

	Product Technical Information	Number	IT.015.3
		Date of issue	2025-11-03
		Version	3.3
		AlphaThor 1800	

Three-layer (reinforced) EPDM waterproofing membrane for terraces, balconies, and Roofs AlphaThor

1. **Technical Specification:** EN 13956:2013-06 Flexible waterproofing sheets – Plastic and rubber sheets for roof waterproofing – Definitions and characteristics and EN 14909:2012-06 Flexible waterproofing sheets – Plastic and rubber sheets for roof waterproofing – Requirements and test methods.
2. **Manufacturer / Place of Production** Alpha Dam Sp. z o.o., 87-207 Dębowa Łąka 45
3. **Product Description, Intended Use and Application Range**

The product meets the requirements of EN 13956:2013-06 and EN 14909:2012-06.

The AlphaThor three-layer (reinforced) EPDM membrane is designed for use as a high-performance waterproofing layer for terraces, balconies, and flat roofs. It can be used in both traditional and inverted systems.

The membrane can also be used as a horizontal damp-proof barrier to stop capillary rise of water from the ground, prevent water from moving between wall parts, and block moisture from entering the structure. This helps guide water away from the building and gives extra protection against damp.

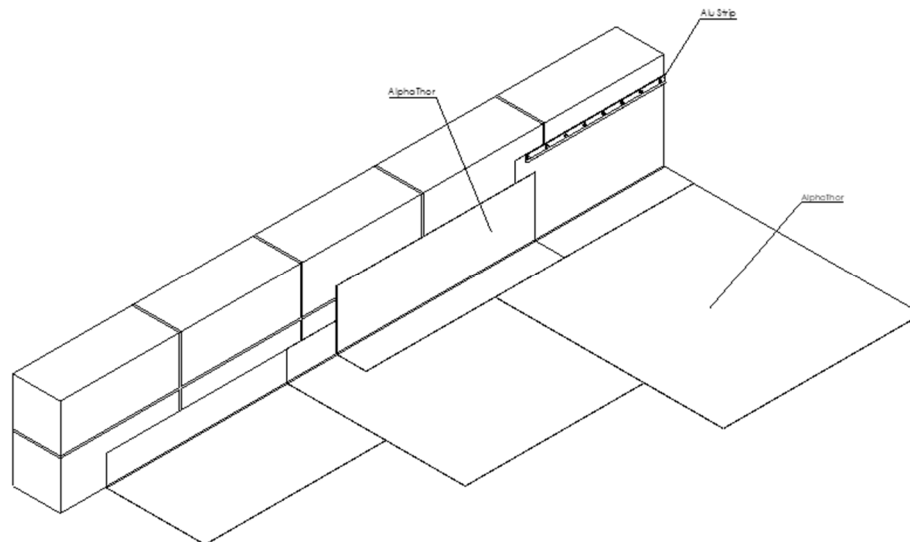
Thanks to its excellent durability, resistance to UV rays, and strong mechanical properties, AlphaThor provides long-lasting protection from moisture, mechanical damage, and weather. It is perfect for projects that require high reliability and resistance to harsh outdoor conditions.
4. **AlphaThor System Components**
 - 4.1. AlphaThor self-adhesive membrane reinforced with fiberglass mesh (IT.015.1)
 - 4.2. **AlphaThor membrane reinforced with polyester mesh** (IT.015.3)
 - 4.3. AlphaThor membrane without reinforcement (IT.015.5)
 - 4.4. AlphaThor welding tape, 150 mm wide, 20 m roll
 - 4.5. Pipe sleeves made of non-reinforced AlphaThor – sizes \varnothing 50 mm, 75 mm, 90 mm, 125 mm
 - 4.6. Vertical water outlet – sizes \varnothing 50 mm, 75 mm, 90 mm, 120 mm; pipe length 600 mm
 - 4.7. Horizontal water outlet – size \varnothing 75 mm
 - 4.8. Vent pipes – sizes \varnothing 80 mm, 110 mm
 - 4.9. Cable penetrations – sizes \varnothing 75 mm, 90 mm, 110 mm
 - 4.10. Corners made of non-reinforced AlphaThor – 100 mm x 100 mm x 100 mm
 - 4.11. AlphaThor 822 primer for AlphaThor 812 sealing adhesive
 - 4.12. AlphaThor 812 UV adhesive
 - 4.13. APP 40H vulcanizing tape
5. **User Information**
 - 5.1. Installation must follow building best practices, current technical knowledge, and the installation manual.
 - 5.2. **AlphaThor** membrane should be installed under normal construction conditions. It is not recommended to install when the temperature is below +5°C.
 - 5.3. Fixing with fasteners:

