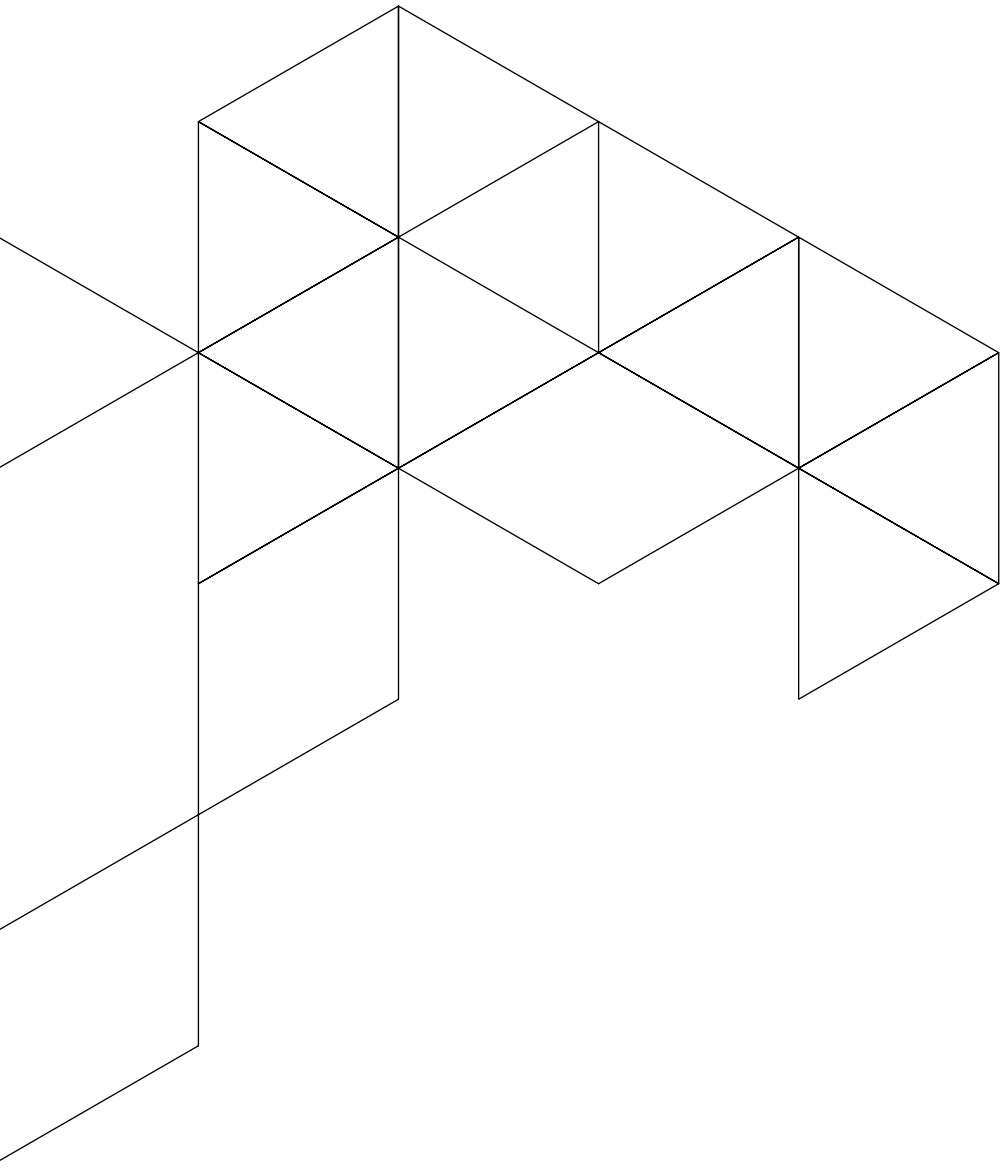
ATLAS **design details**

EXTERNAL WALL INSULATION SYSTEMS GUIDEBOOK

2026



editorial

Thermal insulation of exterior walls with ETICS method is the most common and simplest way to improve thermal and decorative parameters of a building. Correct selection, design and execution of the thermal insulation system determine its future durability and effectiveness. Therefore, the details become of great importance during the implementation of the investor's concept. Based on many years of experience, we would like to present an updated edition of "ATLAS Design Details" – a catalogue for architects and contractors. The book contains carefully elaborated recommendations and technical solutions for complete thermal insulation systems as well as design and architectural details. ATLAS catalogue includes dozens of technical drawings supplemented by axonometric visualizations and detailed descriptions.

Due to worldwide rapid growth of sustainable development and rational management of natural resources and environment concepts, some legal regulations have been introduced in the EU countries. Selection of the most important and current formal and legal issues is presented in this study as well. We hope that information given in this book will facilitate the design and execution of the façades. We sincerely believe that your projects will meet the expectations and needs regarding efficiency, aesthetic and technical issues, so the user can enjoy problem-free operation for many years.

The information contained herein is based on the knowledge as of October 2026.



table of contents

7 **introduction**

19 **ATLAS external wall insulation systems**

31 **thermal insulation – boards and mesh arrangement**

47 **thermal insulation around reveals**

65 **expansion joints, joints between systems, rustification**

77 **plinth thermal insulation**

81 **thermal insulation at the wall-roof junction for flat and pitched roof**

91 **tools and support**



introduction

8 **ETICS technology**

10 **formal and legal requirements**

12 **design recommendations for thermal insulation systems**

14 **technical documentation**

16 **technical assessments and certificates**

ETICS technology





ETICS (External Thermal Insulation Composite System) is one of the most popular methods of thermal insulation for both existing and newly constructed buildings. The ETICS technology consists of applying a system of compatible materials and layers, including thermal insulation and the external finish, to a properly prepared substrate.

A typical ETICS system consists of the following basic components:
- adhesive,
- factory-made thermal insulation product,
- mechanical fixing devices (e.g. anchors),
- rendering system, including:
  - base coat with reinforcing mesh embedded in it,
  - key coat (optional),
  - finishing coat (thin-coat render),
  - decorative coat, e.g. façade paint (optional).

In addition, ancillary components may be used, such as:
- materials for construction details: base profiles, corner profiles, joint covers, etc.,
- sealing materials,
- other necessary accessories, e.g. thermally separated fastening elements for fixing additional components through the ETICS.

Each material has its unique function:
- thermal insulation (e.g. EPS – expanded polystyrene, XPS – extruded polystyrene, mineral wool – MW, PUR/PIR panels, etc.) provides appropriate thermal insulation of the walls,
- adhesive and mechanical fixing devices provide adequate fixing and stability of the system,
- the reinforced layer provides resistance to mechanical damage (e.g. impact) and helps accommodate stresses resulting from thermal loads; it also forms the substrate for subsequent finishing layers,
- the external finish (e.g. render, façade paint or, in appropriate ETICS systems, façade tiles) protects the underlying system layers against adverse weather conditions and provides the decorative finish.



formal and legal requirements

According to legal regulations, **any physical item or set of items placed on the market for permanent incorporation into construction works or parts thereof is considered a construction product**. The properties of construction products are considered in relation to the basic requirements for construction works, which form the basis for identifying their essential characteristics.

In practice, this means that a system consisting of proven and mutually compatible materials, whose relevant properties have been assessed in accordance with applicable technical specifications, can be placed on the European Union market in accordance with harmonised rules. Harmonised rules for making construction products available on the market are laid down in the **Construction Products Regulation (CPR)**. The currently applicable legal act in this field is *Regulation (EU) 2024/3110 of the European parliament and of the council of 27 November 2024 laying down harmonised rules for the marketing of construction products and repealing regulation (EU) no 305/2011*, subject to transitional provisions applicable to certain of its provisions.

Current building regulations provide eight **BASIC REQUIREMENTS FOR CONSTRUCTION WORKS**. The following criteria are to be considered:

- **structural integrity,**
- **fire safety,**
- **hygiene and health protection,**
- **safety and accessibility of construction works,**
- **acoustic properties and protection against sound transmission,**
- **energy efficiency and thermal performance,**
- **protection against emissions into the outdoor environment,**
- **sustainable use of natural resources.**

The first basic requirement relates to **structural integrity**. ATLAS thermal insulation systems are non-load-bearing systems and do not contribute directly to the stability of the building wall on which they are installed. However, the system itself must maintain its integrity and stability on the substrate and be installed in such a way that the loads acting on it do not cause displacement, detachment or damage. Appropriate technical parameters and correct installation allow the system to transfer its self-weight and the pressure and suction effects of wind.

Fire safety is very important when it comes to thermal insulation systems. The reaction to fire of an ETICS depends on the materials used and the composition of the complete system and is expressed by its reaction-to-fire classification. Depending on national regulations, the type of building and the intended application, specific fire safety requirements may apply, including the use of non-combustible materials. ATLAS thermal insulation systems using mineral wool as the insulation material can achieve classifications corresponding to non-combustible systems, with reaction-to-fire classes reaching even A1.

In Poland, as an example, such requirements are explicitly defined in the *Regulation of the minister of infrastructure of 12 April 2002* on the technical conditions to be met by buildings and their location, as amended. According to this regulation, in buildings, at a height above 25 metres from ground level, the thermal insulation of external walls, façade cladding and its mechanical fixing shall be made of non-combustible materials, with a specific exception provided for certain residential buildings.

In France, as another example, fire safety requirements for façades result from the *Construction and housing code[1] and implementing acts, including the Order of 31 january 1986 on fire protection in residential buildings[2], as amended, as well as regulations applicable to public access buildings (Établissements Recevant du Public – ERP)*. These requirements aim, among other things, to limit the spread of fire through façades, including façades incorporating external thermal insulation. The applicable requirements depend on the type of building and the adopted façade solution and may include specific reaction-to-fire classifications for the materials and components used.

1. Code de la Construction et de l'habitation.
2. Arrêté du 31 janvier 1986 relatif à la protection contre l'incendie des bâtiments d'habitation.

The requirement to use non-combustible materials, including mineral wool, may also result from other technical requirements, the function of the building or specific building regulations applicable in a given country.

Buildings and their components must be designed and installed in a way that ensures **hygiene and health protection** and **safety of construction works** throughout their whole service life. In the case of thermal insulation systems, this means, among other things, that the system must be properly fixed to the substrate so that, in addition to maintaining its integrity and stability, its potential detachment or the falling of individual components does not create a hazard to users or other persons.

Construction works should also provide **protection against emissions into the outdoor environment**, including the release of hazardous substances into air, water and soil. Components of ATLAS systems do not contain hazardous substances at levels that would prevent their intended use. Façade paints and primers have a limited content of volatile organic compounds (VOC).

The requirement for **energy efficiency and thermal performance** has a direct impact on ATLAS thermal insulation systems, as their primary function is to ensure appropriate thermal performance of external walls. Correctly selected thickness and properties of the thermal insulation material ensure the required level of thermal insulation, in accordance with applicable regulations, and contribute to reducing energy consumption for heating and cooling.

Sustainable use of natural resources is the last of the eight basic requirements for construction works. It relates to the design, construction, use and demolition of buildings with due consideration to the efficient use of primary and secondary raw materials, minimisation of material consumption and waste generation, as well as the reuse and recyclability of construction works and their materials throughout their life cycle.

Environmental declarations may be used as a tool supporting the assessment of the environmental performance of construction products. Environmental Product Declarations (EPD) are developed in accordance with **EN ISO 14025:2026** and **EN 15804:2012+A2:2019**, which defines the core rules for EPD of construction products based on life cycle assessment (LCA).

ATLAS ETICS is one of the first Polish thermal insulation systems for which **Type III Environmental Product Declarations (EPD)** were issued by the Building Research Institute (ITB), in accordance with **EN ISO 14025:2010**, which has since been replaced by **EN ISO 14025:2026**, for five thermal insulation arrangements. The declarations include the elements necessary for the thermal insulation system (adhesive for polystyrene, polystyrene, mechanical fixings, adhesive for the reinforcing layer, reinforcing mesh and primer) and differ in the type of thin-coat render forming the finishing layer:

- with mineral renders,
- with acrylic renders,
- with silicate renders,
- with silicone renders,
- with silicone-silicate renders.

design recommendations
for thermal insulation systems



The selection of the system should aim to meet the relevant requirements for the building. It is incorrect to consider the design only in terms of the thickness of the thermal insulation layer. A comprehensive approach to thermal insulation should not be limited to meeting thermal performance requirements (see table) and determining the fixing method, including the application of adhesive and mechanical fixings depending on the type of insulation material and the wall structure.

The starting point should be an analysis of the specific characteristics and requirements of the building to be insulated. This includes the material the exterior walls are made of, the building shape, its intended use and location, as well as the investor's aesthetic expectations (see COLOURS AND MATERIALS LIBRARY on our website). Fire protection and sound insulation requirements must also be considered. The efficiency of the investment should then be assessed, taking into consideration both the costs associated with the project and future operating costs. Equally important is the assessment of the adopted solution in terms of building physics.

The essence of thermal insulation is to reduce heat flow between the interior of the building and the outdoor environment. However, when designing the building envelope, not only heat transfer but also moisture transport should be considered. The temperature distribution within the wall structure depends on the internal and external temperatures, the surface heat transfer resistances and the thermal resistance of each wall layer. There is always a certain amount of water vapour in the air, which can diffuse through the building envelope. The amount of water vapour transported through the partition depends primarily on the difference in water vapour pressure between its two sides and on the vapour diffusion resistance of the individual layers. Water vapour pressure, in turn, depends on the temperature and relative humidity of the indoor and outdoor air.

Therefore, the system layers should be selected so as to reduce the risk of harmful water vapour condensation and excessive moisture accumulation within the building envelope. Such moisture can adversely affect the performance of the partition and, under favourable conditions, contribute to mould growth. Mould is particularly likely to develop in areas of reduced internal surface temperature, such as thermal bridges, especially where indoor humidity is high or ventilation is insufficient. Typical examples include junctions between walls and floors, balconies or terraces, as well as room corners. The design of balconies, terraces and roofs is therefore important not only in terms of thermal bridging, but also for maintaining continuity of insulation and protecting the building against moisture (see DESIGN DETAILS on our website).

Thermal insulation should be designed so as to minimise thermal bridging, i.e. areas where heat loss is greater than through the adjacent parts of the building envelope. Thermal bridges can be broadly divided into two categories: material thermal bridges, for example at the junction between a masonry wall and a reinforced concrete ring beam, or between a reinforced concrete column and a wall made of a material with different thermal properties; and geometric thermal bridges, which occur where the geometry of the building envelope increases heat flow, for example at corners. In practice, thermal bridges may also be classified as linear or point thermal bridges. Accordingly, the design documentation must be sufficiently precise and should provide correct and clear design details (see DESIGN DETAILS on our website).

MAXIMUM THERMAL TRANSMITTANCE (U-VALUE) REQUIREMENTS APPLICABLE FROM 1 JANUARY 2021 IN ACCORDANCE WITH THE POLISH REGULATION ON TECHNICAL CONDITIONS TO BE MET BY BUILDINGS AND THEIR LOCATION (AS AMENDED), IMPLEMENTING DIRECTIVE 2010/31/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL ON THE ENERGY PERFORMANCE OF BUILDINGS (EPBD). EACH EU MEMBER STATE ESTABLISHES ITS OWN NATIONAL REQUIREMENTS; LOCAL REGULATIONS SHOULD ALWAYS BE VERIFIED.

No	TYPE OF PARTITION WITH CORRESPONDING INDOOR TEMPERATURE	$U_{c(MAX)}$ [W/m²·K] 31.12 2020 r.
1	External walls:	
	a) $t_i \geq 16°C$	0,20
	b) $8°C \leq t_i < 16°C$	0,45
	c) $t_i < 8°C$	0,90
5	Roofs, flat roofs and ceilings under unheated attics or above driveways:	
	a) $t_i \geq 16°C$	0,15
	b) $8°C \leq t_i < 16°C$	0,30
	c) $t_i < 8°C$	0,70
7	Ceilings above unheated rooms and enclosed underfloor spaces:	
	a) $t_i \geq 16°C$	0,25
	b) $8°C \leq t_i < 16°C$	0,30
	c) $t_i < 8°C$	1,0

technical documentation



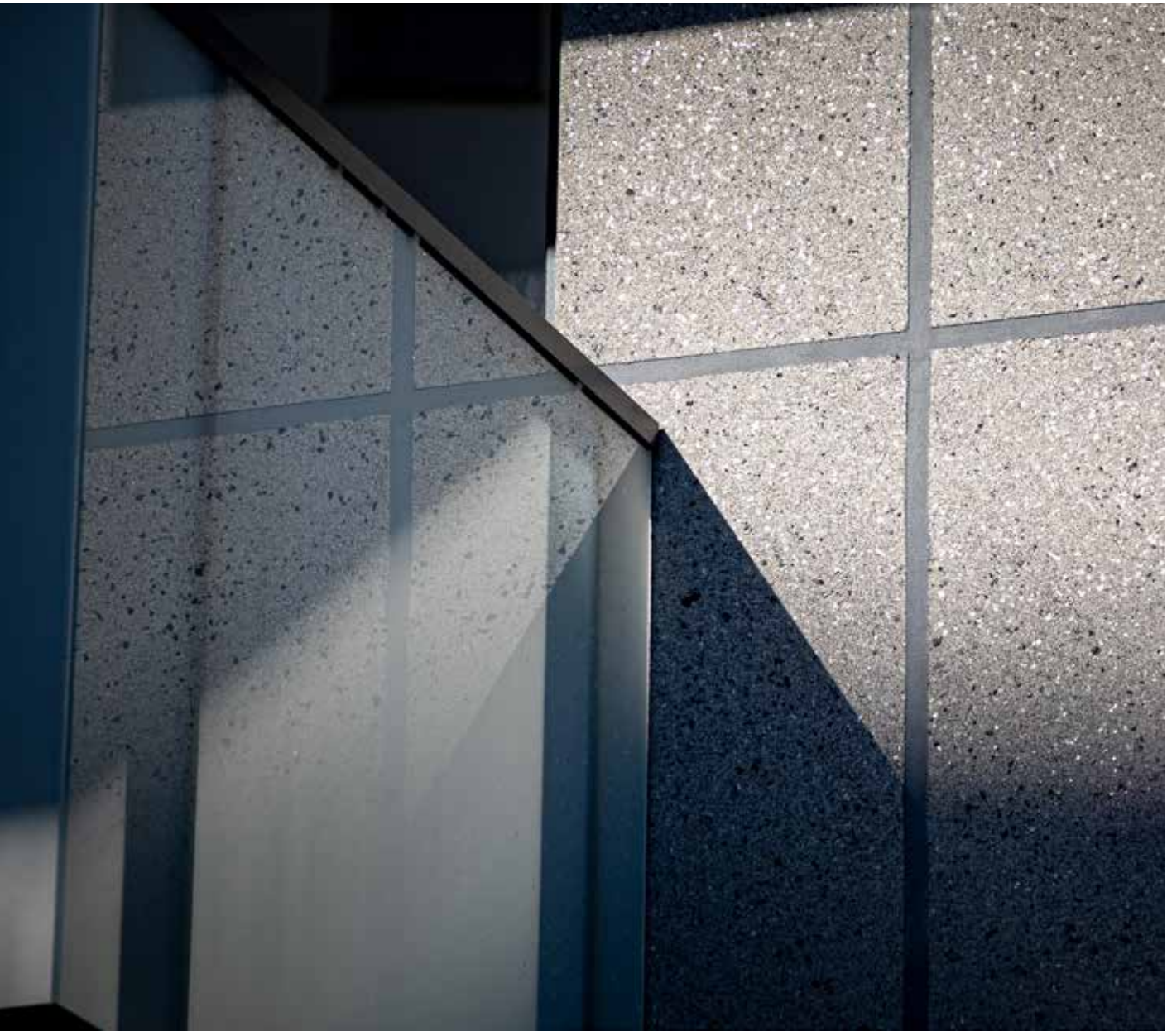


The technical documentation should include, in particular:

- a general thermal insulation design prepared in accordance with the applicable national building regulations and taking into account the technical documentation for the selected ETICS. One of the key documents is the European Technical Assessment (ETA), which assesses the performance of the construction product – in this case, the external thermal insulation system – on the basis of the corresponding European Assessment Document (EAD). Under the Construction Products Regulation (EU) 2024/3110, EADs are no longer classified as harmonised technical specifications, as they were under Regulation (EU) No 305/2011;
- where applicable, relevant national technical assessments, approvals, certificates or other assessment documents, such as BBA Agrément Certificates in the United Kingdom, NSAI Agrément Certificates in Ireland, and CSTB Avis Technique (ATec) or Document Technique d'Application (DTA) in France. These documents may differ in legal status, scope and function; for example, an ATec/DTA is a technical assessment of a construction process or solution rather than a product certificate;
- a site survey report describing the technical condition of the building prior to the application of the thermal insulation system, including the condition of the substrate, existing defects and damage, and the scope of any necessary preparatory or repair works;
- specification of substrate preparation and repair methods, as well as requirements for the application of subsequent system layers, including relevant environmental conditions during installation, such as temperature, humidity, exposure to precipitation, wind or direct sunlight;
- detailed design documentation including the selected technical solutions, such as the plinth zone, window and door reveals, arrangement of insulation boards at corners and around openings, window sills, insulation of balconies and terraces, and technological breaks;
- arrangements concerning the scope of works and contractual responsibilities, as well as, where required, the supervision scheme, quality control procedures and requirements concerning documentation of the works.

In some countries, additional specific requirements concerning system installation, contractor supervision, quality control and warranty conditions may apply. Such requirements may also result from national support schemes or public funding programmes. For detailed and binding information, reference should always be made to the applicable national building regulations and other relevant national requirements, as well as to the technical documentation and assessment documents applicable to the selected ETICS.

technical assessments and certificates



ETA-25/0970 European Technical Assessment for ATLAS ETICS EPS External Thermal Insulation Composite System (ETICS) with rendering.

ETA-25/0971 European Technical Assessment for ATLAS ETICS MW External Thermal Insulation Composite System (ETICS) with rendering.

ETA-06/0081 European Technical Assessment for ATLAS External Thermal Insulation Composite System (ETICS) with rendering.

ETA-16/0933 European Technical Assessment for ATLAS GRAWIS External Thermal Insulation Composite System (ETICS) with rendering.

ETA-06/0173 European Technical Assessment for ATLAS ROKER External Thermal Insulation Composite System (ETICS) with rendering.

ETA-07/0316 European Technical Assessment for ATLAS XPS External Thermal Insulation Composite System (ETICS) with rendering.

EAD 040083-01-0404 (2024) – European Assesment Document for External Thermal Insulation Composite Systems (ETICS) with renderings.

Irish Agrément Board Certificate No. 10-0347 ATLAS/AVAL External Thermal Insulation Composite Systems.

British Board of Agrément Certificate 13/5018 Product Sheet 1 ATLAS/AVAL EPS External Wall Insulation Systems.

British Board of Agrément Certificate 13/5018 Product Sheet 2 ATLAS/AVAL MW External Wall Insulation Systems.

British Board of Agrément UK Technical Assessment UKTA-0836-22/6214 ATLAS External Thermal Insulation Composite System with rendering (ETICS).

British Board of Agrément UK Technical Assessment UKTA-0836-22/6215 ATLAS ROKER External Thermal Insulation Composite System with rendering (ETICS).

British Board of Agrément UK Technical Assessment UKTA-0836-22/6216 ATLAS XPS External Thermal Insulation Composite System with rendering (ETICS).

British Board of Agrément UK Technical Assessment UKTA-0836-22/6217 ATLAS GRAWIS External Thermal Insulation Composite System with rendering (ETICS).

British Board of Agrément UK Certificate of Conformity of the Factory Production Control UK 0836-CPR-24/F7261 for ATLAS, ATLAS XPS, ATLAS ROKER, ATLAS GRAWIS.



ATLAS

external wall insulation systems

1

1.1

ATLAS External Thermal Insulation Composite Systems with EPS insulation

ATLAS ETICS, ATLAS GRAWIS & ATLAS ETICS EPS systems are intended for use as external thermal insulation systems for walls made of masonry elements or concrete, incorporating expanded polystyrene (EPS) as the thermal insulation material, in order to provide them with appropriate thermal insulation properties. The systems can be used on newly erected or existing (modernised) vertical walls. They are recommended for thermal insulation in traditional, energy-efficient and passive construction.

1. **WALL**
   concrete or masonry wall made of ceramic, concrete, lime - sand, aerated concrete or stone elements

2. **ADHESIVE FOR THERMAL INSULATION BOARDS FIXING, for example:**
   – mineral adhesive mortar: ATLAS STOPTER K-20, ATLAS STOPTER K-50, ATLAS HOTER U, ATLAS HOTER S, ATLAS HOTER U WHITE, ATLAS GRAWIS U, ATLAS GRAWIS DUO, ATLAS GRAWIS DUO WHITE, ATLAS GRAWIS P, ATLAS GRAWIS S

3. **THERMAL INSULATION:**
   – boards of expanded polystyrene (EPS), thickness according to thermal calculations
   – In the ATLAS XPS External Thermal Insulation Composite System, instead of expanded polystyrene, thermal insulation made of extruded polystyrene boards (XPS) is used.

4. **MECHANICAL FIXING**
   mechanical fixings, as defined in the thermal insulation project, holding appropriate ETA

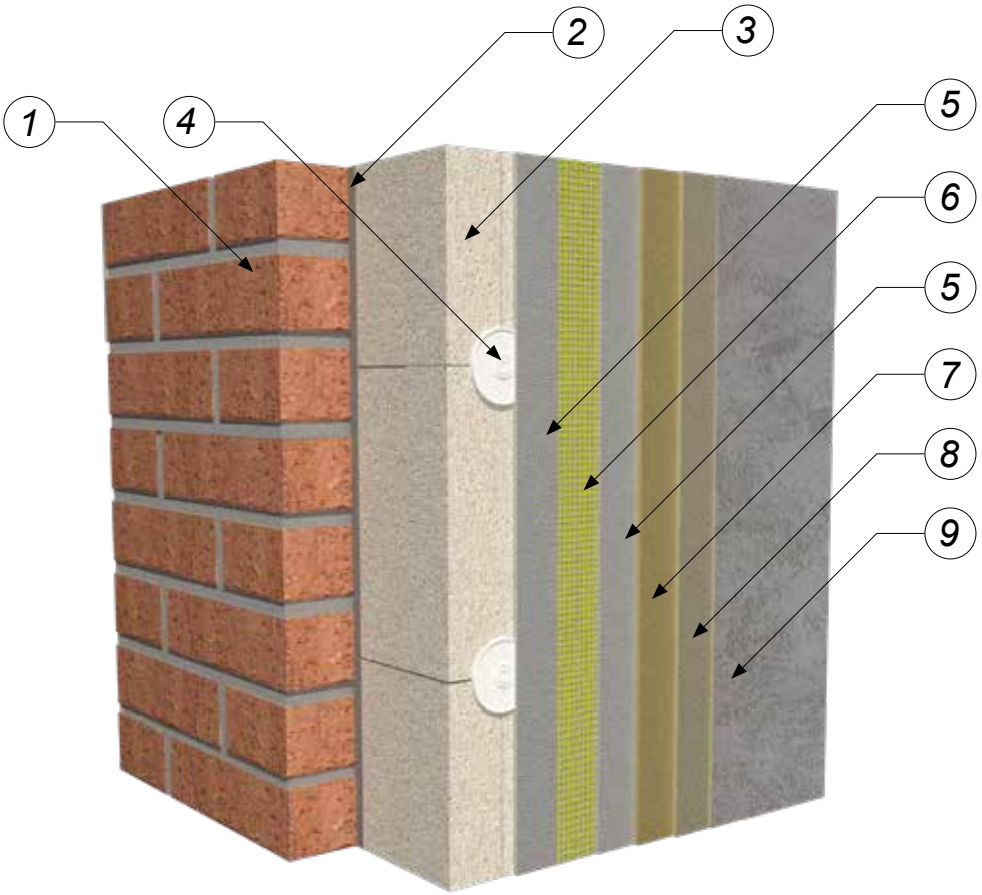
5. **MORTAR FOR REINFORCING LAYER (BASE COAT) APPLICATION, for example:**
   – mineral adhesive mortar: ATLAS STOPTER K-20, ATLAS STOPTER K-50, ATLAS HOTER U, ATLAS GRAWIS DUO, ATLAS GRAWIS DUO WHITE, ATLAS GRAWIS U

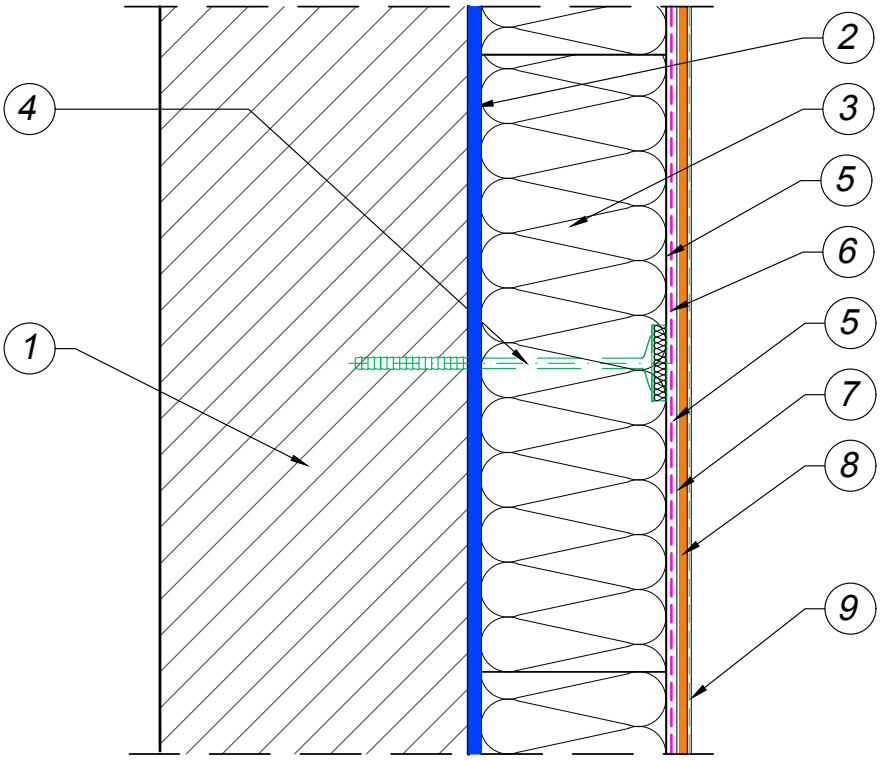
6. **REINFORCING FIBERGLASS MESH**

7. **PRIMING MASS FOR RENDERING, for example:**
   ATLAS SILKON ANX, ATLAS CERPLAST

8. **RENDERING COAT, for example:**
   – silicone: ATLAS SILICONE RENDER, ATLAS GEMINI R, ATLAS GEMINI RS, ATLAS GEMINI RSX, ATLAS SILKON BA
   – silicone-silicate: ATLAS SILICONE-SILICATE RENDER
   – acrylic-silicone: ATLAS SILICONE HYBRID RENDER
   – acrylic: ATLAS ACRYLIC RENDER, ATLAS CERMIT N-100
   – mineral: ATLAS CERMIT WN, ATLAS CERMIT ND
   – mosaic: ATLAS DEKO M

