

TECHNONICOL CORPORATION

CORPORATE PROFILE AND SHORT PRESENTATION

ABOUT TECHNONICOL

6500

QUALIFIED EMPLOYEES

54

PRODUCTION SITES

6

R&D CENTERS

27

YEARS IN THE MARKET



TECHNONICOL Corporation is the leading international manufacturer and supplier of roofing, waterproofing, thermal insulation and sound absorption materials. The company was founded in 1992 and since then has accumulated a considerable experience on the building materials market. We are proud to offer up-to-date materials and technologies that combine global expertise and elaboration of our own R&D centers. Wide range of high-quality materials and reliable solutions allows making a choice that is

best suited to the customer both in price and in quality.

TECHNONICOL Corporation at present owns 54 production sites in Europe and Asia, retail network of 140 branches and representative offices in 37 countries. Company materials were already used in more than 190 000 sites in 95 countries around the world. It is an honor for us to be a partner for more than 700 independent distributors presenting 32 of our own brands.



BITUMEN PRIMER & MASTICS — LIQUID MATERIAL, BRUSH –ROLLER APPLICATION

POLYMER-BITUMEN MEMBRANES

- i. **APP MEMBRANES** - FIBRE REINFORCED MATERIALS, TORCH-ON APPLICATION
- ii. **SBS MEMBRANES** - FLEXIBLE MATERIALS WITH SELF ADHESIVE PROPERTIES

ROOFING SHINGLES , HIP & RIDGES — BITUMEN-FIBRE DESIGNER TILE

EASYROOFING — DESIGNER MEMBRANE – APP MODIFIED

XPS — EXTRUDED POLYSTYRENE — MOST EFFICIENT THERMAL INSULATION MATERIAL

NICOBAND TAPE — SELF ADHESIVE SEALANT TAPE

BITUMEN PRIMERS



BITUMEN PRIME COATING

Ready to use BITUMEN PRIME COATING (Primer TECHNOMIC No.01) is intended for preparation of the surface before installation of torch-on or self-adhesive waterproofing material. The primer presents a mix of high-quality bitumen and specially selected organic solvents. It has an enhanced covering capacity, penetrability and short drying time.



PRIMERS AND
MASTICS



MASTIC TECHNOMIC FIXER

SOLVENT BASED ADHESIVE POLYMER- BITUMEN MASTIC

Ready to use adhesive bitumen mastic TECHNOMIC FIXER presents a mix of high-quality bitumen, special polymers, additives, fillers and organic solvents. The mastic provides excellent adhesion of bitumen-based materials (e.g. roofing shingles, polymer-bitumen membranes) to the application surface, thus reliably seals the overlaps and connections.



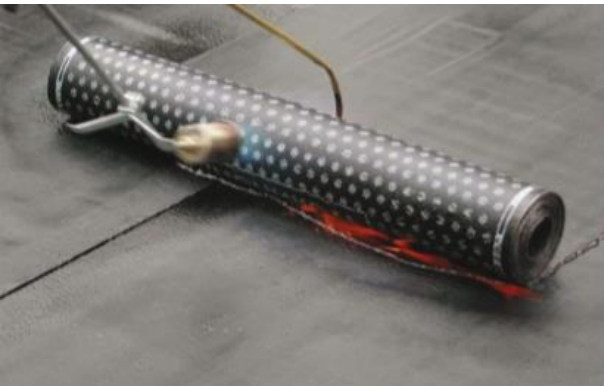
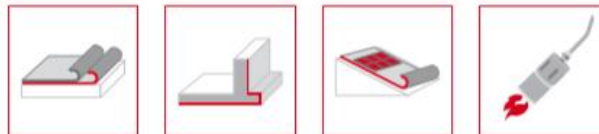
ULTRAPLAST

APP MODIFIED BITUMEN ROOFING AND WATERPROOFING TORCH-ON UNDERLAY MEMBRANE

APP-modified bitumen membrane ULTRAPLAST is designed for installation as the bottom layer in double-layer roofing system on buildings and constructions, for waterproofing of foundations and engineering structures. Can be used as an underlay for bitumen shingles on pitched roofs. Used for new construction or repair.

The material withstands temperature fluctuations and high mechanical loads providing a long-term, reliable and effective waterproofing. APP polymer provides additional flow resistance that makes it possible to use the material in a very hot climate.

On the bottom side, the material is covered by a polymer film with special graphic elements, melting of which indicates the proper material heating. On the top side, the material is covered by a polymer film.