AlphaThor membrane can be anchored at the edge of the roof surface using mechanical fasteners. The fasteners should have a wide head (\varnothing = 4–5 cm). The length of the fastener should match the

thickness of the insulation and the type of roof base material. The fasteners should be covered with the overlap of the next membrane strip, which is heat-welded to the anchored one.

- 5.4. **Gluing:** The bottom side of **AlphaThor** is specially prepared to bond directly to almost any roof surface. For gluing the membrane to the roof base, a special EPDM adhesive should be used. Before applying, always read the glue manufacturer's instructions carefully
- 5.5. **Preparing the surface before gluing.** The roof surface must be flat, stable, compact (without loose particles), dry, and free from blisters, folds, sharp edges, dangerous cracks, bumps, etc.
- 5.6. After applying the adhesive and placing the **AlphaThor** membrane on the roof or terrace, any trapped air bubbles under the membrane should be rolled out using a wide roller.
- 5.7. **Overlapping strips lengthwise:** The overlap between membrane strips should be at least 5 cm. Membranes should be joined using hot air welding – both when the membrane is fastened with mechanical anchors and when it is glued
- 5.8. **Welding temperature:** The proper welding temperature is between 400–450°C, depending on outside air temperature and the welding speed. Before starting work, test the weld on a small piece of membrane and adjust the air temperature accordingly.
- 5.9. **End-to-end joins (cross connections):** Lay the end of one strip over the beginning of the next one, creating an overlap of at least 5 cm. Then heat-weld the two strips end together to ensure a strong and tight cross connection.
- 5.10. **Z Wall-to-roof or wall-to-terrace connections:** To prevent water from getting into the joint between the roof/terrace and the wall, it is recommended to apply the 40H vulcanizing tape on the vertical surface and extend the AlphaThor membrane from the flat (horizontal) surface up the wall by at least 5 cm – all in one continuous piece.

Laying the membrane strips / Connecting the roof with the wall:



- 5.11 Every glued attachment of the **AlphaThor** membrane to a vertical wall must be finished with a mechanical fixing using an aluminum termination bar. The top of the bar should be sealed with AlphaThor UV 812 adhesive to stop water from getting behind it.
- 5.12 To speed up rainwater drainage, water outlets should be placed away from the membrane joints.
- 5.13 In areas with harmful environmental conditions, like acid fog or acid rain, do not use drainage parts made of zinc or zinc alloys..

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5.14 To keep the waterproofing system in good condition for many years, regular inspections and maintenance should be done according to national regulations.

6. Curing / Shelf Life

AlphaThor, in its original packaging, can be stored for up to 24 months from the production date.

7. Storage

AlphaThor rolls should be stored and transported in a cool and dry place (+5°C to +25°C), in a vertical position. Do not stack pallets on top of each other.

8. Warranty

The product is covered by a 10-year waterproofing warranty from the date of purchase.

The warranty applies if:

1. The product is used according to the Technical Information, especially the Installation Guide (see section 5). The manufacturer is not responsible for any damage or faults caused by incorrect installation, use, or purpose.
2. The product is stored according to the Technical Information.
3. All recommendations are based on current knowledge, experience, and test results. This information is not legally binding and does not remove the installer's responsibility to follow good construction practices and adapt to on-site conditions. During installation, applicable standards and common building practices must be followed.
4. Proof of purchase (invoice) and the product ID number must be provided.

9. CE Marking Information

According to standard EN 13956:2013-6



According to standard EN 13956:2013-6

- Factory Production Control Certificate No. 1434-CPR-0256 for AlphaThor
- Factory Production Control Certificate No. 1434-CPR-0255 for AlphaThor NZB

The CE marking is supervised by the Factory Production Control system, certified by the Polish Center for Testing and Certification S.A., (Notified Body No. 1434).