9. **FAÇADE PAINT, for example:**
   – silicone: ATLAS SALTA, ATLAS SALTA N, ATLAS SALTA N PLUS
   – silicate: ATLAS SALTA S
   – acrylic: ATLAS SALTA E
   – impregnant: ATLAS BEJCA


1
4
2
3
5
6
5
7
8
9

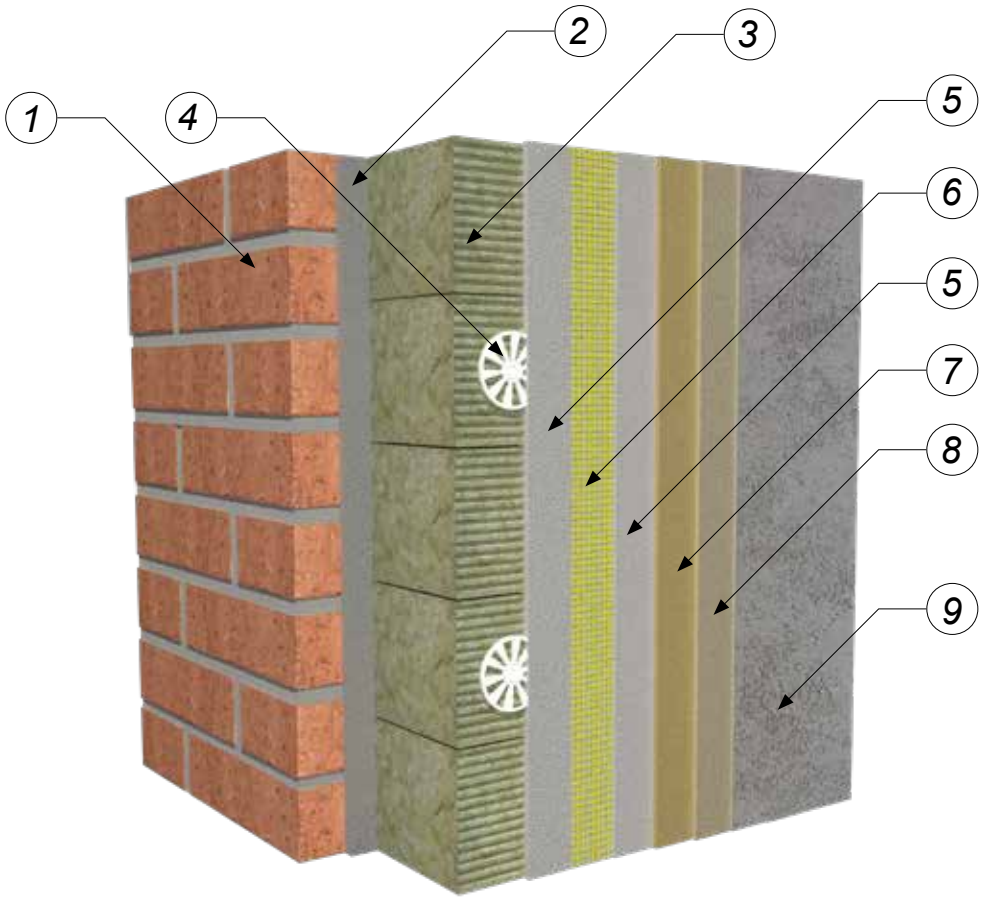

4
1
2
3
5
6
5
7
8
9

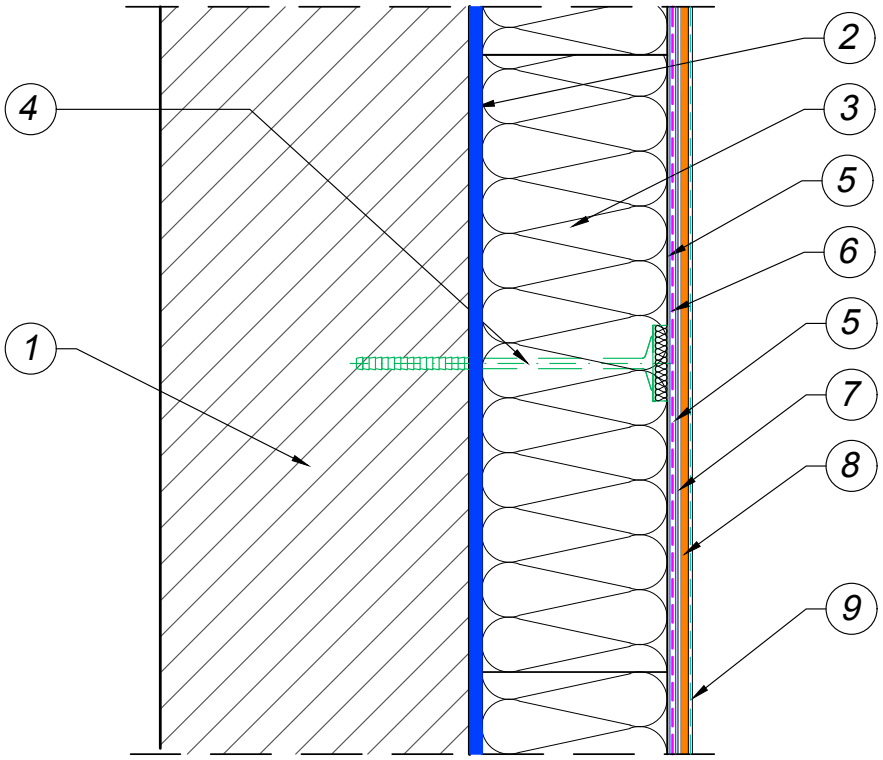
1.2

ATLAS ROKER & ATLAS ETICS MW
- thermal insulation systems with mineral wool boards

ATLAS ROKER & ATLAS ETICS MW systems are intended for use as external thermal insulation of walls made of masonry elements or concrete in order to provide them with appropriate thermal insulation properties. The system can be used on newly erected or existing (modernised) vertical walls. The use of mineral wool as the thermal insulation material in external wall insulation systems makes it possible to meet higher performance requirements, including those relating to fire safety.

1. **WALL**
   concrete or masonry wall made of ceramic, concrete, lime – sand, aerated concrete or stone elements
2. **ADHESIVE FOR THERMAL INSULATION BOARDS FIXING, for example:**
   - mineral adhesive mortar: ATLAS STOPTER K-50, ATLAS ROKER U, ATLAS ROKER W, ATLAS GRAWIS U, ATLAS GRAWIS DUO, ATLAS GRAWIS DUO WHITE
3. **THERMAL INSULATION**
   boards of façade mineral wool (thickness as per thermal calculations
4. **MECHANICAL FIXING**
   mechanical fixings, as defined in the thermal insulation project, holding appropriate ETA
5. **MORTAR FOR REINFORCING LAYER (BASE COAT) APPLICATION, for example:**
   - mineral adhesive mortar: ATLAS STOPTER K-50, ATLAS ROKER U, ATLAS GRAWIS DUO, ATLAS GRAWIS DUO WHITE
6. **REINFORCING FIBERGLASS MESH**
7. **PRIMING MASS FOR RENDERS, for example:**
   - ATLAS SILKON ANX
   - ATLAS CERPLAST
8. **RENDERING COAT, for example:**
   - silicone: ATLAS SILICONE RENDER, ATLAS GEMINI R, ATLAS GEMINI RS, ATLAS GEMINI RSX, ATLAS SILKON BA
   - silicone-silicate: ATLAS SILICONE-SILICATE RENDER
   - acrylic: ATLAS CERMIT N-100
   - mineral: ATLAS CERMIT WN, ATLAS CERMIT ND
   - mosaic: ATLAS DEKO M
9. **FAÇADE PAINT, for example:**
   - silicone: ATLAS SALTA, ATLAS SALTA N, ATLAS SALTA N PLUS
   - silicate: ATLAS SALTA S
   - impregnant: ATLAS BEJCA


1
2
3
4
5
6
5
7
8
9

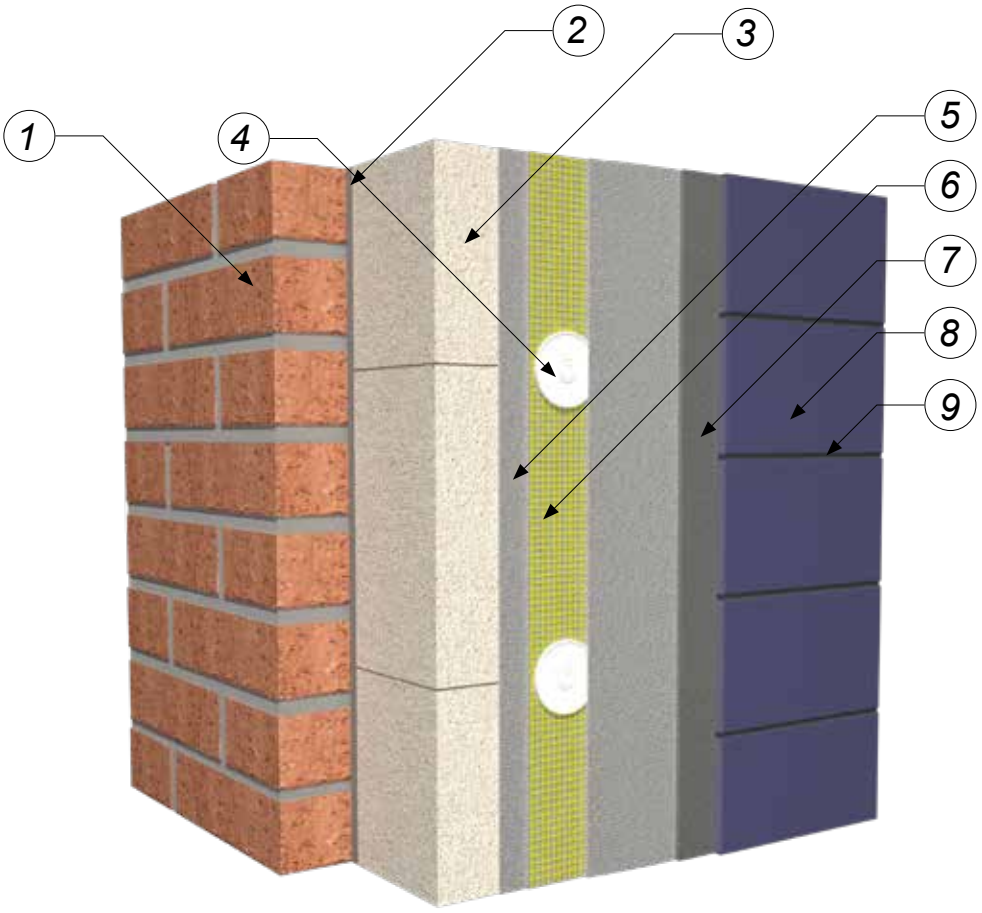

2
4
3
5
6
1
5
7
8
9

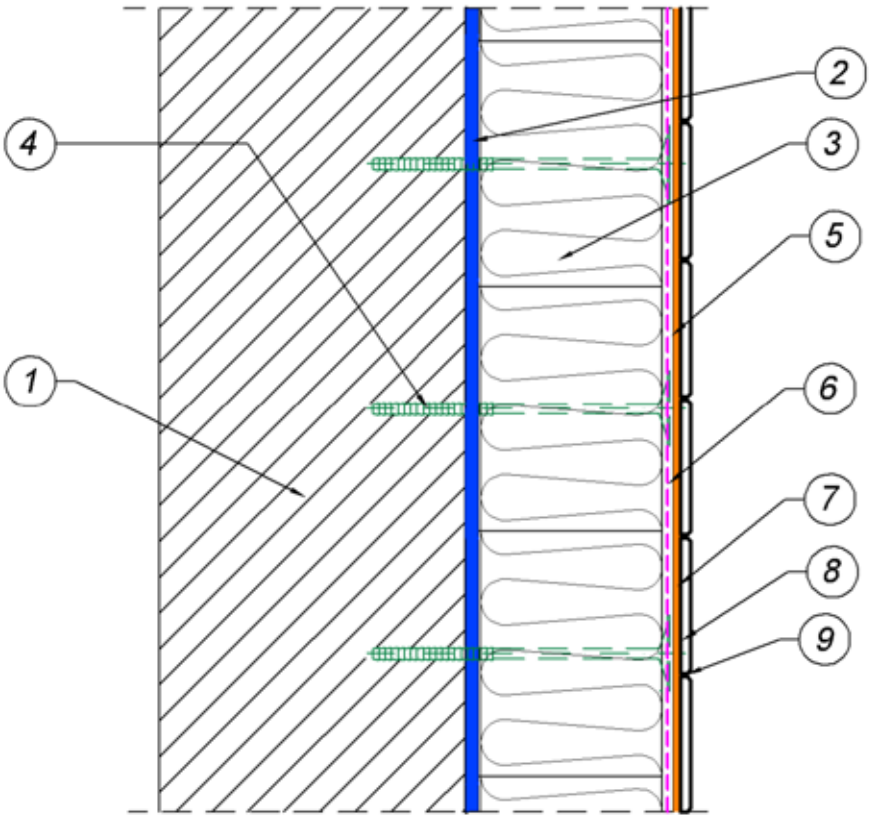
1.3

ATLAS CERAMIK
system with ceramic cladding

ATLAS CERAMIK system is intended for use as external thermal insulation of walls made of masonry elements or concrete in order to provide them with appropriate thermal insulation properties, when the design involves the top layer made of tiles. The system can be used on newly erected or existing (modernised) vertical walls. The appropriate National Technical Assessment ITB-KOT-2018/0385 issue 4 was issued for the system.

1. **WALL**
   concrete or masonry wall made of ceramic, concrete, lime-sand, aerated concrete or stone elements
2. **ADHESIVE FOR THERMAL INSULATION BOARDS FIXING, FOR EXAMPLE:**
   – mineral adhesive mortar: ATLAS STOPTER K-20, ATLAS HOTER U, ATLAS HOTER S, ATLAS GRAWIS S
3. **THERMAL INSULATION**
   EPS boards (thickness as per thermal calculations)
4. **MECHANICAL FIXING:**
   mechanical fixings, as defined in the thermal insulation project, holding appropriate ETA
5. **MORTAR FOR REINFORCING LAYER (BASE COAT) APPLICATION, for example:**
   – mineral adhesive mortar: ATLAS STOPTER K-20, ATLAS HOTER U
6. **REINFORCING FIBERGLASS MESH**
7. **ADHESIVE FOR TILES OF C2T CLASS, for example:**
   – ATLAS ELASTYK
   – ATLAS GEOFLEX
   – ATLAS GEOFLEX WHITE
   – ATLAS PLUS
   – ATLAS PLUS WHITE
   – ATLAS ULTRA GEOFLEX
8. **CERAMIC TILES**
9. **GROUTING MORTAR, for example:**
   – ATLAS CERAMIC GROUT
   – ATLAS ELASTIC GROUT


1
2
3
4
5
6
7
8
9


1
2
3
4
5
6
7
8
9

1.4

ATLAS ROKER G
system for insulating ceilings above unheated spaces

ATLAS ROKER G is a system in which the insulation layer is made of standard or lamella mineral wool boards. It is used for insulating ceilings above unheated rooms (underground garages, basements, under-building passages) and is available in 4 variants:

I – insulation layer protected with a reinforced layer and finished with a paint coat;

II – insulation layer protected with a reinforced layer, covered with thin-layer plaster and additionally finished with a paint coat;

III – insulation layer covered directly with thin-layer plaster;

IV – insulation layer made of lamella mineral wool boards covered only with a paint coat.

The National Technical Assessment has been issued for the ATLAS ROKER G system: ITB-KOT-2018/0583 (issue 2)

1. CEILING
made of concrete

2. ADHESIVE FOR THERMAL INSULATION BOARDS FIXING, for example:
– mineral adhesive mortar: ATLAS ROKER U
ATLAS ROKER W

3. THERMAL INSULATION optional:
– boards of façade mineral wool (thickness as per thermal calculations)
– boards of lamella mineral wool (thickness as per thermal calculations)

4. MECHANICAL FIXING
mechanical fixings, as defined in the thermal insulation project, holding appropriate ETA

5. MORTAR FOR REINFORCING LAYER (BASE COAT) APPLICATION, for example:
– mineral adhesive mortar: ATLAS ROKER U

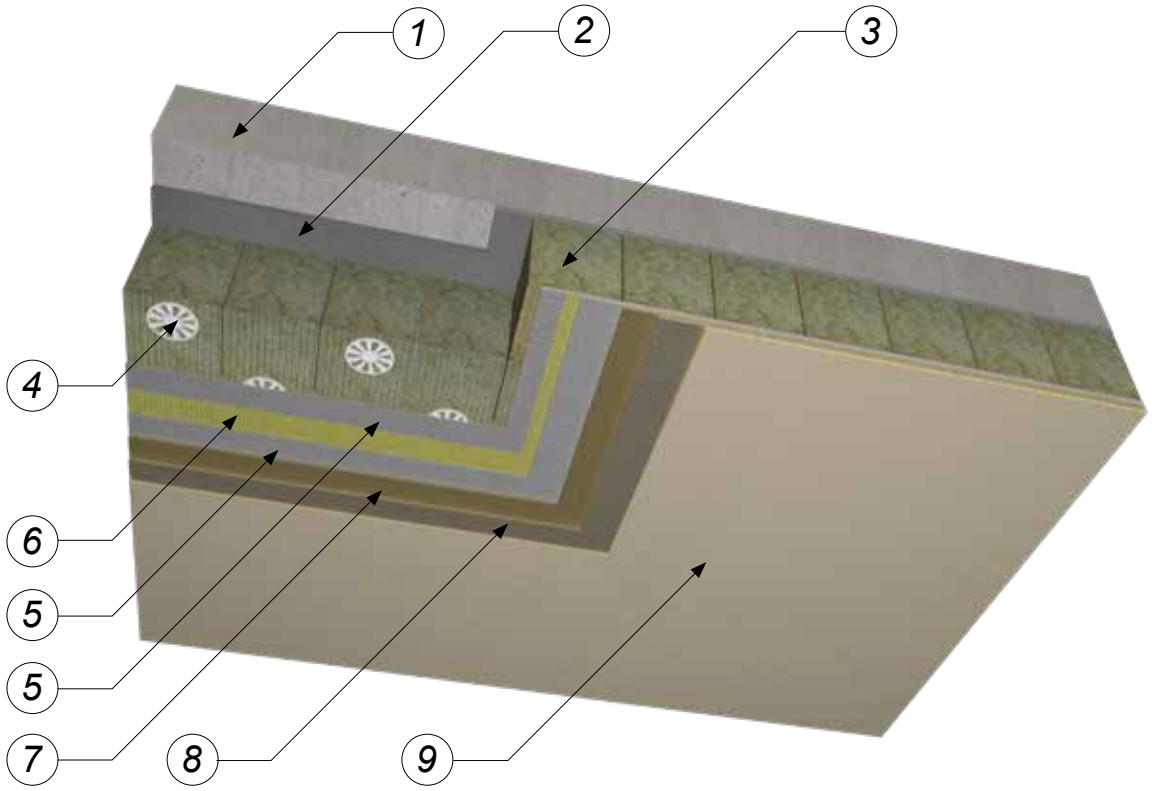
6. REINFORCING FIBERGLASS MESH

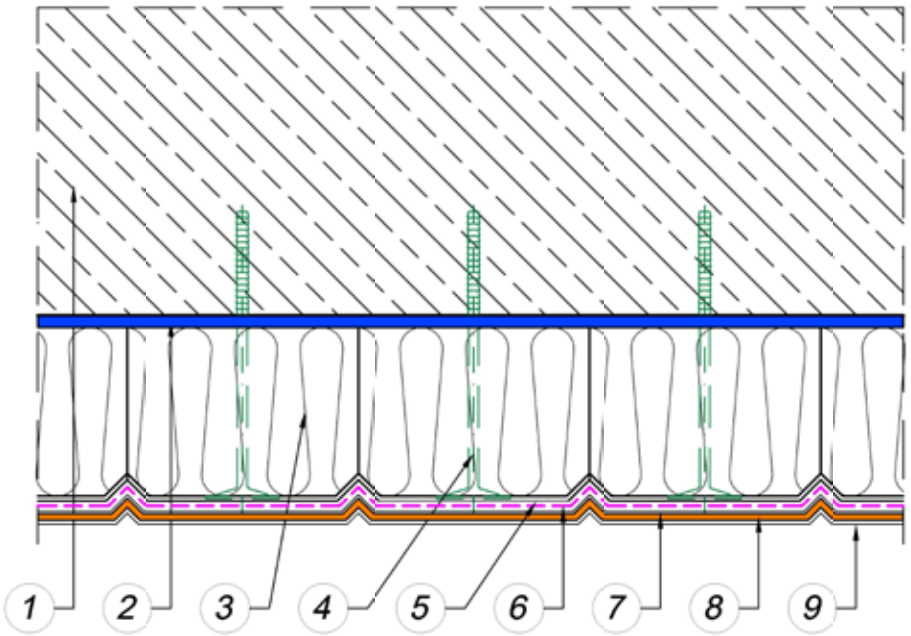
7. PRIMING MASS FOR RENDERS, for example:
– ATLAS SILKON ANX
– ATLAS CERPLAST:

8. RENDERING COAT, for example:
– silicone: ATLAS SILICONE RENDER
ATLAS SILKON BA
– silicone-silicate: ATLAS SILICONE-SILICATE RENDER

9. FAÇADE PAINT, for example:
– silicone: ATLAS SALTA
ATLAS SALTA N
– silicate: ATLAS SALTA S

The presented example shows the version II of the ATLAS ROKER G system.


1
2
3
4
6
5
5
7
8
9


1
2
3
4
5
6
7
8
9

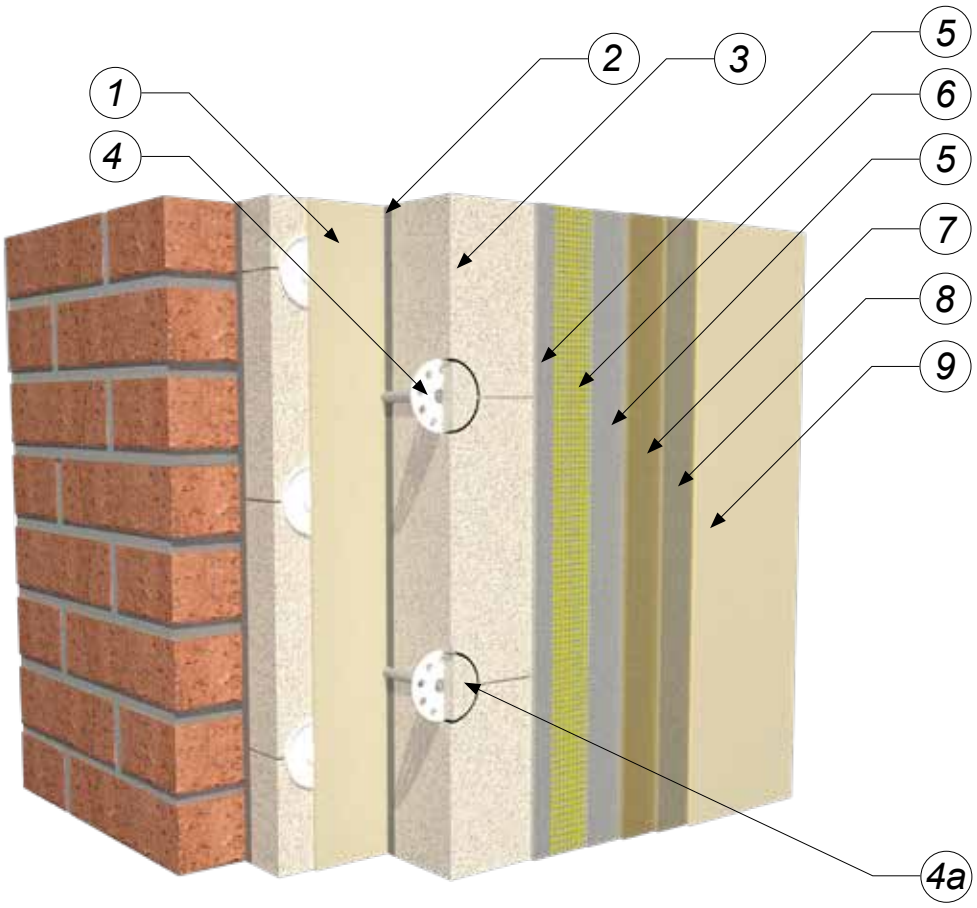
1.5

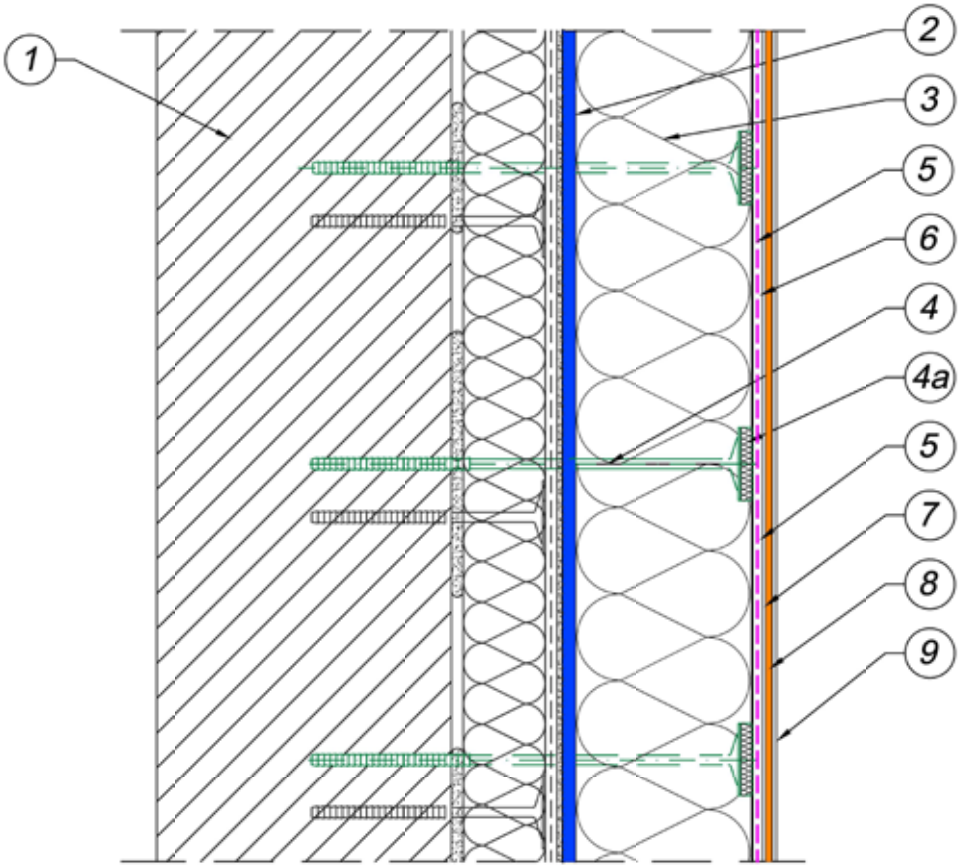
ATLAS RENOTER
system for refurbishment of existing thermal insulation

ATLAS RENOTER system is intended for improvement of thermal characteristic of walls previously insulated with polystyrene. It can be used on buildings of any type. ATLAS RENOTER can be installed directly upon the existing thermal insulation system.

The National Technical Approval No. ITB-KOT-2021/2020 was issued for the ATLAS RENOTER system.