PROPERTIES	TEST METHOD	ULTRAPLAST B
Thickness, mm	EN 1849-1	2.0±0.20 3.0±0.20 4.0±0.20
Mass per unit area, kg/m ²	EN 1849-1	2.8±0.28 3.8±0.38 5.1±0.48
Length x width, m	EN 1848-1	15 x 1 10 x 1 10 x 1
Softening point, °C	ASTM D36	150±5
Flexibility at low temperature, °C	EN 1109-1	≤-2
Flow resistance at elevated temperature, °C	EN 1110	≥120
Elongation L / T, %	ASTM D5147	40±8 / 45±9
Tensile strength L / T, N/50 mm	ASTM D5147	750±150 / 600±120
Tear resistance L / T, N	ASTM D4073	300±100 / 300±100
Reinforcement type	-	polyester
Protective covering type on the top	-	polymer film
Protective covering type on the bottom	-	polymer film

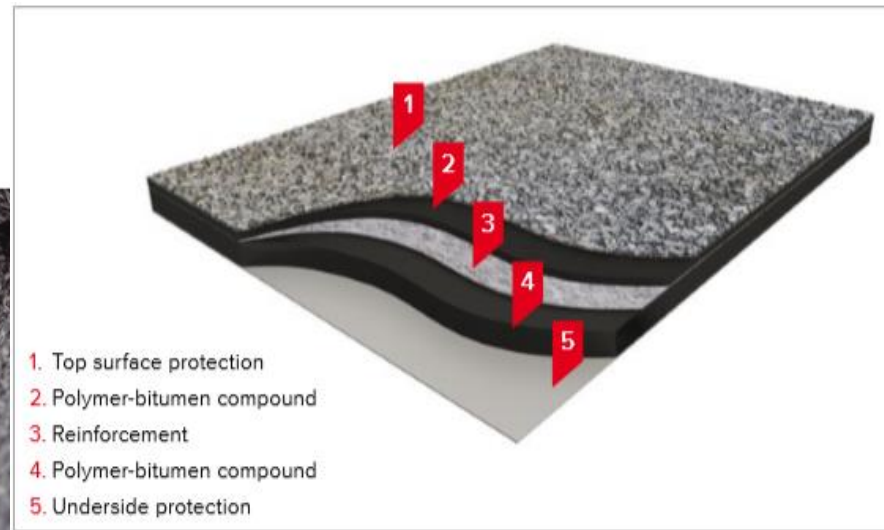
ULTRAPLAST grey mineral

APP MODIFIED BITUMEN ROOFING AND WATERPROOFING TORCH-ON CAP SHEET MEMBRANE

APP-modified bitumen membrane ULTRAPLAST grey mineral is designed for installation as the top layer in double-layer roofing system on buildings and constructions. Can be used for new construction or repair.

The material withstands temperature fluctuations and high mechanical loads providing a long-term, reliable and effective waterproofing. APP polymer provides additional flow resistance that makes it possible to use the material in a very hot climate.

On the bottom side, the material is covered by a polymer film with special graphic elements, melting of which indicates the proper material heating. On the top side, the material is covered by a coarse-grained slate with special hydrophobic treatment that protects the material from damage by ultraviolet radiation during the whole service life of the membrane.



The most widespread materials for creation of the waterproofing layer are the polymer-bitumen roll-fed membranes. This is due to a relative simplicity of installation, popularity of the technology, durability of the material and stability of the factory-set technical parameters. Polymer-bitumen membranes are commonly used for waterproofing of foundations, engineering structures, roads, bridge decks and flat roofs. These materials could also be used as an underlay for pitched roofs and as a vapor barrier.

Polymer-bitumen membranes undergo effects of many unfavourable factors from the external environment. Changes in the surrounding temperature can cause deformations of the material and the base on which it is installed. The ability to withstand such deformations is the most important characteristic of roofing and waterproofing material and it depends on many components used on the production stage.

POLYMER-BITUMEN COMPOUND

The compound is a specially formulated mixture of bitumen and polymers. The main difference between compound types is the kind of polymer used:

- **APP** polymer provides additional flow resistance that makes it possible to use the material in a very hot climate.
- **SBS** polymer provides additional flexibility and dynamic resistance to the material.

becomes completely fused (surface is all black), the material is overheated. The material is heated properly when graphics is deformed, but visible.

- Polymer film without graphic elements is used as top surface protection of underlay membranes and materials, which were designed for waterproofing of foundations and engineering structures.
- Perforated polymer film can be used

SLATE



The coarse-grained mineral slate with special hydrophobic treatments protects the material from damage by ultraviolet

ULTRAFLEX SA STRONG G

Description:

Self-adhesive glass fiber reinforced SBS-modified bitumen membrane ULTRAFLEX SA STRONG G is designed for waterproofing of foundations and engineering structures.

The material is produced by placing a self-adhesive polymer-bitumen binder on a glass fiber carrier. On the top side, the material is covered with a special thick PE film that grants additional tensile properties and elongation. The other side of the material is covered with a removable protective film.

