SELF-ADHESIVE MEMBRANES

ULTRAFLEX SA 7000-X
ULTRAFLEX SA HDPE D
ULTRAFLEX SA NB
ULTRAFLEX SA NBS
ULTRAFLEX SA
ULTRAFLEX SA STRONG
ULTRAFLEX SA ALU
VAPORSTOP CA 500
Long operational lifetime, reliability and convenience of installation – that’s the ideal waterproofing. Any defect, especially when it comes to foundations, will certainly lead to the destruction of the entire system and huge financial losses.

Application of self-adhesive materials makes possible to install reliable waterproofing where the standard torch-on application is forbidden, while high flexibility and elasticity allow the materials to be used on surfaces of any complexity and in limited space.

APPLICATION AREA:

- Waterproofing of underground parts of premises and engineering structures
- Indoor waterproofing of premises and buildings
- Waterproofing of confined area, where standard technologies cannot be applied (e.g. bathroom floor)
- Underlay on pitched roofs and vapor barrier on the corrugated steel sheets and precast concrete slabs
- Corrosion protection of steel pipes and junctions

ADVANTAGES:

- Application on surfaces, where torch-on application is prohibited
- Application on surfaces of any complexity
- Easy to install
- Does not require extra equipment
- Quick installation
- Cold application prevents smoke, odors and noise

Self-adhesive waterproofing is a type of materials that combines all the advantages of torch-on applied materials and non-torch-on installation, which helps to avoid issues associated with the use of flame.
ULTRAFLEX SA 7000-X

Self-adhesive carrier less SBS-modified bitumen membrane is designed for waterproofing of foundations and engineering structures with the additional feature of radon protection. The material is produced by placing a special self-adhesive polymer-bitumen binder on a unique high-performance polymer film that covers the material on top. Thanks to the outstanding properties of the film, the membrane has record elongation characteristics and high dimensional stability. The bottom surface of the material is covered with an easy-removable protective film.

MATERIAL STRUCTURE:

1. **Unique high-performance polymer film**
   Protects the waterproofing layer from mechanical damage and impacts of chemically aggressive environment, grants record high elongation properties

2. **Self-adhesive polymer-bitumen compound**
   The high elasticity of this layer preserves waterproofing undamaged when cracks and splits occur in the foundation

3. **Easy-removable protective film**
   Used for underside surface protection from sticking in the roll

ADVANTAGES:

- Record high elongation properties
- Excellent physical and mechanical characteristics in all directions
- Prevents radon penetration into the structure
- High speed of application
- High repairability

<table>
<thead>
<tr>
<th>PROPERTIES</th>
<th>ULTRAFLEX SA 7000-X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness, mm</td>
<td>1.5±0.10</td>
</tr>
<tr>
<td>Mass per unit area, kg/m²</td>
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</tr>
<tr>
<td>Length x width, m</td>
<td>20 × 1</td>
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<tr>
<td>Flexibility / flow resistance, °C</td>
<td>≤-15 / ≥85</td>
</tr>
<tr>
<td>Elongation L / T, %</td>
<td>≥800 / ≥800</td>
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<tr>
<td>Tensile strength L / T, N/50 mm</td>
<td>400±100 / 300±100</td>
</tr>
<tr>
<td>Protective covering type on the top</td>
<td>high-performance polymer film</td>
</tr>
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</table>
SELF-ADHESIVE CARRIER LESS SBS-MODIFIED BITUMEN MEMBRANE IS DESIGNED FOR WATERPROOFING OF FOUNDATIONS AND ENGINEERING STRUCTURES. THE MATERIAL IS PRODUCED BY PLACING A SPECIAL SELF-ADHESIVE POLYMER-BITUMEN BINDER ON A CROSS-LAMINATED HDPE (HIGH-DENSITY POLYETHYLENE) FILM THAT COVERS THE MATERIAL ON TOP. DOUBLE SELF-ADHESIVE LATERAL OVERLAPPING STRIPS (ONE ON EACH SIDE OF THE TOP SURFACE OF THE MEMBRANE) SIMPLIFY THE INSTALLATION OF THE WATERPROOFING SYSTEM. THE BOTTOM SURFACE OF THE MATERIAL IS COVERED WITH AN EASY-REMOVABLE PROTECTIVE FILM.

