



automated waterproofing  
**membrane**  
installation  
system

macaden<sup>®</sup>

 **CIVIL ROCK**  
by SOPREMA



the **+** Macaden®

- **Fast Installation** : up to 1,800 m<sup>2</sup> per day with 2 operatives only and independently of outside temperature.
- **High performance** : high quality of installation, fewer seams and no swells.
- **Economical** : reduced labor and site downtime.
- **Multi-purpose** : can be used on bridges, overpasses and car parks.
- **Safe** : no flame and limitation of manual operations.

# automated installation

## MACADEN®

The **Macaden®** is a machine for laying bituminous membranes, operated by **SOPREMA** for more than 10 years, for the installation of thermofusible bituminous rolls on bridges and car parks.

With its two hot air nozzles, **Macaden®** preheats the substrate to a temperature of above 100°C, unwinds the 190 lm length Jumbo rolls, then welds and bonds the membrane onto the substrate using compression rollers.

Self-propelled, independent and self guided, **Macaden®** can lay up to 1,800 m<sup>2</sup> per day whatever the outside temperature (> -10 ° C) or wind conditions.

The **Macaden®** only requires two operatives.

- Preheating of the substrate to above 100 ° C.
- Unwinding Jumbo rolls of 190 ml.
- Optimal efficiency from -10 °C.
- Double bonding.
- Propane bottles on board.

The **Macaden®** machines are exclusively operated by **SOPREMA** and operate throughout the entire world.

## FEATURES

- **Dimensions** : length : 4,90 m, width : 1,60 m, height : 1,75 m.
- **Empty weight** : 3,5 T.
- **Processing speed** : 4 to 6 meters per minute.
- **Rolls** : Jumbo 190 ml x 1 m.

## CivilRock® at your service

If you would like to discuss a future project or one that is under way, or if you have any queries, feel free to call us.

Phone: **+33 (0) 1 46 88 94 08**

Fax: **+ 33 (0) 1 46 88 92 30**

More informations on [www.soprema.com](http://www.soprema.com)

## THE PROCEDURE

The operation of the **Macaden®** is 100% fully automatic, with controlled parameters: temperature, speed, etc. ...

1. The Jumbo roll of sealable membrane is installed on the device.
2. The unit is pre-aligned and its guiding system allows the automatic advance and follows the curves of the structure.
3. A first hot air nozzle at the front of the machine pre-heat the substrate surface and promotes optimal welding.
4. The membrane is mechanically held to avoid creases.
5. The second hot air nozzle welds the membrane uniformly and at constant controlled temperature
6. The bonding rollers exert even pressure on the entire surface to ensure perfect adhesion to the substrate.



14 rue de Saint-Nazaire - BP 60121  
67025 STRASBOURG Cedex 1- France  
Phone.: +33 (0)3 88 79 84 00 - Fax: +33 (0)3 88 79 84 01  
e-mail: [contact@soprema.fr](mailto:contact@soprema.fr) - [www.soprema.fr](http://www.soprema.fr)