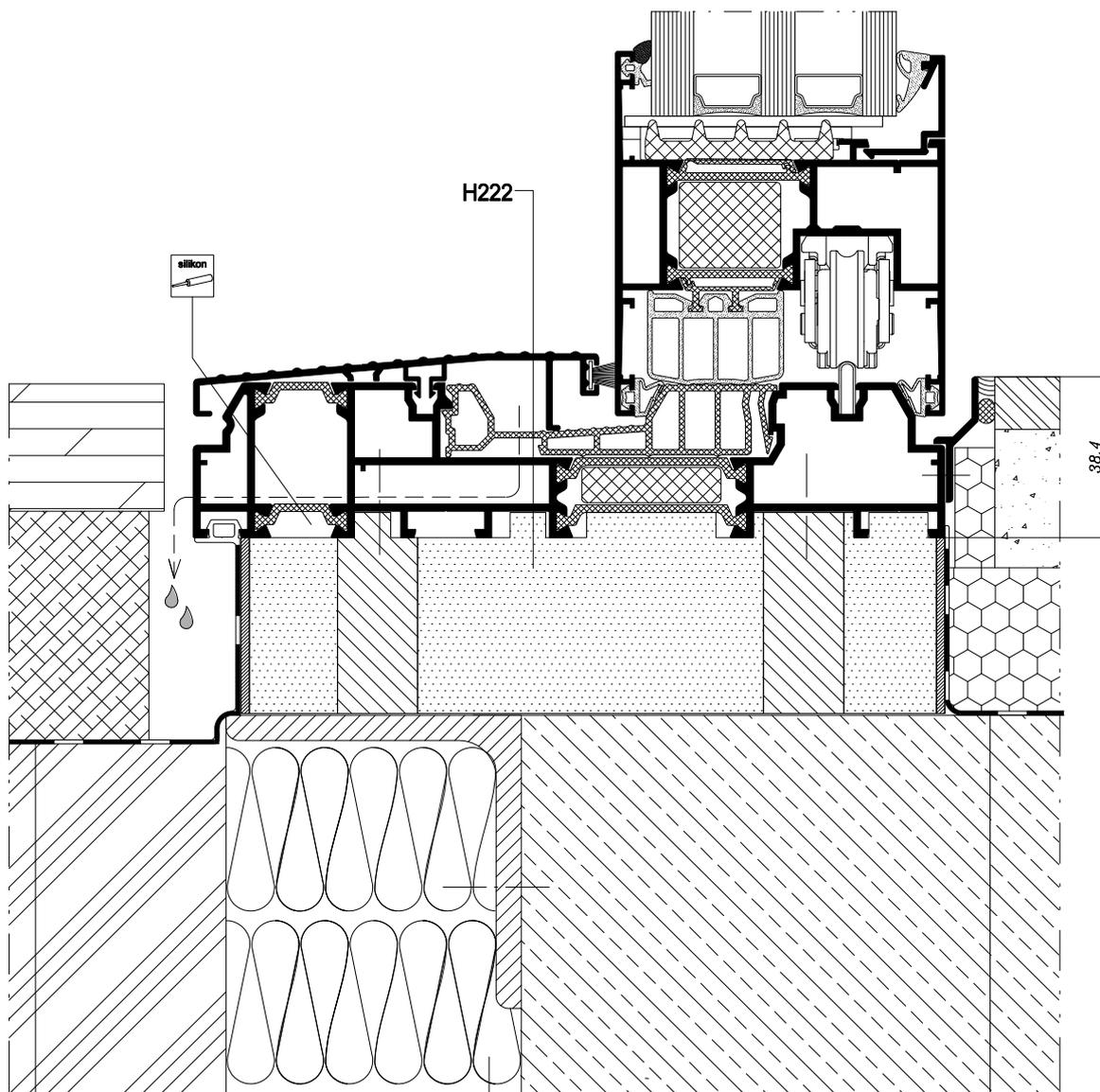
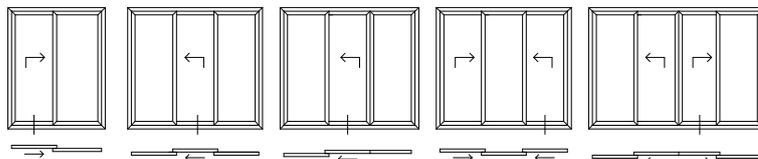




PRZYKŁADY ZABUDOWY

EXAMPLES OF INSTALLATION

1:1,7

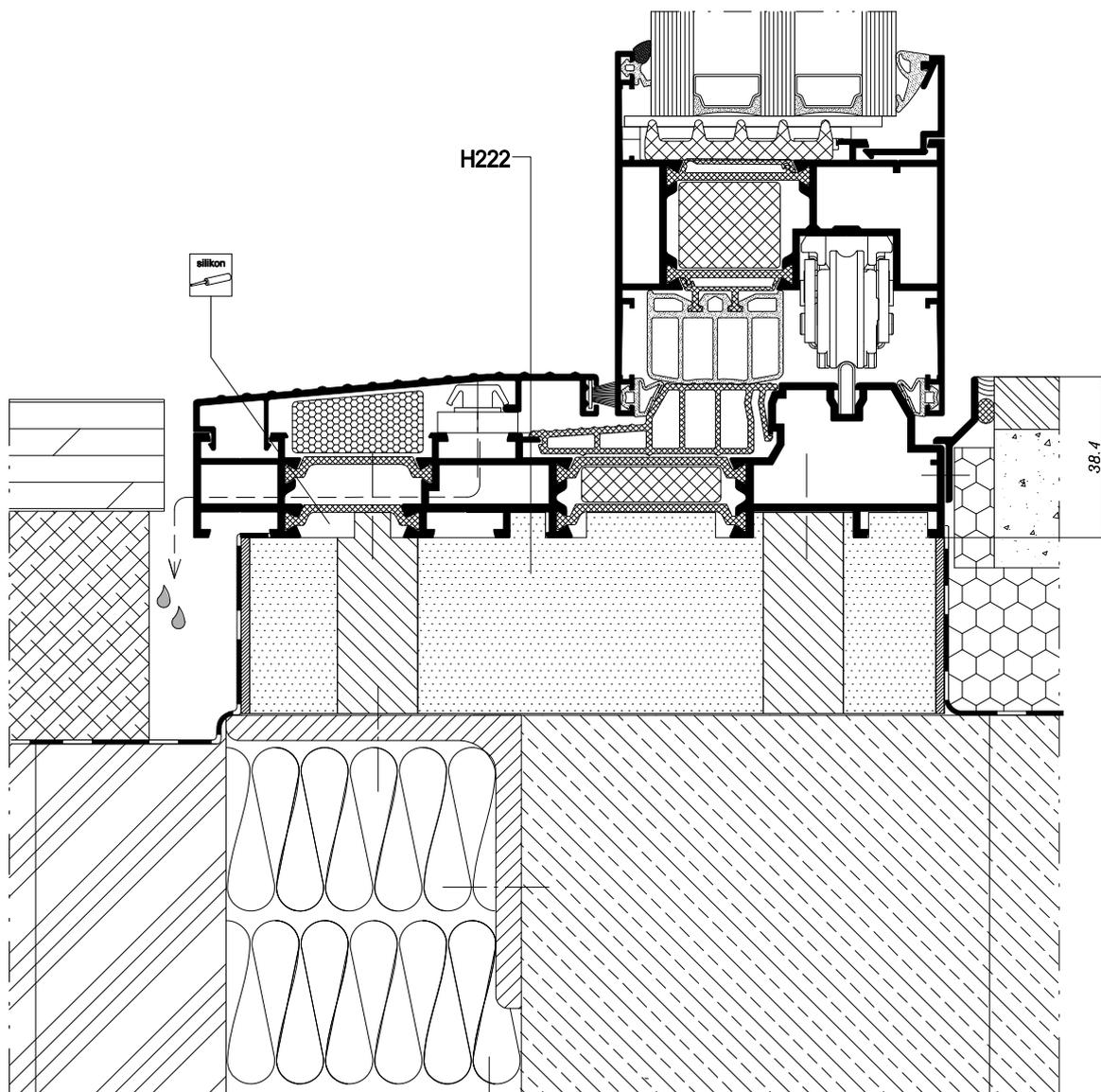
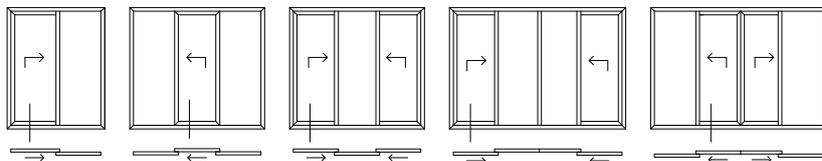


Wełna mineralna lub pianka montażowa
Mineral wool or assembly foam
■ Mineralwolle oder Montageschäume
■ Минеральная вата или монтажная пена

Folia paroprzepuszczalna (U223)
Vapor permeable foil ■ Dampfdiffusionsfolie
■ Паропроницаемая фольга

