nexler® new generation of waterproofing

NEXLER STYROPUK Foundation

Adhesive for polystyrene foam and XPS

TECHNICAL DATA

Correction time	up to approx. 10 min.
Pinning	after approx. 2 h
Full hardening	after approx. 12 h
Foam height increase (expansion degree)	± 3,0 mm
Dimensional stability, after 48 h, at a temp of +60°C and 30% RH, in the direction: a) length b) width c) thickness	 ± 0,5% ± 1,0% ± 1,5%
Shear resistance	≥ 60 kPa
Shear modulus of transverse elasticity	≥ 130 kPa
Tensile strength perpendicular to the surface, connection: EPS – adhesive joint (8 mm) – concrete, made of: a) in laboratory conditions b) in laboratory conditions, after an open time of 5 min. c) at a temp. of -5°C d) at a temp. of +30°C and 30% RH e) when modifying the joint thickness (15 mm)	 ≥ 0,08 MPa ≥ 0,08 MPa ≥ 0,08 MPa ≥ 0,08 MPa ≥ 0,08 MPa
Tensile strength perpendicular to the surface, connection: XPS – adhesive joint (8 mm) – concrete, made of: a) in laboratory conditions b) in laboratory conditions, after an open time of 5 min. c) at a temp. of -5°C d) at a temp. of +30°C and 30% RH e) when modifying the joint thickness (15 mm)	 ≥ 0,08 MPa ≥ 0,08 MPa ≥ 0,08 MPa ≥ 0,08 MPa ≥ 0,08 MPa
Tensile strength perpendicular to the surface, connection: EPS – adhesive joint (8 mm) – concrete with bituminous coating, made of: a) at a temp. of -5°C b) at a temp. of +30°C	 ≥ 0,08 MPa ≥ 0,08 MPa
Tensile strength perpendicular to the surface, connection: XPS – adhesive joint (8 mm) – concrete with bituminous coating, made of: a) at a temp. of -5°C b) at a temp. of +30°C	 ≥ 0,08 MPa ≥ 0,08 MPa
Tensile strength perpendicular to the surface, connection: EPS – adhesive joint (8 mm) – roofing felt, made of: a) at a temp. of -5°C b) at a temp. of +30°C c) at a temp. of +30°C on a roofing felt base heated to a temp. of +60°C	 ≥ 0,08 MPa ≥ 0,08 MPa ≥ 0,08 MPa
Tensile strength perpendicular to the surface, connection: XPS – adhesive joint (8 mm) – roofing felt, made of: a) at a temp. of -5°C b) at a temp. of +30°C c) at a temp. of +30°C on a roofing felt base heated to a temp. of +60°C	 ≥ 0,08 MPa ≥ 0,08 MPa ≥ 0,08 MPa
Tensile strength perpendicular to the surface, connection: EPS – adhesive joint (8 mm) – galvanized steel sheet, made of: a) in laboratory conditions b) at a temp. of +30°C on a steel sheet base heated to a temp. of +60°C	 ≥ 0,08 MPa ≥ 0,08 MPa
Tensile strength perpendicular to the surface, connection: XPS – adhesive joint (8 mm) – galvanized steel sheet, made of: a) in laboratory conditions b) at a temp. of +30°C on a steel sheet base heated to a temp. of +60°C	 ≥ 0,08 MPa ≥ 0,08 MPa
Tensile strength perpendicular to the surface, connection: EPS – adhesive joint (8 mm) – galvanized steel sheet with an organic coating, made of in laboratory conditions	≥ 0,08 MPa
Tensile strength perpendicular to the surface, connection: XPS – adhesive joint (8 mm) – galvanized steel sheet with an organic coating, made of in laboratory conditions	≥ 0,08 MPa
Tensile strength perpendicular to the surface, connection: EPS – adhesive joint (8 mm) – OSB board, made of in laboratory conditions	≥ 0,08 MPa
Tensile strength perpendicular to the surface, connection: EPS – adhesive joint (8 mm) – wood, made of in laboratory conditions	≥ 0,08 MPa
Tensile strength perpendicular to the surface, connection: EPS – adhesive joint (8 mm) – wood, made of in laboratory conditions	≥ 0,08 MPa
Tensile strength perpendicular to the surface, connection: EPS – adhesive joint (8 mm) – EPS, made of in laboratory conditions	≥ 0,08 MPa
Tensile strength perpendicular to the surface, connection: XPS – adhesive joint (8 mm) – XPS, made of in laboratory conditions	≥ 0,08 MPa
Consumption	approx. 10 - 14 m² from a can
Can temperature	from +10°C to +25°C
Ambient temperature during application and bonding	from -5°C to +30°C
Substrate temperature except for: – bituminous felt – galvanised steel sheet metal, galvanised steel sheet metal with an organic coating	from -5°C to +30°C from -5°C to +60°C from -5°C to +60°C
Reference document(s)	ITB-KOT-2020/1264 issue 1 + Annex 1