Advantages:

- Outstanding elongation properties prevent the material from damage caused by movements of the substrate.
- High speed of application.
- Safety and cheap application – the membrane is applied without the use of gas and flame.
- No need for any additional equipment and skills.
- Cold application method prevents smoke, odors and noise.
- Can be used on bases, where the standard torch-on application is forbidden (wood, XPS, etc.).
- High reparability.

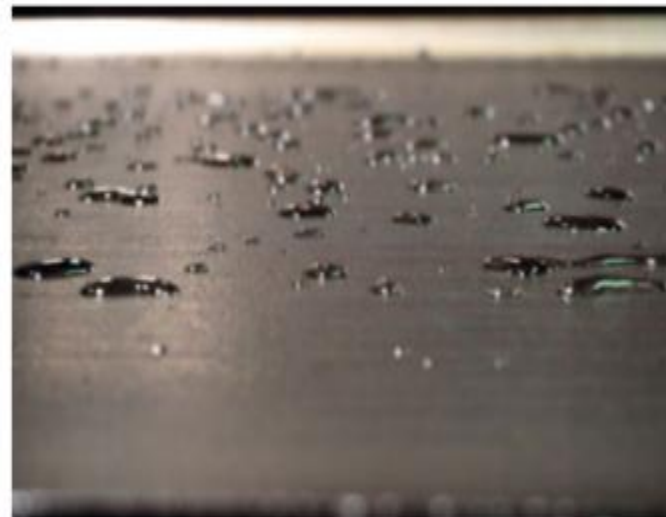
ULTRAFLEX SA

SBS MODIFIED BITUMEN SELF-ADHESIVE POLYESTER REINFORCED MEMBRANE FOR WATERPROOFING WITHOUT TORCHING

Self-adhesive polyester reinforced SBS-modified bitumen membrane ULTRAFLEX SA is designed to complete secure application. It is used as an underlay on pitched roofs and as a vapor barrier. Could also be used for waterproofing of foundations and engineering structures. Thanks to the special adhesive bitumen compound, the material can be used on surfaces, where the standard torch-on application is forbidden (expanded / extruded polystyrene or wooden base).

Waterproofing material ULTRAFLEX SA has the following advantages:

- additional strength granted by polyester reinforcement;
- can be used on bases, where the standard torch-on application is forbidden (wood, XPS, etc.);
- high speed of application;
- safe and cheap application – the membrane is applied without the use of gas and flame;
- no need for any additional equipment and skills;
- cold application method prevents smoke, odors and noise.



ULTRAFLEX SA NBS

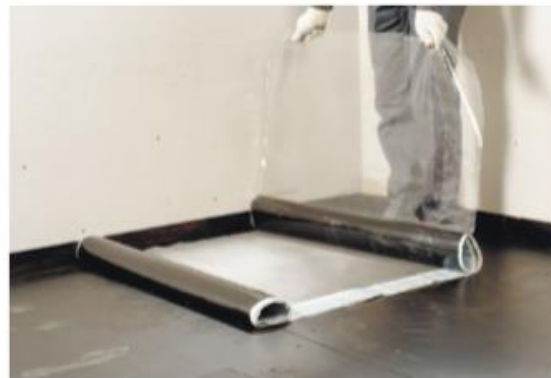
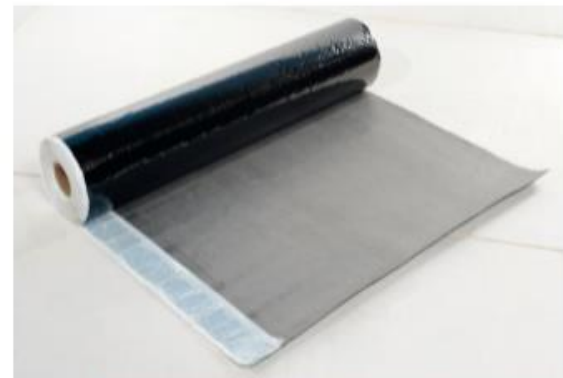
SBS MODIFIED BITUMEN SELF-ADHESIVE NON-REINFORCED MEMBRANE FOR INDOOR WATERPROOFING

Self-adhesive non-reinforced SBS-modified bitumen membrane ULTRAFLEX SA NBS with spunbond as the top protective layer is designed for indoor waterproofing.

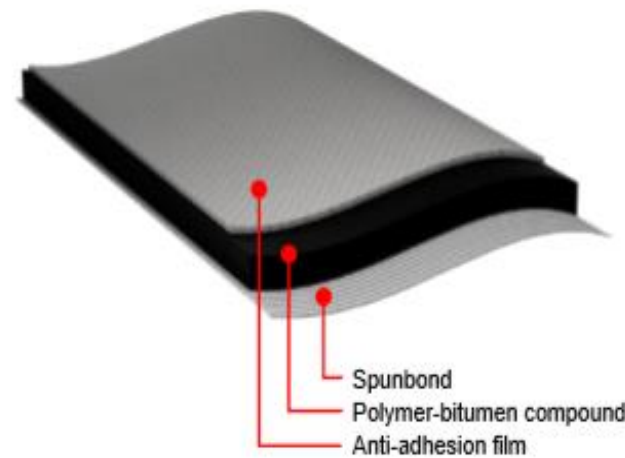
The material is produced by placing a special self-adhesive binder on a spunbond that covers the material on top. The other side of the material is covered with a removable protective film.