Folia paroszczelna (U213)
Vapor barrier foil ■ Dampfsperffolie
■ Паронепроницаемая фольга

1:1,7

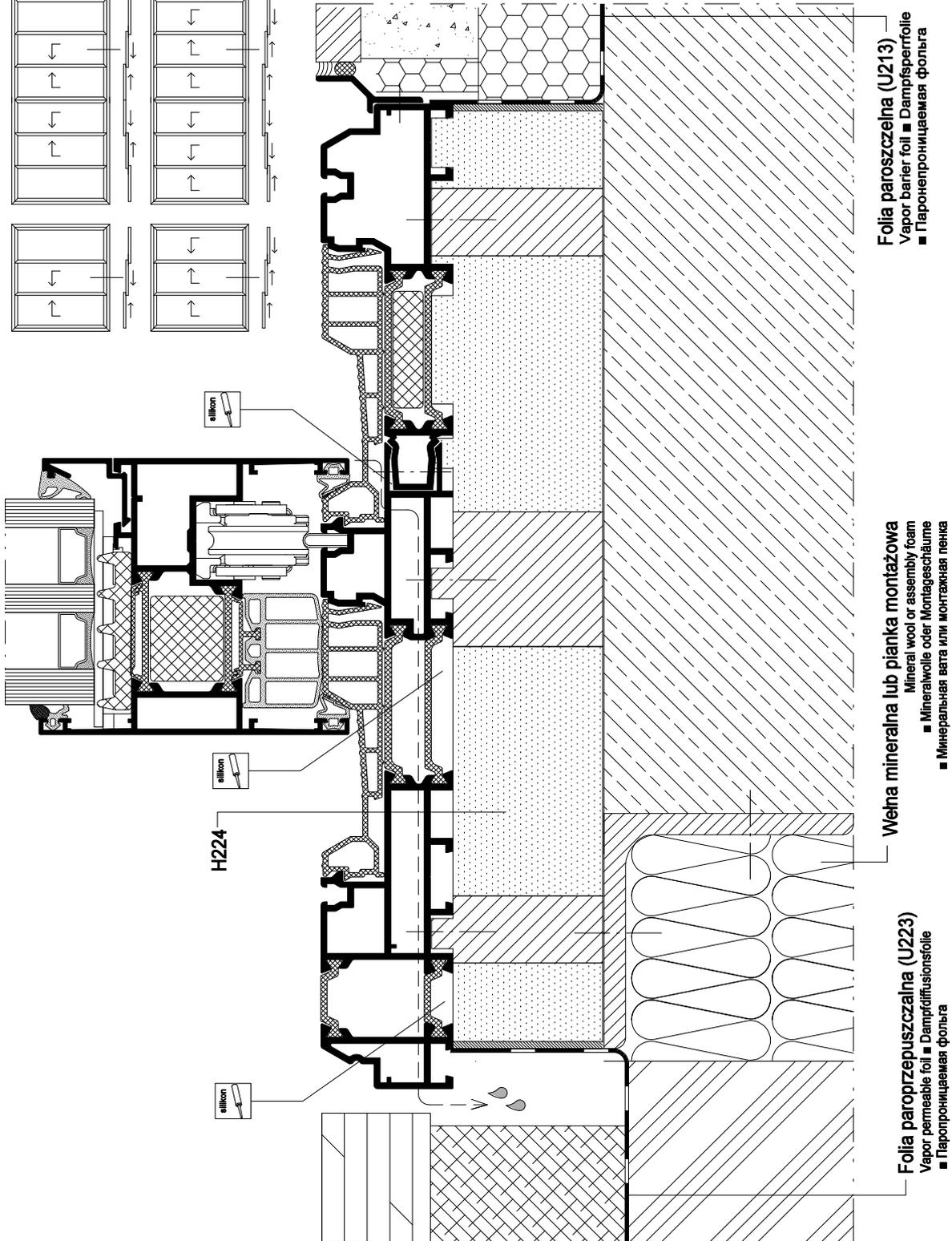
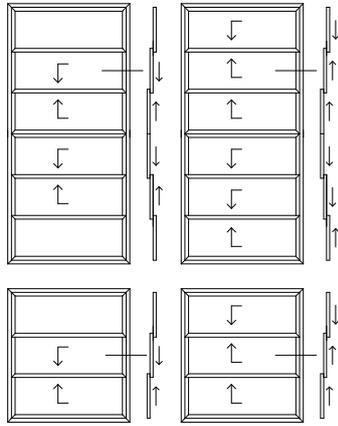


Wełna mineralna lub pianka montażowa
Mineral wool or assembly foam
■ Mineralwolle oder Montageschäume
■ Минеральная вата или монтажная пена

Folia paroprzepuszczalna (U223)
Vapor permeable foil ■ Dampfdiffusionsfolie
■ Паропроницаемая фольга

Folia paroszczelna (U213)
Vapor barrier foil ■ Dampfsperffolie
■ Паронепроницаемая фольга

1:1,7

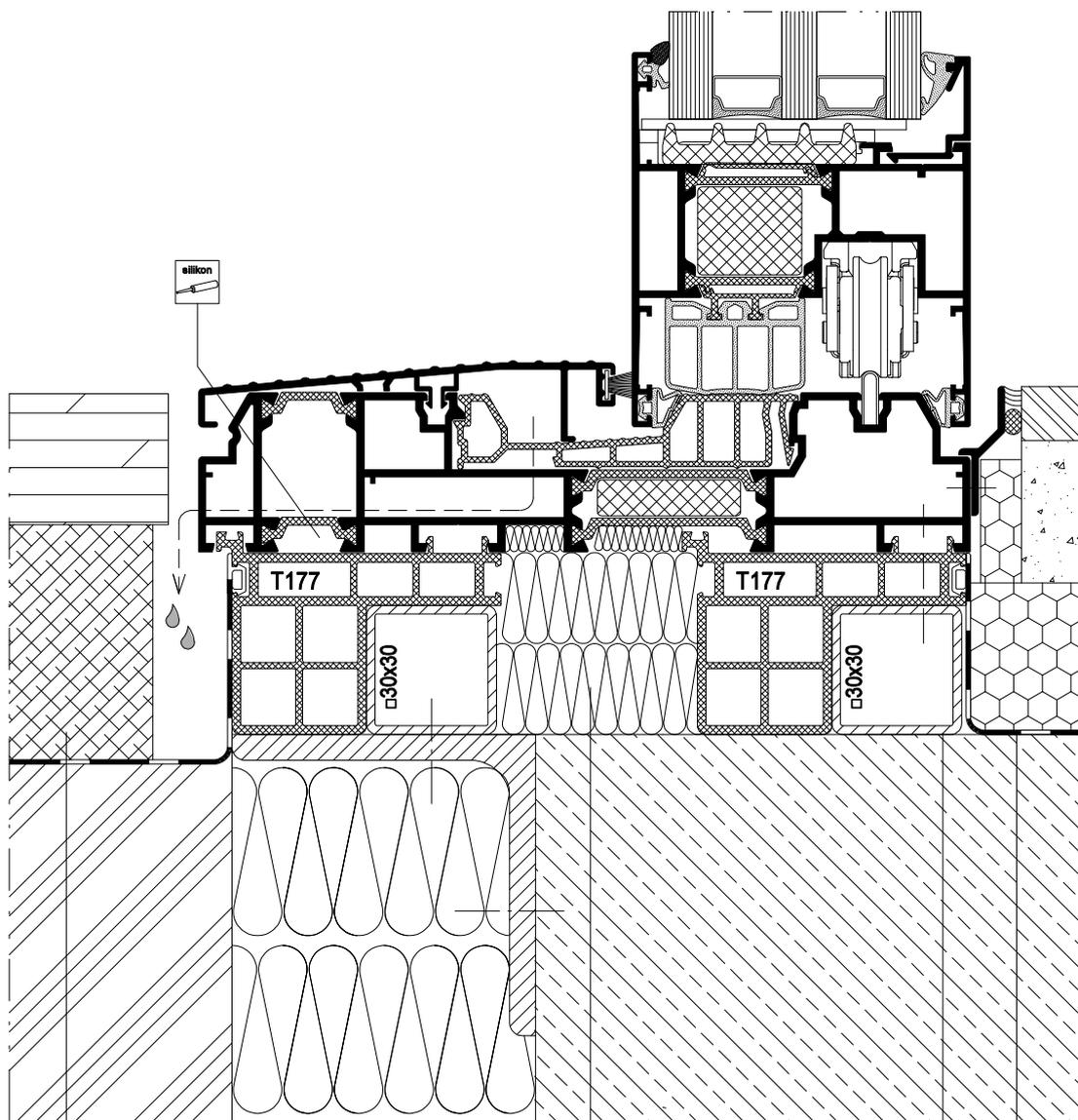
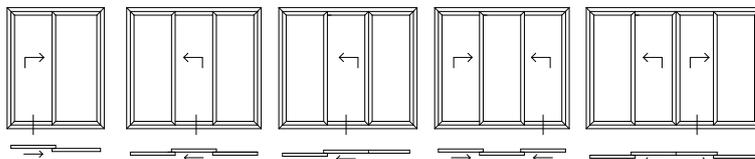