MATERIAL STRUCTURE:

1. **Cross-laminated HDPE film**
   - Protects the waterproofing layer from mechanical damage and impacts of chemically aggressive environment, provides dimensional stability.

2. **Self-adhesive polymer-bitumen compound**
   - The high elasticity of this layer preserves waterproofing undamaged when cracks and splits occur in the foundation.

3. **Easy-removable protective film**
   - Used for underside surface protection from sticking in the roll.

ADVANTAGES:

- Enhanced dimensional stability
- Two self-adhesive lateral overlapping strips provide maximum reliability to the joints sealing and allow temporary fixation of protection boards.
- High speed of application
- No need for any additional equipment and skills

<table>
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<tr>
<th>PROPERTIES</th>
<th>ULTRAFLEX SA HDPE D</th>
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<td>Thickness, mm</td>
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<td>Mass per unit area, kg/m²</td>
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<td>Length x width, m</td>
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<tr>
<td>Flexibility / flow resistance, °C</td>
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<tr>
<td>Protective covering type on the top</td>
<td>cross-laminated HDPE film</td>
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</table>
SOLUTION EXAMPLES:
Surface must be smooth, dry, clean and with no oil stains. For better adhesion, treat the surface with primer.

Measure the depth of the foundation and cut the material to the required length.

Apply the material from top downward by gradual removing the protective film, unrolling the membrane and smoothing it to the surface.

The material to be installed to the height of 30-50 cm above the ground level. Longitudinal overlaps should be 100 mm, sheet end overlaps - 150 mm.
The top end of the waterproofing membrane to be fixed at basement level by profiled metal edge strip and sealed.

Protect the membrane from mechanical damage by means of thermal insulation or protective slabs.

As a protection from mechanical impacts, one can also use PLANTER HDPE membrane.
ULTRAFLEX SA NB

Self-adhesive carrier less SBS-modified bitumen membrane is designed for waterproofing of foundations and engineering structures, indoor waterproofing. The material is produced by placing a special self-adhesive polymer-bitumen binder on a thick polymer film that covers the material on top. The other side of the material is covered with an easy-removable protective film. Thanks to the special adhesive bitumen compound, the membrane can be used on surfaces, where the standard torch-on application is forbidden (expanded / extruded polystyrene or wooden base).

MATERIAL STRUCTURE:

1. Polymer film
   Protects the waterproofing layer from mechanical damage and impacts of chemically aggressive environment

2. Self-adhesive polymer-bitumen compound
   The high elasticity of this layer preserves waterproofing undamaged when cracks and splits occur in the foundation

3. Easy-removable protective film
   Used for underside surface protection from sticking in the roll

ADVANTAGES:

- High speed of application
- No need for any additional equipment and skills
- Safe and cheap application – the membrane is applied without the use of gas and flame
- Can be used for indoor waterproofing in a closed area

PROPERTIES

<table>
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<tr>
<th>Property</th>
<th>ULTRAFLEX SA NB</th>
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<td>Thickness, mm</td>
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<td>Tensile strength L / T, N/50 mm</td>
<td>NPD</td>
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<tr>
<td>Protective covering type on the top</td>
<td>thick polymer film</td>
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SOLUTION EXAMPLES:
Self-adhesive carrier less SBS-modified bitumen membrane is designed for indoor waterproofing (leak protection). The material is produced by placing a special self-adhesive binder on a spunbond that covers the material on top. The other side of the material is covered with an easy-removable protective film. Thanks to the special adhesive bitumen compound, the material can be used for indoor works, where the standard torch-on application is forbidden.