1. **EXISTING WALL WITH ORIGINAL THERMAL INSULATION**
2. **ADHESIVE FOR THERMAL INSULATION BOARDS FIXING, for example:**
   - mineral adhesive mortar: ATLAS STOPTER K-20, ATLAS STOPTER K-50, ATLAS HOTER U, ATLAS HOTER S
3. **THERMAL INSULATION**
   EPS boards (thickness as per thermal calculations)
4. **MECHANICAL FIXING**
   mechanical fixings, as defined in the thermal insulation project, holding appropriate ETA (4a – with an EPS cap)
5. **MORTAR FOR REINFORCING LAYER (BASE COAT) APPLICATION, for example:**
   - mineral adhesive mortar: ATLAS STOPTER K-20, ATLAS STOPTER K-50, ATLAS HOTER U
6. **REINFORCING FIBERGLASS MESH**
7. **PRIMING MASS FOR RENDERS, for example:**
   - ATLAS SILKON ANX
   - ATLAS CERPLAST
8. **RENDERING COAT, for example:**
   - silicone: ATLAS SILICONE RENDER
   - silicone-silicate: ATLAS SILICONE-SILICATE RENDER
   - acrylic: ATLAS ACRYLIC RENDER
   - acrylic-silicone: ATLAS SILICONE HYBRID RENDER
9. **FAÇADE PAINT, for example:**
   - silicone: ATLAS SALTA, ATLAS SALTA N
   - silicate: ATLAS SALTA S
   - acrylic: ATLAS SALTA E


1
2
3
4
5
6
5
7
8
9
4a


1
2
3
5
6
4
4a
5
7
8
9



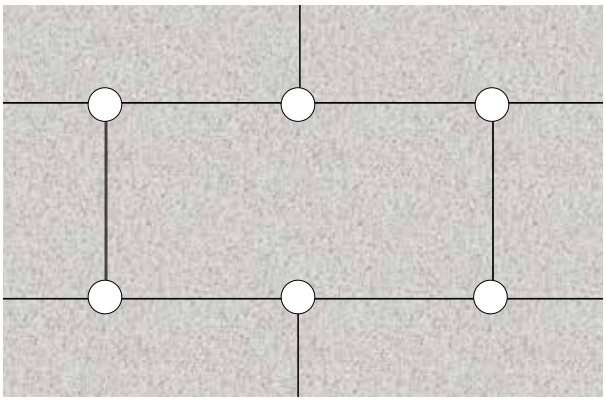
thermal insulation – boards and mesh arrangement

2

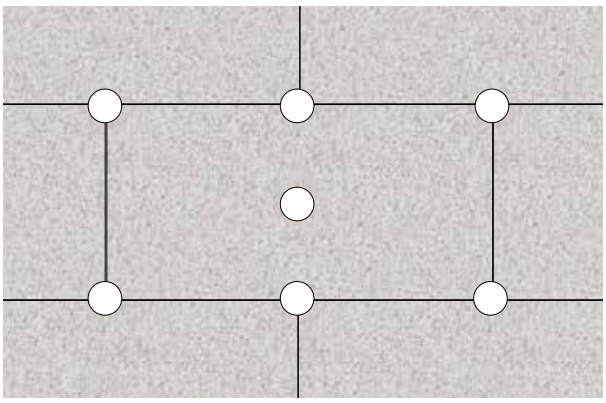
2.1

boards and mechanical fixings arrangement for EPS and XPS boards

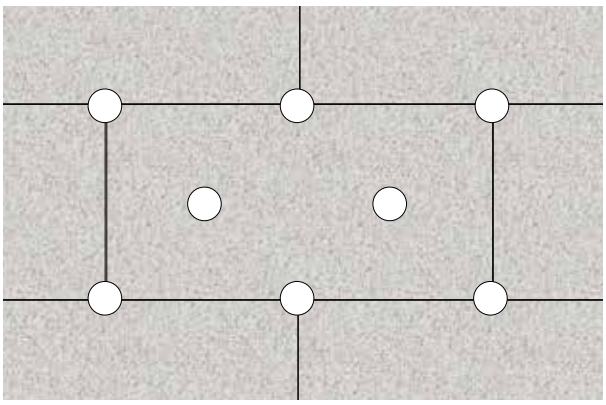
Exemplary arrangement of mechanical fixings



Number of mechanical fixings 4 pcs/m^2



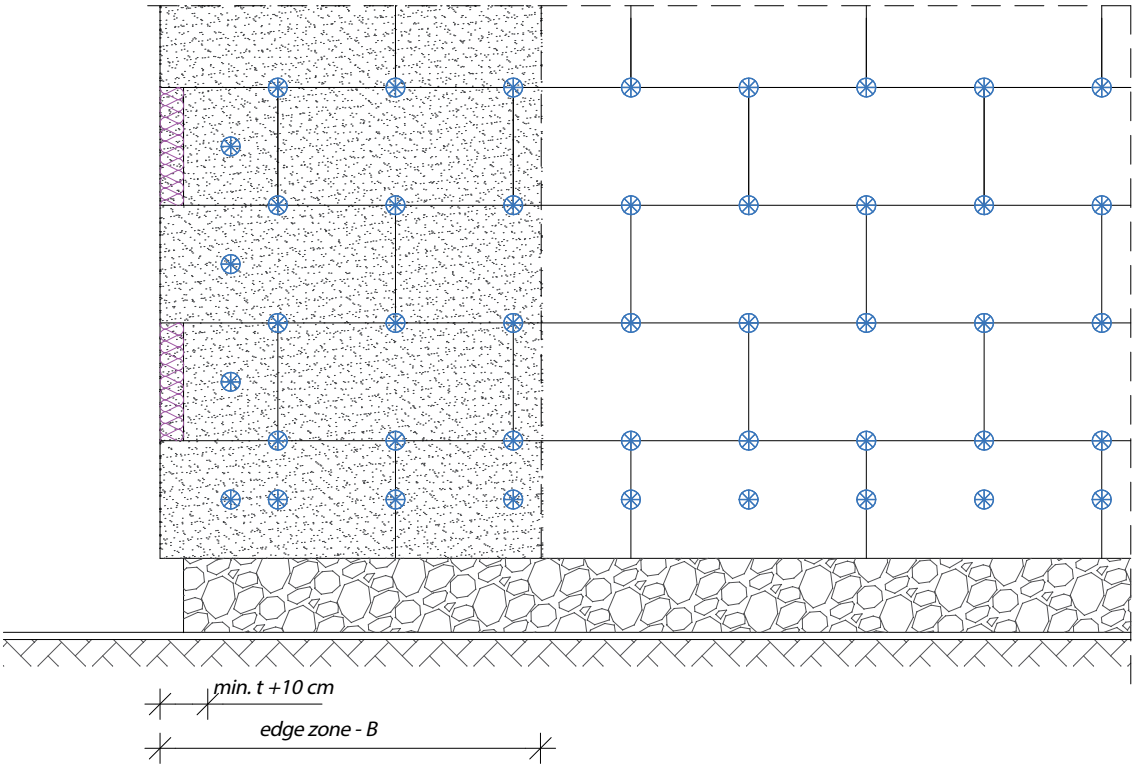
Number of mechanical fixings 6 pcs/m^2



Number of mechanical fixings 8 pcs/m^2

For 50 x 100 cm boards.

An example of mechanical connector arangement showing local density in the edge zone of the building:

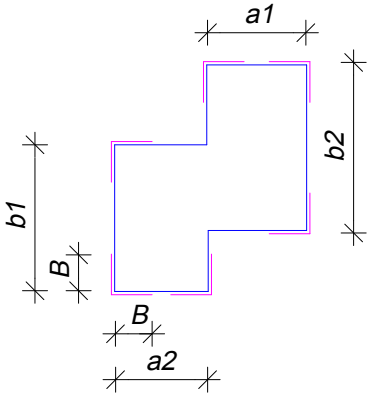


Determination of the edge zone width

The width of the edge zone is 1/8 of the length of the shortest convex exterior wall of a given building, but not less than 1.0 m and not more than 2.0 m, i.e.
B = 1/8 x the shortest from [a1, a2, b1, b2] and
1.0 < B < 2.0 m.

t – EPS or XPS board thickness

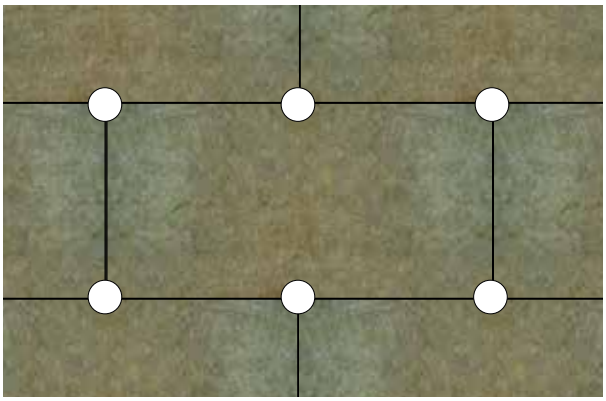
Note: The number of mechanical fixings depends on the wind load and in each case should result from the thermal insulation design.



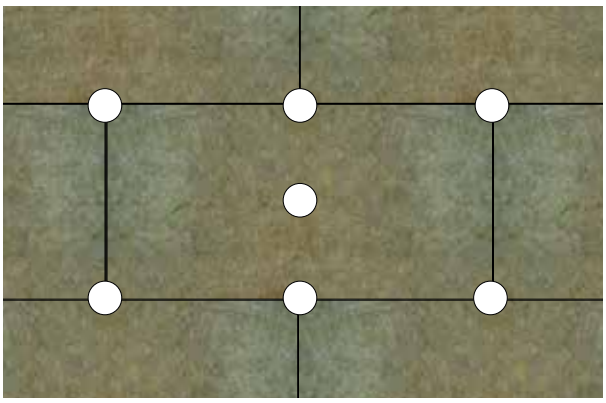
2.2

boards and mechanical fixings arrangement for façade mineral wool boards

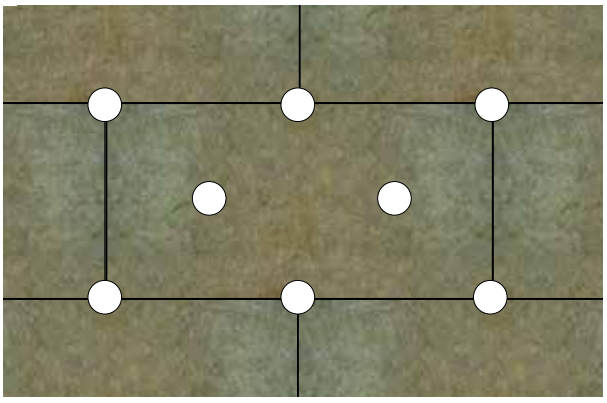
Exemplary arrangement of mechanical fixings



Number of mechanical fixings 4 pcs/m^2



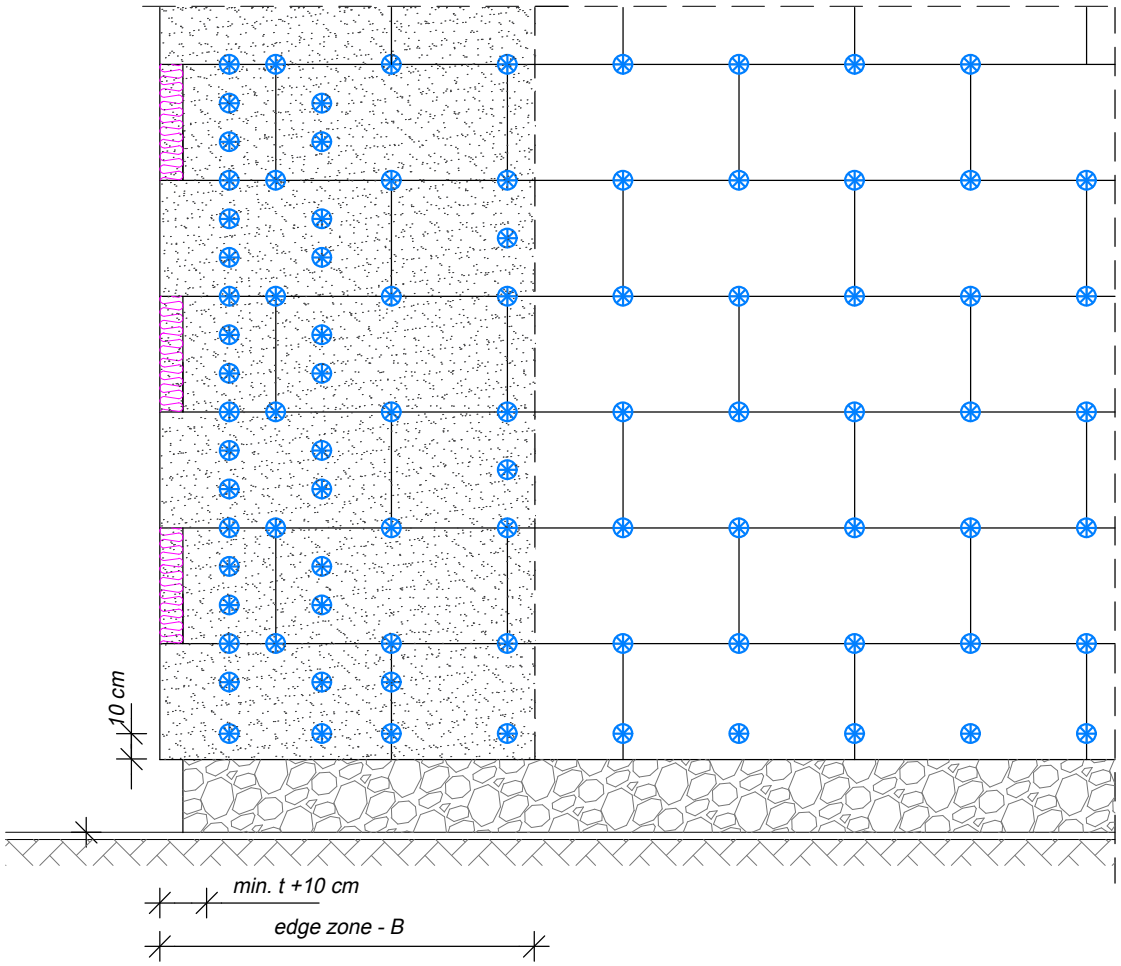
Number of mechanical fixings 6 pcs/m^2



Number of mechanical fixings 8 pcs/m^2

For 50 x 100 cm boards.

An example of mechanical connector arangement showing local density in the edge zone of the building:

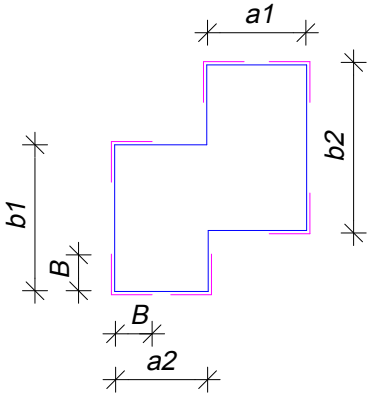


Determination of the edge zone width

The width of the edge zone is 1/8 of the length of the shortest convex exterior wall of a given building, but not less than 1.0 m and not more than 2.0 m, i.e. B = 1/8 x the shortest from [a1, a2, b1, b2] and 1.0 < B < 2.0 m.

t – mineral wool board thickness

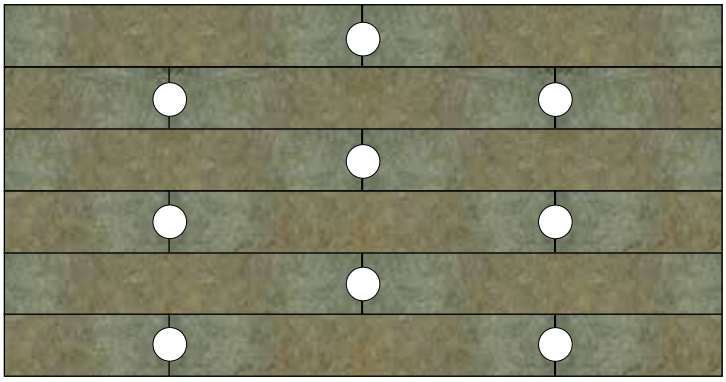
Note: The number of mechanical fixings depends on the wind load and in each case should result from the thermal insulation design.



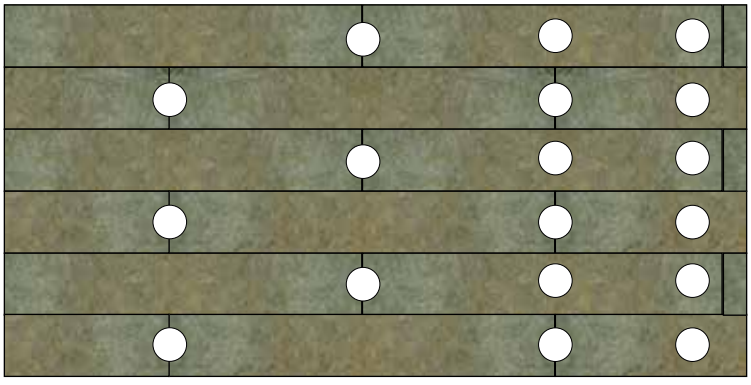
2.3

boards and mechanical fixings arrangement for lamella mineral wool boards

Exemplary arrangement of mechanical fixings



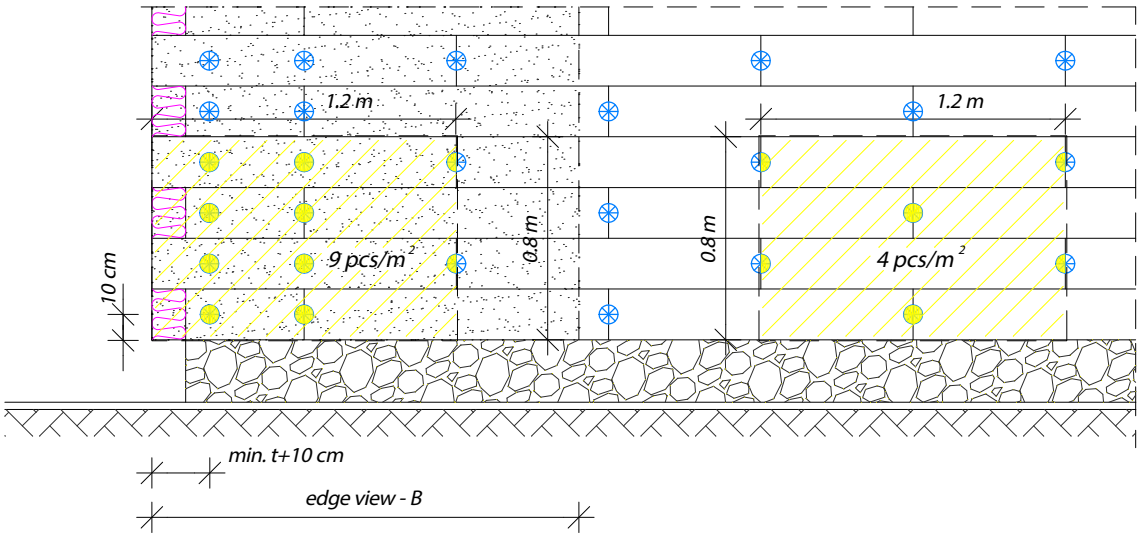
Number of mechanical fixings 4 pcs/m^2



Number of mechanical fixings 9 pcs/m^2

For typical lamella boards 100 x 20 cm boards.

An example of mechanical connector arangement showing local density in the edge zone of the building:

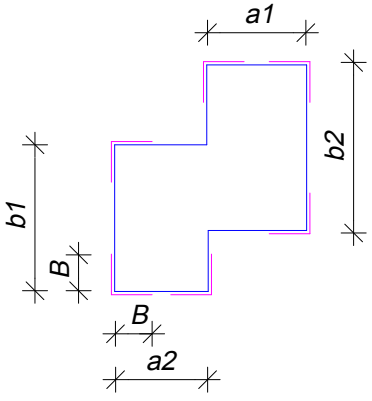


Determination of the edge zone width

The width of the edge zone is 1/8 of the length of the shortest convex exterior wall of a given building, but not less than 1.0 m and not more than 2.0 m, i.e. B = 1/8 x the shortest from [a1, a2, b1, b2] and 1.0 < B < 2.0 m.

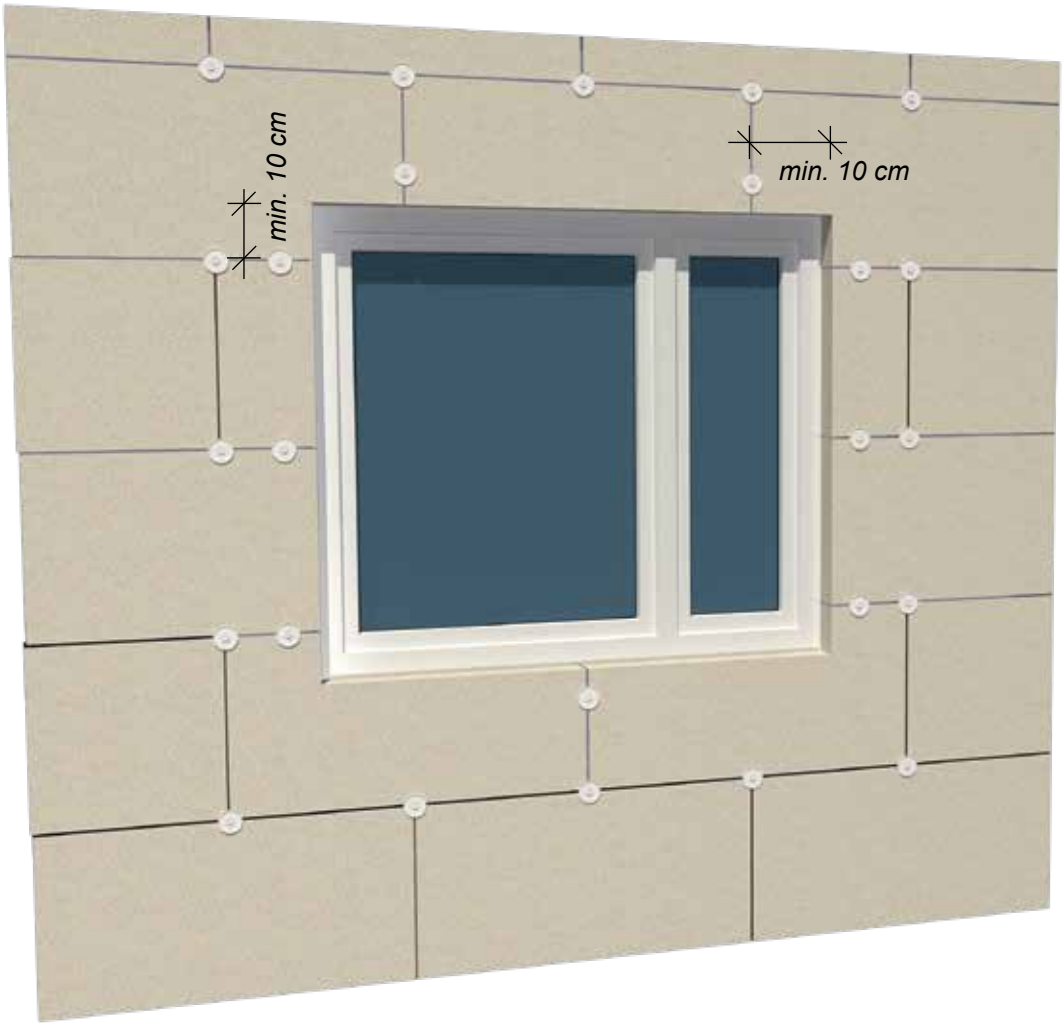
t – mineral wool board thickness

Note: The number of mechanical fixings depends on the wind load and in each case should result from the thermal insulation design.

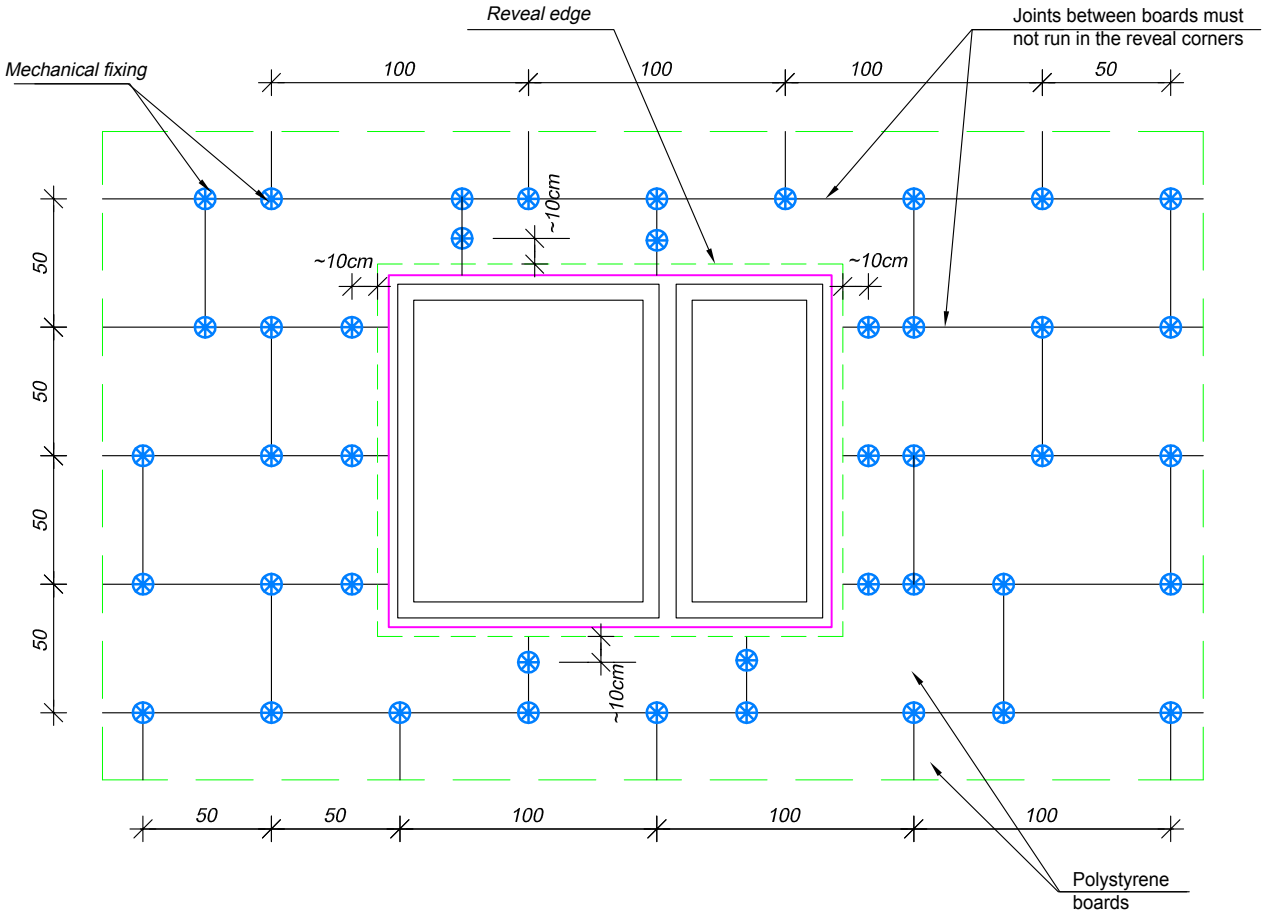


2.4

arrangement of boards and mechanical fixings around reveals

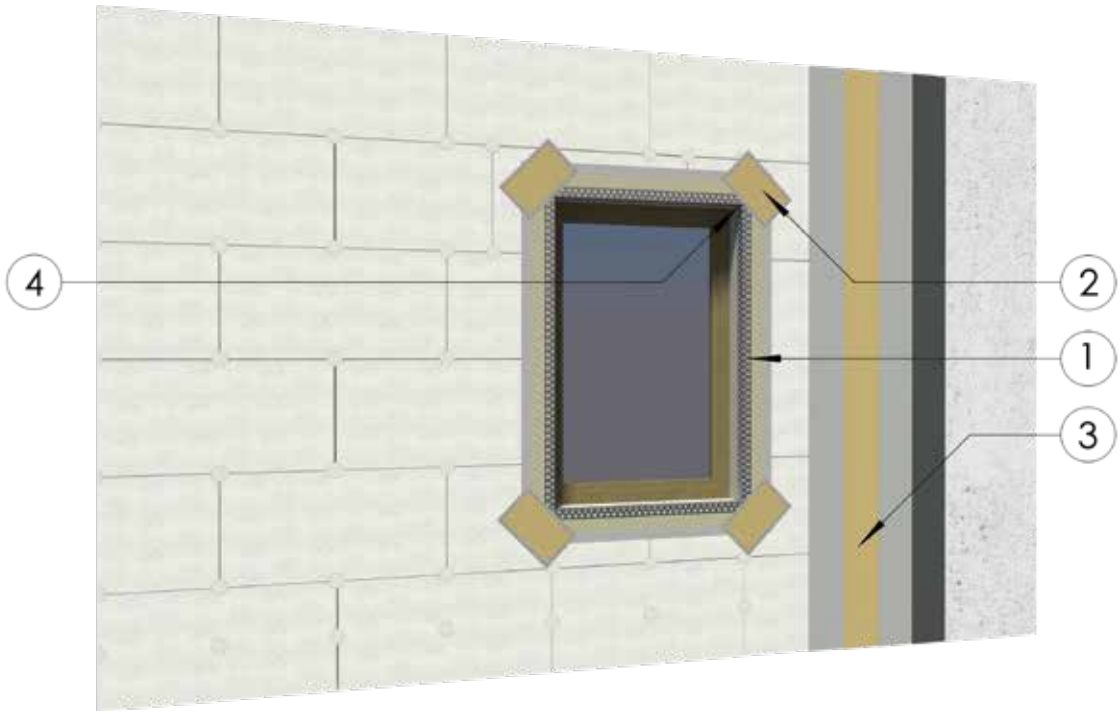


Recommended arrangement of additional mechanical fixings around window and door reveals



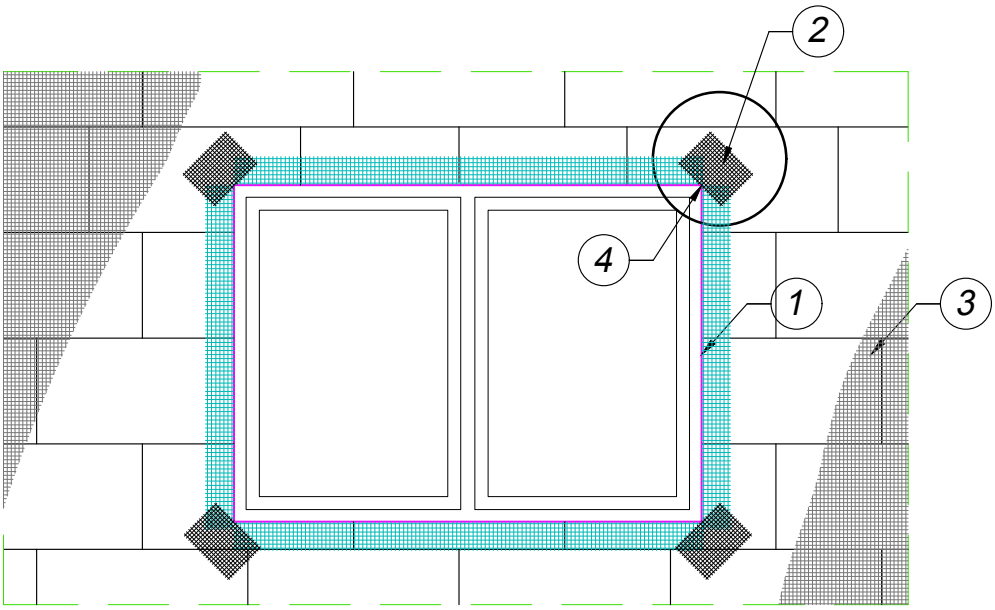
2.5

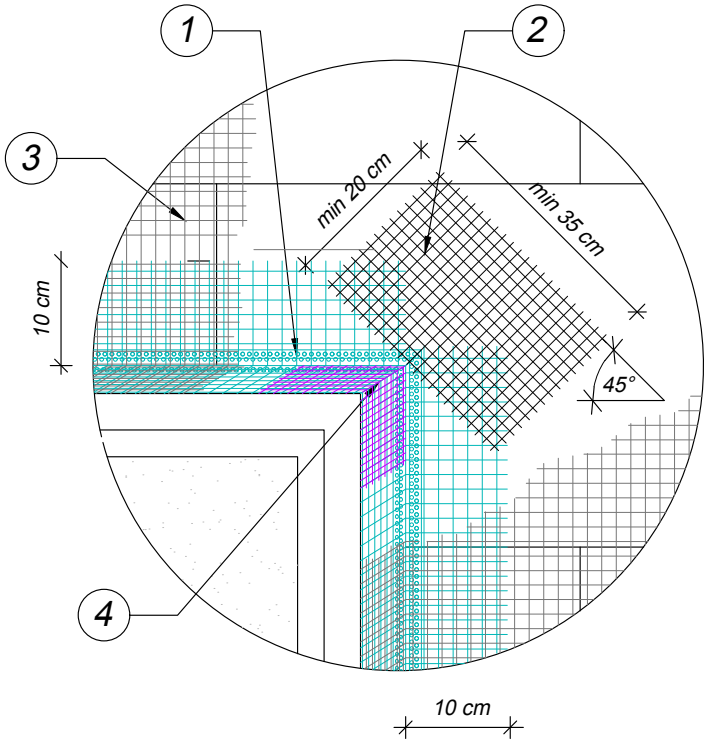
arrangement of reinforcing mesh around the reveals