Folia paroszczelna (U213)
Vapor barrier foil ■ Dampfsperffolie
■ Паронепроницаемая фольга

Wełna mineralna lub pianka montażowa
Mineral wool or assembly foam
■ Mineralwolle oder Montageschaume
■ Минеральная вата или монтажная пена

Folia paroprzepuszczalna (U223)
Vapor permeable foil ■ Dampfdiffusionsfolie
■ Паропроницаемая фольга

1:1,7



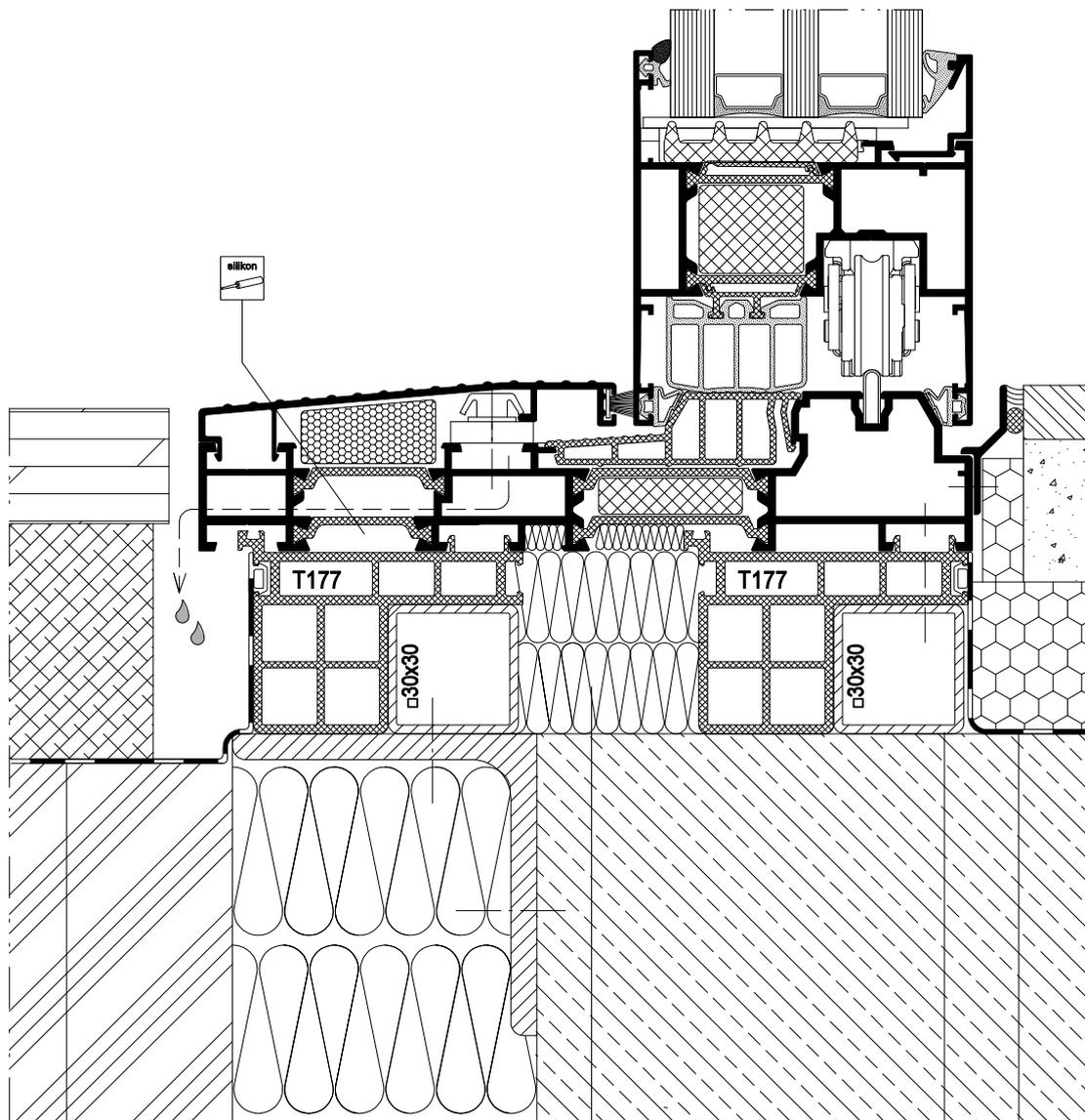
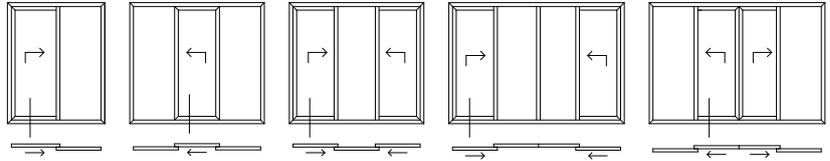
Wełna mineralna lub pianka montażowa
Mineral wool or assembly foam
■ Mineralwolle oder Montageschäume
■ Минеральная вата или монтажная пена

Tuba stalowa 30x30 mm
Steel tube 30x30mm
■ Stahlrohr 30x30mm
■ Стальная труба 30×30 mm

Folia paroprzepuszczalna (U223)
Vapor permeable foil ■ Dampfdiffusionsfolie
■ Паропроницаемая фольга

Folia paroszczelna (U213)
Vapor barrier foil ■ Dampfsperffolie
■ Паронепроницаемая фольга

 1:1,7



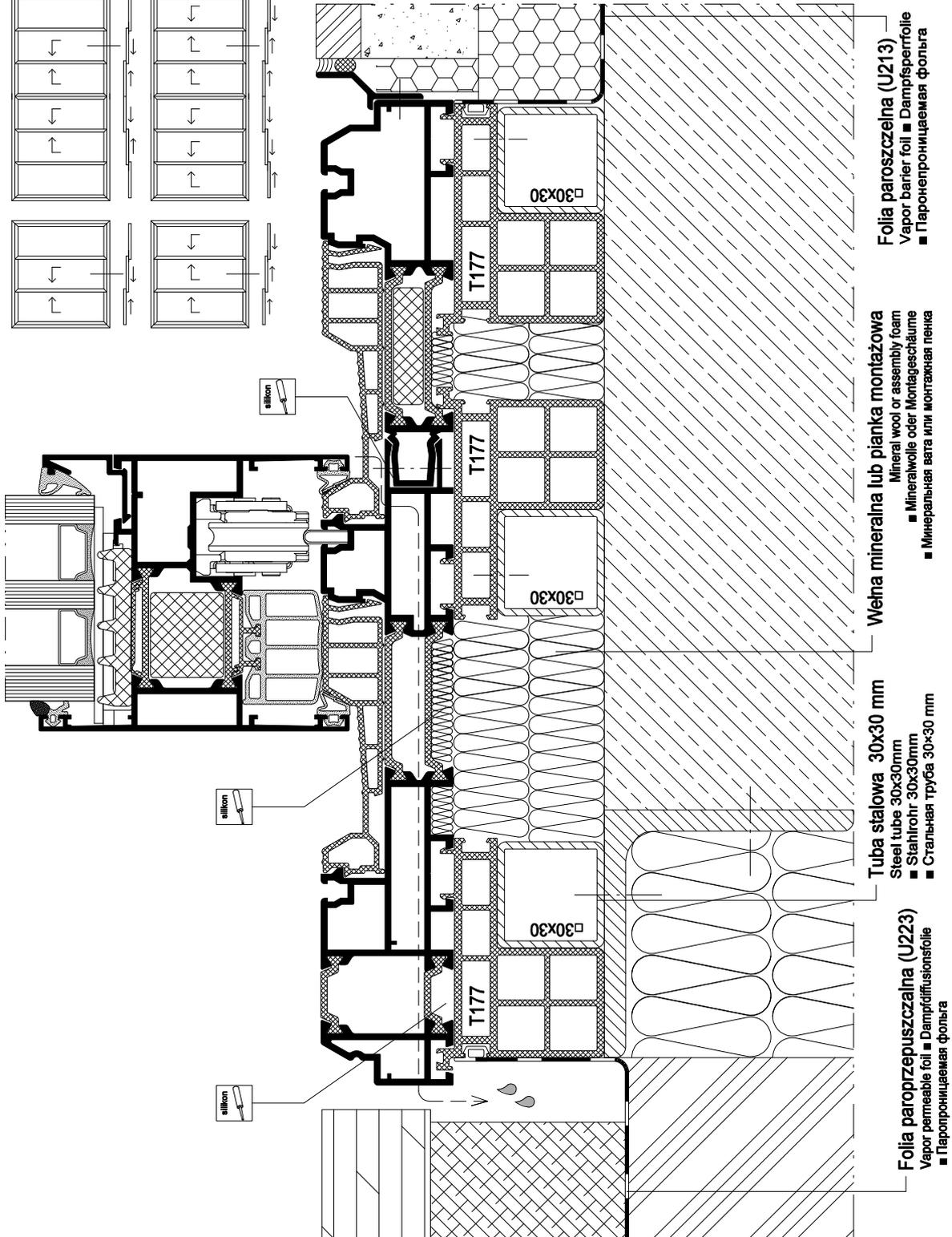
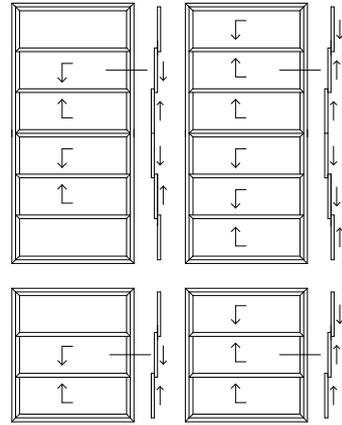
Wełna mineralna lub pianka montażowa
Mineral wool or assembly foam
■ Mineralwolle oder Montageschäume
■ Минеральная вата или монтажная пена

