

Uses

# technical data sheet

### Description

<u>Gripset BRW-HD</u> is a self-adhesive butyl rubber sheet membrane with a laminated high strength HDPE film facing designed for subterranean waterproofing and multi layered sheet membrane applications. The high tack butyl backing provides a high performance waterproof layer with unrivalled adhesion to porous and non-porous surfaces in a wide range of temperature conditions. <u>BRW-HD membrane</u> has outstanding resistance to vibration, movement and flexing, delivering a waterproofing system that overcomes the limitations of bitumen self tack and heat applied sheet membranes.

**GRIPSETBRW HD** 

HDPE REINFORCED BUTYL RUBBER WATERPROOFING

Forming an instant waterproof seal when applied onto surfaces, BRW-HD system avoids down time for drying or curing, delivering rapid application times to enable areas to be in service immediately upon waterproofing completion. As a non-bituminous system, termination points at ground level or above earth lines have no risk of bleeding or yellowing into wall surface finishes. The BRW-HD system along with the <u>BRW-PF</u> grade enable the direct adhesion of finishes over the membrane including tiles, renders, textures, paints systems and decorative finishes.



### **Features & Benefits**

- Self-adhesive application
- Outstanding high bond adhesion over surfaces applied to
- Excellent performance in low to high temperatures, -30°C to 80°C
- Bonds and retains adhesion in cold application temperatures
- Does not slide or soften in hot application temperatures
- Excellent resistance to ground salts and chemical agents
- Self-sealing properties
- Primer-less application on metallic, plastic and glazed surfaces
- Provides dimensional stability, high tear strength, puncture and impact resistance
- Cold lay application. No torching or heat welding, eliminates on site fire hazards and risks
- Excellent waterproof and vapour resistant properties
- Outstanding flexibility in cold temperatures, no cracking
- No "bleed" or "yellowing", as per bitumen based products
- No solvent or hazardous primers emitting dangerous fumes
- Instant sealing properties, no drying required
- Continuity ensured at overlaps with in-built sealing strip along sheet edge
- Solvent free and non-toxic
- Can handle continuously ponding water

- Underground retaining walls
- Roof gardens
- Basement and lift pit wall substrates
- Planter boxes and garden beds
- Plaza decks, podiums, terraces
- Waterproofing damp wall surfaces (incorporating Gripset E60)
- Roof underlayments
- Waterproofing underground walls in cold and/or humid environments
- Waterproofing system over substrates with live and static cracking (maximum 2mm)
- Under pedestal paver finishes
- Roof waterproofing system over failed membranes
- Multi layered high performance system with Gripset BRW-PF

**Note:** If applying <u>BRW-PF</u> over <u>BRW-HD</u>, ensure reference is made to <u>BRW-PF</u> TDS.

### **Substrates**

Gripset <u>BRW-HD</u> will adhere to common and specialist building surfaces, including:

- Primed or dense concrete
- Primed concrete block and masonry
- Galvanised iron, zincalume, copper, aluminium, and most metallics
- Timber
- Structural floor sheeting
- Glazed surfaces
- Marble, granite and ceramics
- Soft and rigid plastics, PVC, DPC films
- Existing coatings including epoxy, polishes, paint surfaces
- Over failed water based and solvent based liquid membranes

Existing coatings must be well bonded to substrates – refer Gripset Technical Dept for further details.





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### **Surface Preparation**

<u>BRW-HD</u> requires surfaces to be dried and free of surface moisture.

Surfaces must be prepared thoroughly before commencing application.

All substrates must be structurally sound, smooth, stable, dry, and clean. Rough surfaces and voids to be evened or filled first. (refer to <u>Gripset 11Y</u> for concrete/masonry repairs). All general surface defects to be repaired.

Building surfaces must be constructed to manufacturer's recommendations and relevant building standards in force at time of membrane application.

All surfaces are to be free of sharp protruding objects, loose material, dirt, dust, de-bonded coatings, curing membranes/agents, release agents, wax residues, foreign particles, laitance, algae and moss, grime, oils, animal fats or grease remains.

Structurally unsound layers and surface contaminants are to be mechanically removed by abrasive blasting, blast tracking, grinding or equivalent methods. All metals must be free of oils, grease and wax residues. Use suitable degreaser or isopropyl solution to ensure surfaces are free of residues before application commences.

### Priming

Priming is generally not required on metal, plastic and glazed surfaces that are clean, stable, free of residues and mechanically sound.

For porous surfaces – prime with <u>Gripset GP</u> or <u>Xpress H20</u>. If surface dust is present after priming, apply a 2nd primer coat.

Damp surfaces with residual moisture – prime with <u>Xpress H20</u> or with <u>Gripset E60</u>. Ground concrete with rising damp or freshly poured concrete walls, e.g. "green concrete" must be prepared with <u>Gripset E60</u> first.

For non-porous surfaces – primer is generally not required. Nonporous surfaces requiring a primer are to be primed with <u>Xpress SP</u> <u>Primer</u>. Check with Gripset Technical Dept for confirmation of primer needs.

\*Refer to relevant data sheets for specific primer application and coverage details

#### **Installation** (refer QR Code for installation video instruction)

The <u>BRW-HD</u> sheet is to be adhered on all wall areas working in a vertical joint pattern. On floors to be waterproofed, adhere to all floor areas abutting perimeter edges of the walls to these areas.

When applying <u>BRW-HD</u> on sloped or graded surfaces, start by laying the membrane from the lowest point (nearest to drainage point) and working upwards to higher points (away from drains). Ensure overlaps formed are aiding drainage of water and not creating counter gradient overlaps. When laying the sheet into position, remove approx 100-200mm of release paper from the rear butyl rubber side and tack this onto the surface. Continue to slowly remove the rear release paper while the sheet is being unrolled and remove any creases or air bubbles with a flat trowel, heavy roller, dry sponge or float to ensure the sheet is firmly bonded to the substrate. Ensure the sheet is well pressed at overlaps, corners, edges and termination points.