ORDER OF MESH APPLICATION AT THE REVEALS:

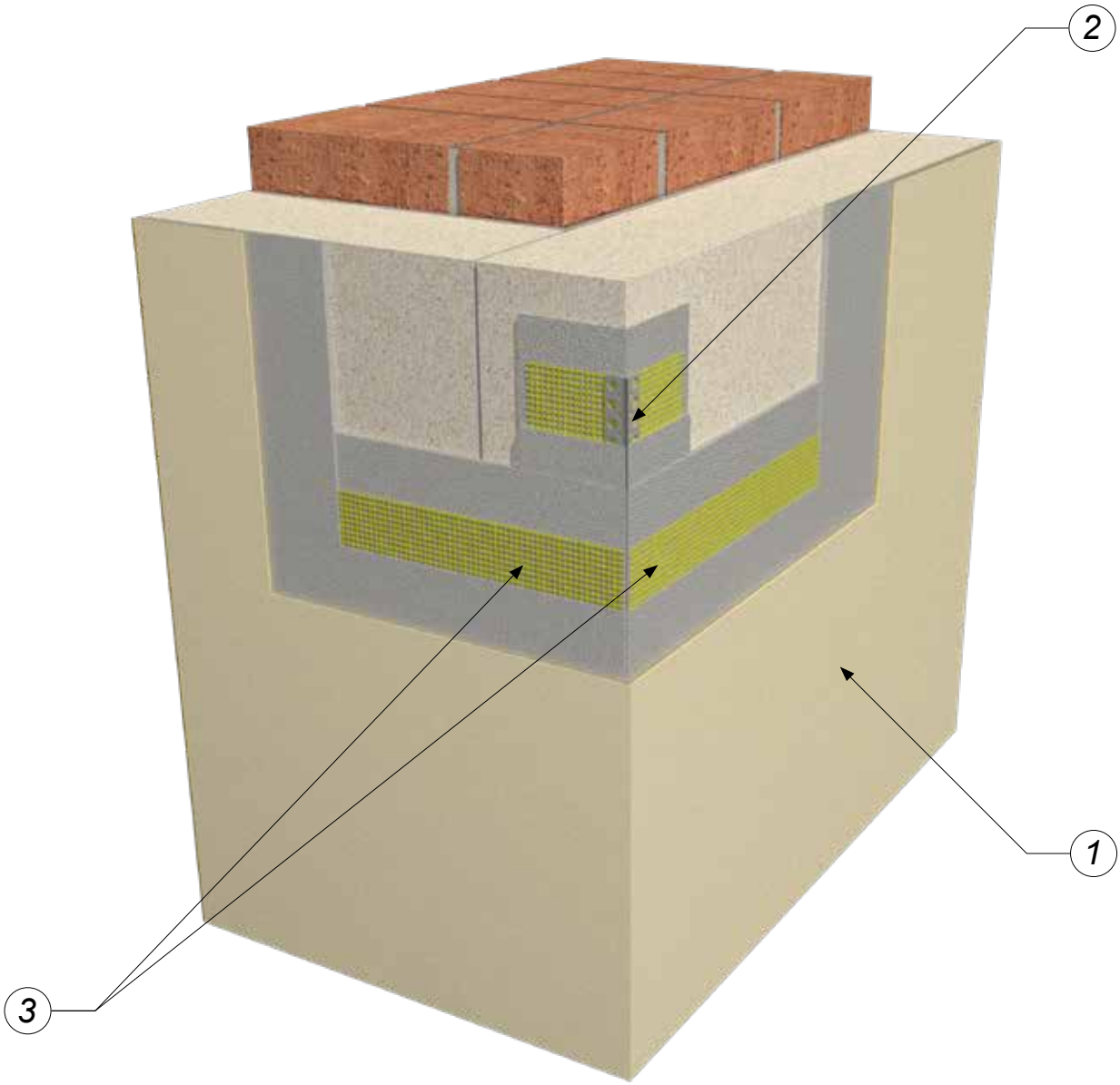
1. **APPLICATION OF CORNER PROFILES WITH REINFORCING MESH EMBEDDED**
2. **APPLICATION OF MESH STRIPS WHICH DIAGONALLY REINFORCE THE CORNERS OF REVEALS**
3. **APPLICATION OF FULL-SIZE REINFORCING MESH**
4. **APPLICATION OF MESH REINFORCING THE CONCAVE CORNERS OF REVEALS**


2
4
1
3

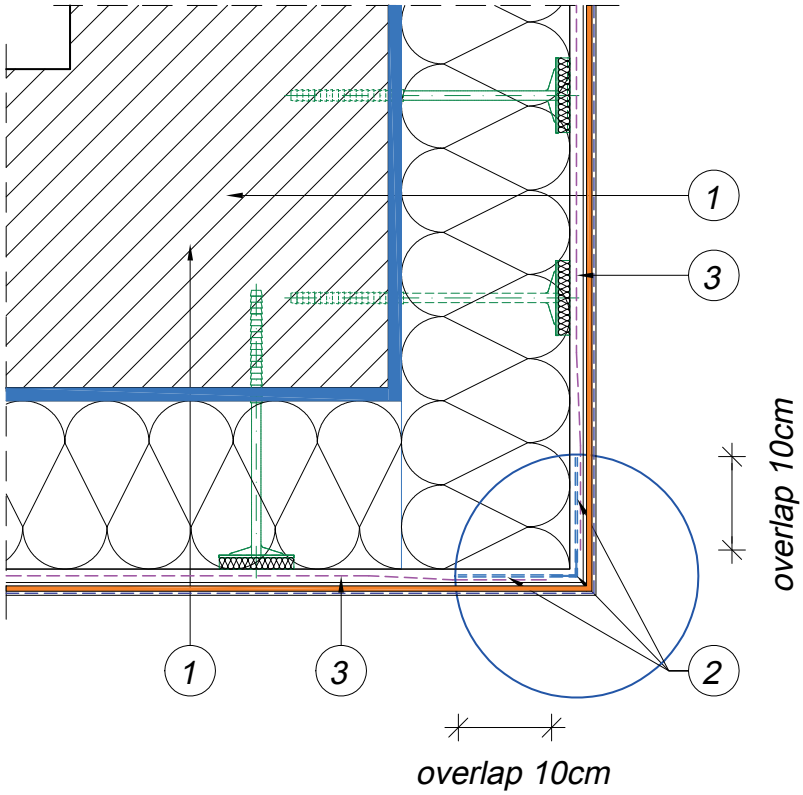

1
2
3
min 20 cm
min 35 cm
10 cm
45°
4
10 cm

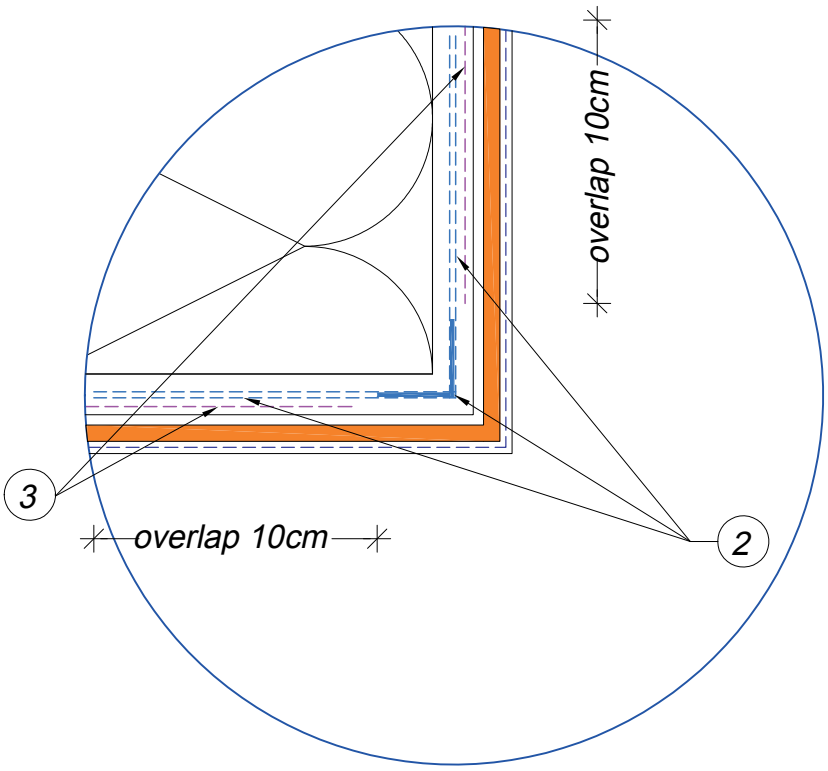
2.6

arrangement of reinforcing mesh at the outer corner



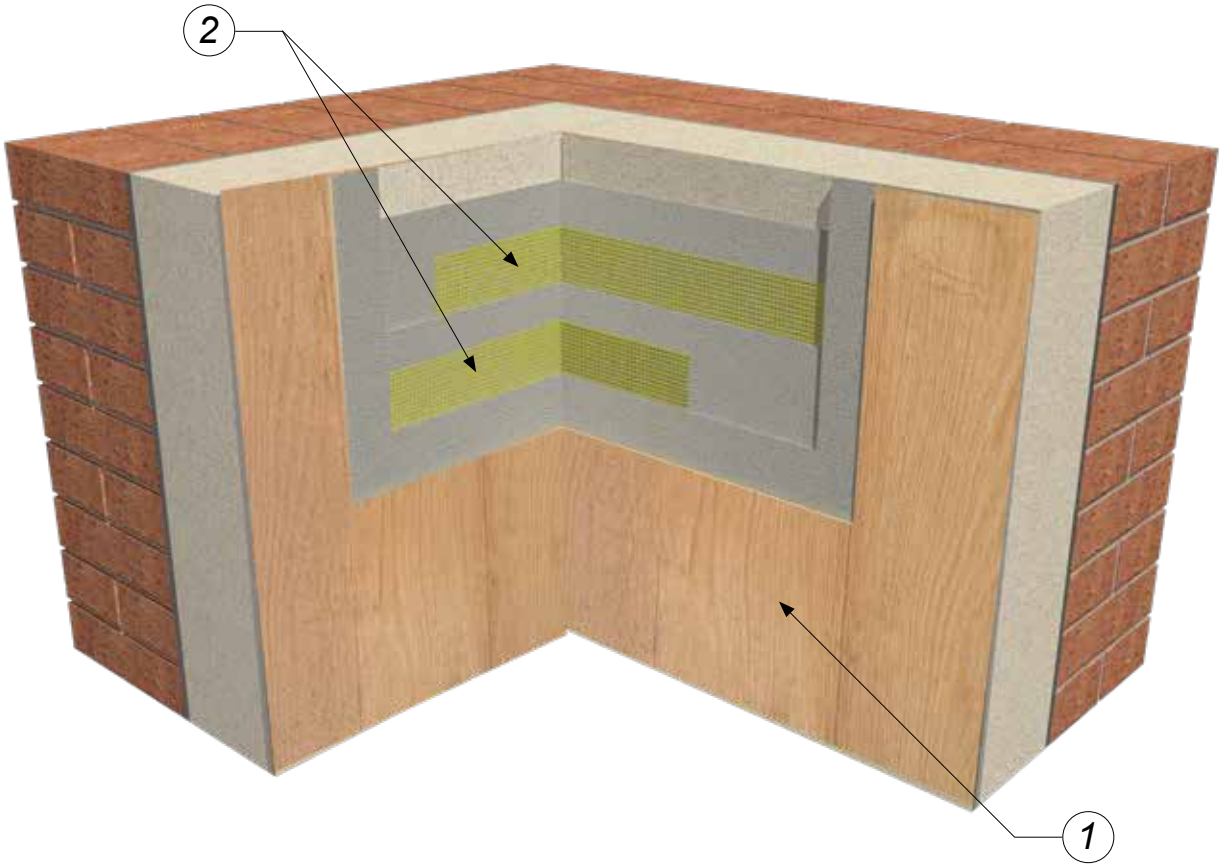
1. **WALL INSULATED WITH ANY ATLAS SYSTEM**
   - adhesive for thermal INSULATION BOARDS
   - polystyrene boards EPS
   - mechanical fixings
   - mortar for reinforcing layer with reinforcing mesh embedded
   - priming mass for rendering coat
   - ATLAS render
2. **CORNER BEAD WITH MESH**
3. **REINFORCING FIBERGLASS MESH**


1
3
overlap 10cm
1
3
2
overlap 10cm


overlap 10cm
3
overlap 10cm
2

2.7

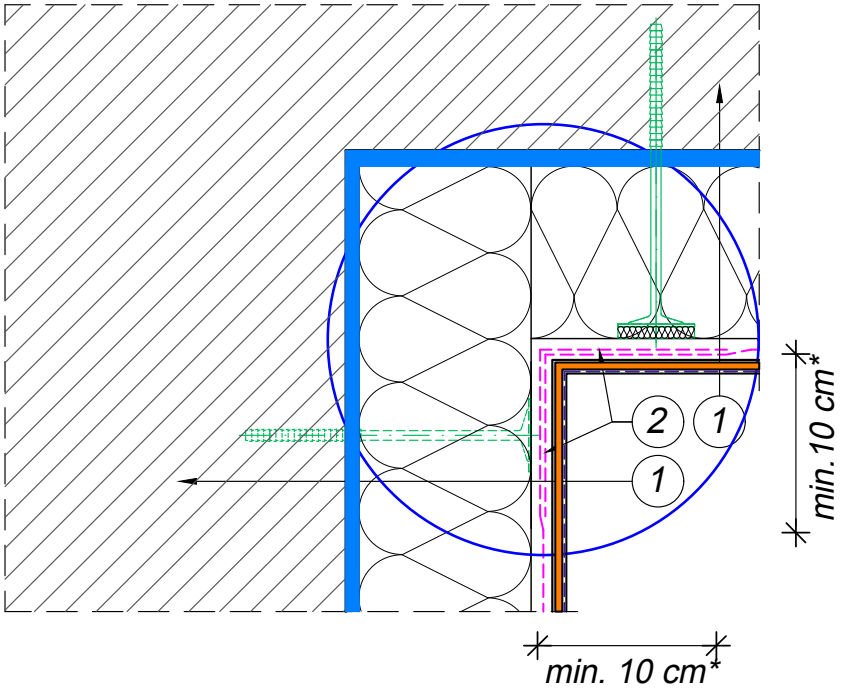
arrangement of reinforcing mesh at the inner corner

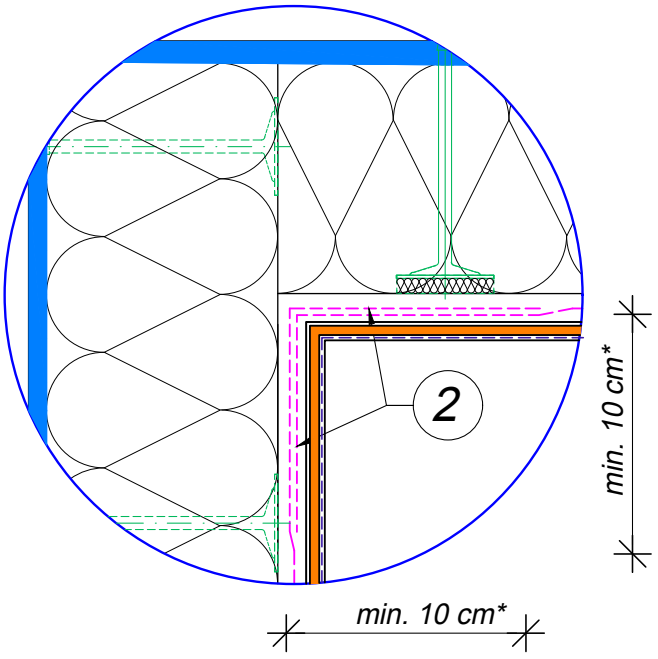


1. WALL INSULATED WITH ANY ATLAS SYSTEM
- adhesive for thermal INSULATION BOARDS
- polystyrene boards EPS
- mechanical fixings
- mortar for reinforcing layer with reinforcing mesh embedded
- priming mass for rendering coat
- ATLAS CERMIT WN mineral render
- ATLAS BEJCA impregnant

e.g. ATLAS timber effect

2. REINFORCING FIBERGLASS MESH





* reinforcing mesh overlap

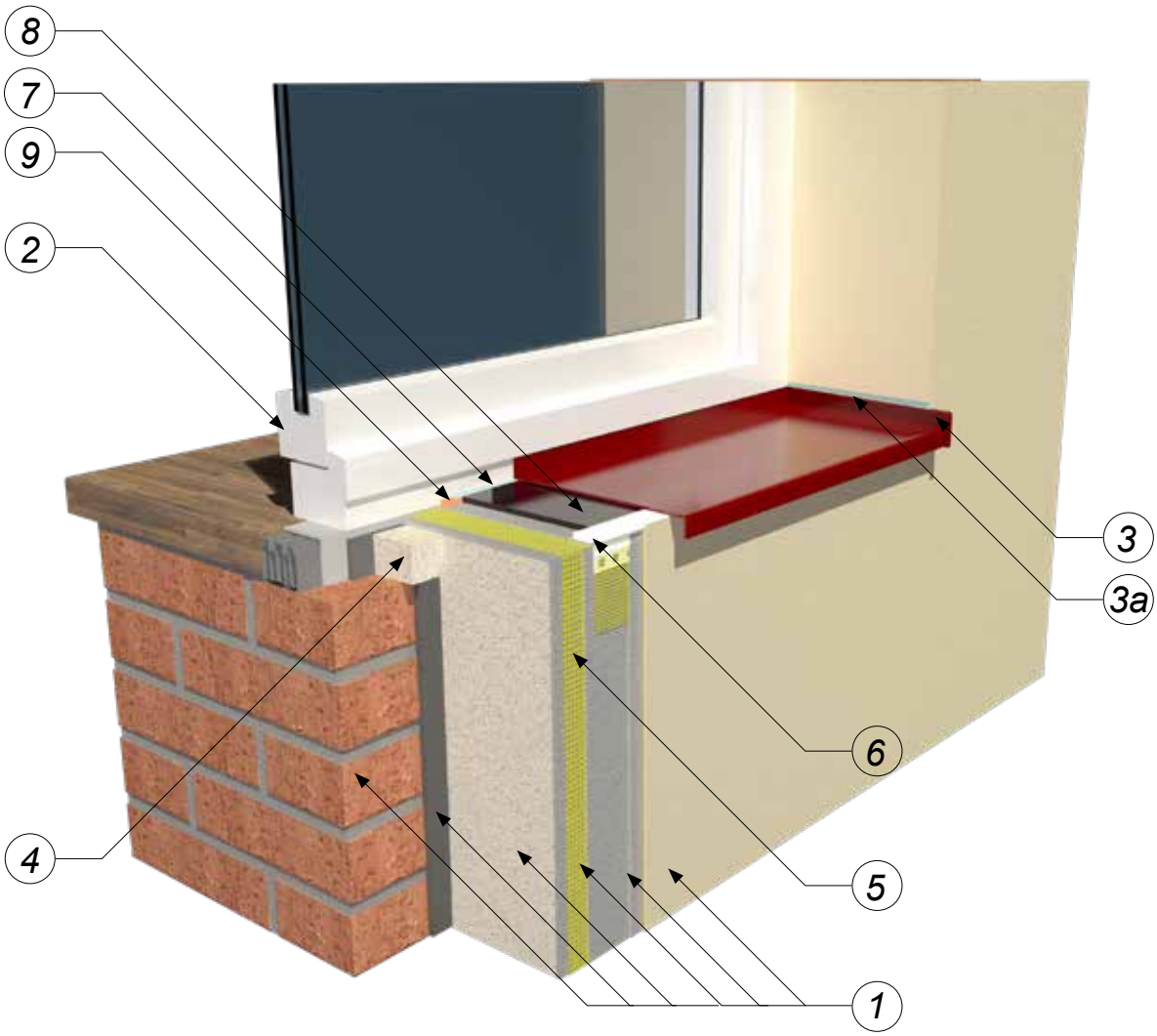


thermal insulation around reveals

3

3.1

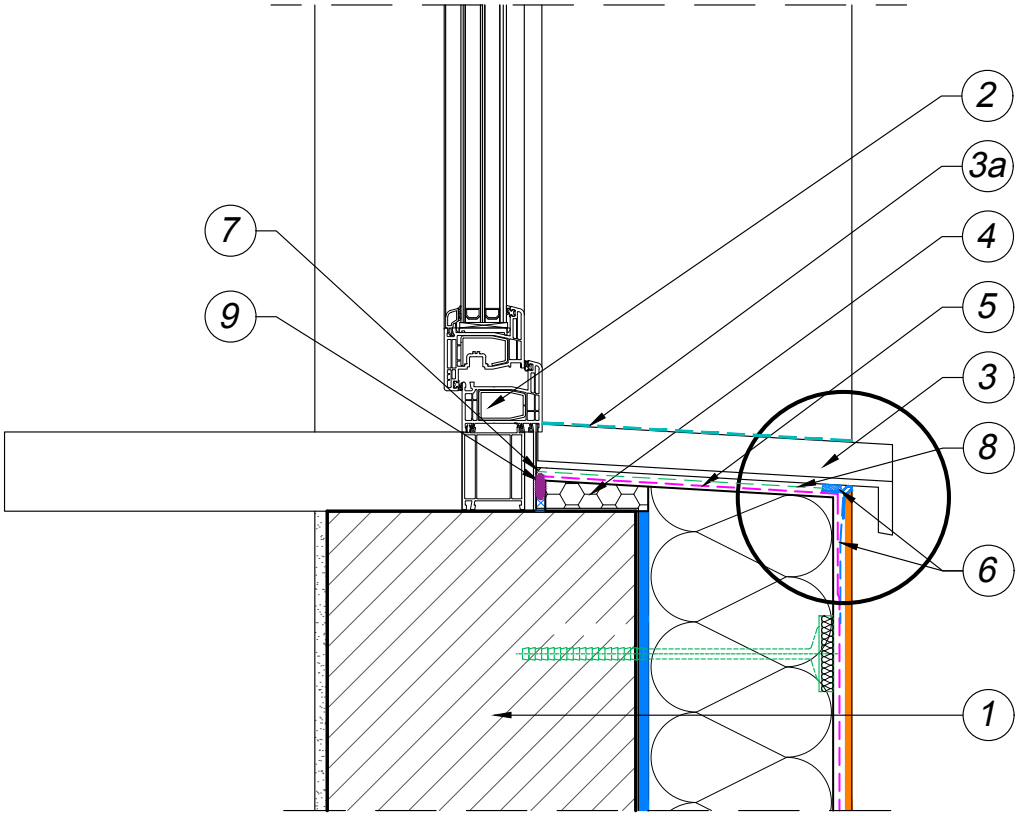
thermal insulation of the wall beneath the reveal
with inset window frame
using sill bead

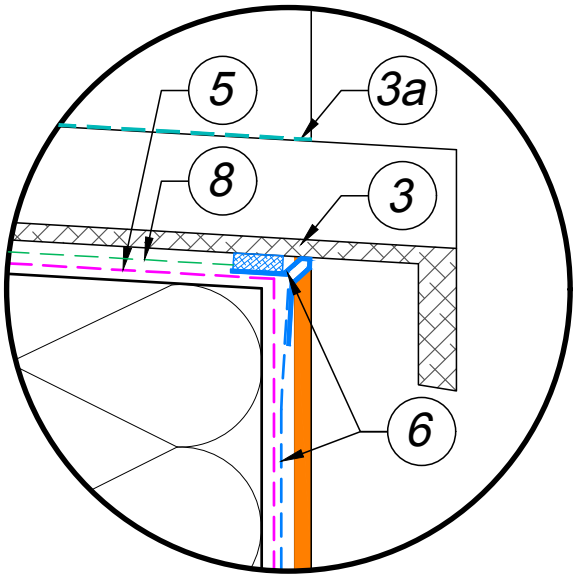


1. **WALL INSULATED WITH ONE OF ATLAS SYSTEMS**
2. **INSET WINDOW FRAME**
3. **EXTERNAL WINDOW SILL**

3a. SEAL BETWEEN WINDOW SILL AND RENDER, for example:
– ATLAS SANITARY SILICONE SILTON S

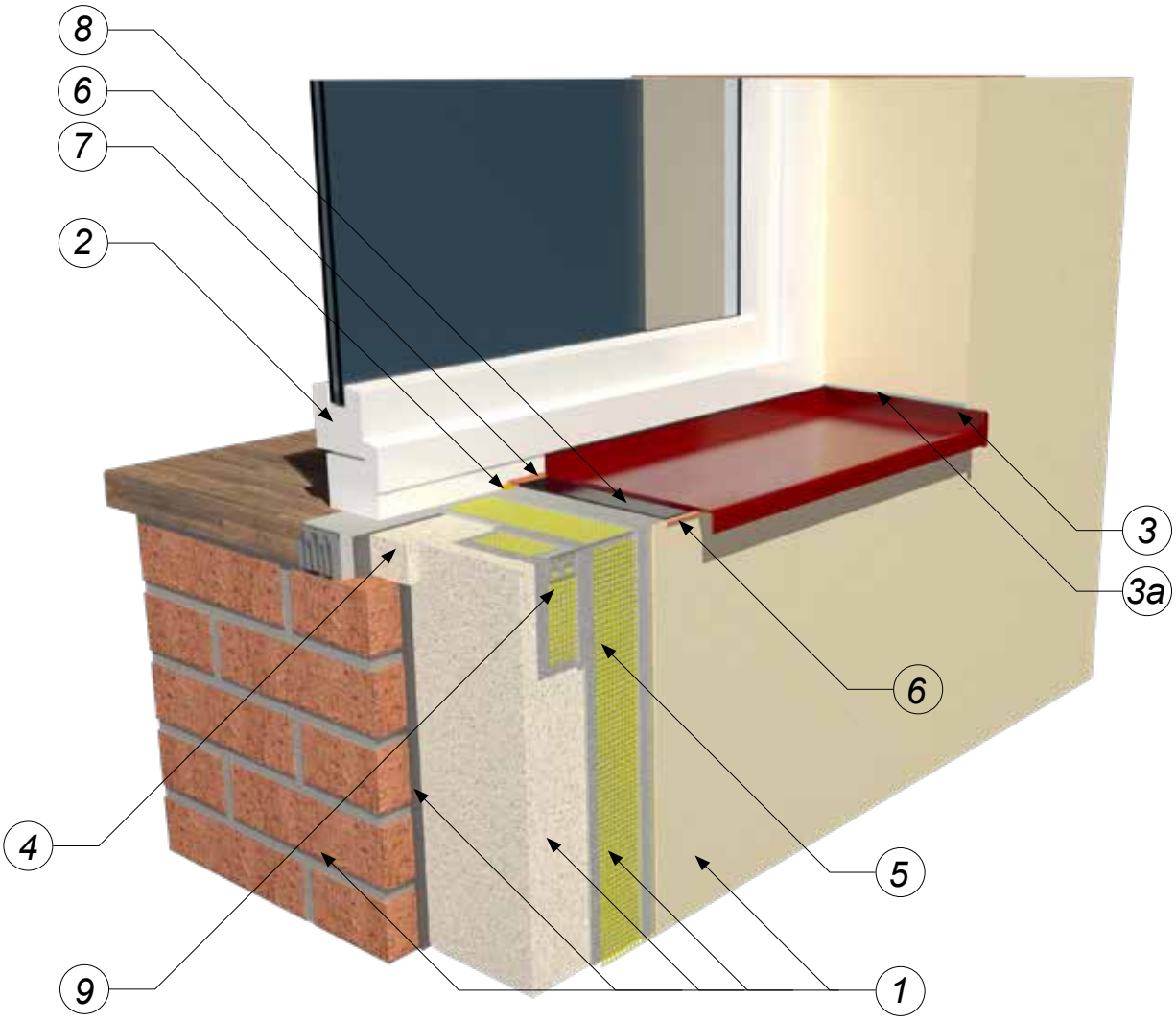
4. **SUPLEMENTARY FILLING OF THE GAP**
polystyrene profile (EPS)
5. **ADHESIVE MORTAR FOR THE REINFORCING LAYER WITH REINFORCING MESH EMBEDDED**
6. **PVC SILL BEAD WITH MESH**
7. **MASTIC SEALANT, for example:**
– ATLAS SANITARY SILICONE SILTON S
8. **ADHESIVE FOR SILLS, for example:**
– double-sided self-adhesive butyl tape
– ATLAS GRAWIS P
9. **ATLAS BACKER ROD**


2
3a
7
4
9
5
3
8
6
1


5
3a
8
3
6

3.2

thermal insulation of the wall beneath the reveal
with inset window frame
using a corner bead



1. **WALL INSULATED WITH ONE OF ATLAS SYSTEMS**
2. **INSET WINDOW FRAME**
3. **EXTERNAL WINDOW SILL**

3a. **SEAL BETWEEN WINDOW SILL AND RENDER, for example:**
– ATLAS SANITARY SILICONE SILTON S

4. **SUPLEMENTARY FILLING OF THE GAP**
– polystyrene profile (EPS)