Waterproofing material ULTRAFLEX SA NBS has the following advantages:

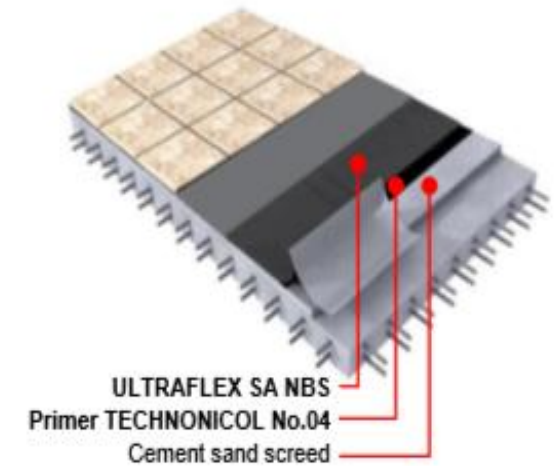
- used for indoor waterproofing with the direct installation of ceramic tiles onto the material without the need of protective sand cement screed;
- high speed of application;
- safe and cheap application – the membrane is applied without the use of gas and flame;
- no need for any additional equipment and skills;
- cold application method prevents smoke, odors and noise and makes it suitable for indoor works.



Material structure:



System solution:



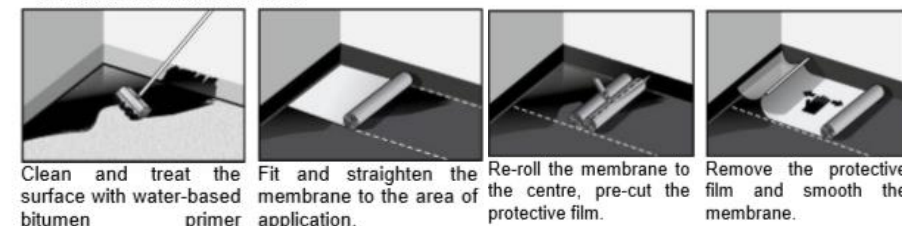
Directions for use:

Self-adhesive bitumen membranes in cold periods tend to harden resulting in decreased adhesion. Installation of self-adhesive materials should be performed within the favorable climatic conditions i.e. dry weather and temperatures above +10°C. At temperatures below +10°C and high air humidity the adhesion of the membrane could be compromised and therefore it is necessary to use the hot air to restore characteristics of the material.



Installation:

- INDOOR WATERPROOFING



ULTRAFLEX SA ALU

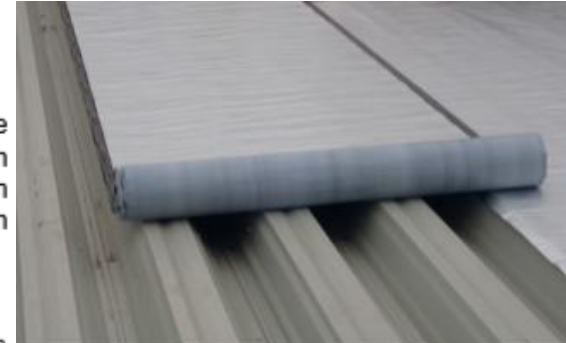
Self-adhesive glass fiber reinforced SBS-modified bitumen membrane with aluminium foil on top

Product description

ULTRAFLEX SA ALU is produced on a base of a high-quality polymer-bitumen binder. On the top side, the membrane is covered with the combination of PET film and aluminium foil. Self-adhesive material allows high speed of application and does not require any additional equipment and skills. The 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).

Performance of works

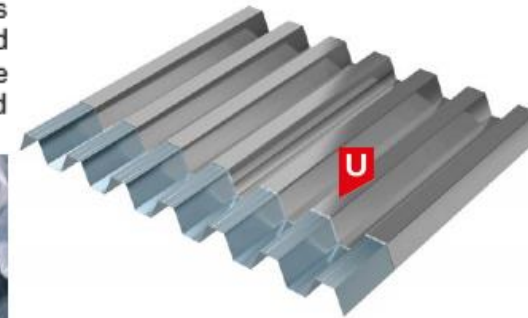
The application surface must be cleaned of dust, debris, grease, leaves, oil and should not have gaps and cracks or other irregularities to ensure proper adhesion of the membrane. Remove anti-adhesion film, smooth the membrane at the prepared surface and press overlaps with a heavy roller. Transverse and longitudinal overlaps are to be 150 mm as per the international standards. Installation of self-adhesive materials should be performed within the favourable climatic conditions i.e. dry weather and temperatures above +10°C. Aluminium foil on the top surface of the material should not be damaged during the whole service life of the membrane as it may lead to degradation of performance and the loss of the manufacturer's warranty.



