

DRYBASE[®]

FLEX MEMBRANE SYSTEM



Application

GUIDELINES

Introduction

Drybase® Flex Membrane has been successfully used above ground for several years. It has now been tested for domestic areas which are partially below ground. Its speedy application allows you to renovate your room in double-quick time.

This handy guide will show you how to waterproof your room above and below ground using the **Drybase® Flex Membrane System**, and all the detailing necessary to achieve a quality finish.



ABOVE GROUND

Preparation



Before applying **Drybase® Flex Membrane**, consider any pipes, electrical outlets, anchoring points, corners and overlaps – see '*Detailing*' section.

If the underlying cause of dampness has not been remedied, it is advisable to apply **Drybase® Flex Membrane** to the entirety of the wall.

Before **Drybase® Flex Membrane** can be applied, any structural defects on the substrate should be made good using Drybase® Universal Mortar. Clean the surface of the substrate to ensure maximum bonding. Remove all surface laitance, loose particles, paint, etc. by means of wire brushing or light sandblasting.

Cut the membrane to the required size, making sure that there is a 25 mm gap between the floor and the membrane and allowing for the overlap between sections. It is advisable to dampen the wall prior to application.



Application

Adhesive Mixing

Each 10 kg bag requires 2.9 litres of clean tap water. One 10 kg bag of adhesive will cover approximately 2 m².

- 1 Add the **Drybase® Flex Adhesive** to the clean tap water and mix thoroughly with a mechanical mixer until a smooth consistency is obtained.
- 2 Spread the **Drybase® Flex Adhesive** with a notched trowel to cover approximately 1 m² at a time. The preferred adhesive thickness is 1 – 2 mm. Key the adhesive with the notched trowel.





Membrane Application

- 1 Once the **Drybase® Flex Adhesive** has been applied to the wall, offer the **Drybase® Flex Membrane** up to the adhesive and use a trowel to apply gentle pressure, spreading from the centre outwards. Make sure there is a 25 mm gap between the floor and the membrane. Ensure that full contact is established between the membrane and the adhesive. Using a hard roller may be more suitable to achieve an even pressure.
- 2 Remove any excess adhesive with a damp cloth before it sets.
- 3 After the adhesive has cured for at least 4 hours, surface finishes can be applied, such as gypsum-based plasters, prior to a skim finish.

Depending on site conditions, **Drybase® Flex Adhesive** should be dry/set in approximately 4 hours and develops full strength after 28 days.

*Note: Use **Drybase® Flex Adhesive** within 30 minutes of mixing. Once the adhesive is on the wall, **Drybase® Flex Membrane** must be adhered to it within 10 minutes. It is recommended to apply **Drybase® Flex Membrane** in 'manageable' sections due to the fast setting of the adhesive.*



Preparation

BELOW GROUND

*Note: Safeguard testing has shown that with an additional polymer-modified layer, **Drybase® Flex Membrane** can withstand water pressure up to 600 mm 'below ground'. Anything exceeding this depth would require structural waterproofing in accordance with BS 8102. In such cases, we recommend consulting Safeguard about our Drybase® Cementitious Waterproofing range and Oldroyd Cavity Membrane Systems.*



Before applying **Drybase® Flex Membrane** below ground, consider any pipes, electrical outlets, anchoring points, corners and overlaps – see 'Detailing' section. Section 8.1.3 in BS 8102 states that continuity of the waterproofing system be maintained and penetrations through walls and floors should be avoided. The structural integrity of the slab should be considered before any waterproofing commences.

Before **Drybase® Flex Membrane** can be applied, any structural defects on the substrate should be made good using Drybase® Universal Mortar. Clean the surface of the substrate to ensure maximum bonding. Remove all surface laitance, loose particles, paint, etc. by means of wire brushing or light sandblasting.

It is recommended to apply a 3:1 sharp sand/ cement render coat to the substrate to create a flat surface for the **Drybase® Flex Membrane**. Roughen the surface slightly while it's still soft to create a key.