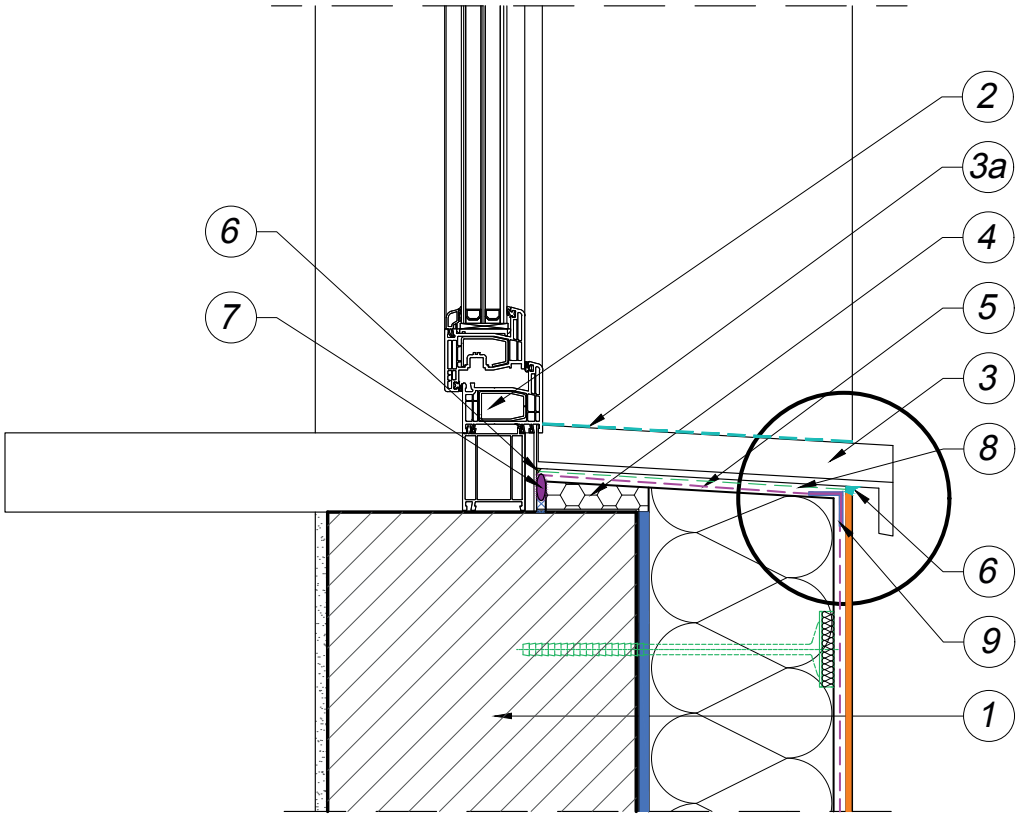
5. **ADHESIVE MORTAR FOR THE REINFORCING LAYER WITH REINFORCING MESH EMBEDDED**

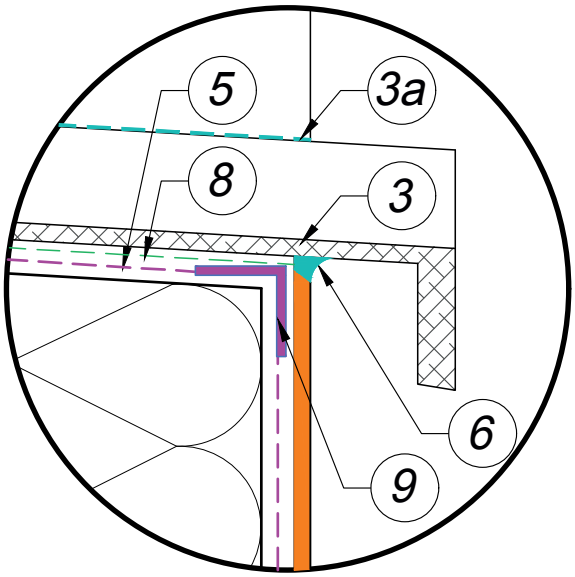
6. **MASTIC SEALANT, for example:**
– ATLAS SANITARY SILICONE SILTON S

7. **ATLAS BACKER ROD**

8. **ADHESIVE FOR SILLS, for example:**
– double-sided self-adhesive butyl tape
– ATLAS GRAWIS P

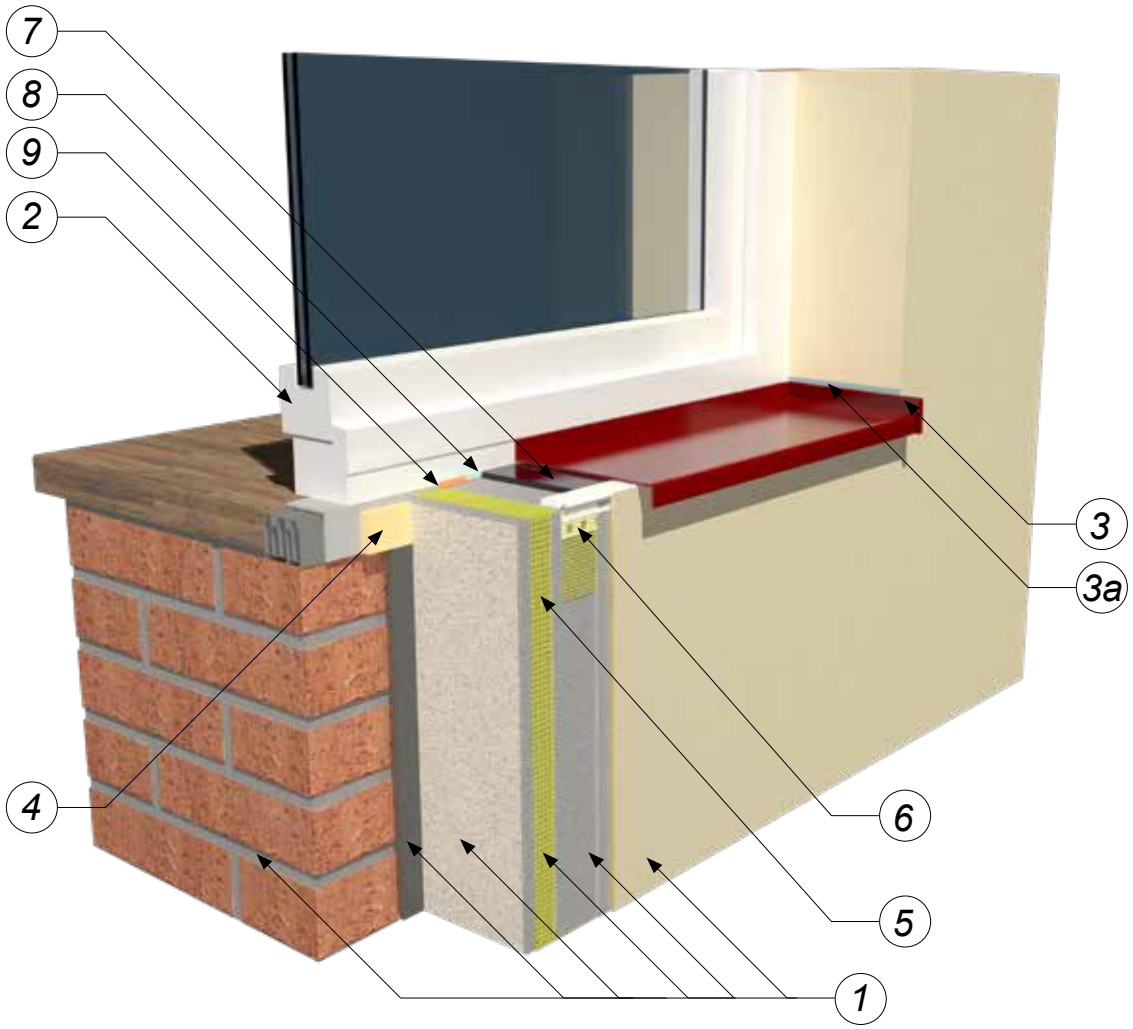
9. **PVC CORNER BEAD WITH MESH**


2
3a
6
4
7
5
3
8
6
9
1


5
3a
8
3
6
9

3.3

thermal insulation of the wall beneath the reveal
with flush window frame
using a sill bead



1. **WALL INSULATED WITH ONE OF ATLAS SYSTEMS**
2. **INSET WINDOW FRAME**
3. **EXTERNAL WINDOW SILL**

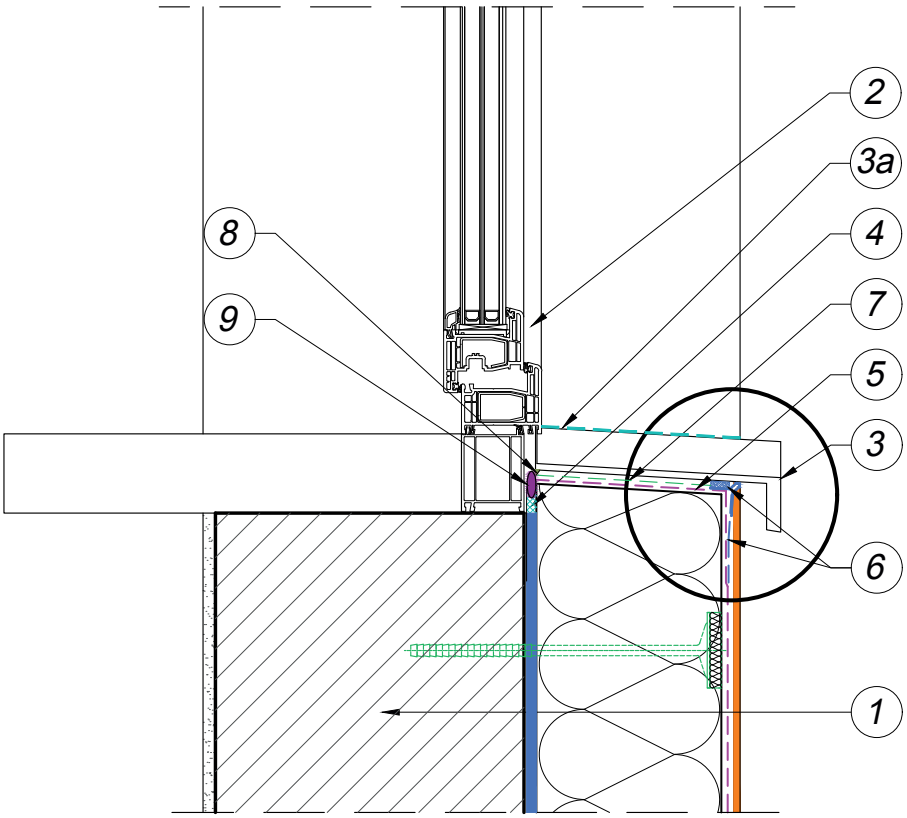
3a. **SEAL BETWEEN WINDOW SILL AND RENDER, for example:**
- ATLAS SANITARY SILICONE SILTON S

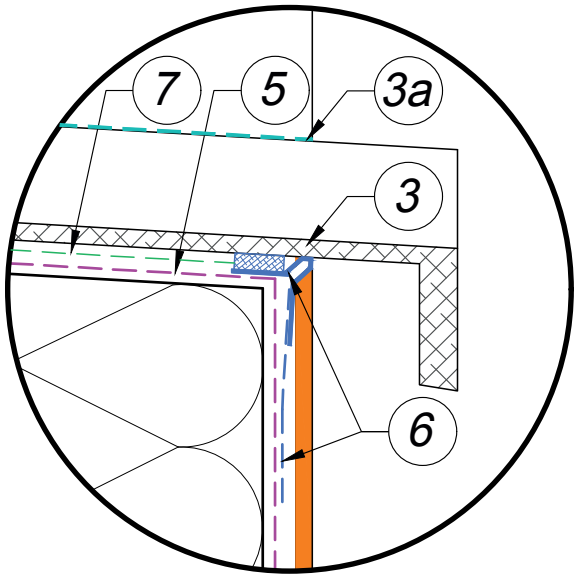
4. **LOW EXPANSION FOAM, for example:**
- ATLAS GRAWIS P

5. **ADHESIVE MORTAR FOR THE REINFORCING LAYER WITH REINFORCING MESH EMBEDDED**
6. **PVC SILL BEAD WITH MESH**
7. **ADHESIVE FOR SILLS, for example:**
- double-sided self-adhesive butyl tape
- ATLAS GRAWIS P

8. **MASTIC SEALANT, for example:**
- ATLAS SANITARY SILICONE SILTON S

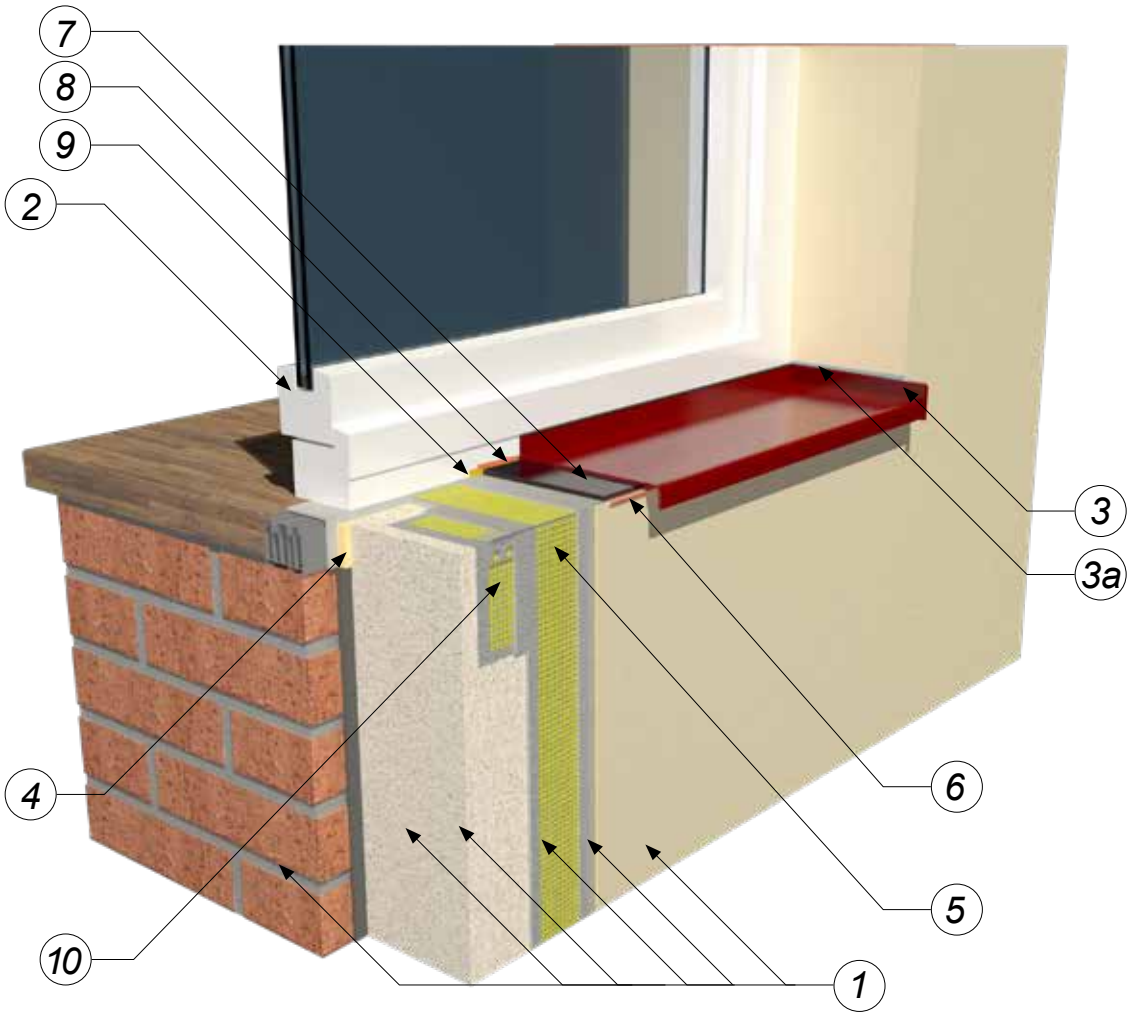
9. **ATLAS BACKER ROD**


2
3a
8
4
9
7
5
3
6
1


7
5
3a
3
6

3.4

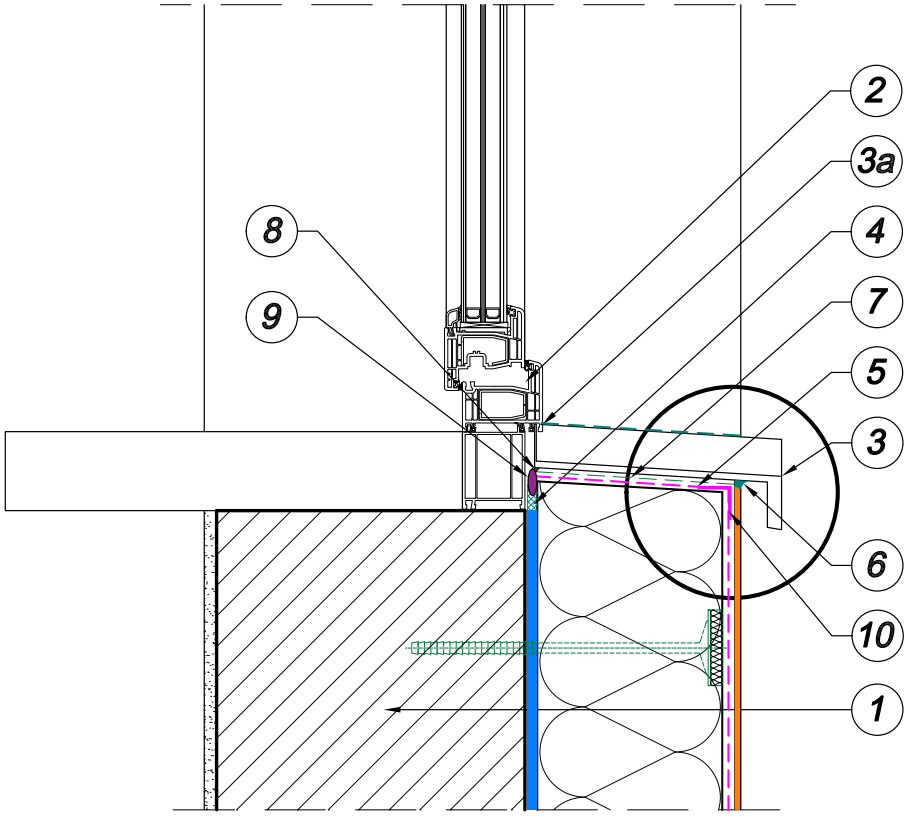
thermal insulation of the wall beneath the reveal
with flush window frame
using a corner bead

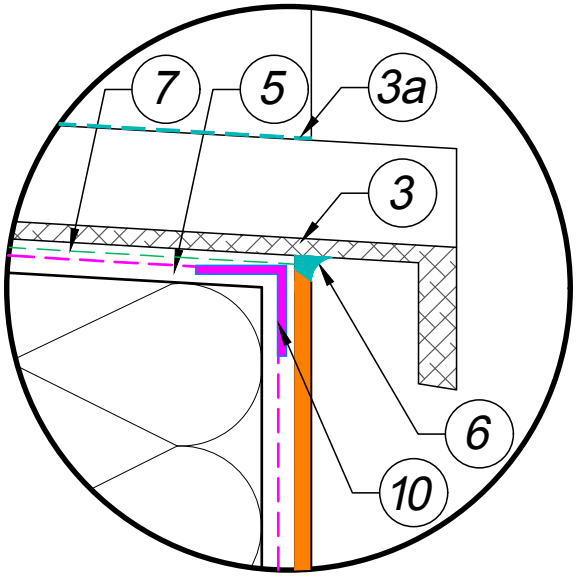


1. **WALL INSULATED WITH ONE OF ATLAS SYSTEMS**
2. **FLUSH WINDOW FRAME**
3. **EXTERNAL WINDOW SILL**

3a. **SEAL BETWEEN WINDOW SILL AND RENDER, for example:**
– ATLAS SANITARY SILICONE SILTON S

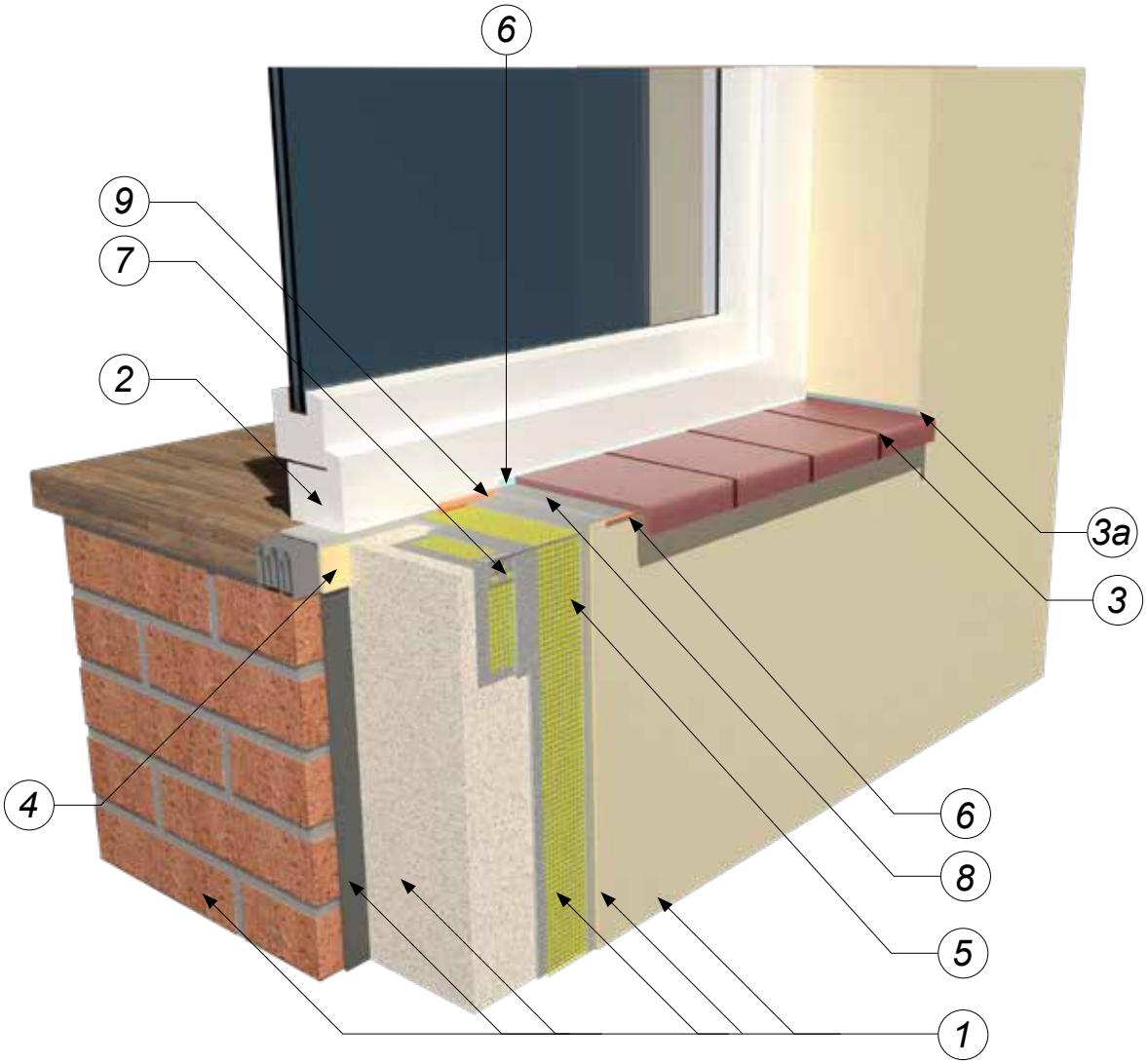
4. **LOW EXPANSION FOAM, for example:**
– ATLAS GRAWIS P
5. **ADHESIVE MORTAR FOR THE REINFORCING LAYER WITH REINFORCING MESH EMBEDDED**
6. **MASTIC SEALANT, for example:**
– ATLAS SANITARY SILICONE SILTON S
7. **ADHESIVE FOR SILLS, for example:**
– double-sided self-adhesive butyl tape
– ATLAS GRAWIS P
8. **MASTIC SEALANT, for example:**
– ATLAS SANITARY SILICONE SILTON S
9. **ATLAS BACKER ROD**
10. **PVC CORNER BEAD WITH MESH**


2
3a
4
7
5
3
6
10
1
8
9


7
5
3a
3
6
10

3.5

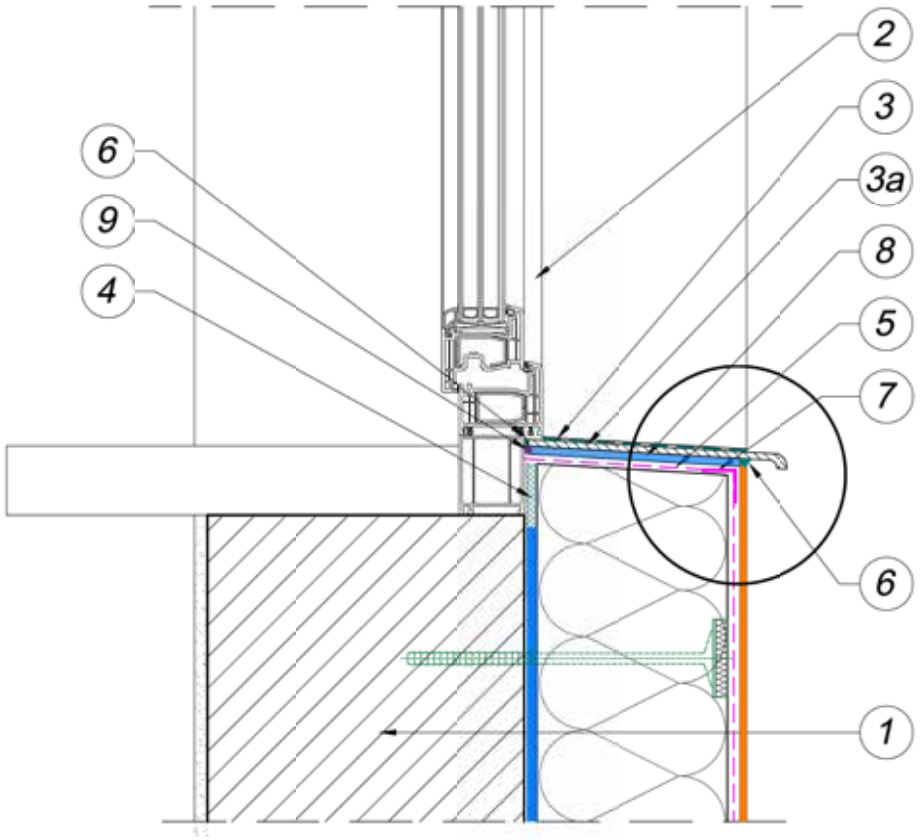
thermal insulation of the wall beneath the window
with a clinker or ceramic sill

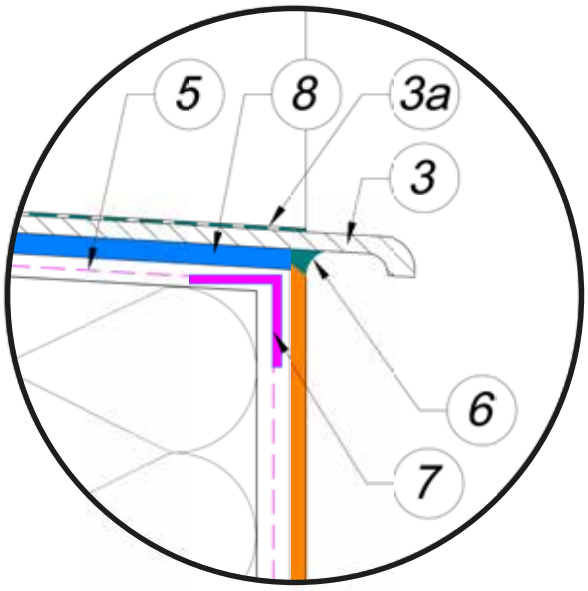


1. **WALL INSULATED WITH ONE OF ATLAS SYSTEMS**
2. **WINDOW**
3. **EXTERNAL CERAMIC WINDOW SILL**

3a. **FLEXIBLE JOINT SEALANT OVER THE BACKER ROD, for example:**
– ATLAS SANITARY SILICONE SILTON S

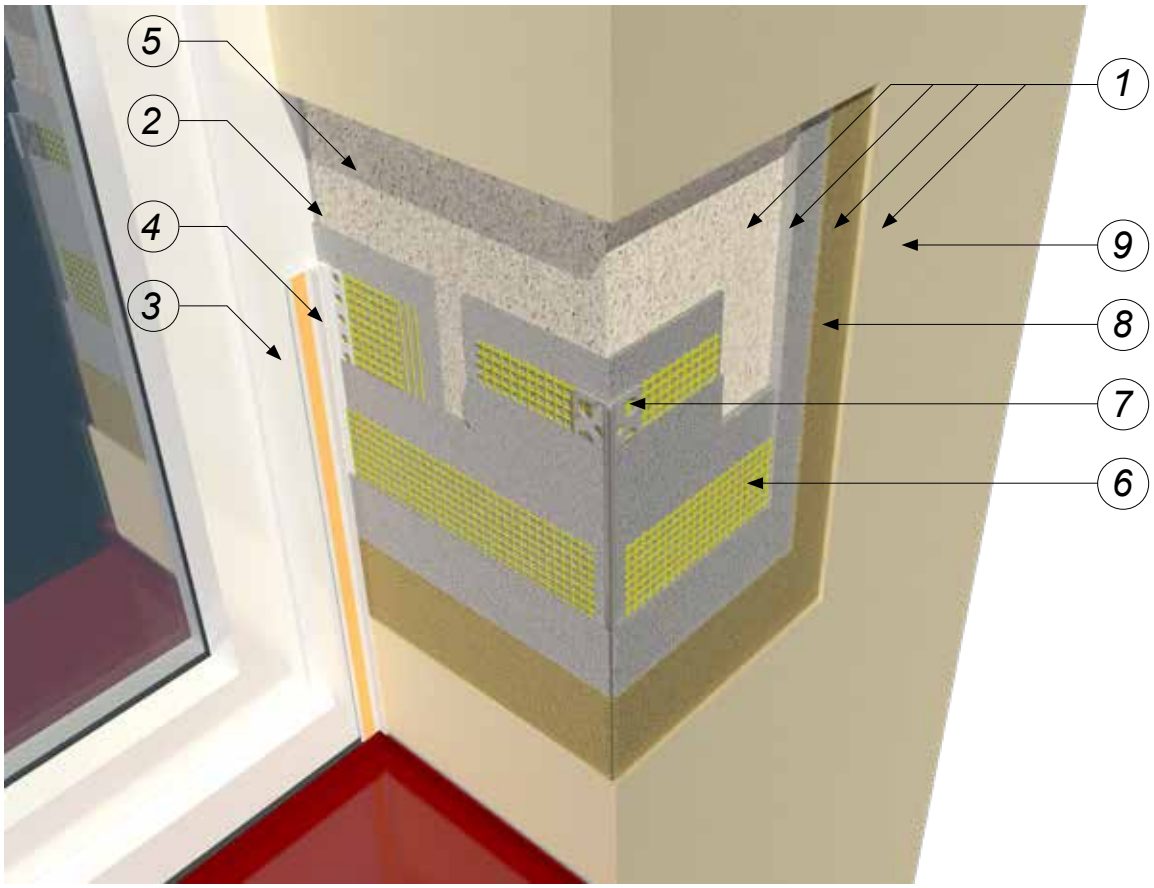
4. **LOW EXPANSION FOAM, for example:**
– ATLAS GRAWIS P
5. **ADHESIVE MORTAR FOR THE REINFORCING LAYER WITH REINFORCING MESH EMBEDDED**
6. **MASTIC SEALANT, for example:**
– ATLAS SANITARY SILICONE SILTON S
7. **PVC CORNER BEAD WITH MESH**
8. **ADHESIVE MORTAR WITH WATERPROOFING FUNCTION for example:**
– ATLAS PLUS S2 HYDRO
9. **ATLAS BACKER ROD**


