

ITER 20 BIARMATO

APP distilled bitumen waterproofing membrane with dual reinforcement

DESCRIPTION

Prefabricated modified polymer bitumen membrane composed of polyolefin thermoplastic stereospecific polymers with high molecular weight and special distilled bitumens, with excellent characteristics of resistance to ageing and phase inversion (type APP). These built in elements, integrating themselves, enhance the excellent qualities of flexibility, lightness, adhesion, resistance to ageing and to UV rays of the ITER 20 BIARMATO membrane. ITER 20 BIARMATO has a dual reinforcement with a woven non woven single strand polyester and rot proof fiber glass mat, which confer to the product high mechanical characteristics and excellent dimensional stability. The fiber glass is positioned in proximity of the upper face of the membrane guaranteeing a longer durability. The ITER 20 BIARMATO membrane is finished on the upper face with a special talc. Upon request, also available a pre-painted red version ITER 20 BIARMATO COLORTEC®. On the application face, the membrane is finished with a woven non woven polypropylene mat, suitable for both application with adhesive cold bond glues, as well as on SELF BASE. ITER 20 BIARMATO is a product specifically studied to be applied with an adhesive cold bond glue, without however impeding the application by torch or hot air, guaranteeing excellent results of durability and watertightness of the roof.

ANTI ROOT VERSION

On request a ITER 20 BIARMATO ANTI ROOT version is available for green roof applications. The compound has a special chemical additive (PREVENTOL B2 BAYER) which provides the membrane with high resistance to root penetration, aggressive chemical agents such as fertilizers, weedkillers, etc. The anti root resistance of the product does not harm the health or life of the plants. The anti root additive does not wash out with water, and remain permanently active.

Reinforcement: Single strand composite polyester + Fibre glass

Compound: Elasto-plastomeric polymer bitumen (APP)

Upper finish: Talc / Colortec®

Lower finish: Polypropylene mat

Intended use:

EN 13707 Continuous roofs (certificate no. CE0958-UKCA0120): Single layer (4-5 mm) / Complimentary layer / Top layer / Under heavy protection (4-5 mm) / Anti-root

EN 13969 Retaining Walls (certificate no. CE0958-UKCA0120) (4-5 mm)

Application method: Torch / Mixed (Torch / Air) / Cold Bond Glue (4-5 mm) / Mechanical Fixing

AREAS OF USE

Due to their characteristics, the membranes of the ITER 20 BIARMATO series can be used with success in a wide range of waterproofing applications in civil and industrial works, for example flat, sloped & barrel roofs, terraces, retaining walls, etc. The particular formulation of the membranes of the ITER 20 BIARMATO series makes them compatible with all NORD BITUMI membranes, be they either APP or SBS based. ITER 20 BIARMATO can be used, based on the type of construction and project, either single layer or in multi-layer systems and especially in those applications where an exceptionally high dimensional stability is required. In the applications with cold bond adhesives ITER 20 BIARMATO is used as a single layer, prior to having applied suitable bituminous adhesive glue (PRATIKO ADHESIVE) and, where necessary, bituminous mastic (PRATIKO MASTIC). When the roof slope is superior to 5% the membrane must be exclusively applied by gas or hot air torch without the use of PRATIKO ADHESIVE. The application over heat sensitive substrates (ex. polystyrene insulation) can only be done prior to having applied a layer of SELF BASE V or P 2,5 mm membrane. The adhesion to the first layer must be total. For further information and news it is recommended to consult the NORD BITUMI technical literature; our Technical office is always available to evaluate particular problems and to provide the necessary assistance to best apply our waterproofing membranes.

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APPLICATION

WITH SELF BASE

- On cementitious substrates or similar apply by roller or airless the bituminous primer PRIMERTEC AD, approx. consumption 300 g/m².
- Apply by torch application in correspondence to the verticals, a strip of APP 4 mm membrane 25 cm wide.
- ITER 20 BIARMATO must always be applied in the same direction and staggered for half of its width for about ¼ in the direction of the length, with the same procedure to that of the layer of SELF BASE.
- In order to have all the overlaps with the slope, position and apply the ITER 20 BIARMATO membrane starting from the lowest point.
- Position the sheets alternating the overlapped areas, in order to not create joints against the slope towards the drains.
- Cut at 45° the angles of the membrane which will overlap with next sheet (10 x 10 cm).
- Weld to the SELF BASE membrane the ITER 20 BIARMATO by means of a gas torch.

WITH COLD BOND GLUE PRATIKO ADHESIVE

- On cementitious substrates or similar apply by roller or airless the bituminous primer PRIMERTEC AD, approx. consumption 300 g/m².
- Apply by torch application in correspondence to the verticals, a strip of APP 4 mm membrane 25 cm wide.
- Position the sheets always starting from the lowest point, in order to have all the overlaps with the slope.
- When applying staggered, position the sheets alternating the overlapped areas, in order to not create joints against the slope towards the drains.
- Cut at 45° the angles of the membrane which will overlap with next sheet (10 x 10 cm).
- Fold or re-roll the membrane halfway, leaving the substrate exposed on which the cold bond glue will be applied.
- Pour the bituminous cold bond glue PRATIKO ADHESIVE based on the absorption of the substrate (from 0.8 to 1.5 kg/m²). To avoid spillage along the pails, scrape the edge with the squeegee.
- Pour and uniformly spread in a homogeneous fashion the cold adhesive glue with a metal/rubber squeegee. Cover with the membrane the cold adhesive glue and fold back the other half.
- Carry out the same procedure as described above with the remaining area.