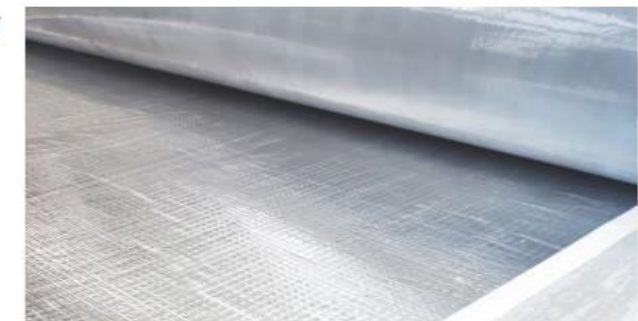
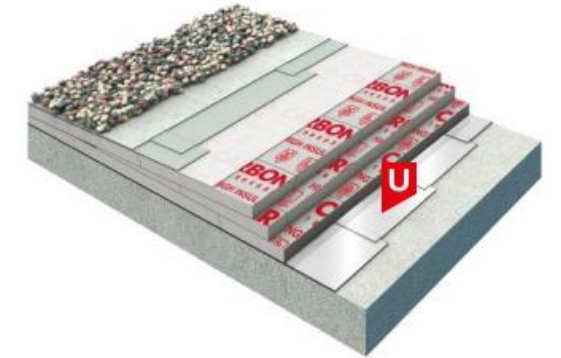
means of roofing knife.



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



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



ULTRAFLEX SA HDPE D

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

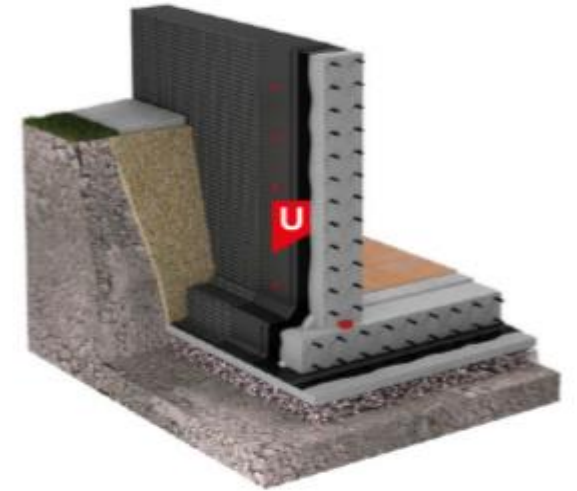
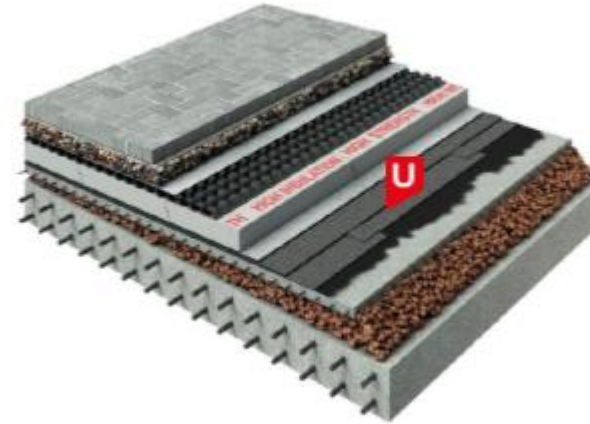
Protects the waterproofing layer from mechanical damage and impacts of chemically aggressive environment, provides dimensional stability

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





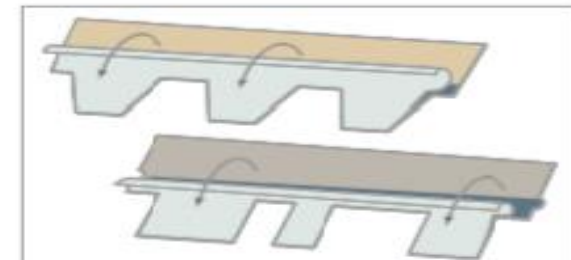
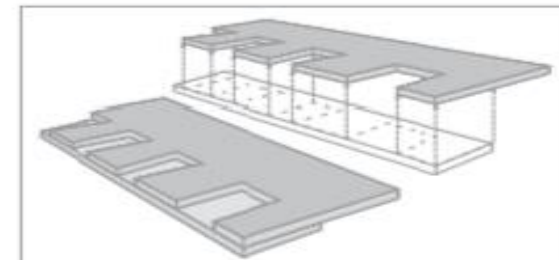
**ROOFING
SHINGLES**



MULTILAYER ROOFING SHINGLES



SINGLE-LAYER ROOFING SHINGLES





Then align the first shingle to the membrane leaving **1-2 cm** to the edge of the fronton plank. Press one side of the shingle and torch the other side.