2
3
3a
8
5
7
6
9
4
6
1

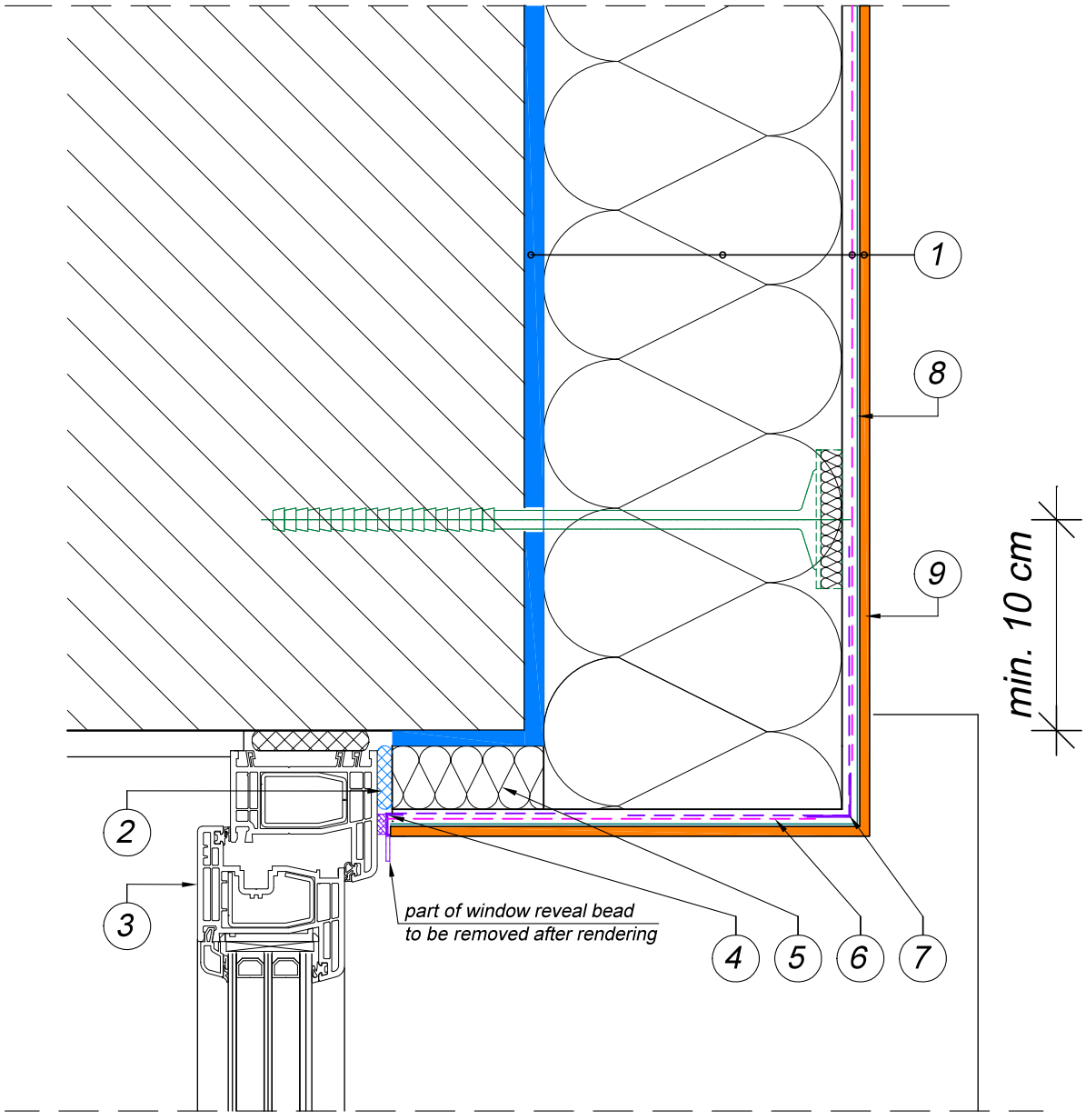

5
8
3a
3
6
7

3.6

thermal insulation of inset reveal using the PVC window reveal bead with mesh

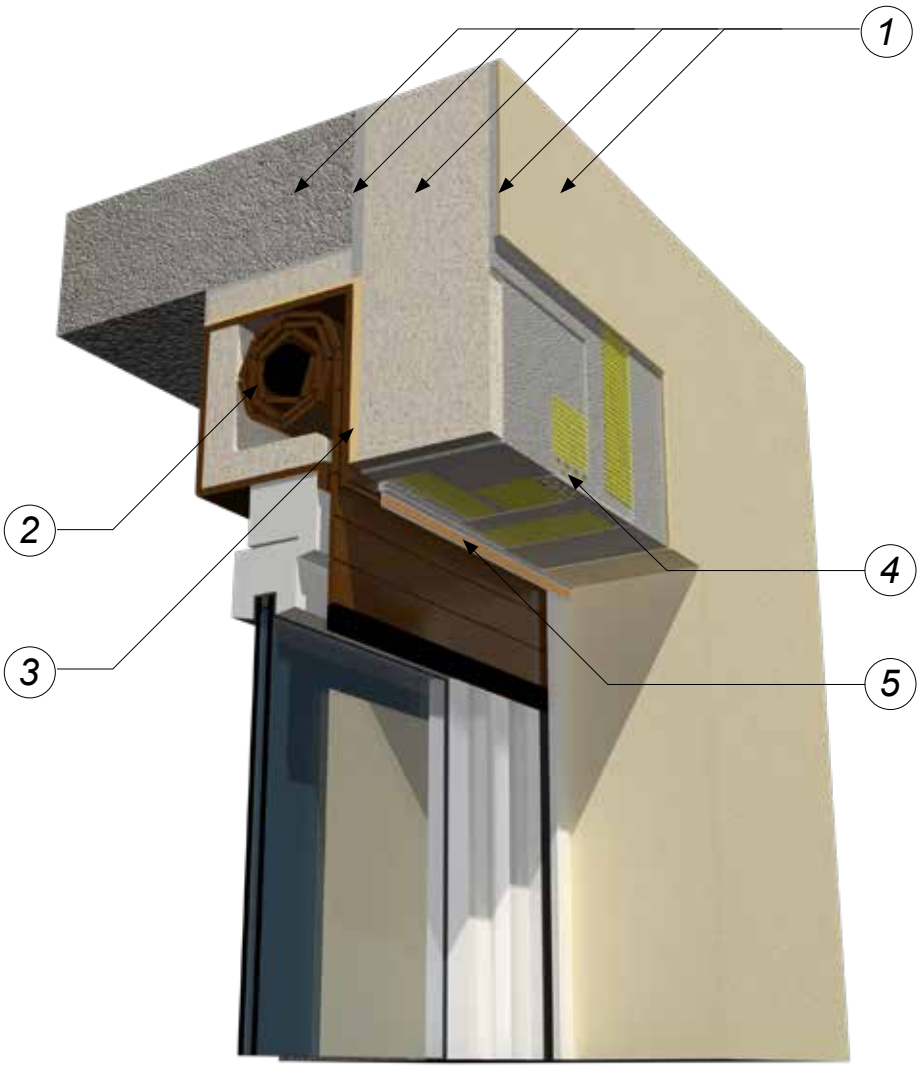


1. **WALL INSULATED WITH ONE OF ATLAS SYSTEMS**
2. **LOW EXPANSION FOAM, for example:**
   – ATLAS GRAWIS P
3. **INSET WINDOW FRAME**
4. **PVC WINDOW REVEAL BEAD WITH MESH**
5. **SUPLEMENTARY INSULATION WITH EPS POLYSTYRENE**
6. **ADHESIVE MORTAR FOR THE REINFORCING LAYER WITH REINFORCING MESH EMBEDDED**
7. **CORNER BEAD WITH MESH**
8. **PRIMING MASS FOR RENDERS**
9. **RENDERING COAT**

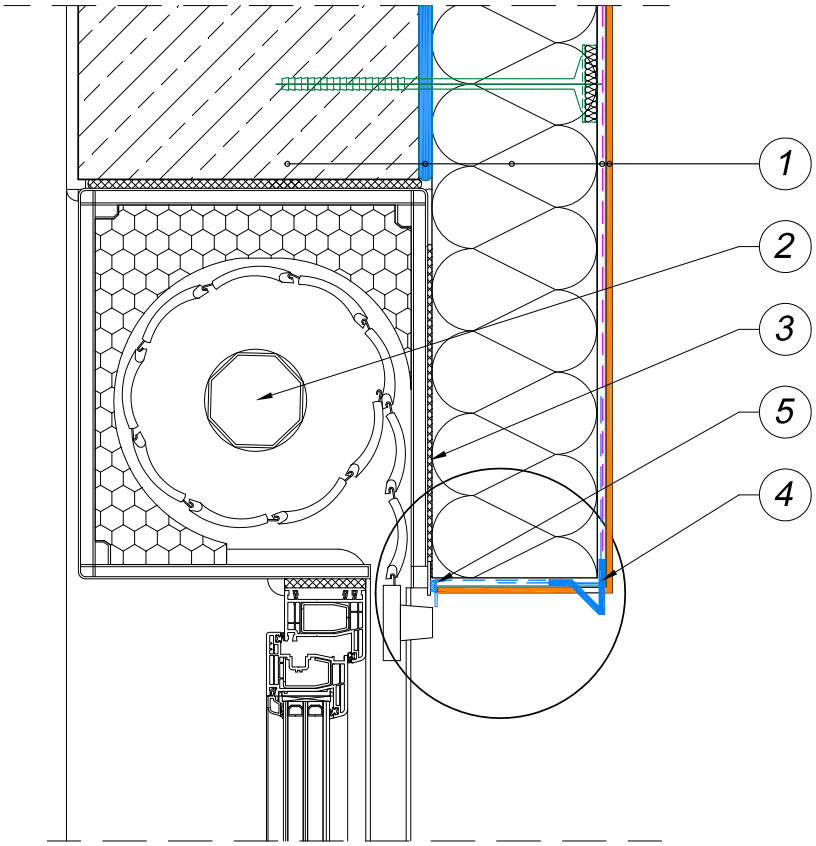

1
8
9
min. 10 cm
2
3
part of window reveal bead
to be removed after rendering
4
5
6
7

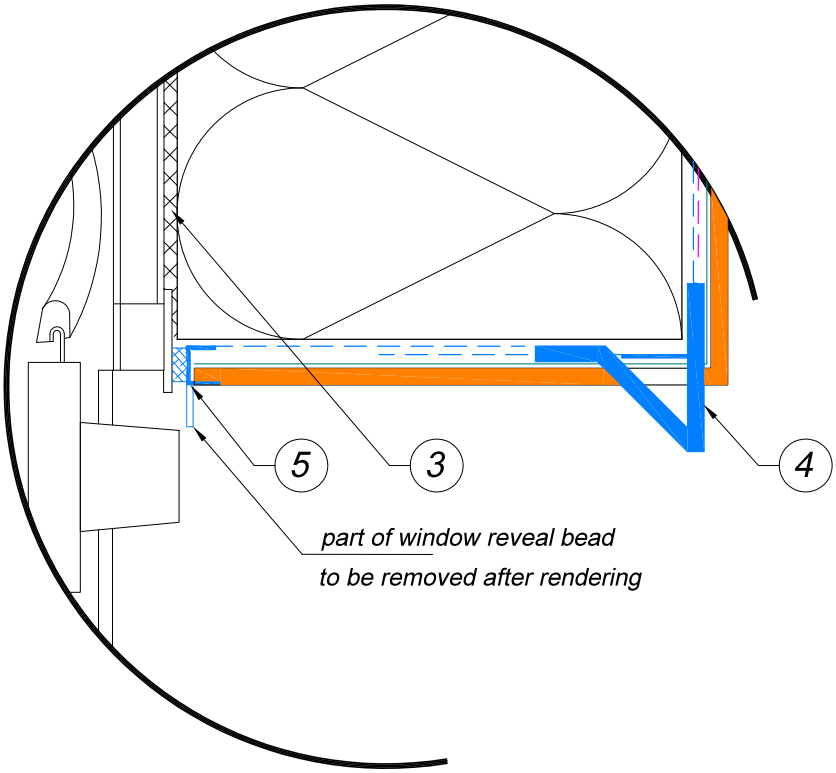
3.7

lintel thermal insulation with concelled roller shutter



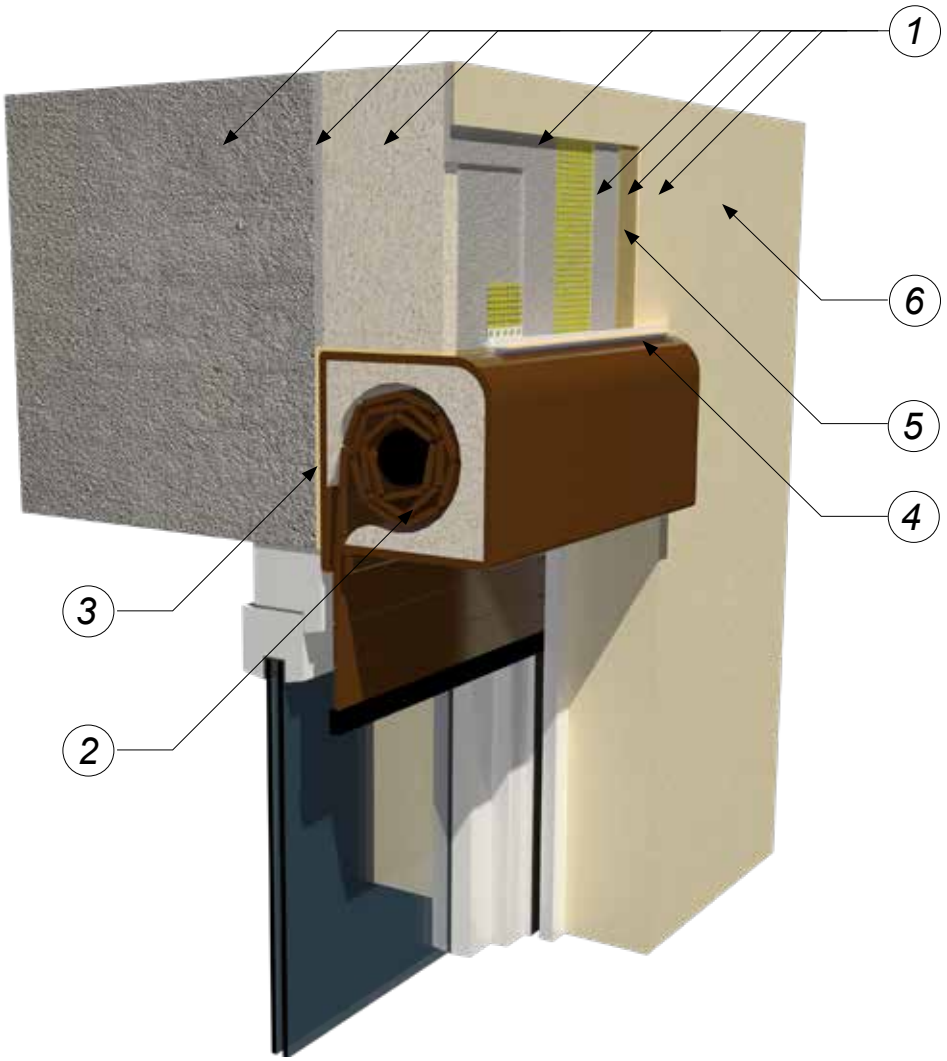
1. **WALL INSULATED WITH ONE OF ATLAS SYSTEMS:**
   - adhesive mortar for thermal INSULATION BOARDS
   - polystyrene EPS
   - mechanical fixings
   - adhesive mortar with reinforcing mesh embedded
   - priming mass for render
   - ATLAS render
2. **ROLLER SHUTTER**
3. **LOW EXPANSION FOAM, for example:**
   - ATLAS GRAWIS P
4. **PVC DRIP BEAD WITH MESH**
5. **PVC WINDOW REVEAL BEAD WITH MESH**


1
2
3
5
4

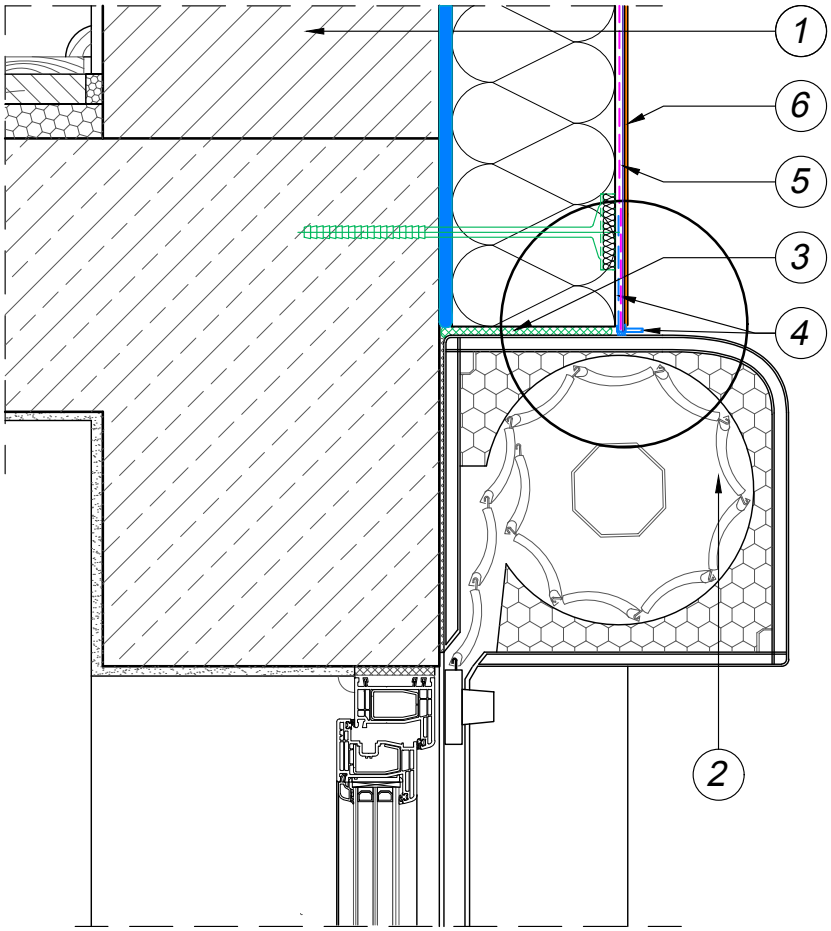

5
3
4
part of window reveal bead
to be removed after rendering

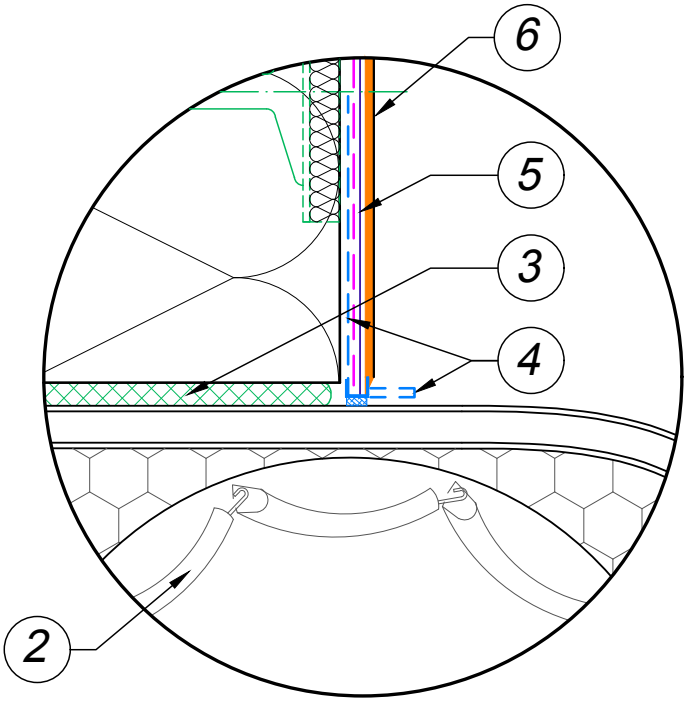
3.8

lintel thermal insulation with external roller shutter



1. **WALL INSULATED WITH ONE OF ATLAS SYSTEMS:**
   - adhesive mortar for thermal INSULATION BOARDS
   - polystyrene EPS
   - mechanical fixings
   - adhesive mortar with reinforcing mesh embedded
   - priming mass for render
   - ATLAS render
2. **ROLLER SHUTTER**
3. **LOW EXPANSION FOAM, FOR EXAMPLE:**
   - ATLAS GRAWIS P
4. **PVC WINDOW REVEAL BEAD WITH MESH**
5. **PRIMING MASS FOR RENDERS (DEPENDING ON RENDER)**
6. **RENDERING COAT, FOR EXAMPLE:**
   - ATLAS SILICONE RENDER


1
6
5
3
4
2


6
5
3
4
2

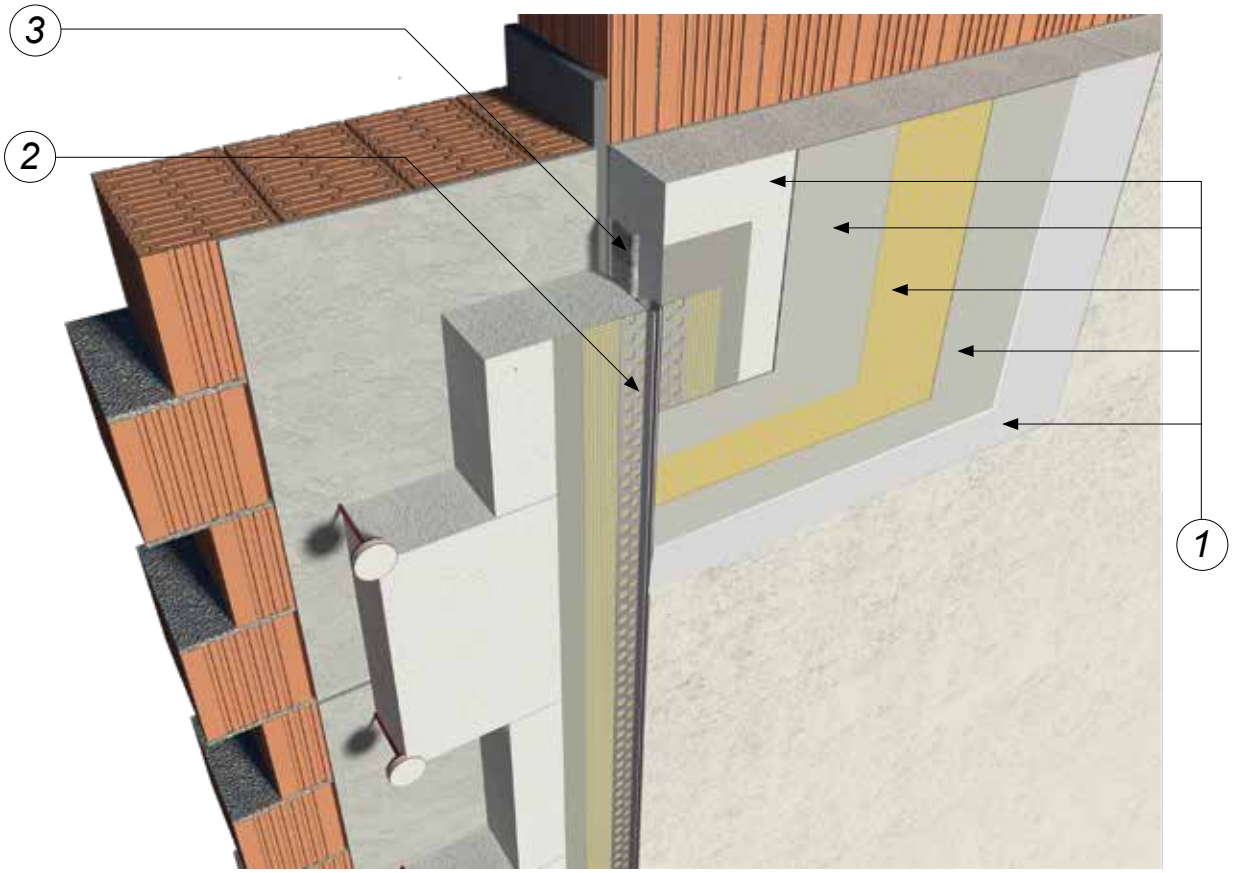


expansion joints, joints between systems, rustication

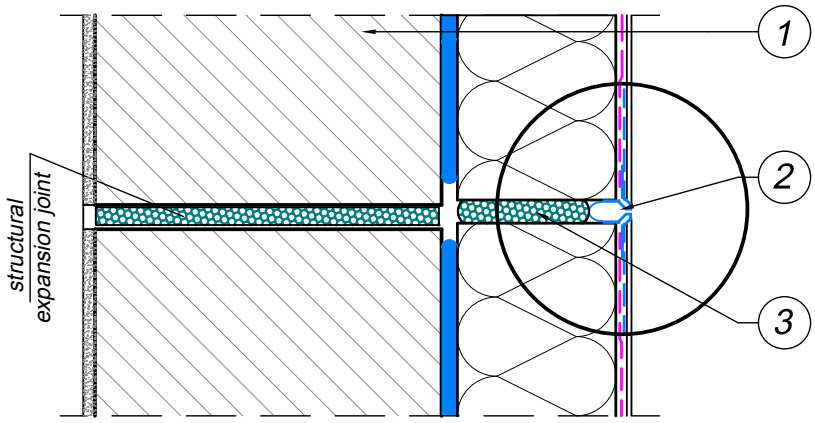
4

4.1

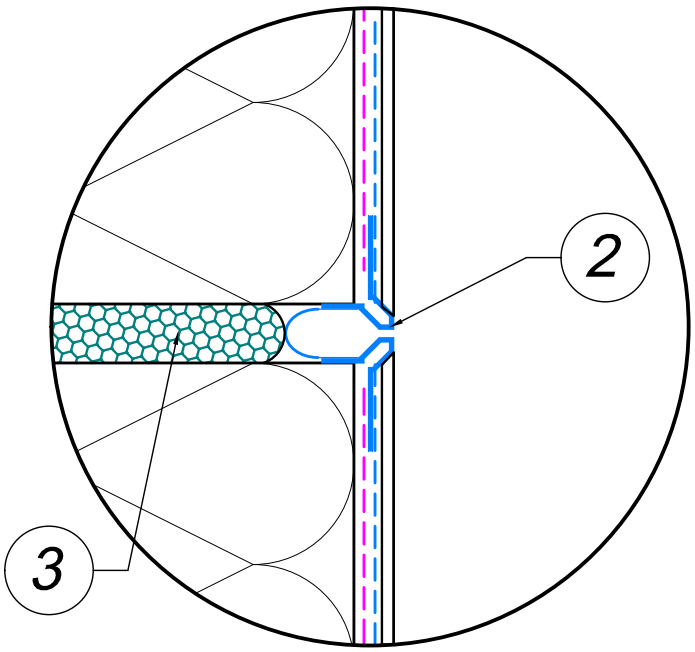
expansion joints
using straight expansion joint bead



1. **WALL INSULATED WITH ONE OF ATLAS SYSTEMS:**
   - adhesive mortar for thermal INSULATION BOARDS
   - polystyrene EPS
   - mechanical fixings
   - adhesive mortar with reinforcing mesh embedded
   - priming mass for render
   - ATLAS render
2. **STRAIGHT EXPANSION JOINT BEAD WITH MESH**
3. **ATLAS BACKER ROD**