Tuba stalowa 30x30 mm
Steel tube 30x30mm
■ Stahlrohr 30x30mm
■ Стальная труба 30×30 мм

Folia paroprzepuszczalna (U223)
Vapor permeable foil ■ Dampfdiffusionsfolie
■ Паропроницаемая фольга

Folia paroszczelna (U213)
Vapor barrier foil ■ Dampfsperffolie
■ Паронепроницаемая фольга

1:1,7



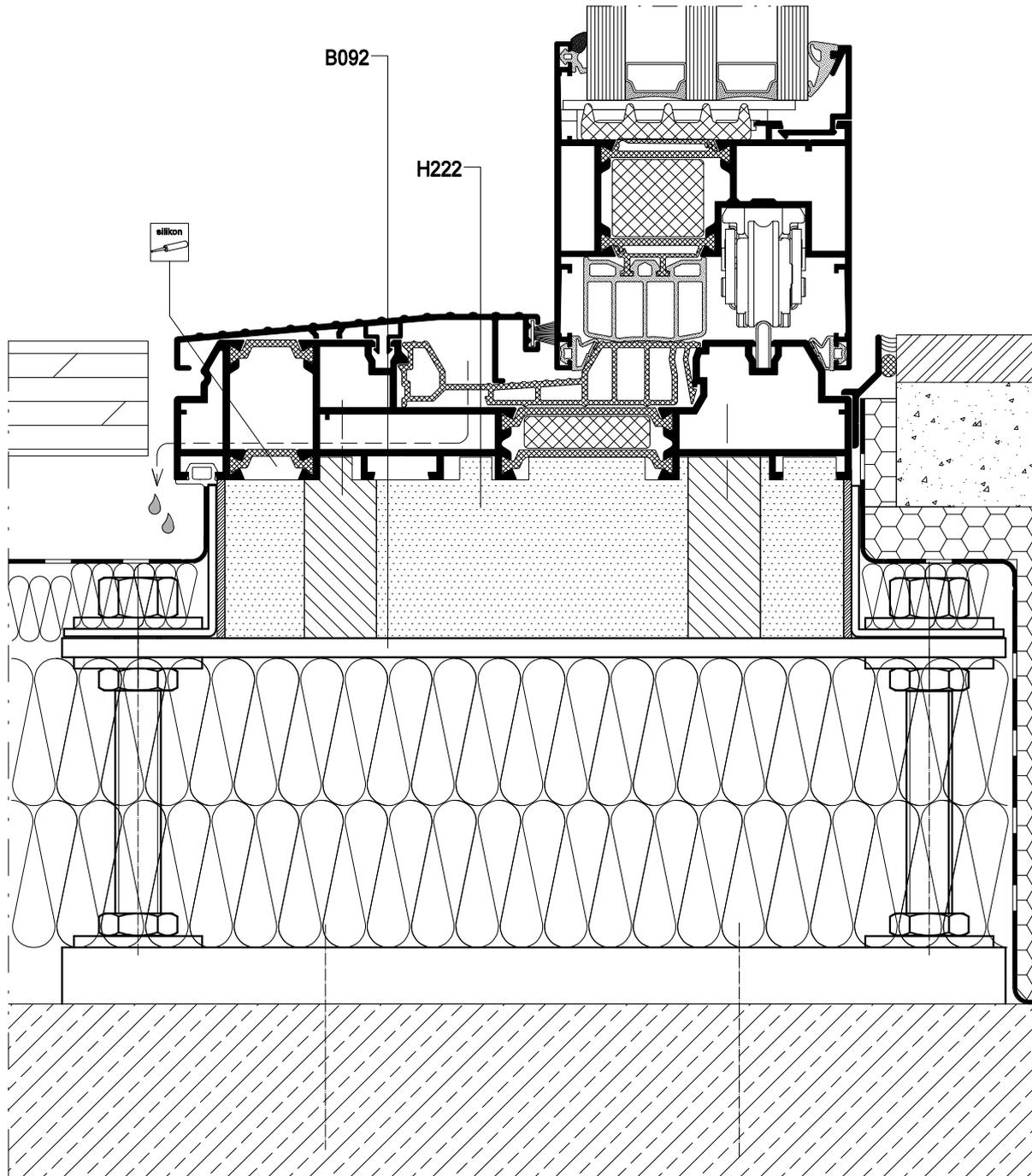
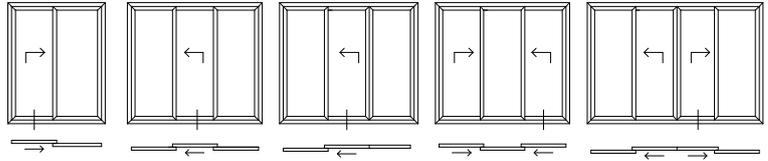
Folia paroszczelna (U213)
Vapor barrier foil ■ Dampfsperffolie
■ Паронепроницаемая фольга

Wełna mineralna lub pianka montażowa
Mineral wool or assembly foam
■ Mineralwolle oder Montageschäume
■ Минеральная вата или монтажная пена

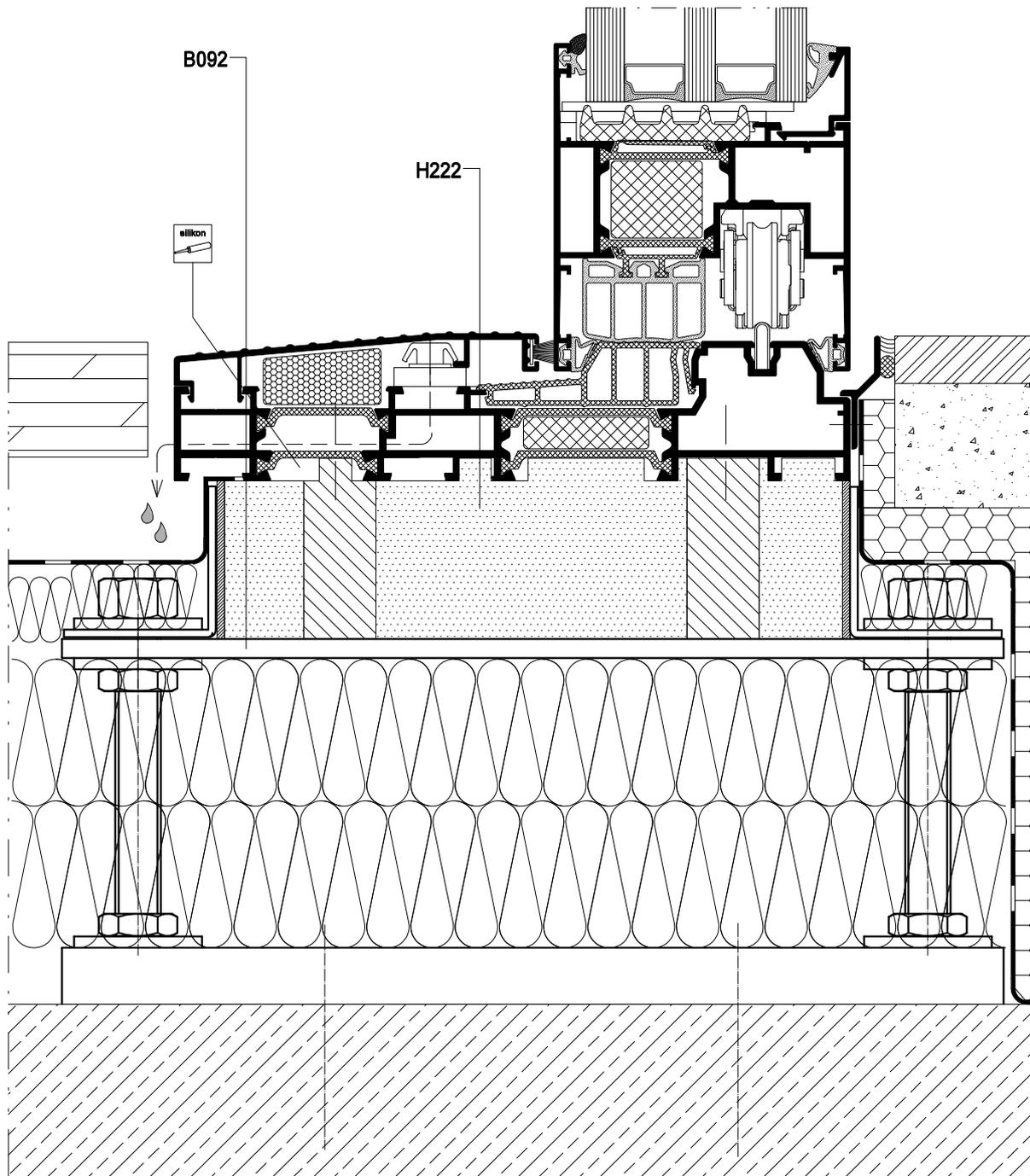
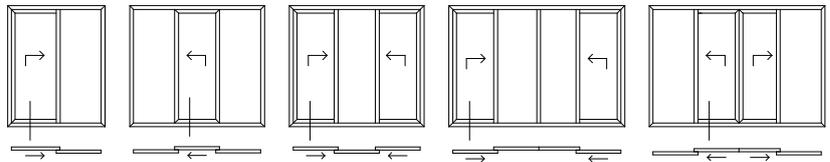
Tuba stalowa 30x30 mm
Steel tube 30x30mm
■ Stahlrohr 30x30mm
■ Стальная труба 30x30 mm

