Technical Data Sheet

ITER ROUTE THERMO ADHESIVE

Heat activated composite waterproofing membrane with high performance

Prefabricated heat activated composite waterproofing membrane, composed of distilled bitumen and special synthesis polymers, which provide thermal adhesion properties to the lower face waterproofing compound.
The waterproofing compound of the upper face allows for fast heat transmission to the lower face.
The heat activated waterproofing compound allows the product to be positioned and applied without the initial use of heat.
ITER ROUTE THERMO ADHESIVE is specifically developed for use on bridges, viaducts, parking decks and for all those applications where the use of road asphalt is required.
ITER ROUTE THERMO ADHESIVE has a rot proof composite woven non woven continuous single strand heavy weight polyester with very high mechanical characteristics.
The upper face is self-protected with a woven non woven polypropylene mat.
The lower face is provided with a thermoplastic removable film.

ADVANTAGES

- ✓ System that is applied rapidly, allowing for minimum closure time of roads, bridges, parking areas.
- ✓ Monolithic system.
- ✓ System with low environmental impact.
- ✓ System with continuous roof sectors.
- ✓ ITER ROUTE THERMO ADHESIVE is resistant to road salts. The coefficient of adhesion is superior to that of the road asphalt to be used.
- ✓ It has sufficient resistance to support asphalt compactors without being damaged.
- ✓ It is easy to apply, allowing for minimum closure time of roads or similar, guaranteeing total adhesion to the substrate, avoiding points of discontinuity, bubbles, etc.
- ✓ For the paving element both traditional pavement asphalt as well as poured mastic asphalt (GUSSASPHALT) can be used.

Reinforcement: Single strand heavy weight polyester
Compound: Distilled bitumen and special synthesis polymers
Upper finish: Polypropylene mat
Lower finish: Silicon release film
Intended use:
EN 14695 Viaducts (certificate no. CE0958-UKCA0120)
Application method: Thermo adhesive / Under asphalt

METHODS OF APPLICATION

ITER ROUTE THERMO ADHESIVE can be used with success as a waterproofing element in a wide range of both civil and industrial works, particularly for those which undergo considerable stress of mechanical nature such as bridges, viaducts, hydraulic works, parking decks, etc.
The particular formulation of the membranes of the ITER ROUTE THERMO ADHESIVE makes it compatible with all NORD BITUMI membranes, be they either APP or SBS based.
The particular heat activated waterproofing compound of ITER ROUTE THERMO ADHESIVE will activate and develop its full adhesive power binding to the substrate when the asphalt is applied.
If applying a second membrane over the ITER ROUTE THERMO ADHESIVE, the latter's adhesion will be obtained during the torching of the second layer.
The substrate must be dry, clean, exempt from irregularities higher than 1,5 mm and with the correct proper slopes.
The concrete will have aged at least two weeks and the water content cannot be higher than 5%.
The cohesion of the concrete: tablet test: 1 MPA.

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When waterproofing road works, the hot asphalt will be applied directly on the membrane without any slip sheet.
The thickness of the binder course must be minimum 6 cm with a granulometry of 0-15 mm, while for the surface course the thickness must be minimum 4 cm and granulometry of 0-12 mm.
If used on a laying surface with a residual humidity greater than 5%, it is mandatory to apply PRIMER EPOX, as indicated in the product technical data sheet.
In case of refurbishing an existing driveway cover, the product must be applied on original concrete support (all existing waterproofing layers must be removed).
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.

APPLICATION

- Apply by roller or airless the bituminous primer PRIMERTEC AD, approx. consumption 300 g/m^2.
- Apply at site, by torch or hot air gun, all parapets/verticals with a 25 cm strip of ITER ROUTE THERMO ADHESIVE.
- Position the ITER ROUTE THERMO ADHESIVE rolls on the application surface.
- Provide for side & head laps respectively of 10 & 15 cm between the sheets, making sure to also remove the side overlap thermoplastic film on the upper face.
- Remove the thermoplastic film from the lower face.
- Carry out thermal activation by torch or hot air gun of the head overlaps.
- After having positioned the rolls, apply pressure over the surface using a suitable roller to promote adhesion.
- Apply the membrane on the verticals by overlapping those on the horizontal surface by at least 15 cm, thermal activating by torch or hot air gun.
- Apply the hot asphalt directly over the ITER ROUTE THERMO ADHESIVE using a paving-machine. The bituminous emulsion is required only on the perimeter area. The thickness of the structural course has to be minimum of 6 cm (size 0-15 mm) while the thickness of the friction course has to be 4 cm at least (size 0-12 mm).
- The adhesion of the ITER ROUTE THERMO ADHESIVE will occur with the heat of the sun and that of the bituminous asphalt.

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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.
- 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.

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TECHNICAL DATA

CHARACTERISTICS	TESTING METHOD	M.U.	TOLERANCE	P	
Length/Width	EN 1848-1	m	MLV ≥	10,00 / 1,0	8,00 / 1,0
Visible defects	EN 1850-1	visual		None	
Thickness	EN 1849-1	mm	MDV ±5%	4	5
Straightness	EN 1848-1	mm/10 m		< 20	
Watertightness at 60 kPa	EN 1928-B	kPa	MLV ≥	60	
External Fire Performance	EN 13501-5			F ROOF	
Reaction to fire	EN 13501-1	class		NPD	
Shear resistance (L/T)	EN 12317-1	N/50 mm	MDV -20% +50%	1100/900	
Maximum tensile strength (L/T)	EN 12311-1	N/50 mm	MDV -20% +50%	1200/1000	
Elongation (L/T)	EN 12311-1	%	MDV -15 +30	45/45	
Resistance to tearing (L/T)	EN 12310-1	N	MDV -20% +50%	300/300	
Cold flexibility	EN 1109	°C	MLV ≤	NPD	
Cold flexibility after ageing	EN 1296	°C	MDV +15°C	NPD	
Flow resistance	EN 1110	°C	MLV ≥	NPD	
Flow resistance after ageing	EN 1296	°C	MDV -10°C	NPD	
Resistance to impact	EN 12691-B	mm	MLV ≥	1500	
Resistance to static loading	EN 12730-A	Kg	MLV ≥	25	
Peel resistance of joints (L/T)	EN 12316-1	N/5 cm	MDV ±20N	NPD/NPD	
Dimensional stability	EN 1107-1	%	MLV ≤	0,5	
Root resistance	EN 13948			NPD	
Bond strenght	EN 13596	N/mm^2	MLV ≥	0,42	
Shear strenght	EN 13653	N/mm^2	MLV ≥	0,24	
Compatibility by heat conditioning	EN 14691	%	MLV ≥	180	
Crack Bridging Ability	EN 14224	°C	MLV ≥	-20	
Resistance to dynamic water pressure	EN 14694			pass	
Resistance to compaction of an asphalt layer	EN 14692			pass	
Behaviour of bitumen sheets during application of mastic asphalt	EN 14693	%, mm, %		NPD	

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

	ROLL SIZE	WEIGHT KG/M²	THICKNESS MM	m^2 PER PALLET
Iter Route Thermo adhesive	10 m x 1 m	-	4	240
Iter Route Thermo adhesive	8 m x 1 m	-	5	184

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 informations 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.