PROPERTIES

- Single-component, low-pressure
- Ready-to-use
- Distinguished by short hardening time, which allows for work to be carried out quickly (initial hardening after 2 hours, full hardening after 12 hours)
- Excellent adhesion to bituminous substrates (PMBC compounds, weldable bituminous felt) and all mineral substrates
- Can be used in a wide temperature range, especially recommended in periods of cool autumn and spring weather
- Very efficient, easy and comfortable to use

HIGH BONDING CAPABILITY

QUICK WORK

EFFICIENT

APPLICATION

- Bonding of EPS (expanded polystyrene) and XPS polystyrene boards to surfaces of foundations and underground parts of buildings and structures, covered with asphalt-based dispersion waterproofing compound, bituminous felt or without waterproofing (e.g. in structures of increased watertightness with no additional coating), when carrying out perimeter thermal insulation
- Fastening EPS (expanded polystyrene) and XPS polystyrene boards to mineral substrates (e.g. concrete, ceramic, silicate, cellular concrete), wooden substrates, OSB, galvanised steel sheet metal, galvanised steel sheet metal with organic or asphaltic felt coating in other external applications, except flat roofs
- Bonding of EPS (expanded polystyrene) and XPS-type thermal insulation boards in the ground parts of buildings (plinths)
- Filling gaps in thermal insulation

GUN

PACKAGING

Poland

- Can: 750 ml
- Quantity per box:
  - 750 ml - 12 pcs.

Export

- Can: 750 ml
- Quantity per box:
  - 750 ml - 12 pcs.

METHOD OF USE

CONDITIONS OF USE

The temperature of the substrate and air during the works should be from -5°C to +30°C. In the case of a substrate made of bituminous felt, galvanised steel sheet metal or galvanised steel sheet metal with an organic coating, work can be carried out at substrate temperatures of up to +60°C.

Works should not be carried out during precipitation and strong sunlight.

SUBSTRATE PREPARATION

Before bonding insulation boards with **STYROPUK Foundation**, the surface must be properly prepared. The substrate should be even and levelled. The bituminous felt must be well heated into the substrate. The permissible deviation of the surface from the flatness of the wall must not exceed -4 mm and +2 mm. The substrate must be clean, free of frost, ice and water stagnation. In addition, it must be free of dust, oil, grease, paint residues and other contaminants that could reduce the adhesion of the adhesive to the substrate.

STYROPUK Foundation can be applied to seasoned substrates and bituminous coatings fully bonded throughout the whole section. It is not permissible to apply the product to a damp substrate. Substrate moisture adversely affects the foam structure.

Thermal insulation boards to be fastened should have straight edges. EPS boards with reduced absorption and XPS boards should be sanded before the adhesive is applied to increase its adhesion to the surface.

PRODUCT CONTROL

Check the production date on the packaging before use. The product should not be incorporated beyond its shelf life. Product packaging must not show signs of damage.

PRODUCT PREPARATION

STYROPUK Foundation is a ready-to-use product. If stored at low temperatures, the product should be placed in a warm room for a minimum of 24 hours before use. Before bonding, shake the can vigorously (for about 30 s) to thoroughly mix the ingredients. Screw the can onto the gun and dispense in an “upside down” position.