Folia paroprzepuszczalna (U223)
Vapor permeable foil ■ Dampfdiffusionsfolie
■ Паропроницаемая фольга

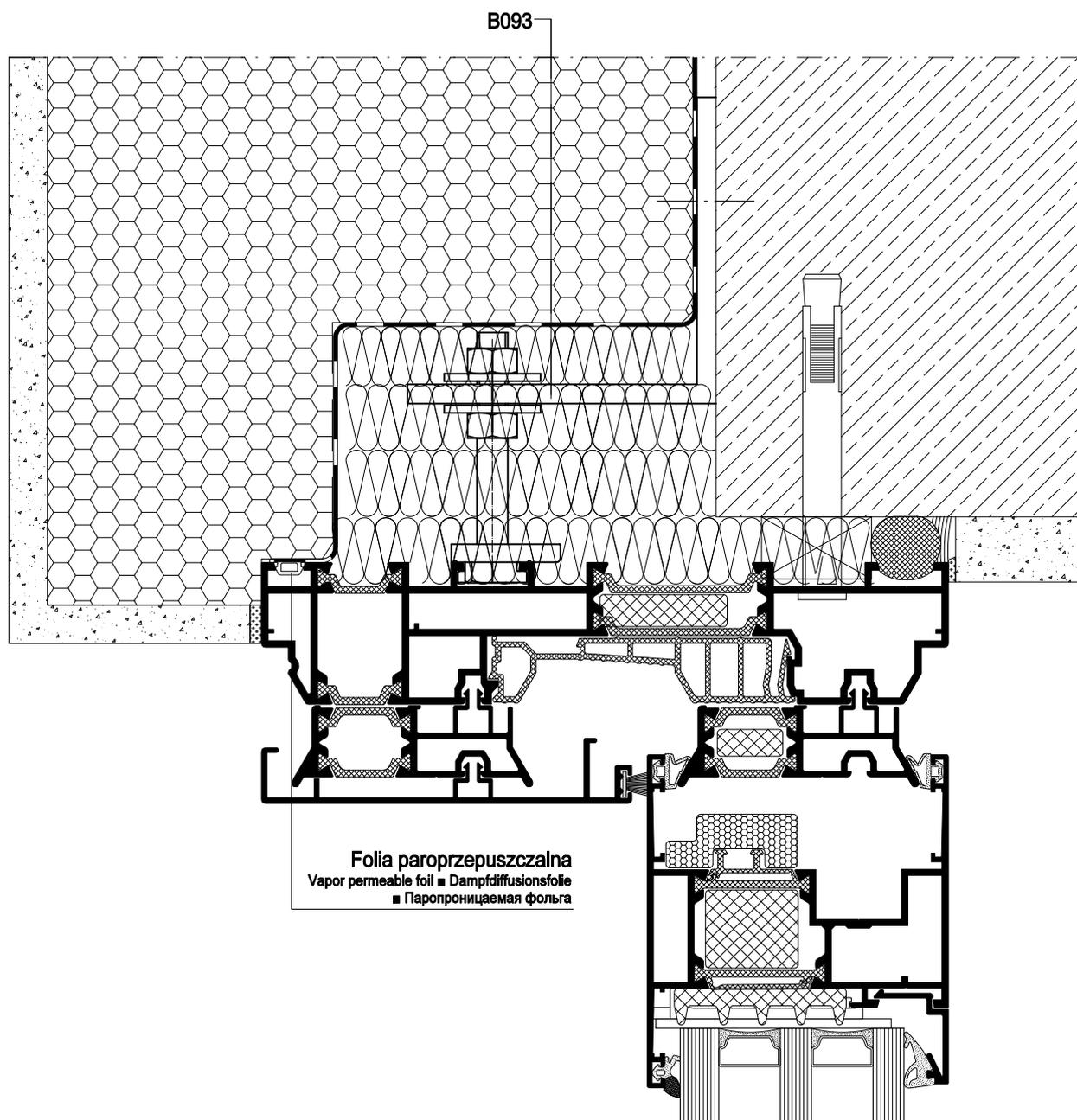
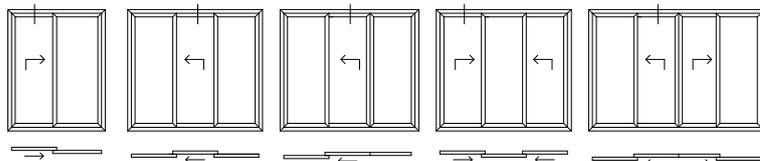
 1:1,7



