Modo/P

3.5 mm thick, elastoplastomeric, torch-applied membrane, reinforced with polyester and stabilised with fibre glass mat, for single or multi layer systems

USES

Modo/P has been specifically designed for the waterproofing of foundations, basements, tunnels, terraces and roofs as a single layer or in a multi-layer system.

Modo/P is only available with the fine serigraphic talc finish and must be protected by backfilling, installing a wearing course or with other Index Mineral finished cap layers (Sirio/P or Testudo Mineral) if exposed to UV.

ADVANTAGES

- Uniform thickness – eliminating likelihood of uneven application possible with liquid applied membranes
- Polyester fabric composite reinforcement ensures dimensional stability and high strength while maintaining flexibility during application and service
- Excellent stability at high and low temperatures
- Over laps are heat fused providing a homogenous joint eliminating the chance of water ingress beneath the membrane system
- Long lasting strength, elasticity and stability at high and low temperatures make Modo/P ideal for use as a waterproofing membrane system for new building work or refurbishment

DESCRIPTION

Modo/P is manufactured from distilled bitumen, selected for industrial use, with special Elastomeric and plastomeric polymers added to obtain a phase inversion compound. This continuous phase is formed by polymers in which the bitumen is dispersed. These characteristics are determined by the polymeric matrix and not by the bitumen even if this is the most consistent ingredient.

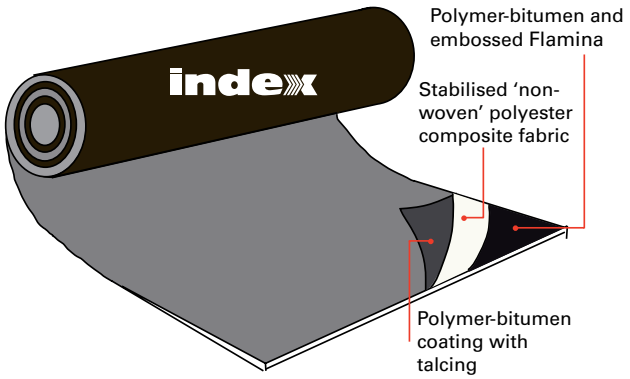
The addition of elastomeric and plastomeric polymers, increases the performance and durability of the bitumen. This blend also increases the performance of the membrane at high and low temperatures.

Modo/P is a reinforced rot-proof "non woven" polyester fabric composite stabilized with fibreglass mat. This ensures a very strong and elastic membrane offering optimal dimensional stability in hot conditions reducing the problem of the banana effect and the retraction of lap joints.

The top face of Modo/P is coated with a uniformly distributed, fine, serigraphed talc, a patented treatment. This enables quick unrolling and installation of the membrane with reliable and fast welding of the joints. The underside of the membrane is coated with Flamina and embossing. The flamina is a plastic film that melts when torched. The embossing maintains the pre-tension and optimal retraction of the film and allows the torch a greater surface area for faster and more reliable installation.

TECHNICAL SUPPORT

Parchem offers a technical support package to specifiers, end-users and contractors, as well as on-site technical assistance.



Modo/P 3.5 mm plain membrane

Modo/P

PROPERTIES

Product code:	742015
Size:	Roll width 1 m, length 10 m
Thickness:	3.5 mm
Reinforcement:	Polyester/fibreglass composite
Tensile strength (EN 12311-1):	
- longitudinal	450 N/50 mm
- transverse	350 N/50 mm
Ultimate elongation (EN 12311-1):	
- longitudinal	40%
- transverse	40%
Flow resistance @ 100°C (EN 1110):	Stable
Flexibility at low temperature (EN 1109):	- 5°C
Shear resistance (EN 112317-1):	≥ 500 N/50 mm or breakage outside the joint
Resistance to tearing (EN 12310-1):	
- longitudinal	120 N
- transverse	120 N
Puncture resistance (UNI 8202):	
	Static / Dynamic
- on concrete	PS_4/PD_4
- on polystyrene	PS_3/PD_4
Impermeability to water:	≥ 60 kPa

MAINTENANCE

No special requirements necessary. Any damage identified during normal inspections should be repaired or replaced as appropriate.

SPECIFICATION CLAUSES

Where so designated on the drawing, the surfaces shall be covered with a torch applied, polyester reinforced, polymer modified bituminous waterproofing membrane.