**MATERIAL STRUCTURE:**

1. **Polypropylene (Spunbond)**
   Protects the waterproofing layer from mechanical damage. Provides strong sticking of the tile adhesive when treated with the contact primer.

2. **Self-adhesive polymer-bitumen compound**
   The high elasticity of this layer allows installation of the membrane on surfaces of any complicated shape.

3. **Easy-removable protective film**
   Used for underside surface protection from sticking in the roll.

**ADVANTAGES:**

- Used for indoor waterproofing with the direct installation of ceramic tiles onto the material without the need of protective sand cement screed.
- High speed of application.
- No need for any additional equipment and skills.
- Safe and cheap application.

<table>
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<td>Tensile strength L / T, N/50 mm</td>
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<td>Protective covering type on the top</td>
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SOLUTION EXAMPLES:
METHOD OF APPLICATION

INDOOR WATERPROOFING

1. Clean and treat the surface with bitumen primer.
2. Fit and straighten the membrane to the area of application.
3. Re-roll the membrane to the center, pre-cut the protective film.
4. Remove the protective film and smooth the membrane.
METHOD OF APPLICATION

INDOOR WATERPROOFING

Longitudinal overlaps: 80-100 mm. End overlaps: 150 mm. End overlaps to be glued with bitumen mastic of 1 mm thickness.

On a vertical surface the material to be placed on a height, sufficient according to the thickness of the floor and decoration.

! Self-adhesive materials to be installed at the temperatures above +10 °C.

! Surface must be smooth, dry, clean and with no oil stains.
**ULTRAFLEX SA**

Self-adhesive polyester reinforced SBS-modified bitumen membrane is designed as an underlay on pitched roofs and as a vapor barrier. Could also be used for waterproofing of foundations and engineering structures. On the top side, the membrane can be covered with polymer film or fine-grained sand. The bottom surface of the material is covered with an easy-removable protective film.

**MATERIAL STRUCTURE:**

1. **PE film or fine-grained sand**
   - Protects waterproofing layer from mechanical damage and prevents adhesion of the material in the roll
2. **Polymer-bitumen compound**
   - Provides reliable waterproofing
3. **Polyester**
   - Provides good elongation and grants optimal strength to the material
4. **Self-adhesive polymer-bitumen compound**
   - Allows installation of the material on combustible surfaces
5. **Easy-removable protective film**
   - Used for underside surface protection from sticking in the roll

**ADVANTAGES:**

- Additional strength granted by polyester reinforcement
- Can be used on bases, where the standard torch-on application is forbidden (wood, OSB boards, XPS, etc.)
- High speed of application
- No need for any additional equipment and skills

**PROPERTIES ULTRAFLEX SA**

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<th>Property</th>
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<td>Elongation L / T, %</td>
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<td>Tensile strength L / T, N/50 mm</td>
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<td>Protective covering type on the top</td>
<td>polymer film or sand</td>
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ULTRAFLLEX SA STRONG

Self-adhesive polyester (P) or glass fiber (G) reinforced SBS-modified bitumen membrane is designed for waterproofing of foundations and engineering structures. On the top side, the material is covered with a special thick polymer film that grants additional tensile properties and elongation. The bottom surface of the material is covered with an easy-removable protective film.

MATERIAL STRUCTURE:

1. **Thick polymer film**
   Protects the waterproofing layer from mechanical damage and impacts of chemically aggressive environment

2. **Polymer-bitumen compound**
   Provides reliable waterproofing

3. **Polyester (P) or Glass fiber (G)**
   Makes the material stable to linear deformations

4. **Self-adhesive polymer-bitumen compound**
   The high elasticity of this layer preserves waterproofing undamaged when cracks and splits occur in the foundation

5. **Easy-removable protective film**
   Used for underside surface protection from sticking in the roll

ADVANTAGES:

- Excellent resistance to puncture – additional protection from mechanical impacts
- Good combination of elongation and dimensional stability
- High speed of application
- No need for any additional equipment and skills