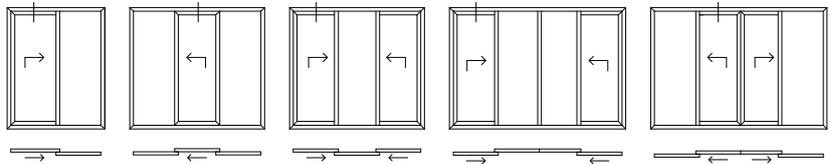
1:1,7



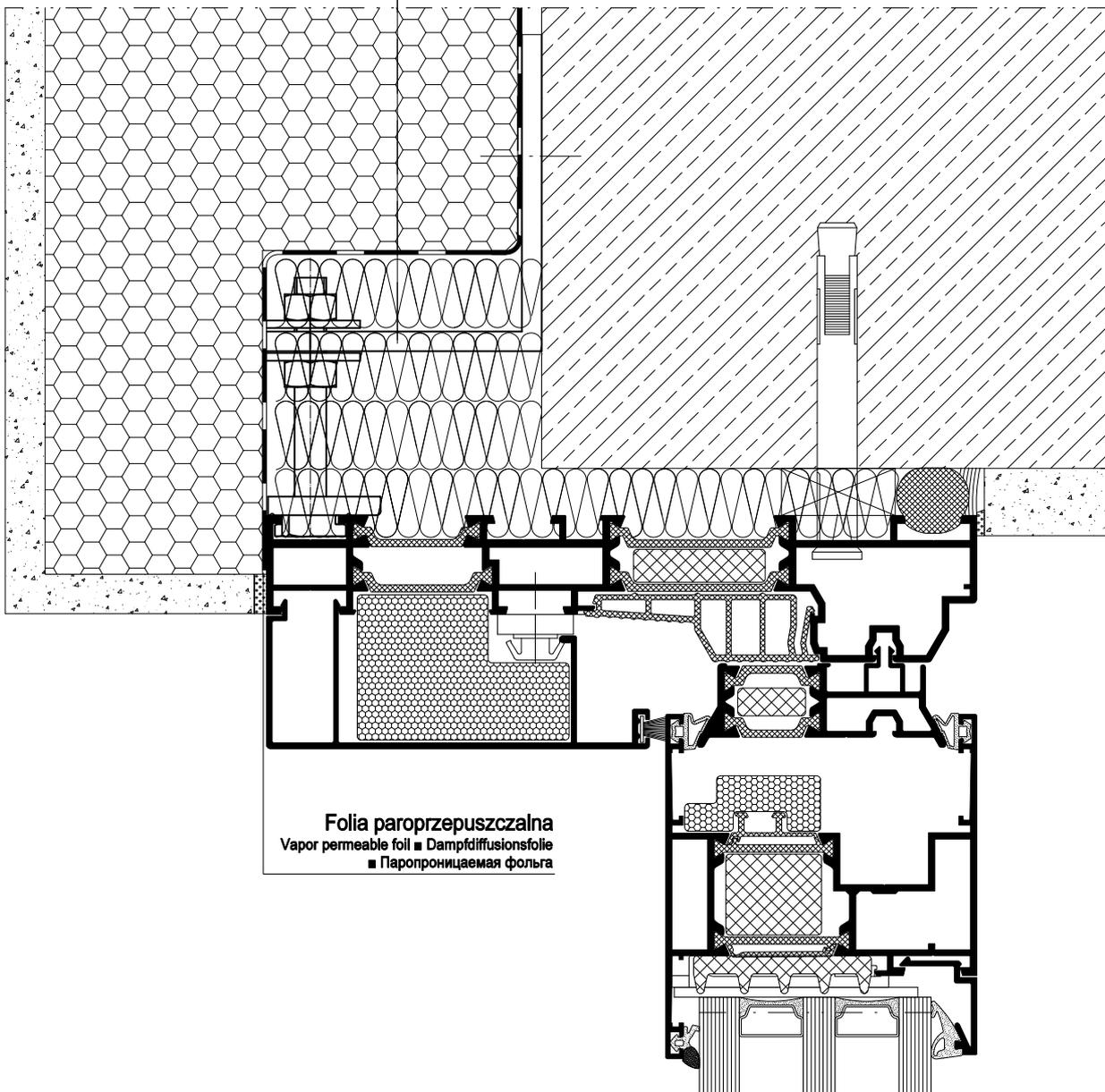
 1:1,7



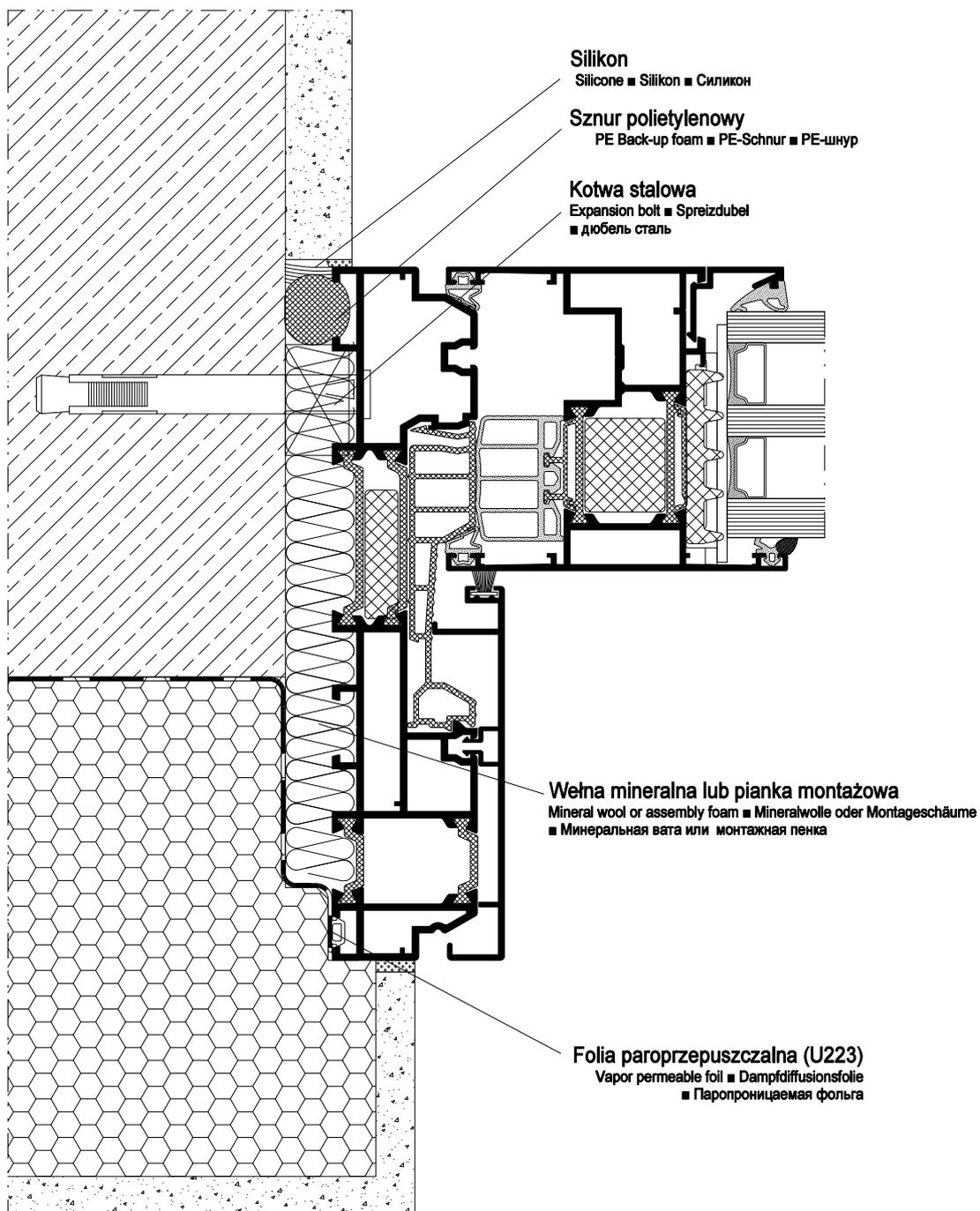
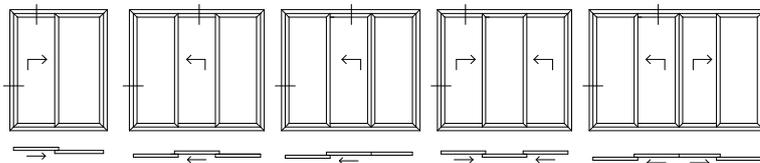
 1:1,7



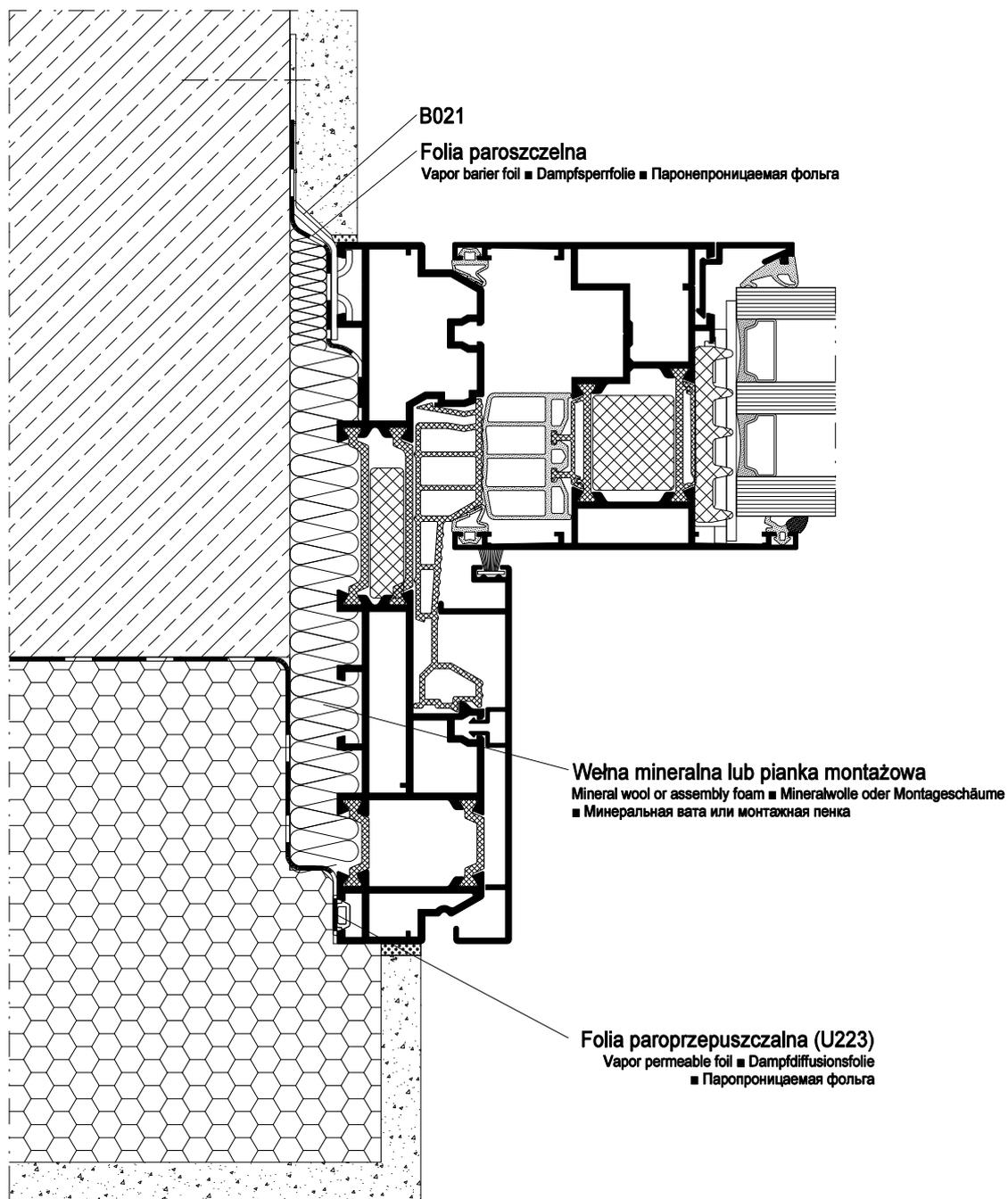
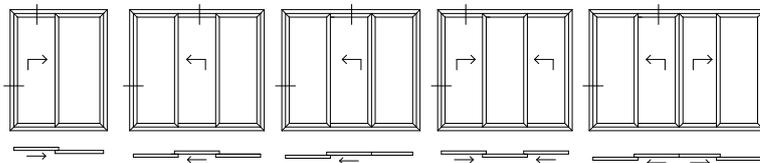
B093