10. Product Properties

Essential Characteristics	Unit	Declared Performance
Visible defects	-	none
Length	m	20 (0% do +5%)
Width	m	1,01 (-0,5% do 1%)
Straightness	mm	≤ 30/10 m
Thickness	mm	1,8 (±5%)
Mass per unit area	kg/m ²	1,8 (±5%)
Water tightness	10 kPa method B	meets requirements
Reaction to fire	class	E

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Peel resistance of joints		
- cross lap	N/50 mm	≥ 150
- longitudinal lap	N/50 mm	≥ 150
Shear resistance of joints		
- cross lap	N/50 mm	≥ 300
- longitudinal lap	N/50 mm	≥ 350
Tensile strength		
- lengthwise	N/50mm	≥ 400
- crosswise	N/50mm	≥ 400
Elongation at break		
- lengthwise	%	≥ 20
- crosswise	%	≥ 20
Impact resistance	mm method A	≥ 500
Resistance to static load	kg method B	≥ 20
Tear resistance		
- lengthwise	N	≥ 150
- crosswise	N	≥ 120
Dimensional stability		
- lengthwise	ΔL [%]	≤ -1,4
- crosswise	ΔT [%]	≤ -1,0
Flexibility at low temperature	°C	≤ -40
Hail resistance	m/s	≥ 19
UV resistance	1000 h 160MJ/m ²	meets requirements watertight
UV resistance	3000 h 480 MJ/m ²	meets requirements watertight
Resistance to water vapor penetration		(±30 %)
1. Water vapor transmission rate	g[(kg)/(m ² s)]	4,44 x 10 ⁻⁹
2. Water vapor diffusion resistance	(m ² s Pa)/kg	5,06 x 10 ⁺¹¹
3. Water vapor diffusion factor	μ	98396,9
4. Sd value	Sd[m]	98,397

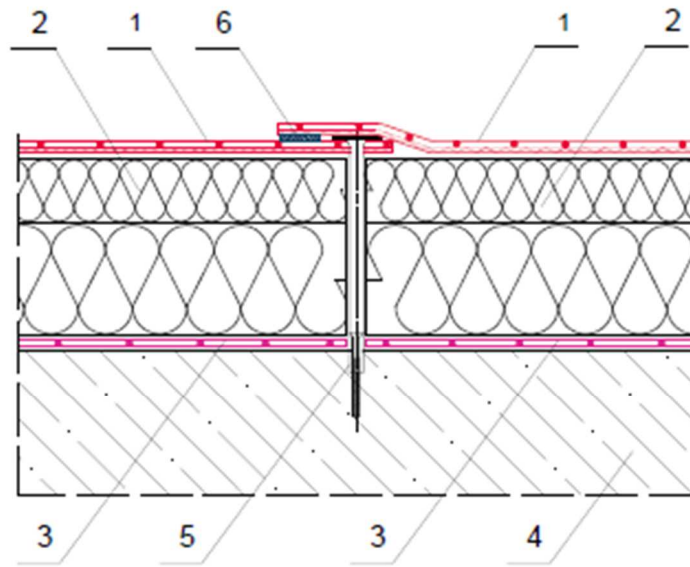
On behalf of the manufacturer:
Quality System Representative