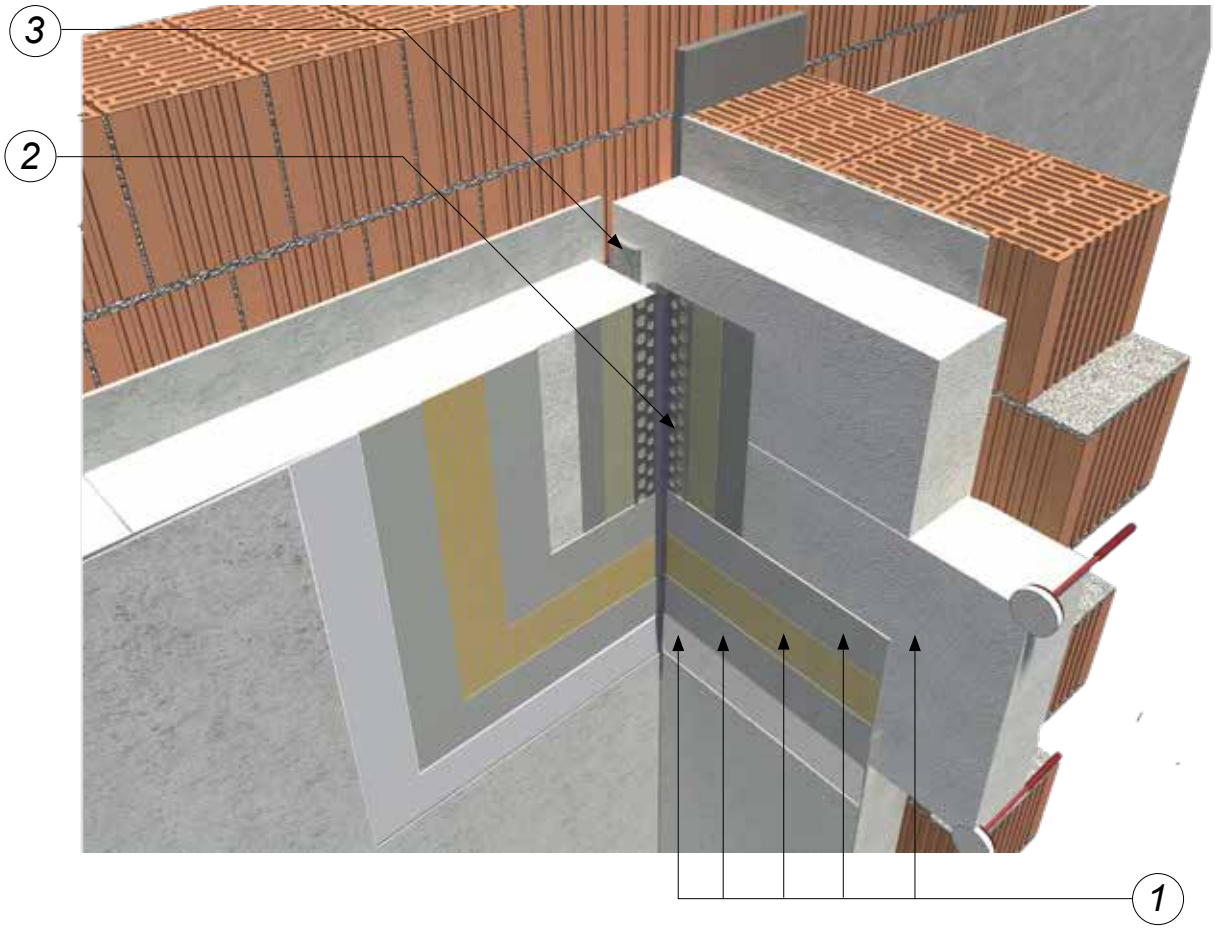


horizontal cross-section

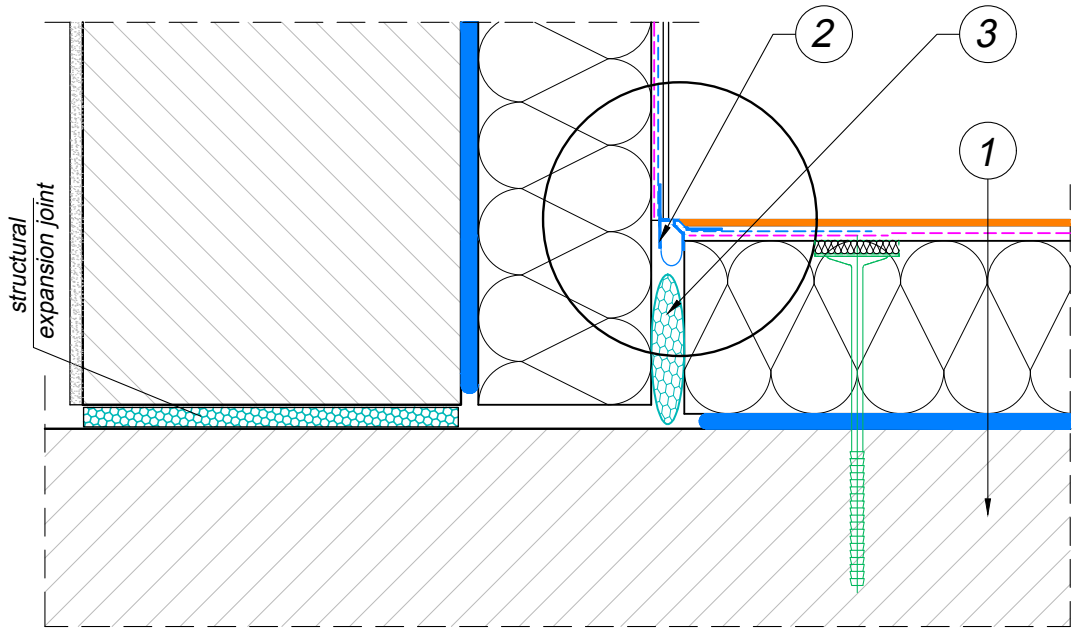


4.2

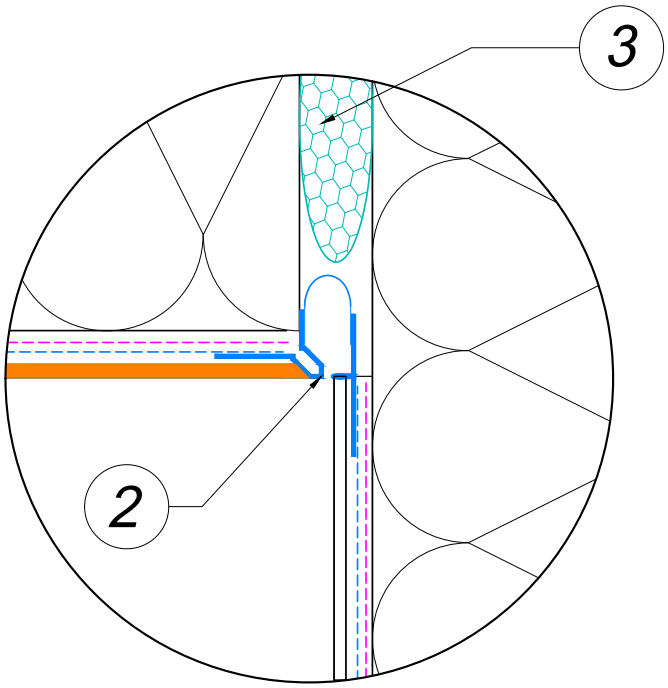
expansion joint using
corner expansion joint bead



1. **WALL INSULATED WITH ONE OF ATLAS SYSTEMS:**
   - adhesive mortar for thermal INSULATION BOARDS
   - polystyrene EPS
   - mechanical fixings
   - adhesive mortar with reinforcing mesh embedded
   - priming mass for render
   - ATLAS render
2. **CORNER EXPANSION JOINT BEAD WITH MESH**
3. **ATLAS BACKER ROD**

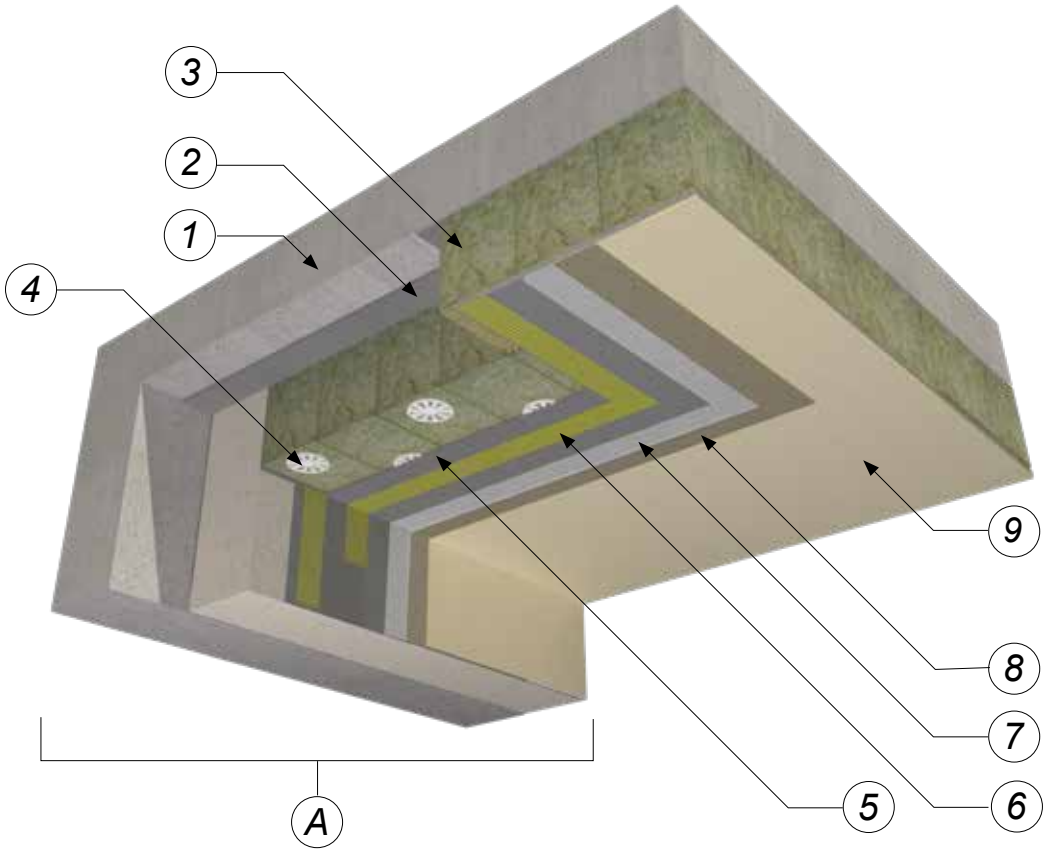


horizontal cross-section



4.3

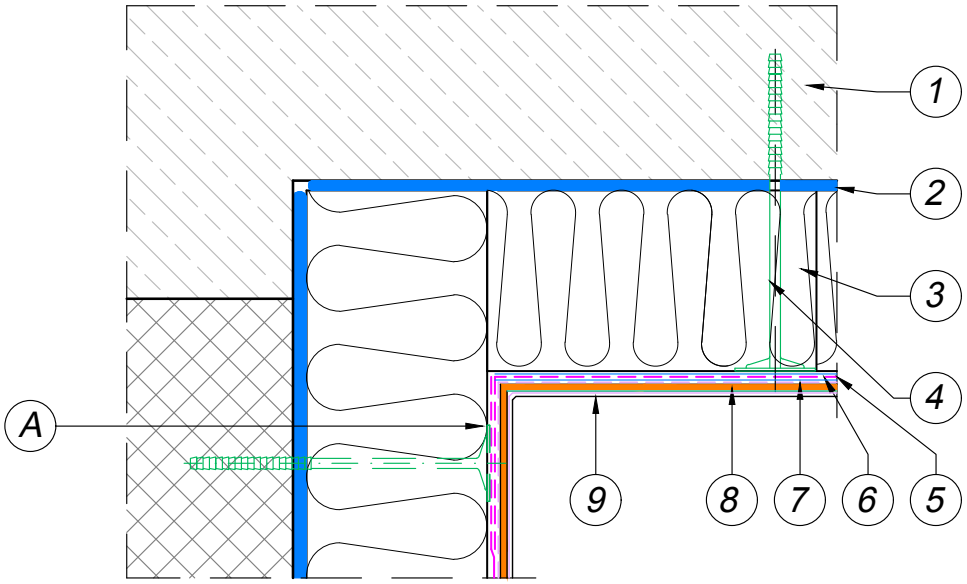
junction of thermal insulation systems at internal wall/ceiling corner – ATLAS ETICS System and ATLAS ROKER G System (variant II)



Thermal insulation of ceiling (horizontal surfaces): ATLAS ROKER G system (variant II)

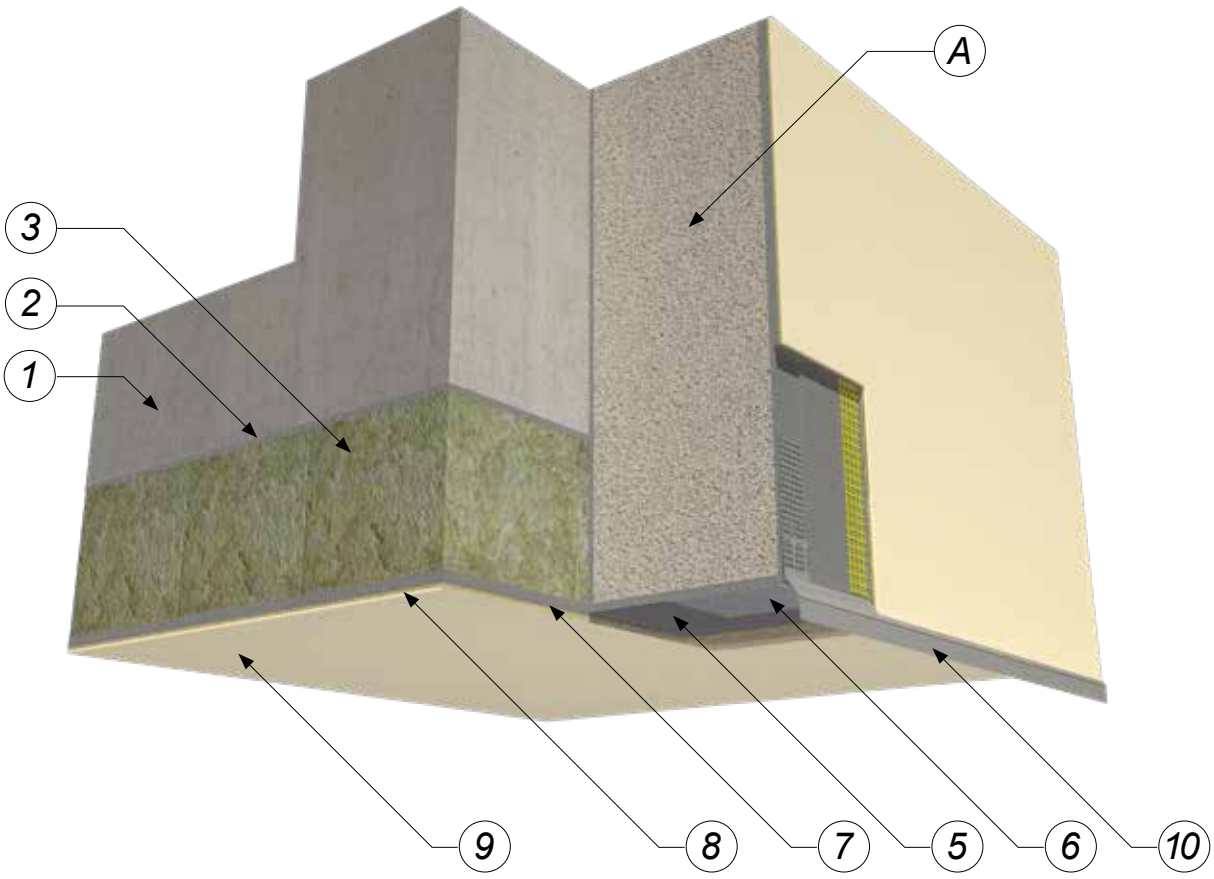
1. **CEILING:**
   – e.g. monolithic concrete slab or prefabricated concrete elements
2. **ADHESIVE FOR THERMAL INSULATION BOARDS**
3. **THERMAL INSULATION, FOR EXAMPLE:**
   – mineral wool boards or lamella mineral wool boards (thickness as per thermal calculations)
4. **SUPPLEMENTARY FIXING:**
   – mechanical fixings determined in the thermal insulation design, holding appropriate ETA
5. **MORTAR FOR REINFORCING LAYER (BASE COAT) APPLICATION**
6. **REINFORCING FIBERGLASS MESH**
7. **PRIMING MASS FOR RENDERS (DEPENDING ON RENDER TYPE)**
8. **RENDERING COAT**
9. **FAÇADE PAINT**

A. **Thermal insulation of wall (vertical surfaces) with ATLAS ETICS systems**


1
2
3
4
5
6
7
8
9
A

4.4

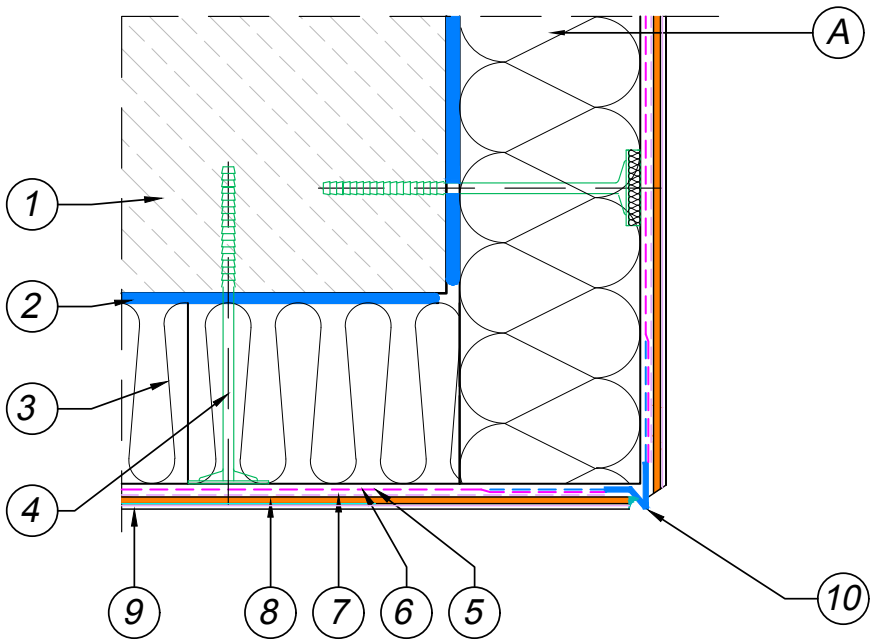
junction of thermal insulation systems at internal wall/ceiling corner – ATLAS ETICS System and ATLAS ROKER G System (variant II)



Thermal insulation of ceiling (horizontal surfaces): ATLAS ROKER G system (variant II)

1. **CEILING:**
   – e.g. monolithic concrete slab or prefabricated concrete elements
2. **ADHESIVE FOR THERMAL INSULATION BOARDS**
3. **THERMAL INSULATION, for example:**
   – mineral wool boards or lamella mineral wool boards (thickness as per thermal calculations)
4. **SUPPLEMENTARY FIXING:**
   – mechanical fixings determined in the thermal insulation design, holding appropriate ETA
5. **MORTAR FOR REINFORCING LAYER (BASE COAT) APPLICATION**
6. **REINFORCING FIBERGLASS MESH**
7. **PRIMING MASS FOR RENDERS (DEPENDING ON RENDER TYPE)**
8. **RENDERING COAT**
9. **FAÇADE PAINT**
10. **PVC DRIP BEAD**

A. Thermal insulation of wall (vertical surfaces) with ATLAS ETICS systems

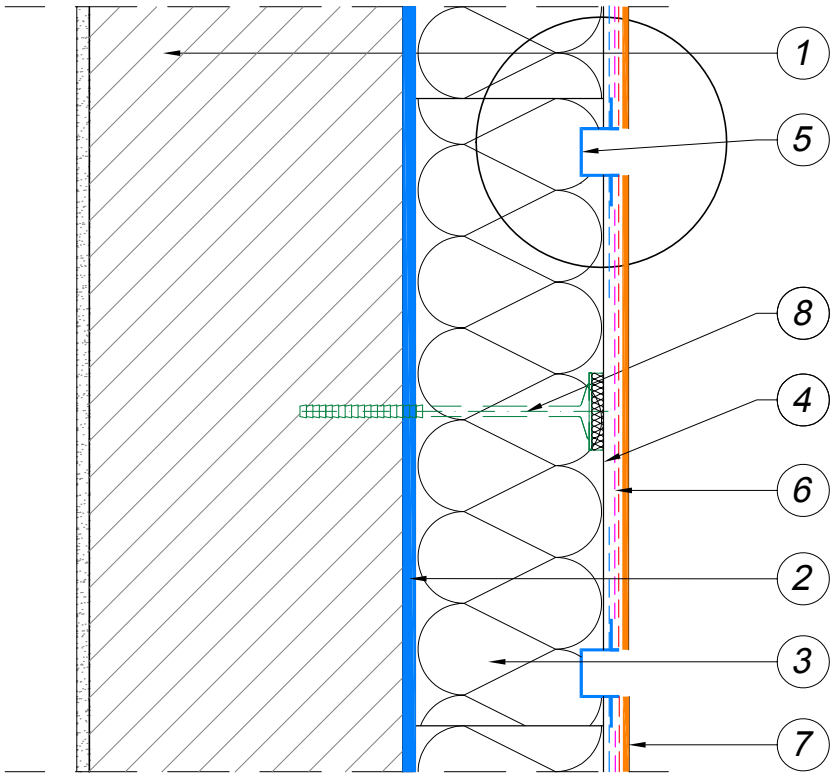

A
1
2
3
4
9
8
7
6
5
10

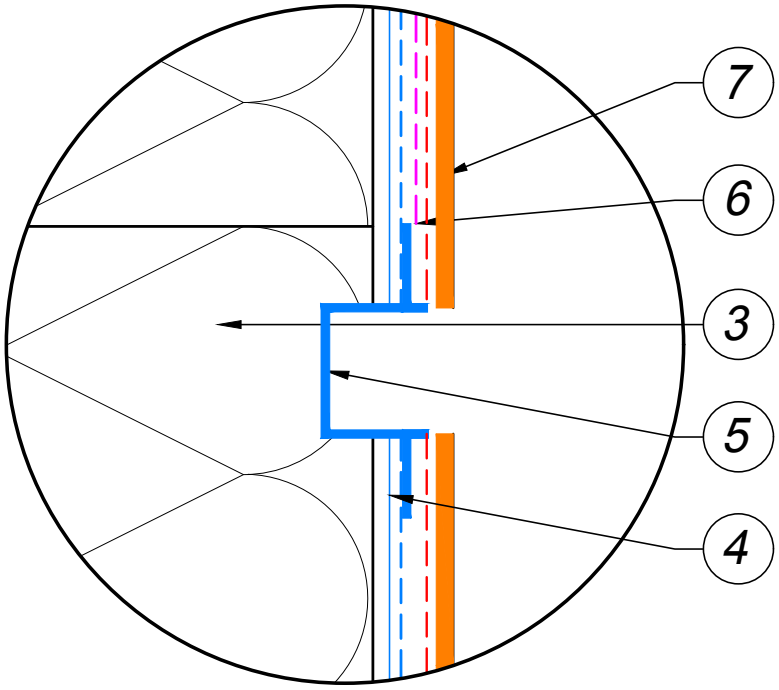
4.5

rustication on façade insulated with an ATLAS ETICS system
using preformed beads



1. **WALL**
2. **ADHESIVE FOR THERMAL INSULATION BOARDS**
3. **THERMAL INSULATION, for example:**
   – EPS boards (thickness as per thermal calculations)
4. **MORTAR FOR REINFORCING LAYER (BASE COAT)**
5. **PREFORMED RUSTICATION BEAD WITH MESH**
6. **REINFORCING FIBERGLASS MESH**
7. **RENDERING COAT**
8. **SUPPLEMENTARY FIXING**
   – mechanical fixings determined in the thermal insulation design, holding appropriate ETA


1
5
8
4
6
2
3
7


7
6
3
5
4

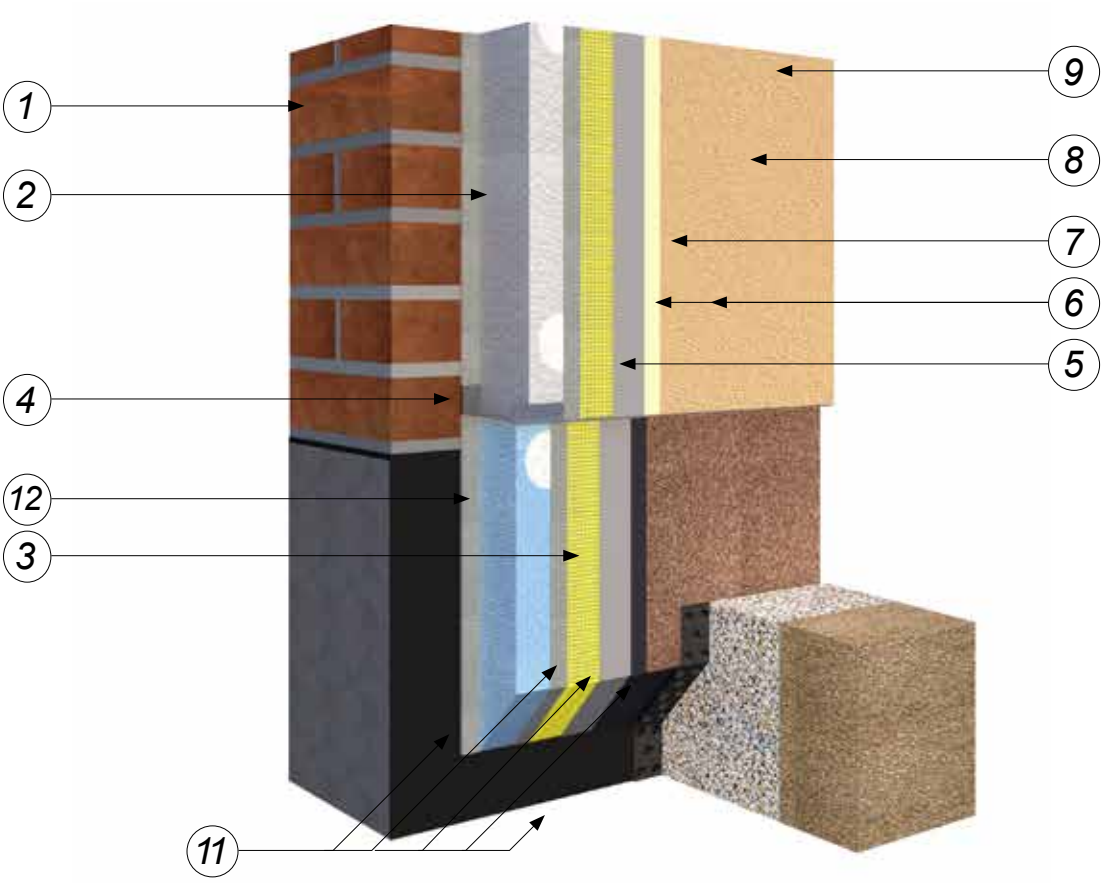


plinth thermal insulation

5

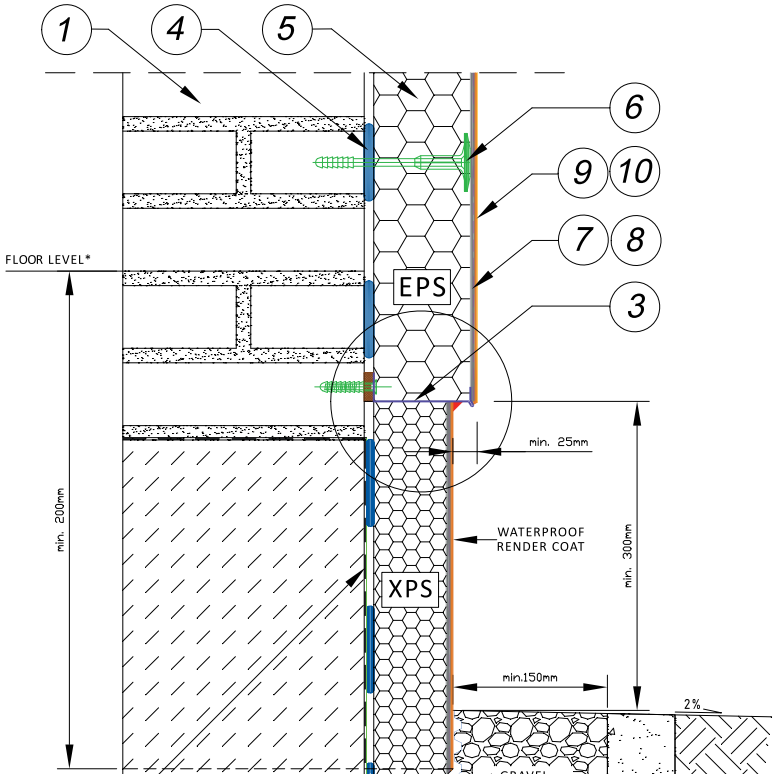
5.1

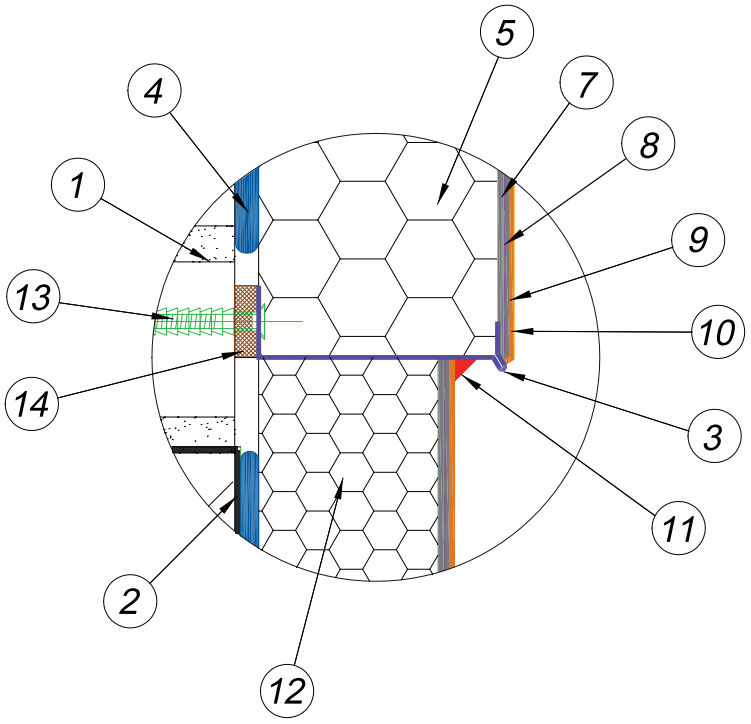
wall and plinth thermal insulation
option with starter track



1. **WALL**
2. **WATERPROOFING**
   e.g. ATLAS WODER DUO*
3. **STARTER TRACK**
4. **ADHESIVE MORTAR FOR THERMAL INSULATION BOARDS**
5. **THERMAL INSULATION**
   expanded polystyrene boards (EPS)
6. **SUPPLEMENTARY MECHANICAL FIXING**
   as defined in the thermal insulation project, holding appropriate ETA
7. **REINFORCING FIBERGLASS MESH**
8. **MORTAR FOR REINFORCING LAYER APPLICATION (BASE COAT)**
9. **PRIMING MASS FOR RENDERING**
10. **RENDERING COAT**
11. **ELASTIC SEALANT**
12. **THERMAL INSULATION OF THE PLINTH ZONE**
    extruded polystyrene (XPS) or high-density water-resistant expanded polystyrene
13. **FIXING OF THE STARTER TRACK**
    using appropriate wall plugs spaced at a minimum of 3 pcs/m
14. **STARTER TRACK LEVELLING SPACER**

* The cured ATLAS WODER DUO is dark grey in colour – the drawing is for illustrative purposes only and does not reflect the actual colours.
The plinth zone is outside the scope of the ETICS system. Water-resistant renders should be used in this area.