In the place of shingles overlap, torch only the upper part, where the shingle contacts the underlay membrane. Press the lower part of the shingle, turn up the upper part with the spatula and torch. Then, press it with the roller.



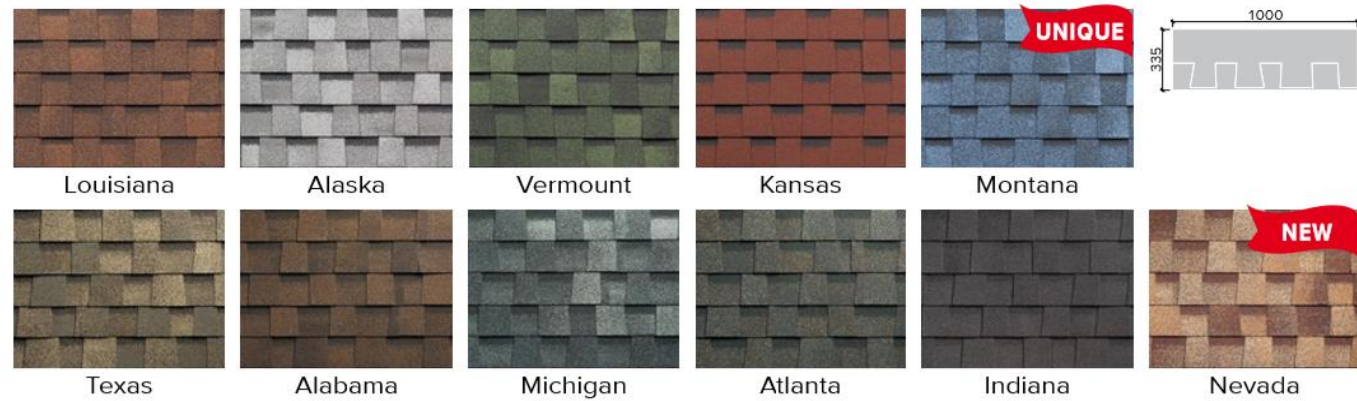
Fix the ridge vents to the base with galvanized self-tapping screws of **60 mm** length.



COUNTRY AR collection

EN 544

COUNTRY AR (algae resistant) collection of double-layer roofing shingles comprises incredible color solutions that imitate diverse nature's shades and nuances. Vibrant color blends and expressive shadow lines create a wonderful dimensional visual image.



50 YEARS
MANUFACTURER'S WARRANTY



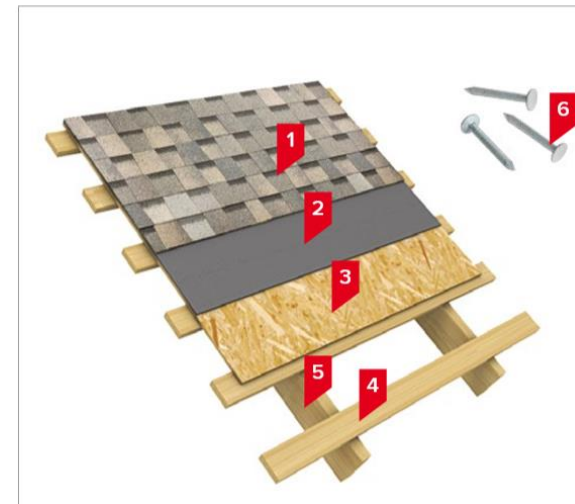
CLASSIC AR series

EN 544

CLASSIC AR (algae resistant) series covers a wide array of attractive colors and various cutting patterns to suit any taste. High-grade bitumen compound is used to produce these single-layer roofing shingles of assured quality.



SYSTEM WITH NAILING METHOD



SYSTEM WITH TORCHING METHOD



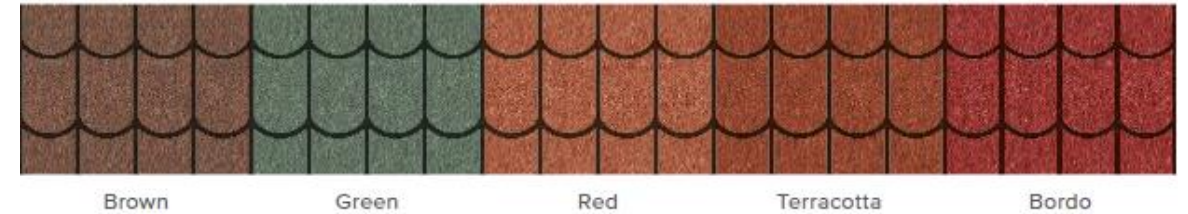
EASYROOFING

APP modified bitumen decorative roofing and waterproofing membrane EASYROOFING is designed for torch-on installation as the top layer in double-layer systems of pitched and flat roofs. Can also be used as a single-layer roof covering in roofing systems with a solid non-flammable base. The material is applicable at roof slopes of 1° to 60°.