Iwona Majek
Dębowa Łąka, 3 November 2025

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System AlphaThor

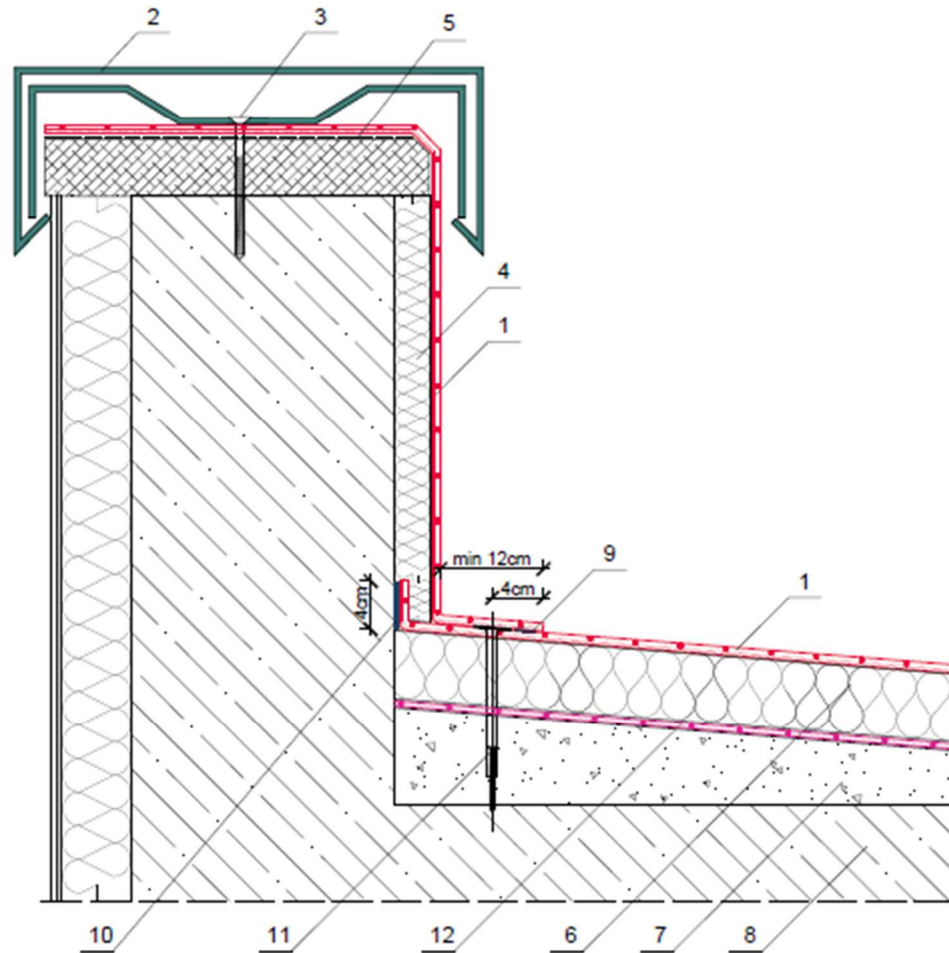


- 1 Trójwarstwowa (zbrojona) membrana EPDM AlphaThor
- 2 Termoizolacja
- 3 Paroizolacja
- 4 Warstwa konstrukcyjna
- 5 Kołek teleskopowy (mechaniczne mocowanie pokrycia)
- 6 Zgrzew termiczny zakładu

T-01.1	DACH PŁASKI UKŁAD TRADYCYJNY HYDROIZOLACJA	Alpha Dam sp. z o.o. 87-207 Dębowa Łąka 45 Tel. 56 646 20 07	alphadam
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Fig. 1: Mechanical fastening

System AlphaThor

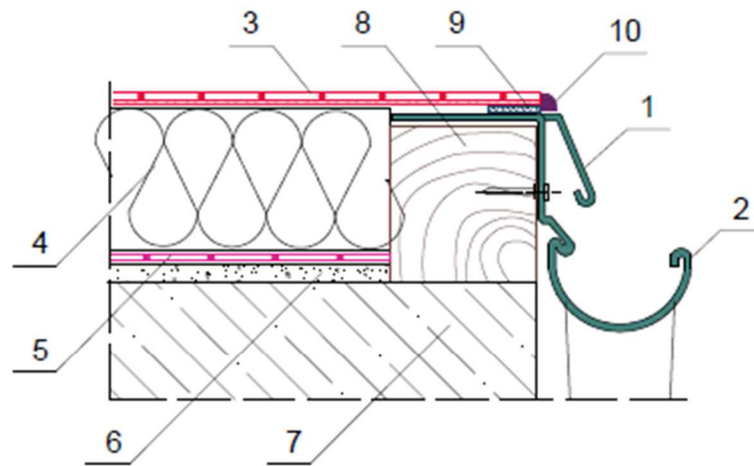


- 1 Trójwarstwowa (zbrojona) membrana EPDM AlphaThor
- 2 Obróbka blacharska
- 3 Mocowanie mechaniczne
- 4 Izolacja termiczna ściany atykowej
- 5 Klej kontaktowy
- 6 Termoizolacja stropodachu
- 7 Warstwa spadkowa
- 8 Część konstrukcyjna
- 9 Zgrzew
- 10 Taśma dwustronna butylowa APP40H
- 11 Kolek teleskopowy
- 12 Paroizolacja