A 30 × 30 mm fillet seal, using Drybase® Universal Mortar, should be applied to the floor-wall junction after the render is applied to the wall. Leave to cure for at least 4 hours before the application of **Drybase® Flex Membrane**.

Cut the membrane to the required size, making sure that there is enough overlap between the floor and the membrane and allowing for the overlaps between sections. See 'Detailing' section.

Application

1st Coat of Adhesive – Polymer-Modified Layer

- 1 For the first coat of **Drybase® Flex Adhesive**, add the 10 kg bag of adhesive to the 5 litre Drybase® Elasticiser in a bucket and mix thoroughly with a mechanical mixer until a smooth consistency is obtained.
- 2 Spread the *polymer-modified* adhesive with a suitable trowel at the preferred thickness of 1 – 2 mm. Roughen the surface slightly with a soft brush while it is still damp to create a key. The first coat should be set between 4 – 6 hours.

Note: For very low-risk areas a standard coat of adhesive can be applied.

2nd Coat of Adhesive – Bonding Layer

- 1 Add the 10 kg bag of **Drybase® Flex Adhesive** to 2.9 litres of clean tap water and mix thoroughly with a mechanical mixer until a smooth consistency is obtained.
- 2 Spread the **Drybase® Flex Adhesive** with a notched trowel to cover approximately 1 m² at a time. The preferred adhesive thickness is 1 – 2 mm. Key the adhesive with the notched trowel.

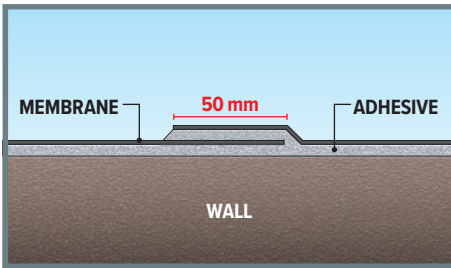
Membrane Application

- 1 Once the **Drybase® Flex Adhesive** has been applied to the wall, offer the **Drybase® Flex Membrane** up to the adhesive and use a trowel to apply gentle pressure, spreading from the centre outwards. Ensure that full contact is established between the membrane and the adhesive. Using a hard roller may be more suitable to achieve an even pressure.
- 2 Remove any excess adhesive with a damp cloth before it sets.
- 3 After the adhesive has cured for at least 4 hours, surface finishes can be applied such as gypsum based plasters, prior to a skim finish.

*Note: Use **Drybase® Flex Adhesive** within 30 minutes of mixing. Once the adhesive is on the wall, **Drybase® Flex Membrane** must be adhered to it within 10 minutes. It is recommended to apply **Drybase® Flex Membrane** in 'manageable' sections due to the fast setting of the adhesive.*



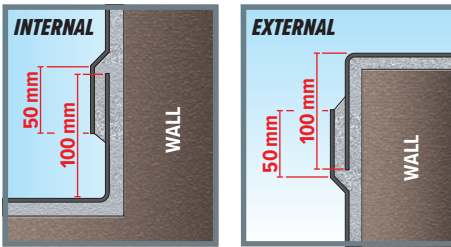
Detailing



Before installation, consider the location of all wall and corner overlaps.

Overlapping Joints

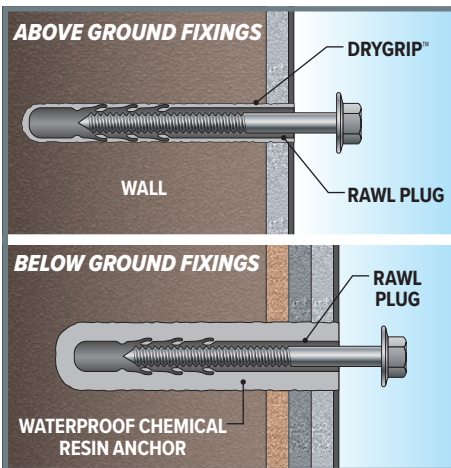
For joining two sections of membrane, an overlap is recommended of at least 50 mm width using **Drybase® Flex Adhesive** between the two layers of membrane.



