

ALUJET Walljet ALU

Manufacturer ▶ ALUJET GmbH; Ahornstraße 16; 82291 Mammendorf

Product description ▶ ALUJET Walljet ALU consists of a composite layered aluminium structure and is used to create a horizontal seal in and underneath walls to protect against rising moisture as specified in DIN 18533-1 class W4-E.



Fig. 1: ALUJET Walljet ALU

Construction ▶

Layer	Material
Top	Polypropylen-nonwoven
Insert	PE coating / HDPE - fabric / PE coating
Bottom	Aluminium compound

Product benefits ▶ Bitumen free; heat-reflecting; Impervious to vapours; compatible with bitumen; compatible with PVC; extremely tear-proof; emissions-free; use as L- and Z-shaped barrier; extremely robust; very flexible; low weight; little overlap, because 50m run length per roll; only scissors or cutters are necessary for processing; Fixation also possible on bituminous substrates.

Area of Application ▶ The ALUJET Walljet ALU is suitable for the execution of structural waterproofing of "horizontal waterproofing in or under walls" against rising damp in accordance with DIN 18533-1 class W4-E as per 18533-1 (see abP P-1200/272/15-MPA BS). Furthermore, for sealing against spray and seepage water and ground moisture at the base of the wall (DIN 18533 Part 1 and 2: W4-E)

Specification ▶

Width / mm:	115	175	240	300	365	500	750	1.000
Length / m:	50	50	50	50	50	50	50	50
Pallet content / Ro.:	216	144	96	72	72	48	24	24
Pallet content / m²:	1242	1260	1152	1080	1314	1200	900	1.200

Technical data

Properties according to DIN EN 14909		Test	Unit / Type of results	Manufacturer value
5.3	Visible defekts	EN 1850-1	no visible defects	no visible defects
5.4	Length	EN 1848-1	[m] MLV	≥ 50,0 m
5.4	Width	EN 1848-1	[m] MLV	1,50 m ± 5mm
5.4	Straightness	EN 1848-1	passed	passed
5.5	Weight / mass	EN 1849-1	[g / m ²] MDV	218 g/m ² ± 10 %
5.5	Thickness	EN 1849-1	[mm] MDV	Thickness 0,48 ± 0,06 mm
5.6	Waterproof to water in liquid phase	DIN EN 1928 procedure B Water pressure 2 kPa Test duration: 24 hours Additionally DIN EN 1928 Procedure B Water pressure 400 kPa Test duration: 72 hours	passed	passed
5.7	Resistance to impact load	EN 12691 - Procedure A Underground Al plate Procedure B Underground EPS plate	[mm] MLV	≤ 500 mm falling height: sealed ≤ 800 mm falling height: sealed
5.8.1	Durability of water resistance against artificial aging	EN 1296 and EN 1928 Proceduren B	passed	passed
5.8.2	Durability to chemicals - waterproofness	DIN EN 1847 EN 1928 Procedure B	passed	passed
5.9	Cold bending	EN 1109	[°C] MLV	≥ -30°C
5.10	Tear resistance longitudinal transversal	EN 12310-1	[N] MDV	390 (-20 / +40 %) 410 (-20 / +40 %)
5.11	Shear resistance of the joint seams	EN 12317-2	Bonding push to kick: *) ≥ 500 N / 50 mm Shearing in the adhesive seam	Demolition outside the joint
5.12	Sd-Value	EN 1931 - Procedure B climate: 23-0/75	[m] MDV	s _D ≥ 1500 m
5.14	Tensile elongation longitudinal transversal	DIN EN 12311-2 Procedure A V = 100 mm / min free clamping length 120 mm Test climate: DIN EN ISO 291-23 / 50-2	N / 50 mm	700 (-20 / +40 %) 895 (-20 / +40 %)
5.14	Elongation longitudinal transversal	DIN EN 12311-2 Procedure A V = 100 mm / min free clamping length 120 mm Test climate: DIN EN ISO 291-23 / 50-2	%	35 ± 15 20 ± 10
5.16	Reaction to fire	DIN EN ISO 11925-2 EN 13501-1	[-] Class E	Class E

*) Joint area centered over with ALUJET Anschlussstreifen SPEED; ALUJET Anschlussstreifen SPEED; Width 20 cm; Aluminum composite foil with self-adhesive acrylate layer.

Processing

- ▶ The contact surfaces of the ALUJET Walljet ALU are adapted to the masonry mortar used as per DIN 1053-1 in such a manner that no unevenness appears that can damage the membrane. When using facing bricks, it is permissible to lay the ALUJET Walljet ALU directly on the substrate, the floor slab. The prerequisite for this is that the substrate does not have any unevenness that is harmful to the wall barrier membrane.