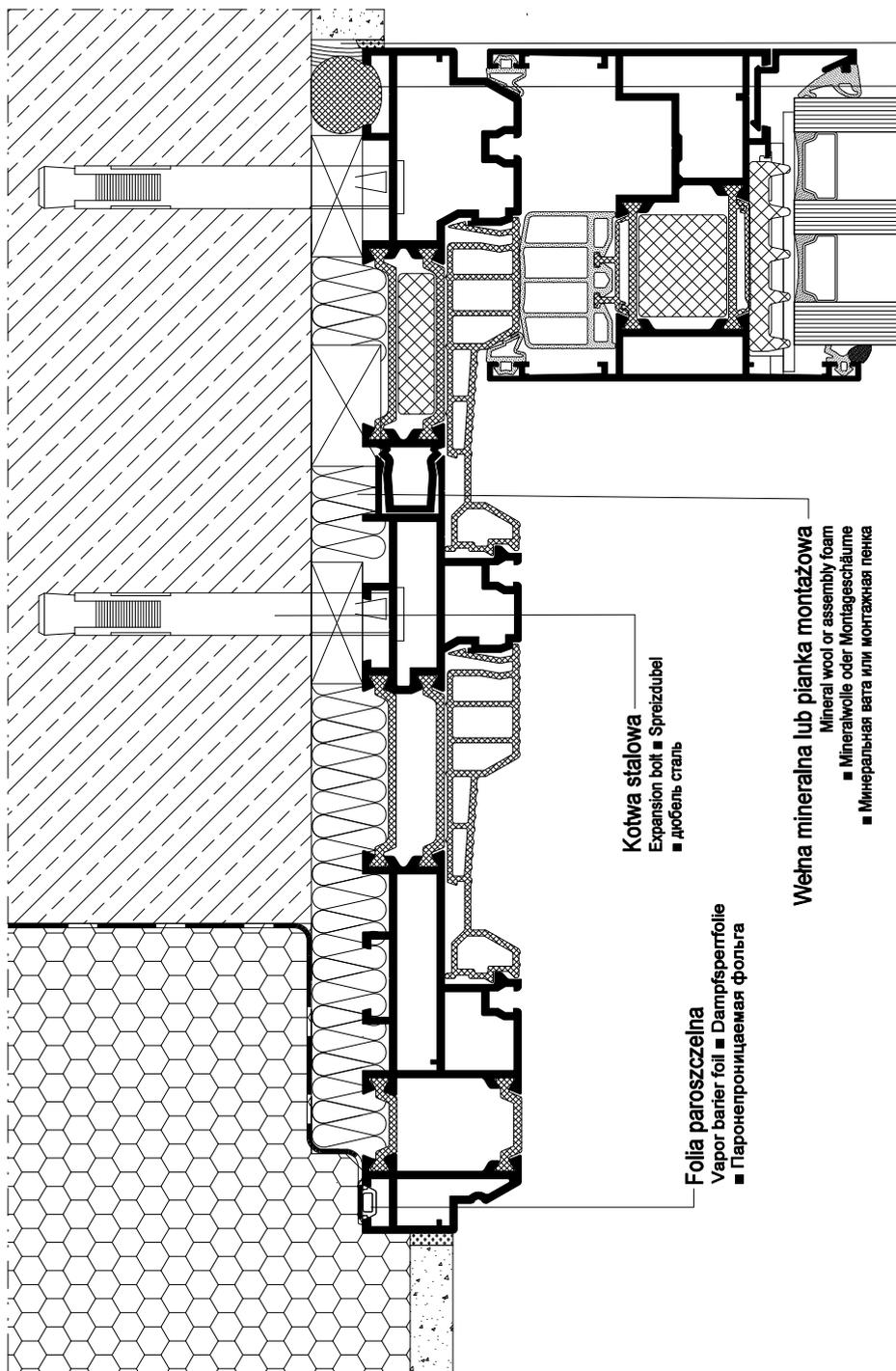
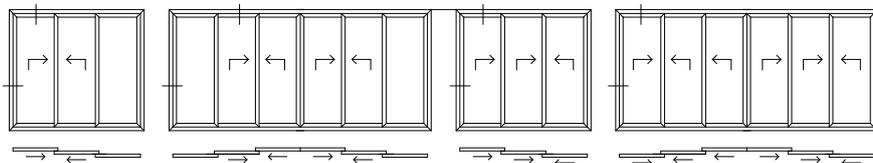
 1:1,7



 1:1,7



1:1,7



Kotwa stalowa
Expansion bolt ■ Spreizdübel
■ дюбель сталь

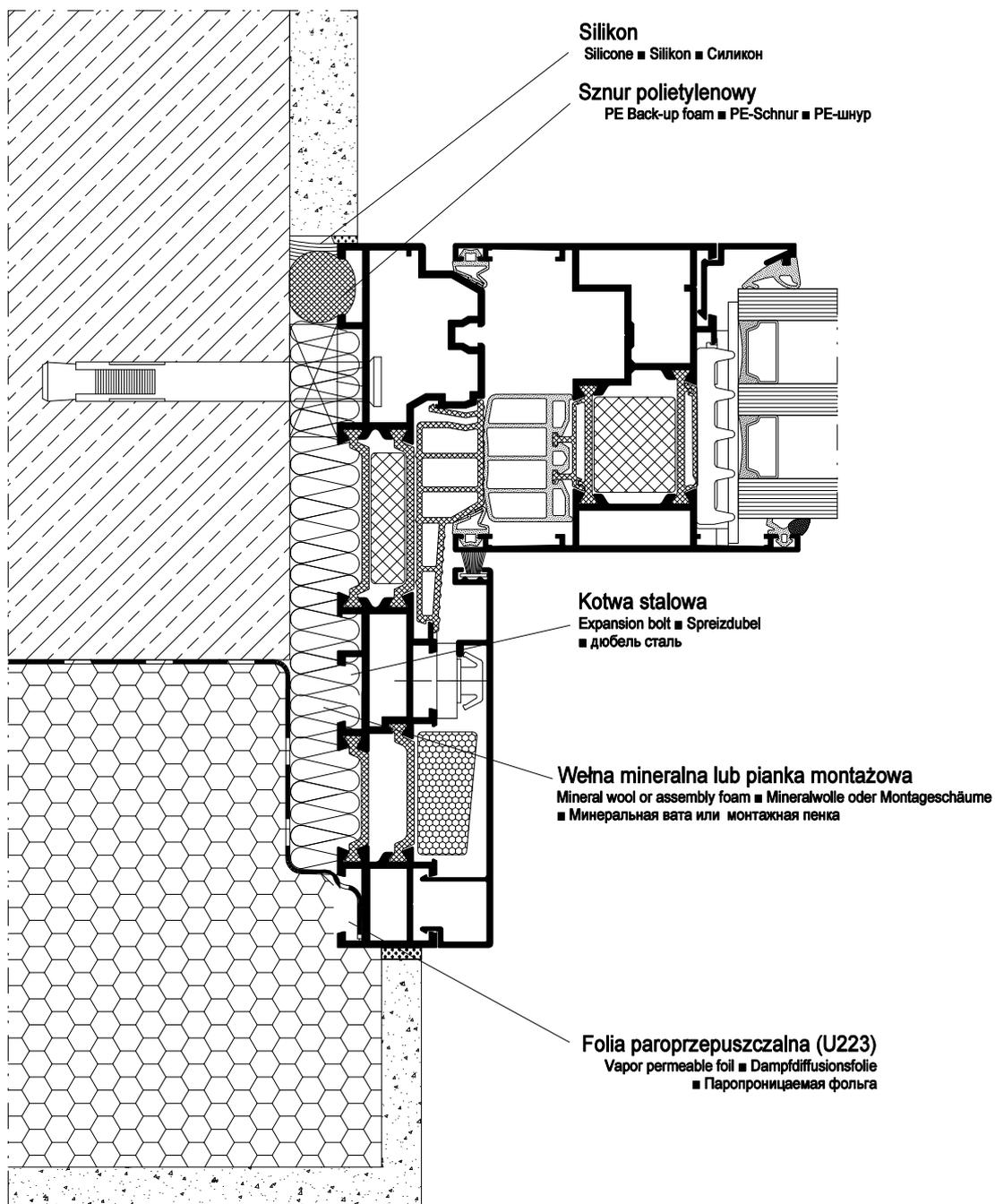
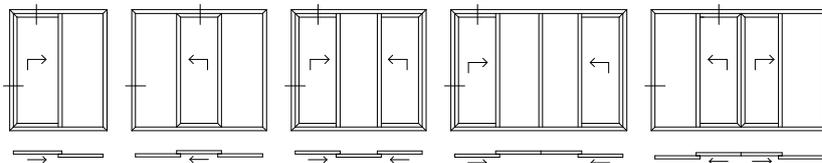
Folia paroszczelna
Vapor barrier foil ■ Dampferfolie
■ Паронепроницаемая фольга