APPLICATION

Apply **STYROPUK Foundation** to the thermal insulation board in at least four vertical braids of approx. 3 cm in diameter. Equal spacing of 20 - 30 cm between the strips should be maintained, while observing a distance of 2 - 3 cm from the edge of the board. For panels wider than 1000 mm, more strips are required. When applying, maintain a distance of approximately 1 cm between the tip of the gun and the thermal insulation board. When the board is placed on the substrate, the thickness of the joint formed should be 8 mm. If work is to be interrupted for more than 15 minutes, lock the trigger, leaving the can screwed on until the next use.

The bonding of the thermal insulation boards to the substrate should be carried out as soon as possible after the application of the adhesive. Open time, i.e. the time of retention of bonding properties at a temperature of (23 ± 2)°C and relative humidity of (50 ± 5) %, is 5 minutes maximum. Place the board on the insulated surface and adjust the alignment using a mounting batten if needed. The position of the boards can be adjusted for up to 10 minutes after they are placed on the insulated surface.

Thermal insulation boards are to be supported on the footing offset and, if this is not possible, to be supported mechanically until the adhesive has set (approximately 10 minutes). After 2 hours, the boards are ready for further processing. An additional mechanical fixing is required in the plinth area.

CONTROL OF PERFORMANCE

When applying the adhesive, care should be taken to spread it evenly over the surface of the board. In order to obtain the correct bonding strength, **STYROPUK Foundation** should be applied in the correct amount, observing the recommended strip width. The boards being bonded should adhere closely to each other and to the substrate.

TOOLS AND TOOL CLEANING

Gun.

After emptying the packaging, clean the gun with NEXLER STYROPUK Polyurethane Foam Cleaner. If the product is fully hardened, remove mechanically.

STORAGE AND TRANSPORT

The shelf life of the product is 24 months from production date specified on the packaging. Store in dry and cool rooms equipped with mechanical ventilation, at a temperature of +5°C to +35°C. Store upright, in tightly sealed, original packaging. The product must be protected from heat and direct sunlight.

NOTES

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

For information on how to deal with symptoms of disease, allergies or irritation of the skin or eyes, please refer to the Safety Data Sheet (www.nexler.com).

The remaining content of the product and container should be handed over to authorized companies.

GENERAL RECOMMENDATIONS

Technical data and information on the method of use are given for a temperature of 23°C ± 2°C and a relative air humidity of 50%. Under different conditions the processing time and the hardening process may change significantly.

The material consumption depends on the ambient temperature, the humidity of the air and the substrate, the temperature of the can, the evenness of the substrate and the cross section of the layer applied.

Hardened polyurethane foam should not be exposed to prolonged sunlight. The UV resistance of the foam depends on the exposure time.

Do not use when there is pressurised water impact (when waterproofing with hydrostatic pressure).

SAFETY INFORMATION

Extremely flammable aerosol. Pressurised container: May burst if heated. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. Suspected of causing cancer. May cause harm to breast-fed children. May cause damage to the respiratory system through prolonged or repeated exposure if inhaled. May cause long lasting harmful effects to aquatic life. Keep out of reach of children. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Avoid breathing mist/vapours/spray. Wear protective gloves/protective clothing/eye protection. IF ON SKIN: Wash with plenty of water and soap. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Protect from sunlight. Do no expose to temperatures exceeding 50 °C. Dispose of contents/container to by disposing in a hazardous waste receptacle.

IMPORTANT INFORMATION

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 own professional 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.

Once we have issued a new technical data sheet, this manual is no longer valid.

