

# **TECHNICAL DATA SHEET**

# **DUROSHEET BGW**

Polymer Self-adhesive Film Composite Waterproofing Membrane

# **DESCRIPTION**

DUROSHEET BGW self adhesive film composite waterproofing membrane is composited of polymer membrane, elastoplasticity gel layer and composite functional coating.

The functions of different structure layers are as follows:

Polymer Membrane: Be the Carrier of gel layers and coating, having high strength, flexibility, puncture resistant, weather resistance etc.

Elastoplasticity gel layer: Asphalt-free synthetic adhesive, can prevent water migration and absorb parts of damage by extraneous factors, not affected by structural cracks.

Composite functional coating: 0.2~0.4mm thick coating could greatly reduce the UV effect on elastoplasticity gel layer. No protection layers immediately trafficable. Microporous structure forms a unique continuous adhesive bond to concrete poured against it.

# PACKING AND SPECIFICATION

Item	Data	
Package	Curled into a cylindrical, using suitable packaging material.	
Width (m)	1.2, 2.4	
Thickness (mm)	1.2, 1.5	
Length (m)	20 or above	
Roll Size (m <sup>2</sup> /roll)	24, 48 or above	



## **TECHNICAL INFORMATION**

Q/SY YHF 0102 Polymer self-adhesive film composite waterproofing membranes

Item	Technical Index	Typical Value
Tension	≥650 N/50mm	750
Elongation at break	≥550%	700
Nail tear resistance	≥500 N	550
Heat resistance	70°C, 2h, no displacement, flowing	700C, 2h, no displacement,
	And dripping	Flowing and dripping
Flexibility at low temperature	-25 <sup>o</sup> C, No Crack	-25°C, No crack
Water tightness	0.6MPa, Impermeable	0.6MPa, Impermeable
Peeling strength (between coil and	≥ 2.5 N/mm	2.8 N/mm
concrete), without treatment		
Peeling strength at overlapped places	≥ 500N/50mm or damage	600 N/50mm

Of coils (between coils)

## AREA OF APPLICATION

Durotech BGW membranes are suitable for all kinds of tunnels and basement.

#### FEATURES & BENEFITS

- Excellent environmental adaptability, when continuous exposure more than 45 days the material properties remain unchanged.
- Have stereoscopic spray coating, providing a permanent and integral adhesive bond to concrete. Improve the safety and reliability of waterproofing.
- Dustproof design and no protection layers immediately trafficable. Directly carry on assembling reinforcement and pouring concrete.
- None release liner, simple and quick to install, Fully-adhered watertight laps and detailing.
- Excellent plastic deformation and perfect show the application performance of the polymer sheet.
- Offer excellent chemical resistance to concrete alkaline water, household garbage, biological damage and mildew corrosion.
- No water pollution and eco-friendly.



#### **METHOD OF APPLICATION**

#### **Construction Process**

#### **Horizontal applications**

Substrate preparation  $\rightarrow$  Set guide line  $\rightarrow$  Apply membrane  $\rightarrow$  Overlap the lap  $\rightarrow$  Details processing  $\rightarrow$  Assembling reinforcement  $\rightarrow$  Pouring concrete

#### **Vertical Applications**

Install formwork  $\rightarrow$  Set guide line  $\rightarrow$  Apply membrane  $\rightarrow$  Additional mechanically fastening  $\rightarrow$  Overlap the lap  $\rightarrow$  Details processing  $\rightarrow$  Assembling reinforcement  $\rightarrow$  Pouring concrete

#### **Applications in tunnel vault**

Substrate preparation  $\rightarrow$  Set guide line  $\rightarrow$  Install formwork  $\rightarrow$  Apply membrane  $\rightarrow$  Additional mechanically fastening  $\rightarrow$  Overlap the lap  $\rightarrow$  Details processing  $\rightarrow$  Assembling reinforcement  $\rightarrow$  Pouring concrete

#### **CONSTRUCTION POINTS**

MD edge Overlapping: Accurately position the succeeding sheets to overlap in 80 mm along the marked selvedge. Ensure the underside of the succeeding sheet is clean, dry and no pollution before attempting to overlap, roll side lap firmly.

CD edge Overlapping: Remove protective coating and gel layer by hot spade, cleaning the lap area, Center Tape over laps and roll firmly.

Tape end laps: Apply special tape (120-150mm width, a PET carrier tape which with double-sided self-adhesive and one side have a protective coating) centered over the lap edges and roll firmly

#### **TRANSPORTATION & STORAGE**

Products of different types and specifications should be stacked separately during storage and transport.

Avoid extrusion and packing damaged. Be stored in well-ventilated and dry place. Storage temperature should be below 45 °C. It only can be put horizontally in five-level. Be away from direct sunlight, rain, high temperature. Avoid contact with acids, alkalis, oils and organic solvents.

Prevent slope, tilt or lateral drift, stamped felt cloth when necessary.

Quality guarantee period is 12 months from date of manufacturing under normal storage and transportation conditions.

#### **PRECAUTIONS & LIMITATIONS**

Operators must go through specialized training, strict adherence to rules.

When rain or snow during the process of construction, membranes protection should be guaranteed.

Don't be performed in the rainy, snowy and windy days. The construction temperature of membrane and tape should be more than 5°C.

Ensure the underside of the succeeding sheet is clean, dry and no pollution before attempting to overlap, roll side lap firmly. Be noted not damage the waterproof layer. Concrete casting process should be finished within 40 days after membrane lying. People wearing spikes are not allowed entering the construction site. No smoking in the construction site.



# **QUALITY, HEALTH & SAFETY**

Please read the safety manual carefully, our security experts will be pleased to give you advises about safety, health and environmental issues.

#### PRODUCT RESPONSIBILITY

The above information and recommendations are based on our experience and for reference only, they can't replace the customers their own experimental results. Since our company, our representatives or distributors can't control the transport, storage, handling and use conditions of the products, the economic disputes and the quality accident caused by improper use can't be attributed to our suggest. In any application, the customer shall be responsible comply with obligations of third-party intellectual property rights. Without our consent, shall not provide technical information to third parties.





14 Essex Street, P.O Box 5092, Minto, NSW 2566

+61 2 9603 1177

🚔 +61 2 9475 5059

🖂 sales@durotechindustries.com.au

#### www.durotechindustries.com.au

The information provided in this data sheet is correct at the time of printing (albeit is subject to change at any time) and is intended to give a simple description of the product and its capabilities. In practice, the substrate, intended surface to be treated and environmental conditions vary widely, making it essential for the user to determine the products suitability for a particular application and to ensure that the product is not used beyond its physical limitations. If in doubt contact the manufacturer. The product will perform as described herein provided it is applied in accordance with the manufacturer's instructions as stated in this data sheet and provided that the building and installation is structurally sound and the application is carried out competently. Durotech terms and conditions of sale apply.