nexler new generation of waterproofing

ECO PLATFORM EPD VERIFIED
Declaration No. 602/2024
Underlay and top-cover membranes

NEXLER Alu S40

Heat weldable underlayer bituminous felt

TECHNICAL DATA

Type of reinforcement	composite of aluminum film and glass veil
Top finishing	fine-grained
Low temperature flexibility	≤ 0°C
Width	≥ 1 m
Straightforwardness	≤ 10 mm per 5 m roll length
Thickness	4,0 mm ± 15 %
Resistance to external fire exposure* *applies to the examined layer systems	$B_{roof}(t_1)$
Reaction to fire	class E
Watertightness: waterproof at a pressure	≥ 2 kPa (method A) ≥ 10 kPa (method B)
Maximum tensile force: - longitudinal extension - transversal extension	500 ± 200 N/50 mm (4 ± 2) % 300 ± 150 N/50 mm (4 ± 2) %
Resistance to root penetration	NPD
Resistance to static loading	≥ 5 kg (method B)
Resistance to impact	≥ 600 mm (method A)
Resistance to tearing: - longitudinal - transversal	150 ± 100 N 150 ± 100 N
Resistance of the joint: - shear • longitudinal joint • transversal joint	300 ± 150 N/50 mm 500 ± 200 N/50 mm
Permeation of water vapor	2,2E+12 $m^2 \cdot Pa \cdot s/kg$ ± 25%
Diffusion resistance factor S_d	approx. 440 m
Radon diffusion coefficient	$D < 10^{-14}$ m²/s
Durability: - durability after artificial ageing, watertightness - durability against chemical - after artificial ageing, vapour diffusion - chemicals resistance	≥ 2 kPa (method A) acc. to annex A of standard EN 13969 2,2E+12 $m^2 \cdot Pa \cdot s/kg$ ± 25% acc. to annex A of standard EN 13970
Reference document(s)	EN 13707:2004+A2:2009; EN 13969:2004; EN 13969:2004/A1:2006; EN 13970:2004; EN 13970:2004/A1:2006

PROPERTIES

- Excellent vapour barrier properties
- Effective protection against radon radiation
- Fixed by welding
- Composite reinforcement made of aluminium

8-YEARS WARRANTY RADON-RESISTANT

APPLICATION

- Vapour barrier for roofs and terraces under the thermal insulation layer
- Horizontal damp-proof insulation
- Radon barrier in underground parts of buildings under floors

VAPOUR BARRIER FOR FOUNDATIONS WELDING

PACKAGING

Poland

- Roll length: 5 m
- Quantity per pallet: 30 rolls (150 m²)

Export

- Roll length: 5 m; 7,5 m
- Quantity per pallet:
  - 30 rolls (150 m²) - rolls of length 5 m
  - 20 rolls (150 m²) - rolls of length 7,5 m

METHOD OF USE

CONDITIONS OF USE

Making an insulation using **NEXLER Alu S40** bituminous felt should be carried out according to the technical design, in accordance with the current building regulations and the detailed guidelines for the design and execution of insulation contained in NEXLER Insulation Systems and the Technical Data Sheet.

The bituminous felt should be installed in ambient temperatures of above +5°C, this requirement applies to the time of day and night.

Do not carry out insulation work during strong winds and precipitation.

SUBSTRATE PREPARATION

In addition, the substrate should meet the following requirements:

- dry substrate (concrete in an air-dry condition, without any visible traces of moisture or darkening caused by moisture),
- clean substrate (the surface of the concrete is free of loose fractions, dust, oil stains, grease and other impurities),
- smooth substrate (local unevenness and cavities in the surface of concrete do not exceed ± 5 mm),
- even substrate (the gaps between the surface of the substrate and a 4 m long batten placed on the concrete substrate do not exceed 10 mm).

Before welding **NEXLER Alu S40** bituminous felt is recommended to prime concrete substrate with solvent-based bitumen primers for example NEXLER Penetrator G7, or water-based bitumen products for example NEXLER BITFLEX Primer.

PRODUCT CONTROL

The product should not raise any objections. The roll should be evenly rolled, without kinks.