T-01	DACH PŁASKI UKŁAD TRADYCYJNY OBRÓBKA ATYKI	Alpha Dam sp. z o.o. 87-207 Dębowa Łąka 45 Tel. 56 646 20 07	
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Fig.2: Attic treatment with thermal insulation

System AlphaThor



- 1 Obróbka blacharska - fartuch nadrynnowy
- 2 Rynna
- 3 Trójwarstwowa (zbrojona) membrana EPDM AlphaThor
- 4 Termoizolacja
- 5 Paroizolacja
- 6 Zaprawa wyrównująca
- 7 Część konstrukcyjna
- 8 Profil drewniany lub kształtownik zimnogięty
- 9 Taśma dwustronna butylowa APP40H
- 10 Klej uszczelniający #812 poprzedzony aktywatorem do EPDM #822

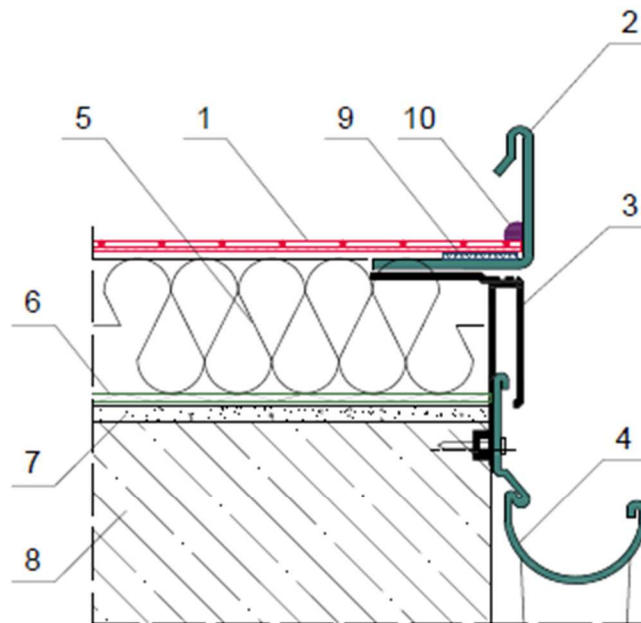
T-02

DACH PŁASKI
UKŁAD TRADYCYJNY
KRAWĘDŹ DACHU Z RYNNĄ

Alpha Dam sp. z o.o.
87-207 Dębowa Łąka 45
Tel. 58 646 20 07

Fig.3: Connection with sheet metal flashing, gutter apron

System AlphaThor



- 1 Trójwarstwowa (zbrojona) membrana EPDM AlphaThor
- 2 Obróbka blacharska - profil perforowany
- 3 Obróbka blacharska - pas nadrynnowy
- 4 Rynna
- 5 Termoizolacja
- 6 Samoprzylepna paroizolacja aluminiowa
- 7 Zaprawa wyrównująca
- 8 Część konstrukcyjna
- 9 Taśma dwustronna butylowa APP40H
- 10 Klej uszczelniający #812 poprzedzony aktywatorem do EPDM #822