CONTACT DETAILS

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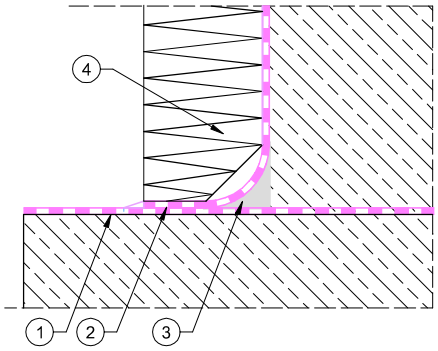
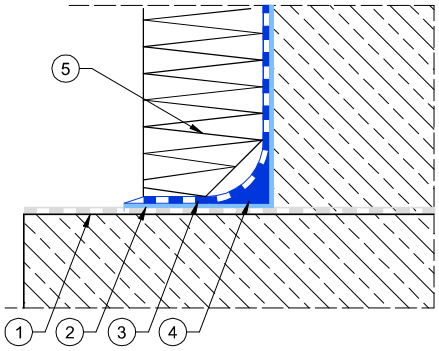
DETAILS

Detail of footing and foundation wall connection - damp proofing

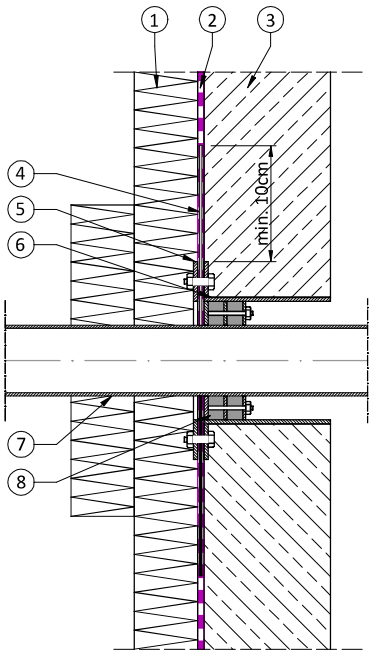


1. Horizontal waterproofing - NEXLER AQUAMINERAL 1K Ultra
2. Vertical waterproofing – NEXLER AQUAMINERAL 1K Ultra/ NEXLER AQUAMINER 2K Ultra
3. A facet made of NEXLER RENOBUD R 103 mortar with a radius of 5 cm
4. Thermal insulation – XPS or EPS boards bonded with **NEXLER STYROPUK Foundation**

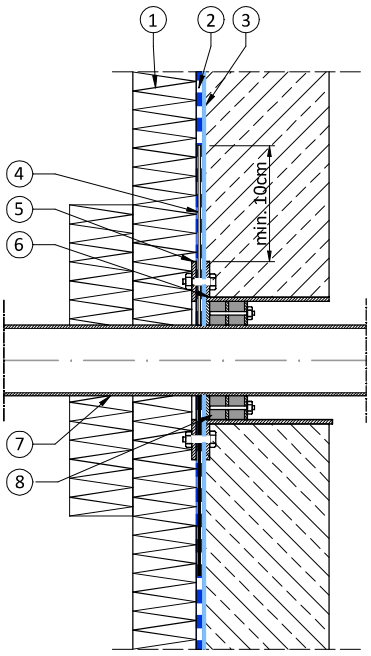


1. Horizontal insulation made of bituminous felt
2. Priming layer of NEXLER BITFLEX Primer
3. Waterproofing – NEXLER BITFLEX 1KP
4. A facet made of NEXLER BITFLEX 1KP mass with a radius of 2 cm
5. Thermal insulation – XPS or EPS boards bonded with **NEXLER STYROPUK Foundation**

Detail of the sealing of an installation pipe passage through a foundation wall - damp proofing



1. Thermal insulation – XPS or EPS boards bonded with **NEXLER STYROPUK Foundation**
2. Vertical waterproofing – NEXLER AQUAMINERAL 1K Ultra
3. Foundation wall
4. Sealing sleeve
5. Movable flange
6. Fixed flange
7. Installation pipe
8. Sealing chain



1. Thermal insulation – XPS or EPS boards bonded with **NEXLER STYROPUK Foundation**
2. Vertical waterproofing – NEXLER BITFLEX 1KP
3. Priming layer of NEXLER BITFLEX Primer
4. Sealing sleeve
5. Movable flange
6. Fixed flange
7. Installation pipe
8. Clamping seal