The ALUJET Walljet ALU must not be affixed with adhesive and must form one continuous sealing layer. It is laid with the fleece or aluminium side facing upwards and must overlap by at least 200 mm. With membrane widths under 200 mm, lay the membranes end to end and tape them over using the ALUJET Speed bonding strip. Perform a visual inspection of the ALUJET Walljet ALU before proceeding further with the construction. To create the necessary conditions for bringing up, overlapping or bonding the subsequent structure to or with the wall barrier, we recommend that the ALUJET Walljet ALU be allowed to extend beyond the brickwork by about 10 cm in each instance. If necessary, rectify any damaged spots. Membranes protruding from the wall must be protected from damage for the subsequent construction process.

The ALUJET Walljet ALU must be extended to the outer side of the inner shell (L end stop) at a height of at least 15 cm to 30 cm over the ground level surface.

ALUJET Walljet ALU as an L shaped barrier without a terminal block:

Cut the ALUJET Walljet ALU to size and press it down on the ALUJET Montagekleber WAL. Membrane overlaps must be at least 10 cm and taped over using the ALUJET Speed bonding strip. The ALUJET Walljet ALU is laid without producing any tension. A terminal block/end trim is no longer necessary, provided the ALUJET Montagekleber WAL and ALUJET Walljet bonding strip are used. With a bitumen substrate, bonding to the bitumen is carried out using the ALUJET Montagekleber BIT.

The ALUJET Montagekleber WAL is used to bond the membrane to a mineral substrate and to the ALUJET Walljet ALU. There are two ways of bonding to choose from depending on the preferred operation: bonding using a toothed spatula or bonding with contact pressure on adhesive beads. Please refer to the technical data sheet of the ALUJET Montagekleber WAL during the procedure.

ALUJET Walljet ALU as an L shaped barrier with a terminal block:

In this case, additional mechanical fastening of the ALUJET Walljet ALU must be done using an end trim/terminal block (please refer to the manufacturer's installation manual and the relevant standards). The ALUJET Walljet ALU can likewise be inserted as a Z end stop in the facing brickwork under the ventilation stone and must be brought up to the L end stop in such a way that no moisture bridges can form.

ALUJET Walljet ALU as a Z shaped barrier

The ALUJET Walljet ALU can also be used as a Z shaped barrier. However, over the duration of the construction process, make sure that the ALUJET Walljet ALU is protected from damage or turned up until it is used in the facing layer.

ALUJET Walljet ALU Sealing of wall bases and walls in contact with the ground:

For vertical application on the wall or in the area of the wall base, the waterproofing membrane must be laid loosely, with the fleece side facing down, on the substrate without overlapping the longitudinal and transverse or head seams, butt to butt. The joint areas are to be taped over using an "ALUJET Anschlussstreifen SPEED" of at least 20 cm width with the joint area in the middle. The cold self-adhesive edge strip in the area of the butt joint, if present, must also be pasted over. Carefully roll over any overlaps with a pressure roller.

Connections and terminations to penetrations and to rising components are to be made using an "ALUJET Anschlussstreifen SPEED" with an overlap of at least 10 cm.

The upper end of the waterproofing membrane must be secured against slipping in the area of the wall base or vertical wall and against running behind in the event of direct exposure to spray water. There must be no moisture bridges. In the area of the wall base there is an exception to the rule that the "ALUJET Anschlussstreifen SPEED" with self-adhesive acrylic layer, which has the same sealing layer structure as the "ALUJET Floorjet SPEED" waterproofing membrane, may also take over the task of surface sealing. For this application, the connecting strip must be bonded to the substrate over its entire surface without overlapping the longitudinal and transverse or head seams, butt to butt. The joint areas are to be glued over using an "ALUJET Anschlussstreifen SPEED" of at least 20 cm width with the joint area in the middle.

Drainage of window and door openings

In double-skin masonry, the inner shells must also be protected against moisture in the area of the window and door lintels.

