

# PARALONPLUS MS

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## **Nature of product**

The PARALON PLUS MS prefabricated membrane is produced by coextrusion of a reinforcement in non-woven polyester fabric with a continuous filament stabilised with mineral fibres and the innovative PARALLOY® compound, based on metallocene resins with selected molecular weight dispersed in bitumen, stratified on the lower side to give the finished product outstanding characteristics of adhesiveness on the laying surface and rapidity of execution in the creation of the sealed joints.

The upper side is finished with slate flakes, while the lower side is coated with Termotene thermoformable film which facilitates installation operations and further improves adhesion to the surface to be waterproofed.

PARALON PLUS MS is produced in the thickness of 4 mm, in addition to the slate surface finish; it is packaged in rolls with plastic strips and accompanied by a Quality Control Certificate.

It complies with the current requirements for CE marking; it does not contain asbestos, tar or other dangerous substances.

#### Intended use

The PARALON PLUS MS membrane is specifically used for the reconstruction of slated waterproof layers to be reconditioned. With respect to the use on roofs and in foundations, it can be used with reference to the following diagram (1). For clarification of the systems that can be implemented, consult our Technical Services.

| PRODUCTS       | FIELDS OF USE (1) |           |                         |                           |                             |            |  |           |
|----------------|-------------------|-----------|-------------------------|---------------------------|-----------------------------|------------|--|-----------|
|                |                   |           | Subtile<br>(EN 13859-1) | Foundations<br>(EN 13969) |                             |            |  |           |
|                | Exposed           |           |                         | Roof gardens              | Under heavy-duty protection |            |  |           |
|                | Single-ply        | Multi-ply |                         | Root-resistant            | Single-ply                  | Multi-ply  |  | Multi-ply |
|                | Single-ply        | Upper     | Lower                   | nuut-resistant            | Sillyle-ply                 | wiuiti-piy |  |           |
| PARALONPLUS MS | •                 | •         |                         |                           | •                           |            |  |           |

<sup>(1)</sup> In compliance with the applicable AISPEC/SITEB-MBP Guidelines.



### **Application procedure**

The PARALON<sup>PLUS</sup> MS membranes are installed via flame or mechanical fixing. The application methods are a determining factor capable of characterising the performance of the waterproof covering itself. In general terms, we remind you to carry out careful preparation and cleaning of the substrate followed by the priming treatment with a suitable primer (applied with a long-handled brush, roller, spray), with a consumption of  $0.2 \div 0.3 \, l/m^2$  and in any case variable with the degree of porosity of the substrate itself. The membrane will be applied with the aid of a propane gas torch; particular care must be given to performing of sealing between the sheets always laid with staggered joints: the lateral joints must be installed with overlap of  $8 \div 10$  cm and the end joints with overlapping of  $12 \div 15$  cm. For correct and detailed documentation, as well as to identify the most effective intervention solutions in all circumstances, we recommend consulting the Technical Services of IMPER ITALIA srl which are in any case available for the consultation of particular problems as well as to provide all the assistance necessary for the best use of these materials.

| TECHNICAL SPECIFICATIONS                |              |                    |                |                 |  |  |  |  |  |
|---|--------------|--------------------|----------------|-----------------|--|--|--|--|--|
| Specifications                          | EN Standards | Unit of<br>Measure | Tolerances (2) | PARALONPLUS MS  |  |  |  |  |  |
| Roll dimensions                         | 1848-1       | m                  | ≥              | 10 x 1 (-1%)    |  |  |  |  |  |
| Thickness                               | 1849-1       | mm                 | ±5%            | 4 + slate       |  |  |  |  |  |
| Mass per unit area                      | 1849-1       | kg/m²              | ±10%           |                 |  |  |  |  |  |
| Standard colour                         | -            | -                  | -              | G. N. (*)       |  |  |  |  |  |
| Watertightness                          | 1928-B       | kPa                | ≥              | 60              |  |  |  |  |  |
| Cold flexibility                        | 1109         | °C                 | ≤              | -25             |  |  |  |  |  |
| Flow resistance at elevated temperature | 1110         | °C                 | ≥              | 140             |  |  |  |  |  |
| L/T tensile strength                    | 12311-1      | N/5cm              | ±20%           | 750 / 650       |  |  |  |  |  |
| L/T tensile elongation                  | 12311-1      | %                  | ±15 (3)        | 45 / 45         |  |  |  |  |  |
| L/T dimensional stability               | 1107-1       | %                  | ≤              | 0.3 / 0.3       |  |  |  |  |  |
| Static puncture                         | 12730-B      | kg                 | ≥              | 25              |  |  |  |  |  |
| Dynamic puncture                        | 12691-B      | mm                 | ≥              | 1000            |  |  |  |  |  |
| L/T tear resistance                     | 12310-1      | N                  | ±30%           | 160 / 180       |  |  |  |  |  |
| Joint peel resistance                   | 12316-1      | N/5cm              | ±20 N          | 210             |  |  |  |  |  |
| L/T Joint cut resistance (4)            | 12317-1      | N/5cm              | ±20%           | 700 / 600       |  |  |  |  |  |
| Durability after aging:                 |              |                    |                |                 |  |  |  |  |  |
| <ul> <li>Cold flexibility</li> </ul>    | 1296-1109    | °C                 | +15°C          | -15             |  |  |  |  |  |
| Flow resistance at elevated temperature | 1296-1110    | °C                 | -10°C          | 130             |  |  |  |  |  |
| • UV Ageing                             | 1297         | -                  | -              | Passes the test |  |  |  |  |  |
| Watertightness                          | 1296-1928    | kPa                | ≥              | 60              |  |  |  |  |  |
| Chemical resistance                     | -            | -                  | -              | NPD (5)         |  |  |  |  |  |
| • L/T tensile strength                  | 12311-1      | N/5cm              | ±20%           | 700 / 600       |  |  |  |  |  |
| • L/T tensile elongation                | 12311-1      | %                  | ±15            | 40 / 40         |  |  |  |  |  |
| Steam permeability                      | 1931         | μ                  | ≥              | 20,000          |  |  |  |  |  |
| Root resistance                         | 13948        |                    | -              | NPD (5)         |  |  |  |  |  |
| External fire behaviour                 | 13501-5      | EC (6)             | -              | Froof           |  |  |  |  |  |
| Fire reaction                           | 13501-1      | EC (6)             | -              | E (7)           |  |  |  |  |  |

Notes: (2) In compliance with the applicable AISPEC-SITEB-MBP Guidelines

(3) ± 2 for Glass Mat reinforcements

(4) Or off-joint breakage.

(5) NPD - Characteristic not determined because it is not relevant for use.

(6) Euroclass

(7) Internal report

(\*) G.N.= Natural Grey. Other colours upon request Red, Green

### Rev. 04 (06-22)

Considerando le diverse situazioni d'impiego dei prodotti e l'intervento di fattori da noi non dipendenti (supporti, condizioni di esercizio, in osservanza delle prescrizioni, ecc.), non è possibile alla IMPER ITALIA sri assumere responsabilità in merito ai risultati ottenuti. Il progresso unito alla costante ricerca dei massimi livelli prestazionali possono apportare - nel tempo - modificazioni alle informazioni contenute in questo stampato, senza che la IMPER ITALIA sri debba darne preavviso a tutti gli interessati.