At pipe penetrations <u>BRW-HD</u> sheet is to be cut to enable the sheet to slide over penetrations to prepare for the BRW-Pipe detail seal. This is best achieved by measuring the pipe diameter and in the position where the sheet will cover the pipe, a cross "+" should be cut that is the pipe diameter length and sliding this over the pipe. Trim any of the loose membrane around the upturn of the pipe from the section where the cross "+" was formed, ensuring the pipe surface is clean to allow the BRW-Pipe detail to be formed.

To seal all pipe penetrations, a two-section BRW-Pipe detail is created. Refer to the instructional video on the QR code for details to form the pipe seal on both vertical and horizontal pipes.

### **Overlap Details & Bond Breaker System**

Utilise the in-built sealing strip on sheet edges to create a sealed lap between sheets. Remove the release tape on the sealing strip and place the overlapping sheet onto this ensuring the overlapping sheet lines up along the guide line. <u>BRW FG Tape</u> is to be used at sheet ends to create a perminent seal beetween ajoining rolls. Once end of <u>BRW-HD</u> is reached, mark where roll ends to use as a guide. Install <u>FG</u> <u>Sealing Tape</u> centrally over marked line pushing firmly in place and remove relase paper. Lap roll end 25mm over <u>BRW FG Tape</u> ensuring no air bubbles or creases once in place start new roll appliction at 50mm overlap of existing sheet as indicated by perforated squares. Refer to <u>BRW FG Tape</u> Tape TDS for additional details and uses.

On general subterranean applications, the <u>BRW Fillet</u> is recommended to be used at perimeter junctions over the correctly prepared substrate. This preformed waterproof butyl fillet requires no drying and enables the <u>BRW-HD sheet</u> to be immediately applied over, performing as both the bond breaker and a mechanism to prevent water ponding at critical junction areas. BRW 150mm HD should be utelised for permiter detailing and construction of internal and external corners for all details refer to 150mm HD Tape TDS.

At the termination edge of the <u>BRW-HD</u> sheet where surface finishes are to be integrated, e.g. abut or lap onto the primary membrane, the <u>BRW-PF grade</u> is to be incorporated by overlapping a minimum 50mm over the top edge of the <u>BRW-HD</u> membrane surface. The <u>BRW-PF</u> is to continue and terminate to create a capping detail to then enable the direct application of surface finishes (refer to <u>BRW-PF</u> TDS for surface finish information). A pressure seal detail is to be used at termination points where the <u>BRW-HD sheet</u> is to finish at soil lines with no vertical surface finish being incorporated, e.g. exposed brick, stone etc.





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### **Multi Layered Membrane System**

### Notes

The <u>BRW-HD</u> sheet can be utilised in multi layers systems for specific project demands and extended warranty projects. This can be incorporated with subsequent layers of the <u>BRW-HD</u>, or can incorporate a secondary layer of the <u>BRW-PF</u> directly over the <u>BRW-HD</u> system for applications requiring tiled or other flooring finishes. Contact Gripset Technical Dept for details.

### **Storage conditions**

- Product is best used within 12 months of purchase; however, properties of product will be unchanged if stored correctly
- Best stored at room temperature in dry internal conditions
- Not affected by frost, or cold floors
- Keep product stored upright vertically

### Packaging

10m x 1m Roll packed in cardboard cartons. Pallet 49 x 10m rolls

### Precautions

- Not an exposed membrane finish, protect from extended periods of UV
- Not to be used as a trafficable surface
- Do no directly apply surface finishes. Incorporate BRW-PF
- Not to be used over expansion joints
- Concrete surfaces containing residual moisture must be sealed with
- <u>Gripset P10</u> or <u>E60 vapour barrier primer</u> before applying membrane
- For further information that cannot be found in this data sheet, contact Technical Department of Gripset Industries

### **TECHNICAL DATA**

Colour	HDPE film;
	butyl backing black
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Thickness	lmm
Solids	100%
Specific Weight	1.55g/cm <sup>3</sup>
Tensile Strength (ASTM D412)	3.5N/mm² longitudinal
	3.4N/mm <sup>2</sup> transverse
Elongation at break (ASTM D412)	620% longitudinal
	700% transverse
	70070 Hallsverse
Tear Resistance (ASTM D1004)	14N longitudinal
	11N transverse
Adhesion to Steel (ASTM D1000)	28N/25mm (180°peel)
Cold Adhesion -Steel (ASTM D1000)	13N/25mm (180°peel)
Lapped Joint Strength (50mm)	107N/50mm
Heat Resistance (6hrs, Flow, mm)	( 80°C) 0
Application temperature	5° C to 45° C
Service temperature	- 30° C to 80° C

It is recommended before commencing the application; that adhesion of products to be used (e.g. primers, membranes, coatings adhesives etc) is tested over a typical area of the prepared surface to ensure satisfactory adhesion. It is the responsibility of the applicator to carry this out and accept the substrate suitability before any application starts. Gripset Industries offers a service for pre-testing adhesion to surfaces for large commercial areas or unusual substrates. For further details contact Gripset Industries.

Details contained in product data sheets are general. For any situation or items not covered in this data sheet, it is the responsibility of the applicator to check with Gripset Technical Services before commencing the application. A written confirmation will then be issued by Gripset Technical Services.

### **RLA Polymers**

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#### **Product Disclaimer**

This Product Data Sheet (PDS) 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 PDS 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. Gripset Industries 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

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