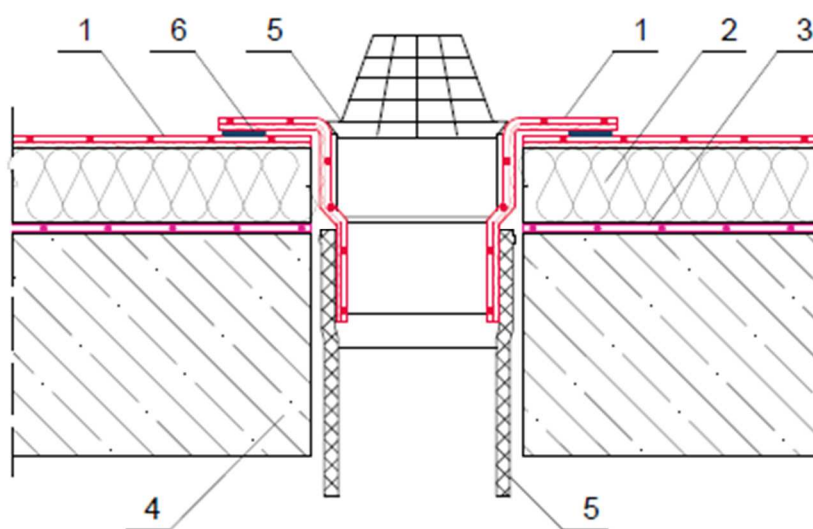
T-02A

DACH PŁASKI
UKŁAD TRADYCYJNY
KRAWĘDŹ DACHU Z RYNNĄ

Alpha Dam sp. z o.o.
87-207 Dębowa Łąka 45
Tel. 56 646 20 07

Fig.4: Connection with sheet metal flashing and gutter profile

System AlphaThor



- 1 Trójwarstwowa (zbrojona) membrana EPDM AlphaThor
- 2 Termoizolacja
- 3 Paroizolacja
- 4 Warstwa konstrukcyjna
- 5 Wpust dachowy AlphaThor z kołnierzem z EPDM AlphaThor lub dowolny wpust dachowy z kołnierzem skrętnym samozaciskowym bądź z kołnierzem TPO
- 6 Zgrzew

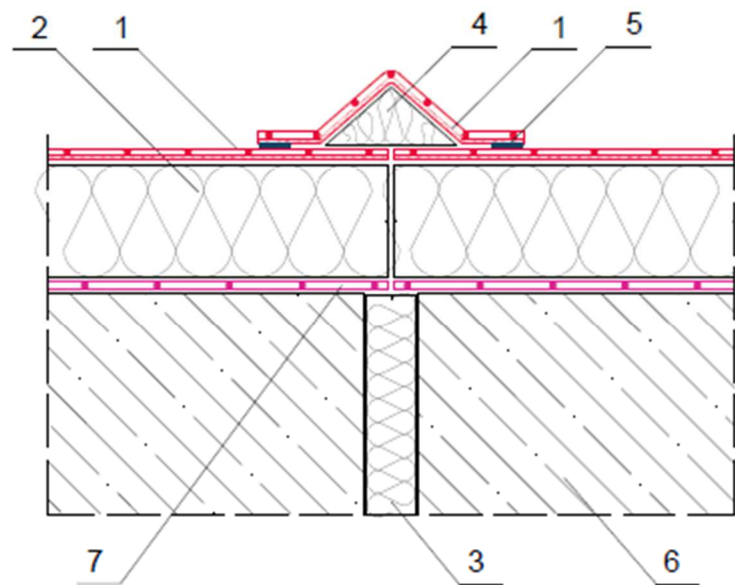
T-03

 DACH PŁASKI
UKŁAD TRADYCYJNY
ODWODNIENIE

 Alpha Dam sp. z o.o.
87-207 Dębowa Łąka 45
Tel. 56 646 20 07

Fig.5: Roof drain processing

System AlphaThor



- 1 Trójwarstwowa (zbrojona) membrana EPDM AlphaThor
- 2 Termoizolacja
- 3 Wkładka dylatacyjna
- 4 Trójkąt z wełny mineralnej (min. 5x5cm)
- 5 Zgrzew (szer. min 4cm)
- 6 Warstwa konstrukcyjna
- 7 Paroizolacja