### PROPERTIES

<table>
<thead>
<tr>
<th></th>
<th>P</th>
<th>G</th>
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<td>Flexibility / flow resistance, °C</td>
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<tr>
<td>Elongation L / T, %</td>
<td>100±50 / 100±50</td>
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<td>Tensile strength L / T, N/50 mm</td>
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<td>thick polymer film</td>
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SOLUTION EXAMPLES:
ULTRAFLEX SA ALU

Self-adhesive glass fiber reinforced SBS-modified bitumen membrane is used as an underlay on pitched roofs and as a vapor barrier. Could also be used on top of metal corrugated sheeting with adhering to the whole surface of corrugations (not only on the upper edge of the profiled sheet). On the top side, the membrane is covered with the combination of PET film and aluminium foil. The bottom surface of the material is covered with an easy-removable protective film.

MATERIAL STRUCTURE:

1. Combination of PET film and aluminium foil
   Protects the waterproofing layer from mechanical damage and provides solar reflection properties to the material
2. Polymer-bitumen compound
   Provides reliable waterproofing
3. Glass fiber
   Makes the material stable to linear deformations
4. Self-adhesive polymer-bitumen compound
   Allows installation of the material on combustible surfaces
5. Easy-removable protective film
   Used for underside surface protection from sticking in the roll

ADVANTAGES:

- Additional dimensional stability granted by glass fiber reinforcement
- Provides solar reflection
- High speed of application
- Can be used on bases, where the standard torch-on application is forbidden
- Safe and cheap application

PROPERTIES

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<th>Property</th>
<th>ULTRAFLEX SA ALU</th>
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<td>Mass per unit area, kg/m²</td>
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<td>Flexibility / flow resistance, °C</td>
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<td>Elongation L / T, %</td>
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<td>PET film + aluminium foil</td>
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SOLUTION EXAMPLES:
VAPORSTOP CA 500

Self-adhesive glass net reinforced SBS-modified bitumen membrane is used as a high-performance vapor barrier in roof waterproofing systems. The membrane is protected on the bottom side with an easily removable siliconized film, while the top surface is covered with aluminium foil. Self-adhesive bottom surface and high tensile strength ensure the ability of the material to withstand the weight of the person standing between the corrugations of the profiled metal deck without breaking or stretching.

MATERIAL STRUCTURE:

1. High-performance reinforced aluminium foil
   Grants additional strength to the material, protect the bitumen compound from damage by UV and provides effective vapor insulation

2. Self-adhesive polymer-bitumen compound
   Provides excellent adhesion, prevents the material from shifting and reliably seals the overlaps for many decades

3. Easy-removable protective film
   Used for underside surface protection from sticking in the roll

ADVANTAGES:

- Provides very effective vapor insulation
- High tensile strength
- Reliable adhesion properties
- Can be used in combination with any thermal insulation and waterproofing material
- High speed of application
- Resistant to accidental burning

PROPERTIES

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<tr>
<th>Property</th>
<th>VAPORSTOP CA 500</th>
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<td>Mass per unit area, kg/m²</td>
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<td>Peel resistance of joints, N/50mm</td>
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<td>Protective covering type on the top</td>
<td>aluminium foil</td>
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</tbody>
</table>
VAPORSTOP CA 500

SOLUTION EXAMPLES:
VAPORSTOP CA 500:

Convenience, simplicity and safety of installation of the membrane are due to the special adhesive polymer-bitumen layer, which allows installation of the material without additional equipment.

1. Cut the siliconized anti-adhesion film at the distance of 30-40 cm from the beginning of the roll by means of roofing knife.

2. Remove the protective film from the edge of the roll and attach the membrane to the surface.

3. Press the place of the first adhesion by roller for the whole width of the membrane.

4. Continue attaching membrane to the base. One worker pulls the film off, while the other smooths the membrane by brush.
THANK YOU FOR ATTENTION!

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