COMMON PROCESS BETWEEN THE SYSTEMS

OVERLAPS

- Weld the side (10 cm) and head laps (15 cm) by torching with suitable overlap torch or hot air gun. During this operation, apply pressure to the overlap with a metal roller (15 kg); a bead of bitumen compound must come out from the overlap. For this it is not necessary to iron the overlaps.
- Apply the vertical membrane by overlapping it to the flat surface by at least 10 cm, torching it with a suitable safety burner or hot air gun, squeezing the overlaps with a heated trowel, this in order to have a bead of bitumen to round off the edges.
- The height of the verticals must be equal or superior to 15 cm of the superior finished layer of the roof.

RECOMMENDATIONS

To best use the technical characteristics of bituminous membranes and guarantee the maximum performance and durability of the jobs where they are used, some simple but fundamental rules must be respected.

- The rolls are to be stored in an upright position, indoors in a dry and ventilated area, away from heat sources. Absolutely avoid the stacking of rolls and pallets for storage or transport to avoid possible deformations which may compromise a perfect installation. It is recommended to store the product at temperatures above 0°C.
- The rolls shall be kept in a warm or heated storage area during application, should the workability of the material deteriorate or become stiff and difficult to install during application, these should be returned to the heated storage area and substituted with new rolls. The rolls that are temporarily stored on the roof before application, shall be kept elevated by being left on their own pallets and shall be covered and protected from the weather.
- The application surface must be smooth dry & clean.

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- The application surface must be previously treated with a suitable bituminous primer, to eliminate dust and enhance the adhesion of the membrane.
- The application surface must not have any depressions to avoid the risk of ponding water, the slope must be at least 1.5% on concrete decks and 3% for steel or wooden ones, this to guarantee a proper run off of rainwater.
- The application must be done at temperature higher than +5°C.
- The application must be interrupted in adverse weather conditions (high humidity, rain, etc.).
- The pallets on which the rolls are packaged are intended for normal warehouse use.
- The materials on stock should be rotated following a first in first out rotation.

TECHNICAL SPECIFICATIONS

| CHARACTERISTICS | TESTING METHOD | M.U. | TOLERANCE | VALUE | | |
|---|----------------|---------|---------------|------------|------------|------------|
| Length/Width | EN 1848-1 | m | MLV ≥ | 10,0 / 1,1 | 7,27 / 1,1 | 7,27 / 1,1 |
| Visible defects | EN 1850-1 | visual | | None | | |
| Thickness | EN 1849-1 | mm | MDV ±5% | 3 | 4 | 5 |
| Straightness | EN 1848-1 | mm/10 m | MLV | < 20 | | |
| Watertightness | EN 1928 | kPa | MLV ≥ | 60 | | |
| External Fire Performance | EN 13501-5 | | | F ROOF | | |
| Reaction to fire | EN 13501-1 | class | | NPD | | |
| Artificial U.V. ageing | EN 1297 | | | Pass | | |
| Maximum tensile strength (L/T) | EN 12311-1 | N/50 mm | MDV -20% +50% | 700/600 | | |
| Elongation (L/T) | EN 12311-1 | % | MDV -15 +30 | 45/45 | | |
| Resistance to tearing (L/T) | EN 12310-1 | N | MDV -20% +50% | 200/200 | | |
| Dimensional stability | EN 1107-1 | % | MLV ≤ | 0,2 | | |
| Peel resistance of joints (L/T) | EN 12316-1 | N/50 mm | MDV ±20N | 40/40 | | |
| Cold flexibility | EN 1109 | °C | MLV ≤ | -20 | | |
| Cold flexibility after ageing | EN 1296 | °C | MDV +15°C | -15 | | |
| Flow resistance | EN 1110 | °C | MLV ≥ | 140 | | |
| Flow resistance after ageing | EN 1296 | °C | MDV -10°C | 140 | | |
| Joint strength (shear resistance) (L/T) | EN 12317-1 | N/50 mm | MDV -20% +50% | 600/500 | | |
| Resistance to impact | EN 12691-B | mm | MLV ≥ | 1250 | | |
| Resistance to static loading | EN 12730-A | Kg | MLV ≥ | 20 | | |
| Root resistance | EN 13948 | | | NPD | | |
| Watertightness after ageing | EN 1296 | kPa | MLV ≥ | 60 | | |
| Vapour transmission | EN 1931 | μ | MLV ≥ | 20000 | | |
| Anti-root version | | | | | | |
| Root resistance | EN 13948 | | | Pass | | |

MDV : value declared by the manufacturer associated with a declared tolerance.

MLV : limit value, minimum or maximum, declared by the manufacturer.

NPD : No Performance Declared in accordance with the EU Construction Products Directive.

PACKAGING

| PRODUCT | ROLL SIZE | WEIGHT KG/M ² | THICKNESS MM | SQUARE METRES PER PALLET |
|------------------|----------------|--------------------------|--------------|--------------------------|
| Iter 20 Biarmato | 10 m x 1,1 m | - | 3 | 330 |
| Iter 20 Biarmato | 7,27 m x 1,1 m | - | 4 | 264 |
| Iter 20 Biarmato | 7,27 m x 1,1 m | - | 5 | 192 |

The waterproofing membrane based on distilled bitumen and polymers, as shown in this data sheet does not require the issue of a MSDS, because it does not contain dangerous substances. The information data sheet for the proper use of products is available. The technical data given is based on average values obtained during production. We reserve the rights to change or modify the nominal values without prior notice or advice. The information contained in this data sheet are based on our experience. We cannot take any responsibility for a possible incorrect use of the products. The customer has to choose under their own responsibility a product fit for the intended use.

26/02/2025 - This version supersedes all previous ones.