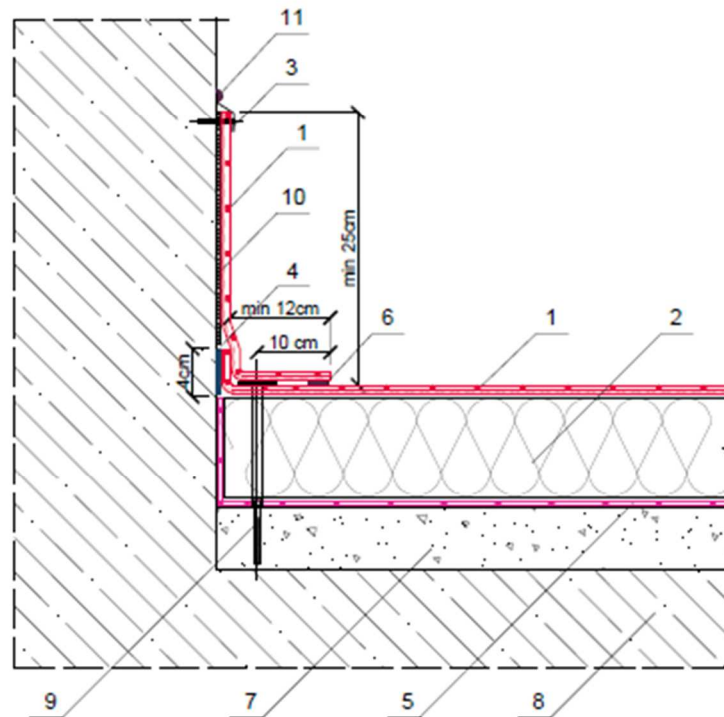
T-06

DACH PŁASKI
UKŁAD TRADYCYJNY
OBRÓBKA DYLATACJI

Alpha Dam sp. z o.o.
87-207 Dębowa Łąka 45
Tel. 58 646 20 07

Fig.6: Creating an expansion joint on the roof

System AlphaThor



- 1 Trójwarstwowa (zbrojona) membrana EPDM AlphaThor
- 2 Termoizolacja
- 3 Listwa dociskowa mocowana mechanicznie (∞ ok. 25cm)
- 4 Taśma dwustronna butylowa APP40H
- 5 Paroizolacja
- 6 Zgrzew
- 7 Warstwa spadkowa
- 8 Część konstrukcyjna
- 9 Kolek teleskopowy
- 10 Klej kontaktowy
- 11 Klej uszczelniający #812 poprzedzony aktywatorem do epdm #822

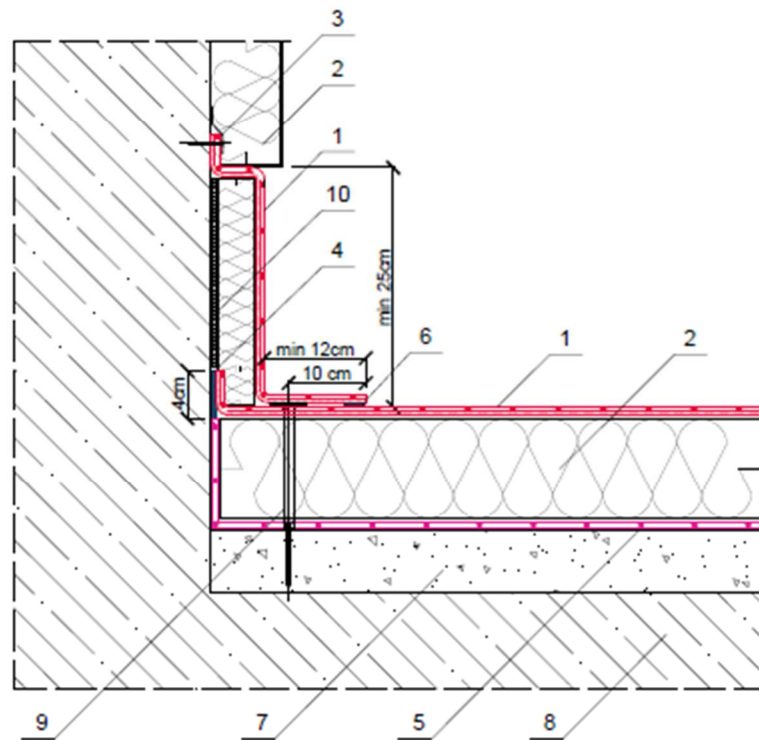
T-07

DACH PŁASKI
UKŁAD TRADYCYJNY
OBRÓBKA ŚCIANY/KOMINA

Alpha Dam sp. z o.o.
87-207 Dębowa Łąka 45
Tel. 56 646 20 07

Fig.7: Roof to wall connection

System AlphaThor



- 1 Trójwarstwowa (zbrojona) membrana EPDM AlphaThor
- 2 Termoizolacja
- 3 Listwa dociskowa mocowana mechanicznie
- 4 Taśma dwustronna butylowa APP40H
- 5 Paroizolacja
- 6 Zgrzew
- 7 Warstwa spadkowa
- 8 Część konstrukcyjna
- 9 Kołek teleskopowy
- 10 Klej kontaktowy (powierzchnia termoizolacji ściany attykowej odpowiednio przygotowana pod klej kontaktowy)

T-05

DACH PŁASKI
UKŁAD TRADYCYJNY
PRZEJŚCIE NA ŚCIANĘ

Alpha Dam sp. z o.o.
87-207 Dębowa Łąka 45
Tel. 56 646 20 07

Fig.8: Roof connection with thermally insulated wall