Colored basalt granules do not fade under the influence of the sun and are not washed off by the rain providing nice aesthetic appearance and reliable protection of bitumen compound from ultraviolet for the full service life of at least 25 years.

EASYROOFING membrane with different patterns and colors will not only enrich the roof with an elegant finishing touch, but it will also protect the internal premises from leakages and reduce the noise of rain. The material withstands temperature fluctuations and high mechanical loads guaranteeing a long-term effective waterproofing.

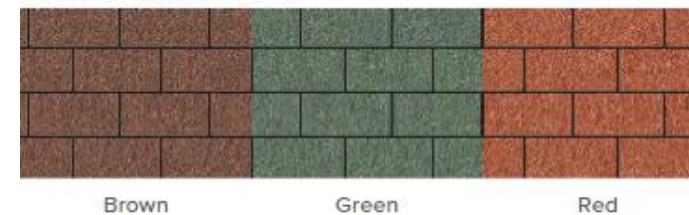
COLLECTION: TILES

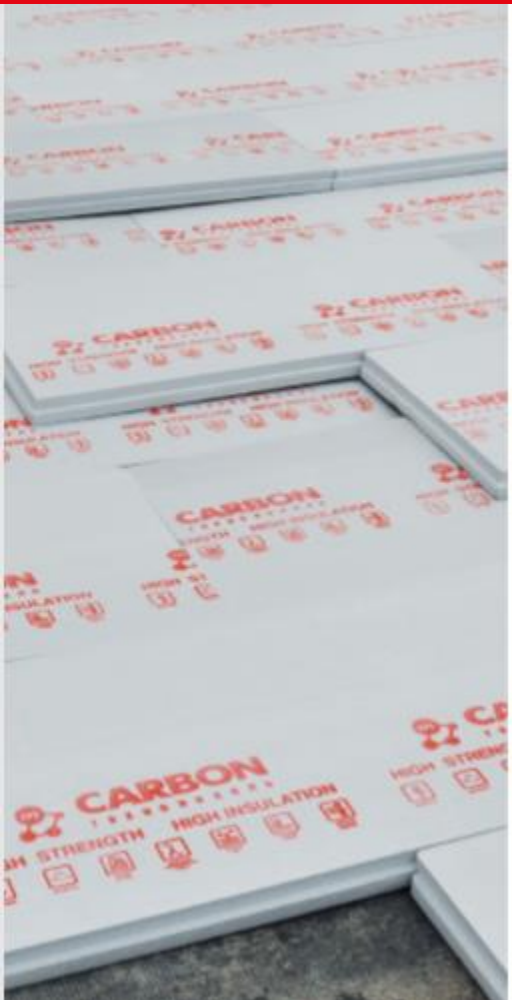


COLLECTION: BEAVER TAIL



COLLECTION: BRICK

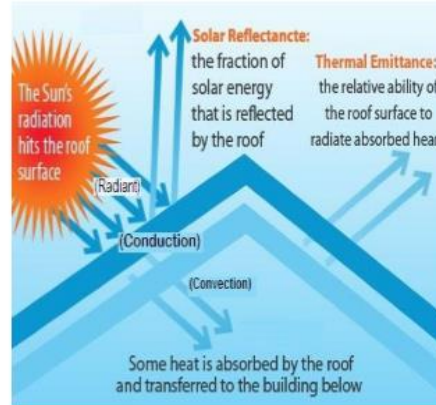




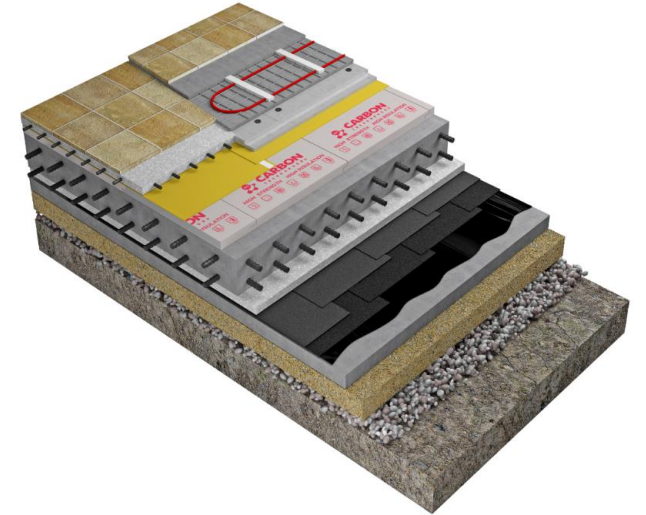
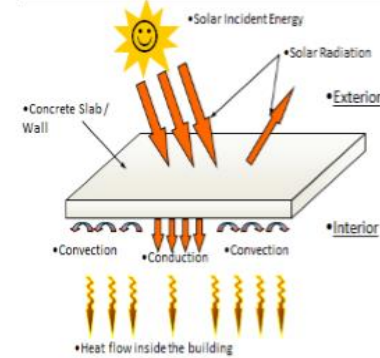
**EXTRUDED
POLYSTYRENE**