1
4
5
6
9
10
7
8
3
FLOOR LEVEL*
EPS
min. 25mm
WATERPROOF
RENDER COAT
min. 300mm
min. 200mm
XPS
min.150mm
2%


5
4
7
8
1
9
13
10
14
3
11
2
12

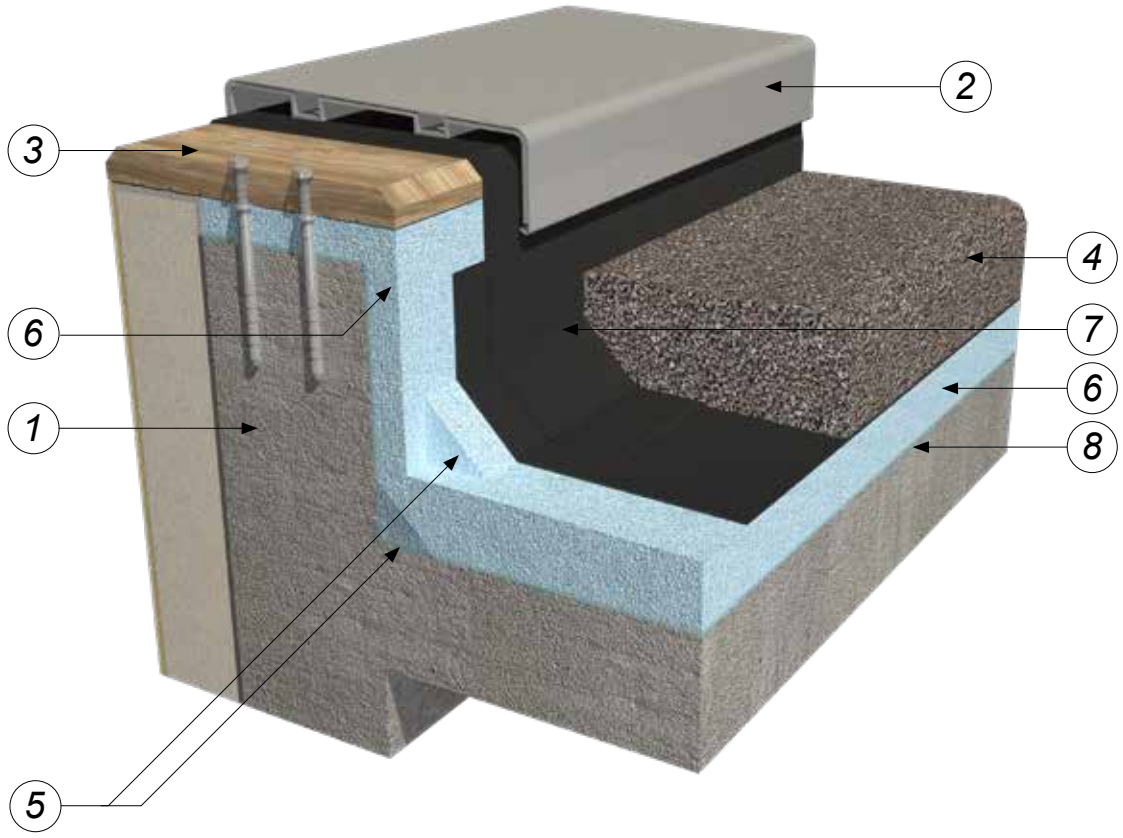


thermal insulation at the wall-roof junction for flat and pitched roof

6

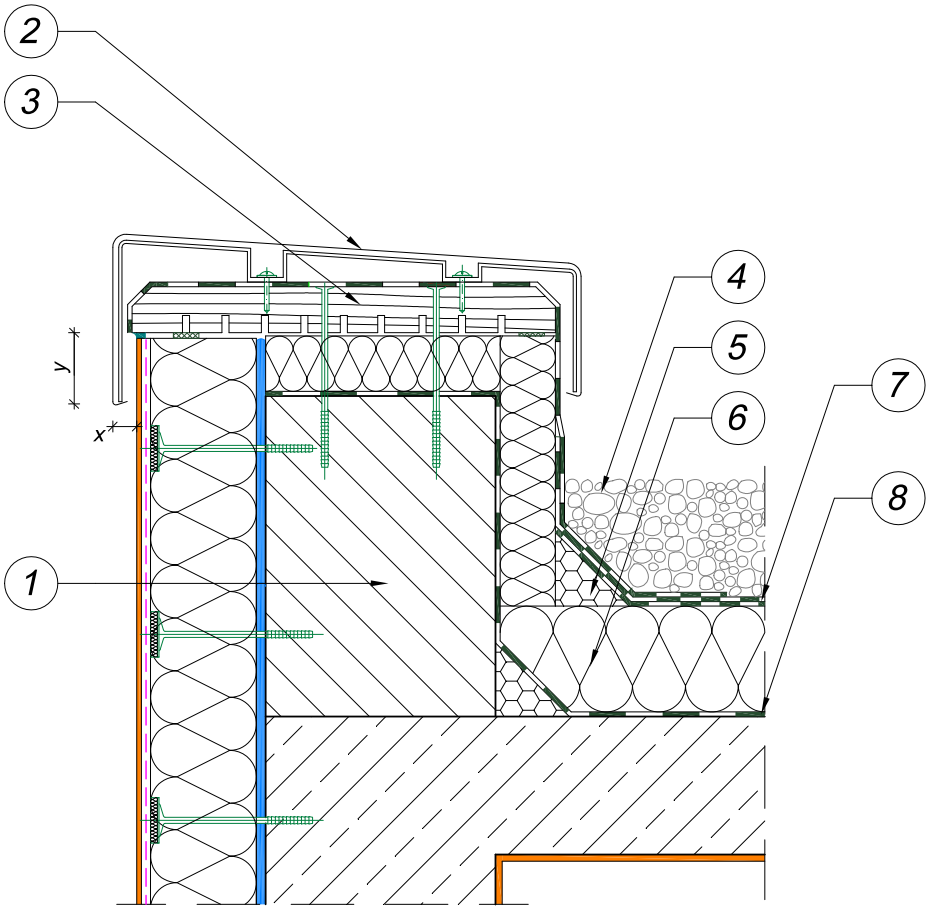
6.1

thermal insulation of the parapet at the junction on an ETICS insulated wall and a flat roof



1. **WALL INSULATED WITH ONE OF ATLAS SYSTEMS:**
   - adhesive mortar for thermal INSULATION BOARDS
   - polystyrene EPS
   - mechanical fixings
   - adhesive mortar with reinforcing mesh embedded
   - priming mass for render
   - ATLAS render
2. **PARAPET WALL FLASHING**
3. **PLYWOOD SUPPORT FOR FLASHING**
4. **GRAVEL – LOAD LAYER**
5. **XPS FILLET**
6. **THERMAL INSULATION**
   extruded polystyrene (XPS)
7. **WATERPROOFING**
8. **WATER VAPOUR BARRIER**

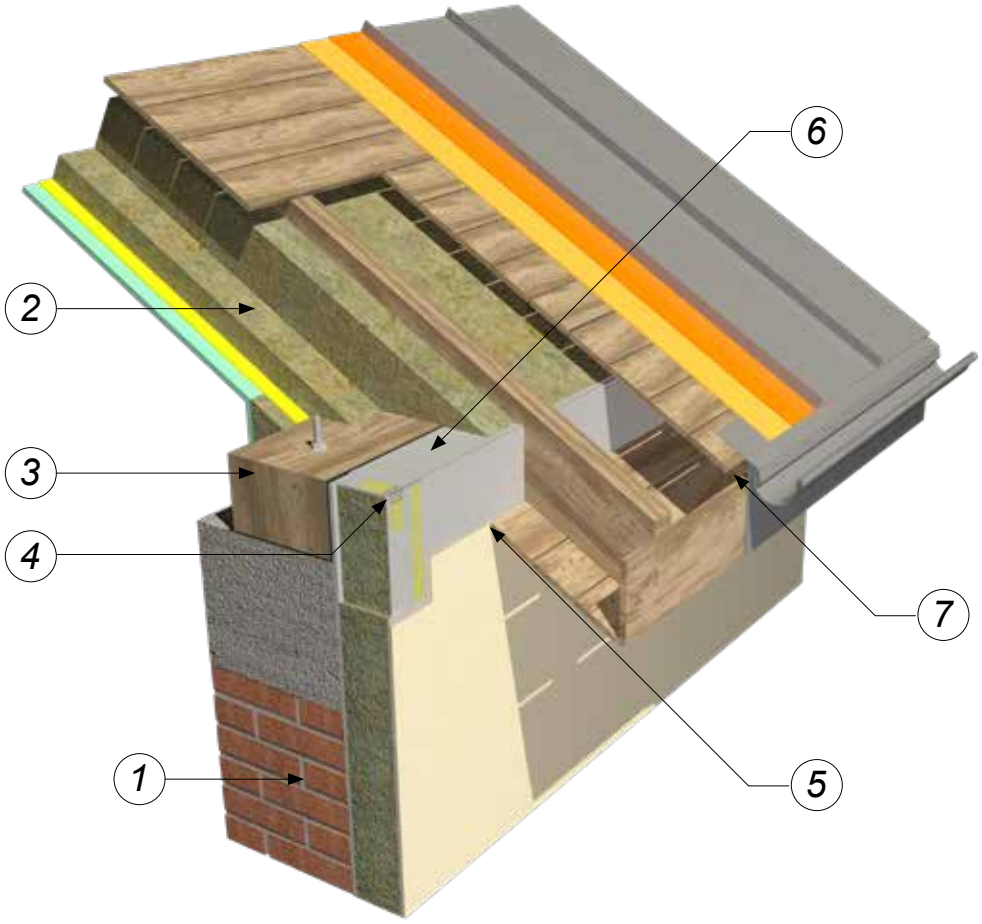
6. THERMAL INSULATION AT THE WALL-ROOF JUNCTION FOR FLAT AND PITCHED ROOF



Flashings shall overhang beyond the edge of the insulated parapet. The required horizontal and vertical projection (x, y) shall be governed by local regulations or good practice guidance and may vary with building location or height.

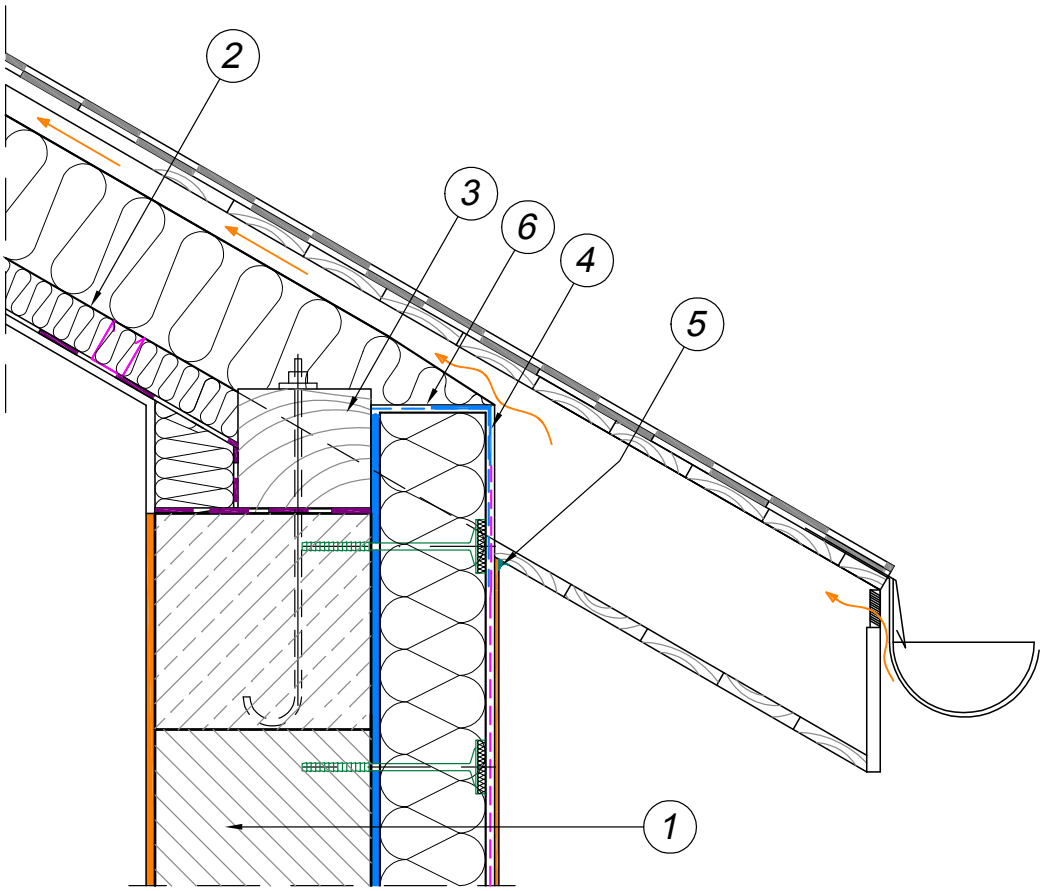
6.2

junction of an ETICS-insulated wall with a pitched roof
insulated at rafter level (warm roof)



1. **WALL INSULATED WITH ONE OF THE ATLAS SYSTEMS:**
   - adhesive mortar for thermal INSULATION BOARDS
   - polystyrene EPS
   - mechanical fixings
   - adhesive mortar with reinforcing mesh embedded
   - priming mass for render
   - ATLAS render
2. **PITCHED ROOF INSULATION INSTALLED BETWEEN RAFTERS**
3. **TIMBER WALL PLATE FIXED TO MASONRY WALL**
4. **CORNER BEAD WITH MESH**
5. **FLEXIBLE SEALANT**
6. **ETICS SYSTEM TERMINATION**
   base coat with embedded reinforcing mesh, e.g.:
   - ATLAS ROKER U + ATLAS 150 mesh
7. **FASCIA VENT**

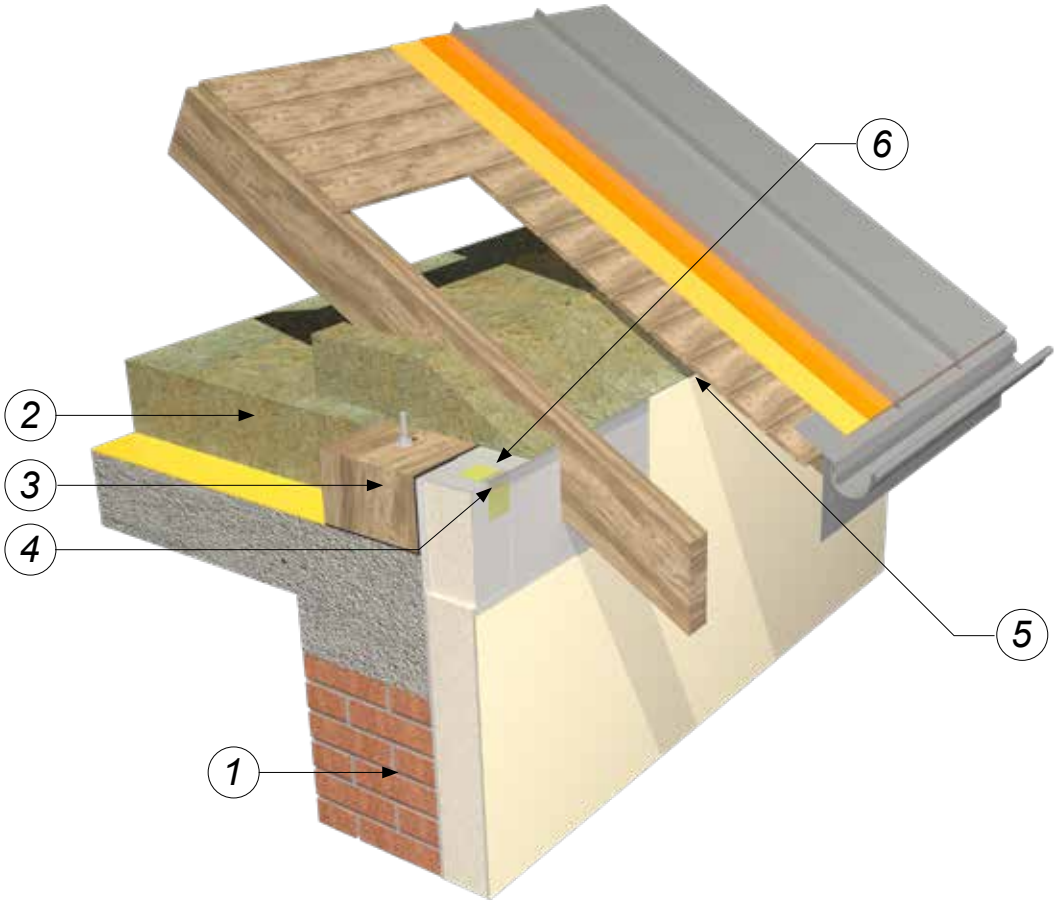
6. THERMAL INSULATION AT THE WALL-ROOF JUNCTION FOR FLAT AND PITCHED ROOF



6.3

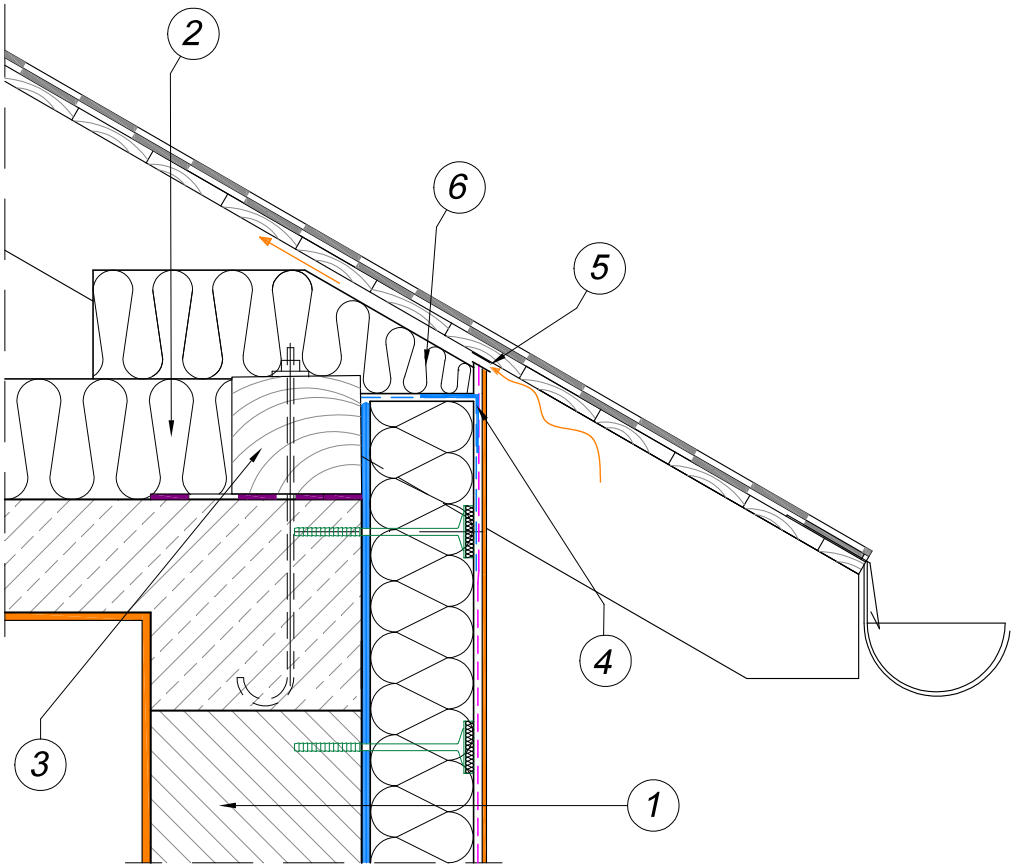
junction of an ETICS-insulated wall with a pitched roof

above an insulated ceiling of the top storey and a ventilated roof void (cold roof)



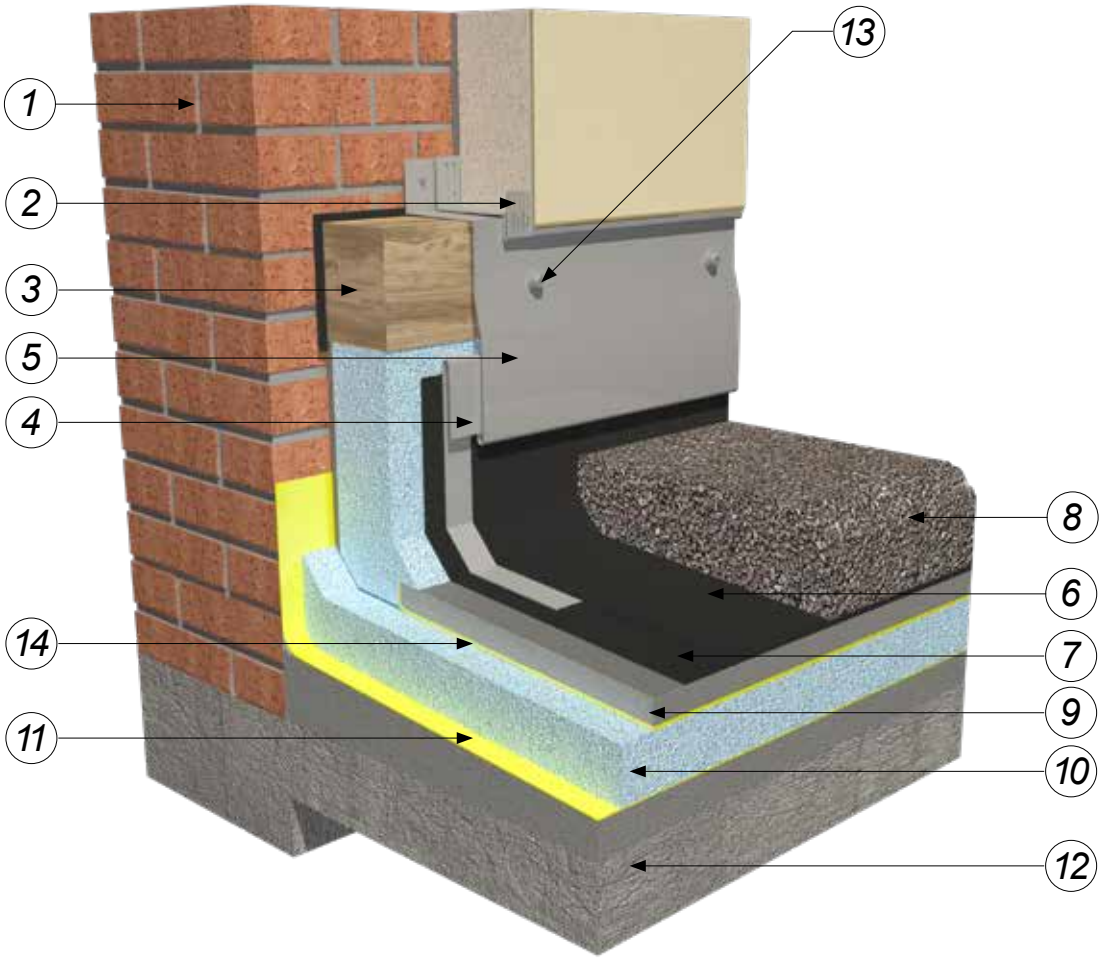
1. **WALL INSULATED WITH ONE OF THE ATLAS SYSTEMS:**
   - adhesive mortar for thermal INSULATION BOARDS
   - polystyrene EPS
   - mechanical fixings
   - adhesive mortar with reinforcing mesh embedded
   - priming mass for render
   - ATLAS render
2. **THERMAL INSULATION OF THE CEILING OF THE TOP STOREY**
3. **TIMBER WALL PLATE FIXED TO MASONRY WALL**
4. **CORNER BEAD WITH MESH**
5. **VENTILATION GRILLE**
6. **ETICS SYSTEM TERMINATION**
   base coat with embedded reinforcing mesh, e.g.:
   - ATLAS HOTER U + ATLAS 150 mesh

6. THERMAL INSULATION AT THE WALL-ROOF JUNCTION FOR FLAT AND PITCHED ROOF



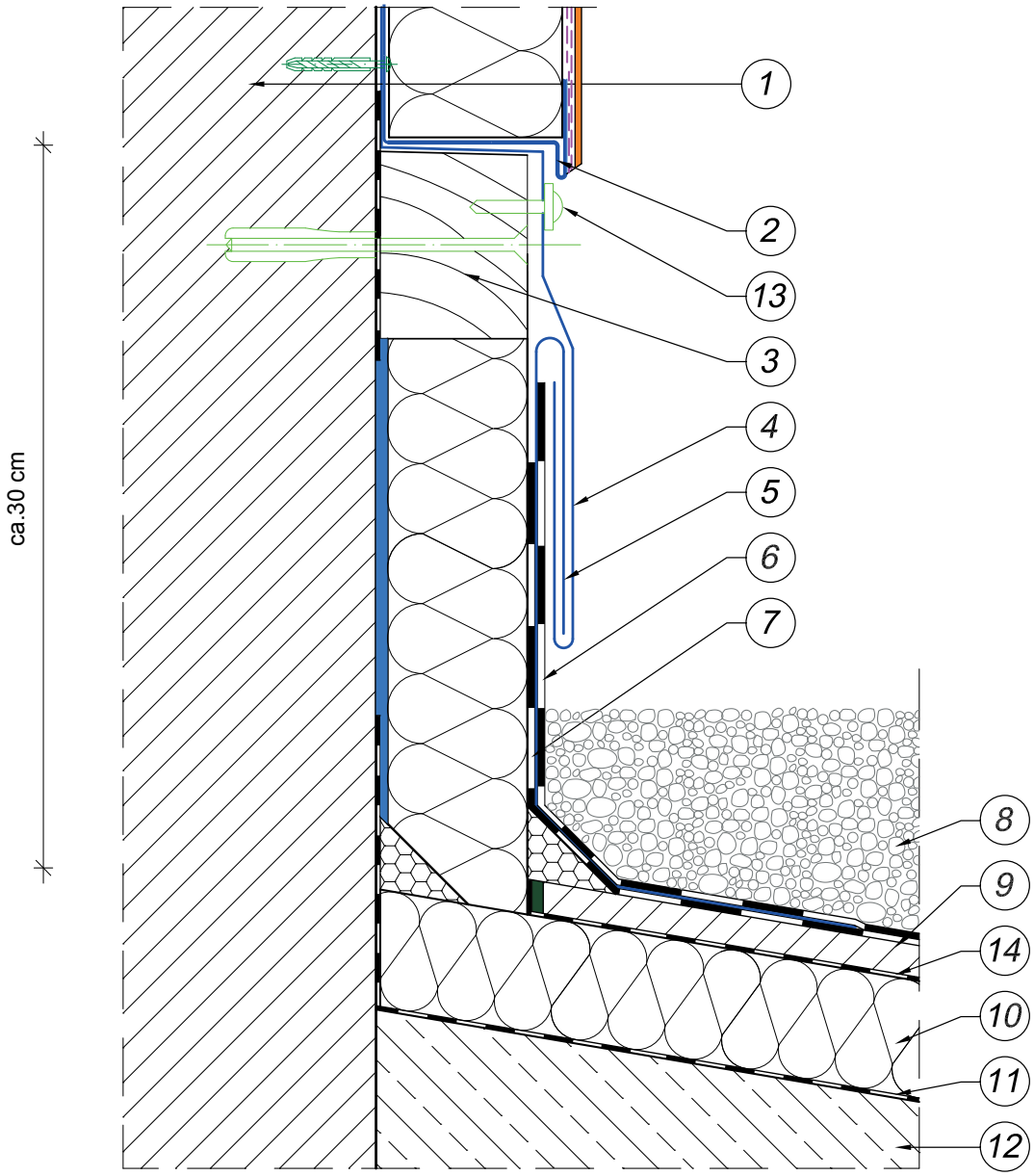
6.4

junction of an ETICS-insulated wall with an inverted roof build-up



1. **WALL INSULATED WITH ONE OF THE ATLAS SYSTEMS:**
   - adhesive mortar for thermal INSULATION BOARDS
   - polystyrene EPS
   - mechanical fixings
   - adhesive mortar with reinforcing mesh embedded
   - priming mass for render
   - ATLAS render
2. **STARTER TRACK**
3. **TIMBER BATTEN FIXED TO THE WALL AS SUPPORT FOR FLASHING**
4. **LAPPED FLASHING JOINT PERMITTING VERTICAL MOVEMENT**
5. **DRAINAGE FLASHING INSTALLED BENEATH THE STARTER TRACK**
6. **BITUMINOUS TOP LAYER MEMBRANE**
7. **BITUMINOUS BASE SHEET**
8. **GRAVEL AS AN OPTIONAL FREE-DRAINING BALLAST LAYER**
9. **OPTIONAL RIGID BALLAST LAYER, E.G. ATLAS POSTAR 80**
10. **ROOF AND PLINTH WALL INSULATION: XPS**
11. **VAPOUR CONTROL LAYER (VCL)**
12. **LOADBEARING ROOF SLAB**
13. **FIXING SCREWS FOR FLASHING**
14. **SEPARATION LAYER**

6. THERMAL INSULATION AT THE WALL-ROOF JUNCTION FOR FLAT AND PITCHED ROOF





tools and support

ATLAS belongs to the leading manufacturers of products for thermal insulation of buildings. Each thermal insulation product is subject to numerous tests, executed both by our laboratories and ordered outside, led in the most demanding conditions which the product could face in the natural environment.

The development of ATLAS materials, from design to application, is supervised by specialists and professionals: in ATLAS R&D laboratories, validation departments, training units and quality control laboratories.

Our specialists, advisors, technical representatives are ready to support you and advice at any construction problems. Almost any information concerning the use of ATLAS products can also be found on our web site www.atlas.com.pl/en together with some helpful tools.

CONTACT INFORMATION

COLOURS AND MATERIALS LIBRARY

ART OF FACADE CATALOGUE

DESIGN DETAILS

ATLAS FOREIGN SALES OFFICE
export@atlas.com.pl
+48 42 631 87 45
+48 42 631 88 18

HEADQUATERS
ATLAS sp.z o.o.
Kilińskiego 2
91-421 Łódź
Poland

KEEP UP TO DATE