Wełna mineralna lub pianka montażowa
Mineral wool or assembly foam
■ Mineralwolle oder Montageschäume
■ Минеральная вата или монтажная пена

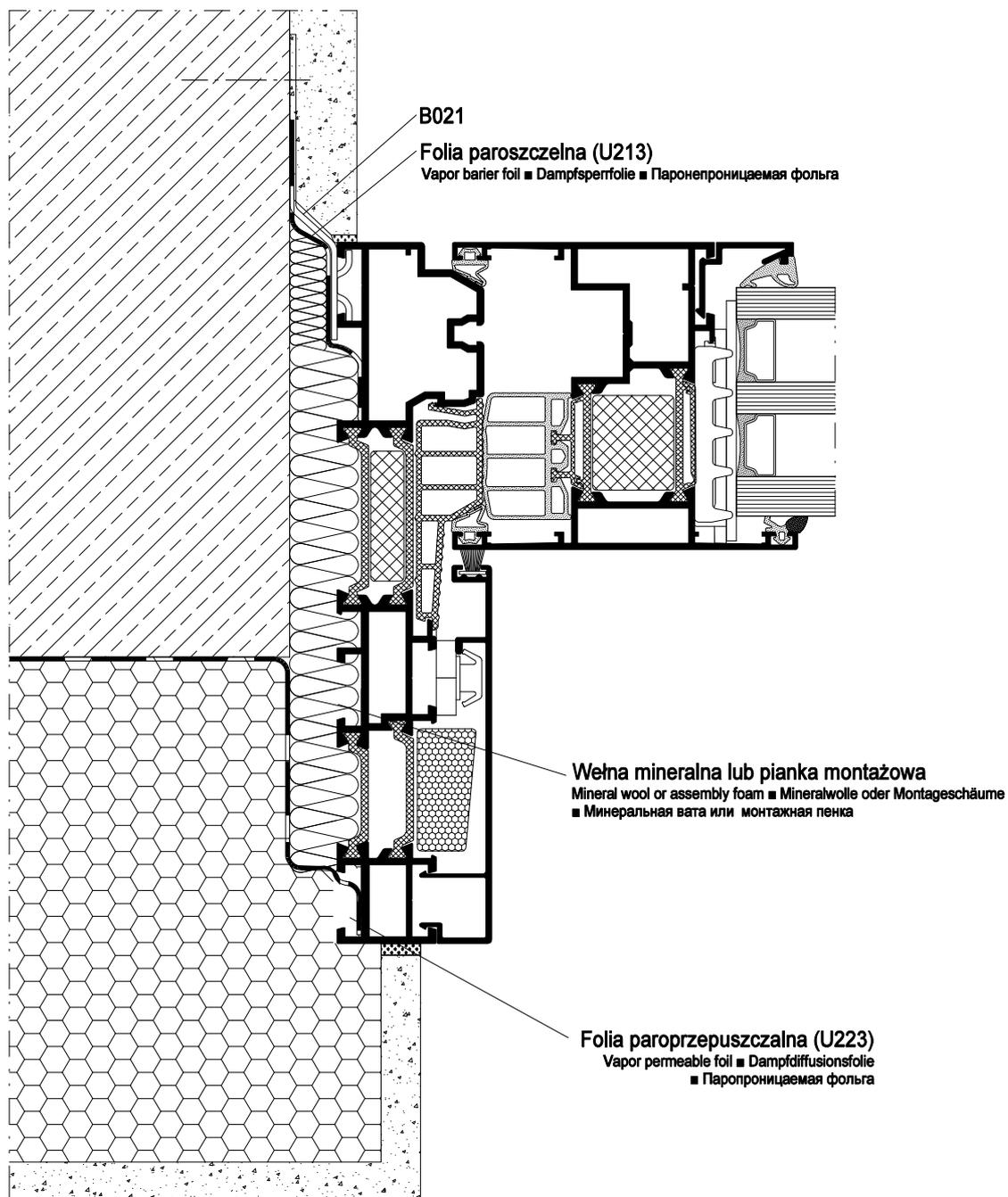
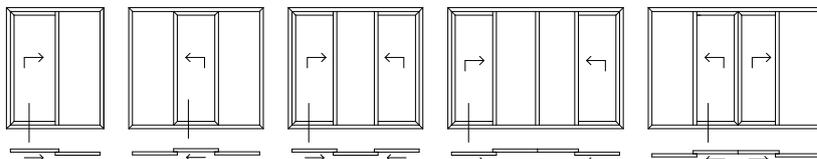
Sznur polietylenowy
PE Back-up foam ■ PE-Schnur ■ PE-шнур

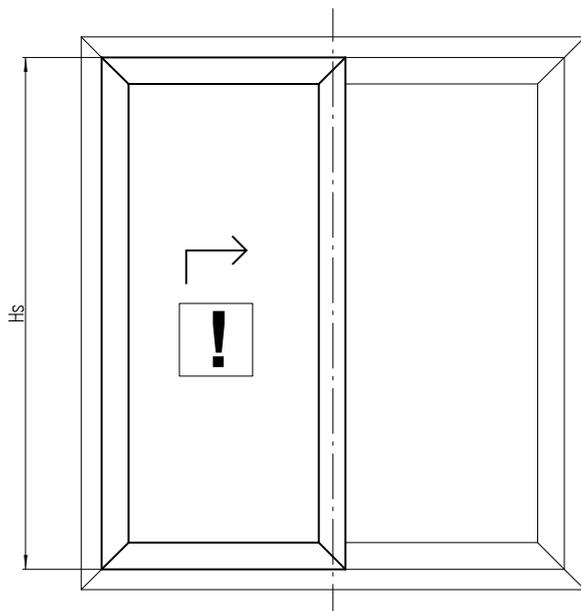
Silikon
Silicone ■ Silikon ■ Силикон

 1:1,7



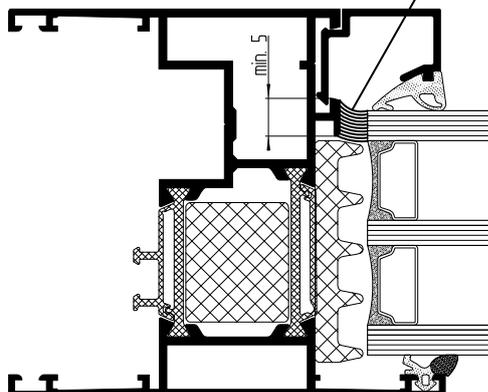
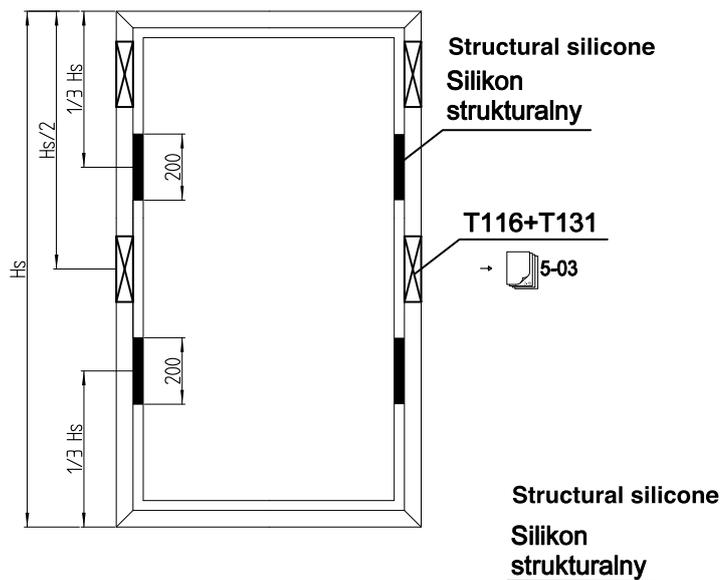
 1:1,7





 **Hs>2300**

Jeżeli wysokość skrzydła przekracza 2300mm zaleca się klejenie szyby do skrzydła wg schematu:
If the height of the door leaf exceeds 2300mm, it is recommended to adhere the glass to the door leaf according to the diagram:



Zalecane silikon strukturalne:
-Sikasil WT480
-Sikasil SG500
-DC 776
-DC 993