Heat Transfer takes place through –

- Conduction
- Convection
- Radiation

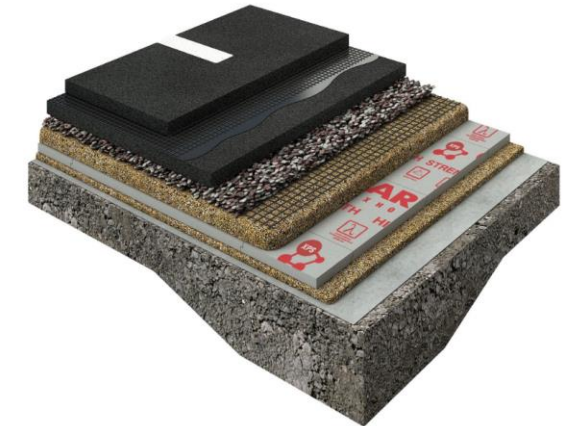


Schematic illustrations of Heat Flow



WHAT THERMAL INSULATION CAN DO

- Stop heat / cold ingress from outside
- Creates an envelope outside the building
- Maintains at least 6-7 degrees temp. difference
- Maintains controlled temp. for longer periods
- Human comfort



**High Heat Incidence and Low Thermal Resistance of
RCC / Brick Walls Calls for
'INSULATION OF ROOF AND WALL'**

THERMAL INSULATION IS THE SYSTEM, PROVIDED TO RETARD FLOW OF HEAT OR COLD FROM ENVIRONMENT TO INSIDE OF BUILDING AND VICE-VERSA.

'COOLING OF INSIDE AIR IN BUILDINGS'



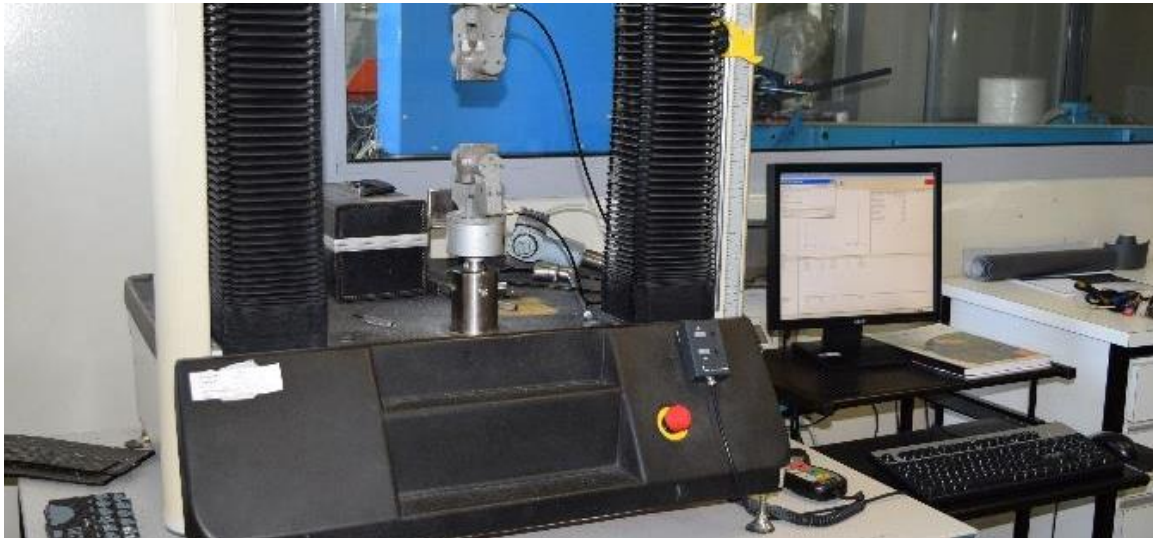
SELF-ADHESIVE
SEALANT TAPE

NICOBAND

This self-adhesive sealant tape is a convenient way to seal various cracks and joints. Can also be used to insulate junctions and for roofing repairs. Main features:

- Protected from UV radiation by aluminum coating – can be used outdoor
- Easy to use – requires no special skills
- Durable – lifetime is 10 years
- Silver colour– repairs or maintenance performed in the tone of the main surface
- Flawless adhesion to different surfaces – metal, slate, wood, plastic, plaster, concrete, glass, etc.







THANK YOU FOR ATTENTION!

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