PRODUCT PREPARATION

If it is necessary to make the covering at low ambient temperatures, it is recommended to store the rolls in heated rooms at a temperature of not less than +18°C for 24 hours before installation.

APPLICATION METHOD

NEXLER Alu S40 bituminous felt should be fixed by welding to a primed concrete substrate. Application should be carried out after the priming agent has completely dried (or cured). As a result of heating both the substrate and the underside of the bituminous felt with a burner, the thin protective plastic foil melts, the asphalt is slightly melted and the bituminous felt sticks evenly to the substrate. Maintain a bituminous felt overlap min. 8 cm wide along the length of the felt strip and an overlap min. 12 cm wide at the joint perpendicular to the length of the felt strip. An asphalt outflow of approx. 0,5 cm in width over the entire length of the welded overlap is required.

CONTROL OF PERFORMANCE

During acceptance, the following should be checked:

- correctness of welding of overlaps - a continuous trickle of melted asphalt mixture on the overlaps is required,
- adhesion of the bituminous felt to the substrate,
- correctness of detail work.

WARRANTY

The manufacturer NEXLER sp. z o.o. provides the direct purchaser of **NEXLER Alu S40** bituminous felt:

- a material warranty of 8 years.

Details of the guarantee provided to the purchaser are contained in the guarantee card.

TOOLS AND TOOL CLEANING

Roofing gas burner, bituminous felt uncoiler.

STORAGE AND TRANSPORT

The rolls of **NEXLER Alu S40** bituminous felt are protected with packing tapes before unrolling. Each roll has a label with the required data on it. The rolls are placed vertically on wooden industrial pallets and foiled.

During transportation and storage, the rolls must be protected from moisture and exposure to sunlight, and be placed upright in one layer in a way preventing any dislocation or damage.

The bituminous felt rolls must be stored on a flat surface at a distance of at least 120 cm from radiators.

Transportation must be carried out in compliance with applicable shipment safety regulations.

NOTES

Works should be carried out in accordance with technical conditions, manufacturer's instructions, health and safety standards and regulations.

Before welding the bituminous felt, take notice of whether the next roll to be rolled out does not differ in the shade of the sprinkle. The sprinkle is a natural raw material and may vary in shade.

IMPORTANT INFORMATION

The Environmental Product Declaration (EPD) for the company NEXLER, covering both top layer and underlayer bituminous felt, was developed by the Building Research Institute (ITB) in accordance with international standards ISO 14025 and EN 15804.

Please refer to the detailed conditions of use of the product before use.

We guarantee the quality of our materials as part of our terms of sale and delivery.

For buildings with special requirements that are not covered by this manual, we provide our Customers with our ownprofessional advisory service.

The manufacturer has no influence on the improper use of the material, its use for other purposes or under conditions other than those described above. The guarantee only covers the quality of the delivered product. The correct and therefore effective use of the product is not subject to our control.

Neither the manufacturer nor his authorized representative may be held liable for any loss incurred as a result of improper use or storage of the product.

Employees of the company are authorized to provide technical information only and solely in accordance with this Technical Data Sheet. Information other than that contained in this sheet should be confirmed in writing.

If you have any doubts, consult the manufacturer.

CONTACT DETAILS

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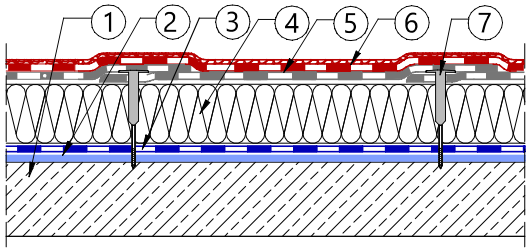
ISSUE DATE

This Technical Data Sheet was issued on 17.10.2025.

Once we have issued a new Technical Data Sheet, this one is no longer valid.

DETAILS

Covering for a flat roof with a concrete substrate



1. Reinforced concrete floor
2. Bituminous primer NEXLER BITFLEX Primer
3. Vapour barrier **NEXLER Alu S40**
4. Mineral wool
5. Underlayer bituminous felt NEXLER PREMIUM PYE PV200 S40
6. Top layer bituminous felt NEXLER PREMIUM PYE PV250 S53H
7. Telescopic connector