Corners

For internal and external corners, apply the adhesive and membrane up to the corner joint and 100 mm onto the adjacent wall, overlapping the next section by 50 mm.

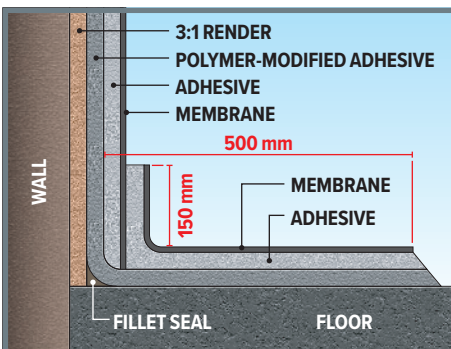
Fixings for Above and Below Ground



- 1 Use a masonry drill bit to make a pilot hole through the membrane (reduces fibre entanglement) before drilling out the hole fully.
- 2 For *above ground* use, fill the fixing hole with Drygrip™ and insert wall plug and fixing.
- 3 For *below ground* use, fill the fixing hole with waterproof epoxy chemical anchor and insert fixing.

Note: Due to damp and salty conditions, using non-corroding materials is advisable e.g. stainless steel screws.

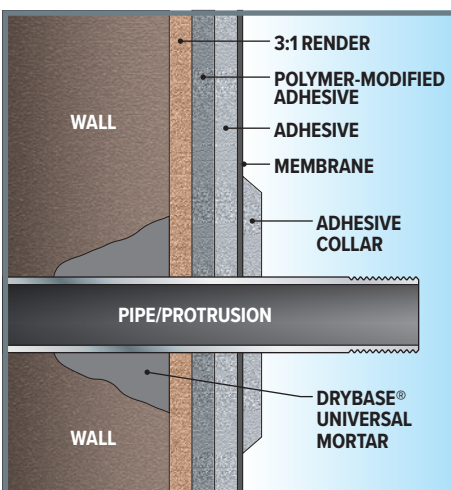
Floor-Wall Junction for Below Ground



- 1 Apply the first coat of *polymer-modified* adhesive 500 mm onto the floor.
- 2 Apply the second coat of bonding adhesive (with water) and membrane to the wall, stopping short of the floor.
- 3 Then apply the membrane onto the floor, overlapping up the wall by 150 mm.

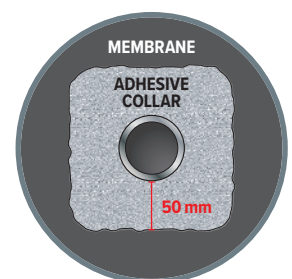
Pipework/Protrusions for Below Ground

Any protrusions should be minimised in a *below ground* area to prevent discontinuity in the waterproofing system.