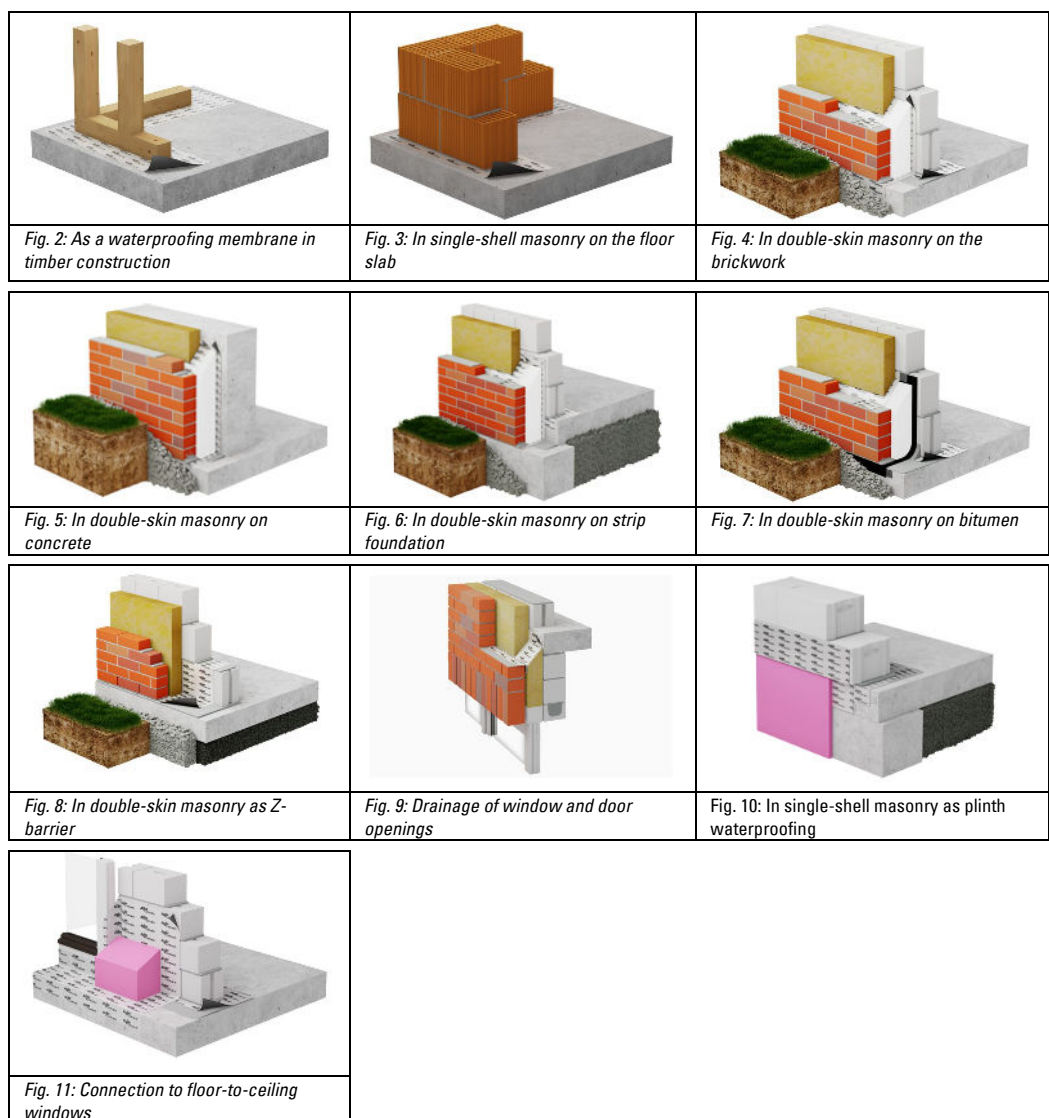
When preparing the waterproofing strips, it must be taken into account that the clear width of the window or door opening must be inserted with an overhang of approx. 25 cm on the left and right.

It is necessary to fix the ALUJET Walljet ALU to the load-bearing interior wall with the ALUJET Montagekleber WAL or to lay it in the masonry of the interior wall (Lay the strip only to half of the masonry width in the interior wall) In the next step, the ALUJET Walljet ALU is laid in the hollow layer, if possible with a gradient, to the outside and embedded in the bearing joint of the facing shell. It must be taken into account that a channel is formed between the insulation material and the facing shell (the drainage of the facing shell then takes place here above the lintel and is led past the window or the).

The ALUJET Walljet ALU is only inserted halfway into the facing shell to ensure stability.

Use under window sills as a second water-bearing level:

The ALUJET Walljet ALU is inserted in the window frame in the shape of a trough and sealed towards the window frame in accordance with the relevant specifications and regulations. In the reveal, the membrane is pulled up at least 6 cm to the side. In order to maintain the property as a second water-bearing level, the membrane must be sealed without gaps at the reveal and window frame using ALUJET Allfixx in accordance with the existing specifications and regulations. After 6 weeks at the latest, the ALUJET Walljet ALU must be professionally covered with the window sill. A maximum temperature load of 70°C must be taken into account. The ALUJET Walljet ALU does not fulfil the properties of a window sill.



System components ▶ ALUJET Anschlussstreifen SPEED; ALUJET Montagekleber WAL; ALUJET Allfixx:

Storage

▶ The ALUJET Walljet ALU is to be stored horizontally on the pallet. Moisture, UV radiation and heat should be avoided. The material should be transported from the warehouse to the construction site immediately before processing.

Notes

 CE 15 EN 14909 Leistungserklärung Nr. LE10037-000-1519		 eco INSTITUT TESTED PRODUCT ID 0117 - 33679 - 001	 GEV-EMICODE ECI PLUS sehr emissionsarm	 GRÜNHEIT GESÜNDERE PRODUKTE QNG READY ZERTIFIZIERT DURCH MPA
Allgemeines bauaufsichtliches Prüfzeugnis Nr. P-1200/272/15-MPA BS MPA Braunschweig				

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