

Technical Data Sheet

# HR MEMBRANE

Torch-Applied Waterproofing Sheet Membrane



## Product Description

HR Membrane is a high-quality torch-applied waterproofing sheet membrane designed for permanent waterproofing of concrete, masonry, and structural surfaces. It is manufactured using bitumen modified with polymers and reinforced with polyester / fiberglass, providing excellent durability, flexibility, and resistance to water ingress.

## Applications

- RCC roofs and podium slabs
- Basements and foundations
- Retaining walls and tunnels
- Wet areas, balconies, and terraces
- Concrete and masonry structures requiring long-term waterproofing

## Key Features & Benefits

- Torch-applied system for strong adhesion
- Excellent waterproofing performance
- High tensile strength and flexibility
- Resistant to aging, weathering, and water pressure
- Seamless joint sealing when properly lapped
- Suitable for horizontal and vertical applications



## Technical Properties

| Property            | Typical Value               | Test Method |
|---------------------|-----------------------------|-------------|
| Base                | APP / SBS Modified Bitumen  |             |
| Reinforcement       | Polyester / Fiberglass      |             |
| Thickness           | 3 mm / 4 mm (standard)      |             |
| Roll Size           | 1 m × 10 m                  |             |
| Weight              | 3.5 – 4.5 kg/m <sup>2</sup> |             |
| Softening Point     | ≥ 150°C (APP)               |             |
| Tensile Strength    | ≥ 600 N / 50 mm             | ASTM D5147  |
| Elongation at Break | ≥ 30%                       |             |



|                     |                |  |
|---------------------|----------------|--|
| Water Tightness     | Passed         |  |
| Service Temperature | -10°C to +80°C |  |

## Method of Application

### Surface Preparation:

Surface must be clean, dry, smooth, and free from dust, oil, and loose particles  
 Apply suitable primer (e.g., HR Emulsion Primer) and allow it to dry

### Membrane Application

Unroll HR Membrane and align properly  
 Heat the underside with a gas torch until bitumen melts  
 Roll forward while applying uniform pressure for full bonding

### Joint Sealing

Side laps: minimum 75 mm  
 End laps: minimum 100 mm  
 Heat overlaps properly to ensure complete sealing

### Protection

Protect the membrane with screed, tiles, or protection board where required

## Surface Preparation

- All cracks and honeycombs must be repaired prior to application
- Sharp edges should be rounded
- Ensure proper slope for drainage

## Storage & Shelf Life

- Store rolls upright in a cool, dry place
- Protect from direct sunlight and heat
- Shelf Life: 24 months when stored under recommended conditions



## Health & Safety

- Use protective gloves and safety shoes during application
- Avoid inhalation of fumes during torch application
- Ensure adequate ventilation
- Refer to MSDS for detailed safety instructions

## Limitations

- Application must be carried out by trained personnel
- Not suitable for wet or damp surfaces
- Avoid application during rain or extreme weather conditions

## Disclaimer

The information provided in this Technical Data Sheet is based on laboratory testing and practical experience. Actual performance may vary depending on site conditions, workmanship, and application methods. The manufacturer shall not be held responsible for improper use.