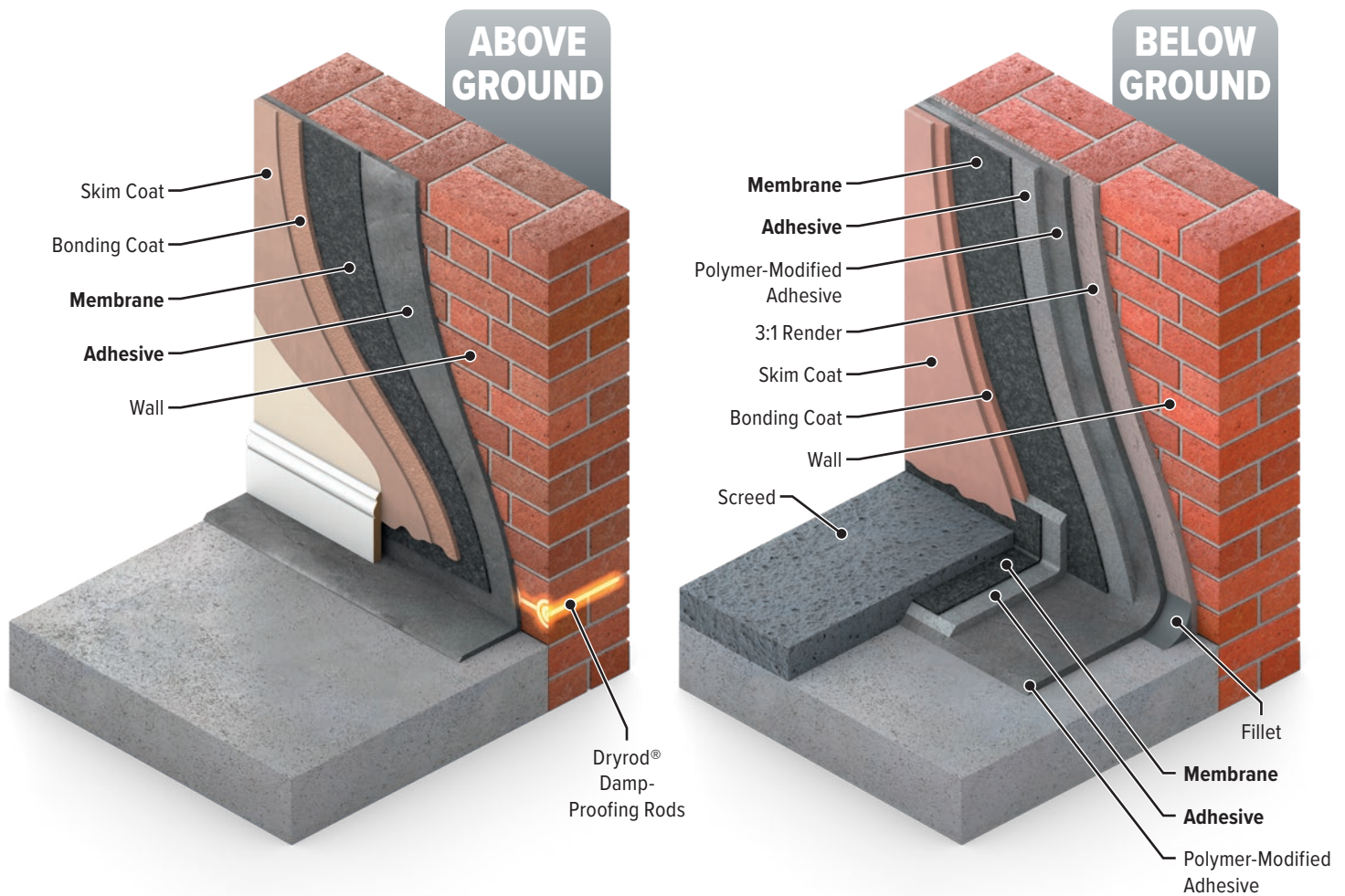
- 1 Fill any gaps around the pipe with **Drybase® Universal Mortar**.
- 2 Apply **Drybase® Flex Membrane** as per '*Below Ground*' instructions.
- 3 When dealing with protrusions, cut a hole in the membrane at the required position and diameter.
- 4 Seal 50 mm around the protrusions with adhesive.

NOTE: the same method is suggested for above ground protrusions.



NOTE: IN ALL DIAGRAMS, OBJECTS AND LAYER THICKNESSES ARE **NOT TO SCALE**.

Drybase® Flex Membrane System



Other Information

For health and safety information see the Safety Datasheet (available upon request).

Drybase® Flex Membrane is produced in accordance with ISO 9001 and ISO 14001 quality and environmental management Systems.

Drybase® Flex Membrane is non-hazardous to the environment.



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