The membrane shall be reinforced with non-woven polyester composite fabric and be based on distilled bitumen and polymers. Such a product is Modo/P as supplied by Parchem. Areas shall be prepared and the membrane applied in accordance with the current Modo/P technical data sheet, all materials used in conjunction with the Modo/P membrane must be approved by Parchem Construction Products.

Application of the membrane should be carried out by a competent applicator, well trained in the application of modified bitumen torch applied membrane systems.

For further detailed specification information refer to the appropriate Waterproofing Specification available from your local Parchem sales office.

APPLICATION INSTRUCTIONS

Surface Preparation

All surfaces receiving the Modo/P membrane must be firm, dry, and free from contaminants and loose material. It must also be even and smooth, without any elements that could damage the membrane. Rough concrete must be "faired up" before commencing application. Contact your local Parchem office for suitable fairing products from our extensive range.

Priming

Index Bitumen Primer should be applied to all the prepared surfaces prior to the application of the membrane and allowed to dry. The primer will take at least one hour to dry at temperatures 25^{0}C and above. At lower temperatures allow additional drying time.

Index Bitumen Primer should be applied at the rate of approximately 0.13 litres per square metre to the surface to which Modo/P will be applied. The coverage rate for the primer will vary depending on the porosity of the surface being treated.

Primer may be applied by brush, roller or spray equipment, coverage must be uniform. Primed areas must be covered with the membrane on the same day.

Application

Planning the installation of the membrane is important to ensure joints occur in suitable locations.

Modo/P membrane must be laid to allow side laps of 10 cm and end laps of 15 cm. If the membrane is to be spot bonded, full bonding must occur for 1 m each side of the end laps. Application of the membrane is by torch bonding using a suitable gas torch. The membrane is applied with the surface protected by the Flamina facing down towards the substrate, during the application of the gas flame the Flamina will melt away.

Beginning at the lowest point of the deck area and working in the direction of the slope towards the highest point. The first roll of membrane is unrolled completely and aligned, remaining rolls should be unrolled approx. halfway in order to properly align the 10 cm side lap and ensure the required 15 cm end lap is maintained.

Starting at the low point in the deck apply heat by the gas torch to the outer surface of the rolled portion of membrane while un-rolling, move the flame from side to side while unrolling the membrane by slightly pressing it onto the underlying surface. Avoid shifting the roll while unrolling. Follow the edge of the deck or the lap line. In order to have a smooth and even seal at the joint, apply the flame to the bleed out and the trowel simultaneously and spread the melted compound evenly to seal the joint.

Proceed torching the remaining membrane as described above, working your way to the highest point on the deck always maintaining the 10 cm side lap and 15 cm end lap.

On completion of the membrane installation all exposed perimeter edges must be mechanically fixed or terminated under a flashing.

Protection

Whilst the Modo/P membrane is based on a polymer modified bitumen which is resistant to UV, it is not recommended for long term exposure with out some form of protective topping medium.

Where the membrane is to be back filled, such as with basement applications, the Modo/P should be protected from mechanical damage with the Emer-Proof Drain V drainage/protection system also available from Parchem.

Limitations

New concrete substrates should be allowed to cure for a minimum of 28 days prior to the installation.

ESTIMATING

Supply

Modo/P:	1 m wide rolls, 10 m long
Emer-Proof Drain V:	2m x 20m roll (40m^2)

Note: no allowance has been made for wastage.

STORAGE

Storage conditions

Store in cool, dry conditions ie. not exceeding 25°C.

Rolls must be stored on end and must NOT be stored lying down.

ADDITIONAL INFORMATION

Parchem provides a wide range of complementary products which include:

- waterproofing membranes – liquid applied, cementitious and bituminous sheet membranes
- concrete repair – cementitious and epoxy
- grouts and anchors – cementitious and epoxy
- waterstops – pvc and swellable
- joint sealants – building, civil and chemical resistant
- industrial flooring systems – cementitious and epoxy
- architectural coatings
- filler boards – swellable cork, bituminous and backing rod
- ancillary products

For further information on any of the above, please consult with your local Parchem sales office.

IMPORTANT NOTICE

A Material Safety Data Sheet (MSDS) and Technical Data Sheet (TDS) are available from the Parchem website or upon request from the nearest Parchem sales office. Read the MSDS and TDS carefully prior to use as application or performance data may change from time to time. In emergency, contact any Poisons Information Centre (phone 13 11 26 within Australia) or a doctor for advice.

PRODUCT DISCLAIMER

This Technical Data Sheet (TDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this TDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Parchem does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.