

TECHNICAL DATASHEET

HYDRA FLEX

Flexible Tanking Membrane

Premium elastomeric waterproof membrane for brickwork, concrete and stone



HydraFlex is a two-component flexible coating made of a cementitious powder and a high concentration liquid polymer.

It can be applied to mineral substrates, such as concrete and masonry, to provide a protective waterproof barrier which can bridge cracks in the substrate so the coating remains water-tight.

With superior crack-bridging ability down to -5°C , as well as thixotropic application properties, HydraFlex is a suitable solution for areas at risk of movement in both internal and external environments. HydraFlex is an excellent radon barrier and has passed all the relevant tests for resistance of this gas.

ADVANTAGES

- Permanent waterproofing for concrete and masonry.
- Superior crack-bridging capability, even at sub-zero temperatures, making it ideal for high-risk areas.
- Resists both positive and negative water pressure.
- Recommended for both internal and external use.
- Bag and bottle system ensures accurate and simple mixing.
- Versatile product which can be used in a variety of areas.
- Excellent adhesion to well-prepared mineral substrates, even when damp.
- Exceptional workability, providing easy application on vertical and overhead surfaces.
- Ideal radon barrier

TYPICAL USES

Waterproofing of areas subject to vibration or minor substrate movement that are constructed of concrete, brickwork, or stone. These areas include:

- Basements, cellars, foundations, lift pits.
- Water tanks.
- Construction joints, wall-floor junctions, etc.
- Podium decks, balconies/terraces, flat roofs.

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Properties	Result
Pot life (mins)	45
Resistant to rain (hours)	6
Resistant to foot traffic (hours)	24
Crack bridging ability @ 20°C (mm)	1.5
Crack bridging ability @ -5°C (mm)	1.5
Adhesion strength – Ambient (N/mm ²)	0.8
Adhesion strength – Immersed (N/mm ²)	0.6
Water resistance pressure (Bar)	7
Reaction to Fire	NPD

SUBSTRATE PREPARATION

All active water leaks must be stopped using HydraDry Waterstop (rapid setting plugging compound) before continuing to the next stage of application.

Uneven surfaces: This includes non-flush pointed brickwork. Remove by suitable means, all loose pointing, any remaining render or plaster, wood, dust, grease, oil, organic growth or other foreign materials that may cause contamination or adversely affect adhesion properties. To create a level surface, Wykamol's Universal Mortar should be applied in line with the relevant data sheet, which is available upon request or can be downloaded from our website. Follow the Universal Mortar priming requirements before application.

Level Surfaces:

If there is any exposed steel present, apply two coats of suitable corrosion inhibitor to the exposed steel, by brush. Remove all loose material and surface latencies, i.e. dust, oil, grease, corrosion and organic growth, preferably by using wet grit or water blasting techniques. The strength of the concrete subbase must be a minimum of 25 N/mm².

Note: Special precautions may be necessary to ensure a continuous waterproof barrier at the wall to floor joints and corner joints. This is to avoid sharp changes of angle in the tanking membrane. The joints should be thoroughly raked out and cleaned prior to an application of Universal Mortar as a fillet seal, this should be applied in line with the relevant data sheet.

Construction Joints

For all construction joints including, angled, movement, expansion or connection joints, please refer to the Wykamol Proflex Tape data sheets.

Priming (if necessary):

- Using a brush, roller or spray, apply SBR Latex, mixed 1:1 (by volume) with water.
- Allow to become tacky to the touch. Approx. 30 mins time.

MIXING

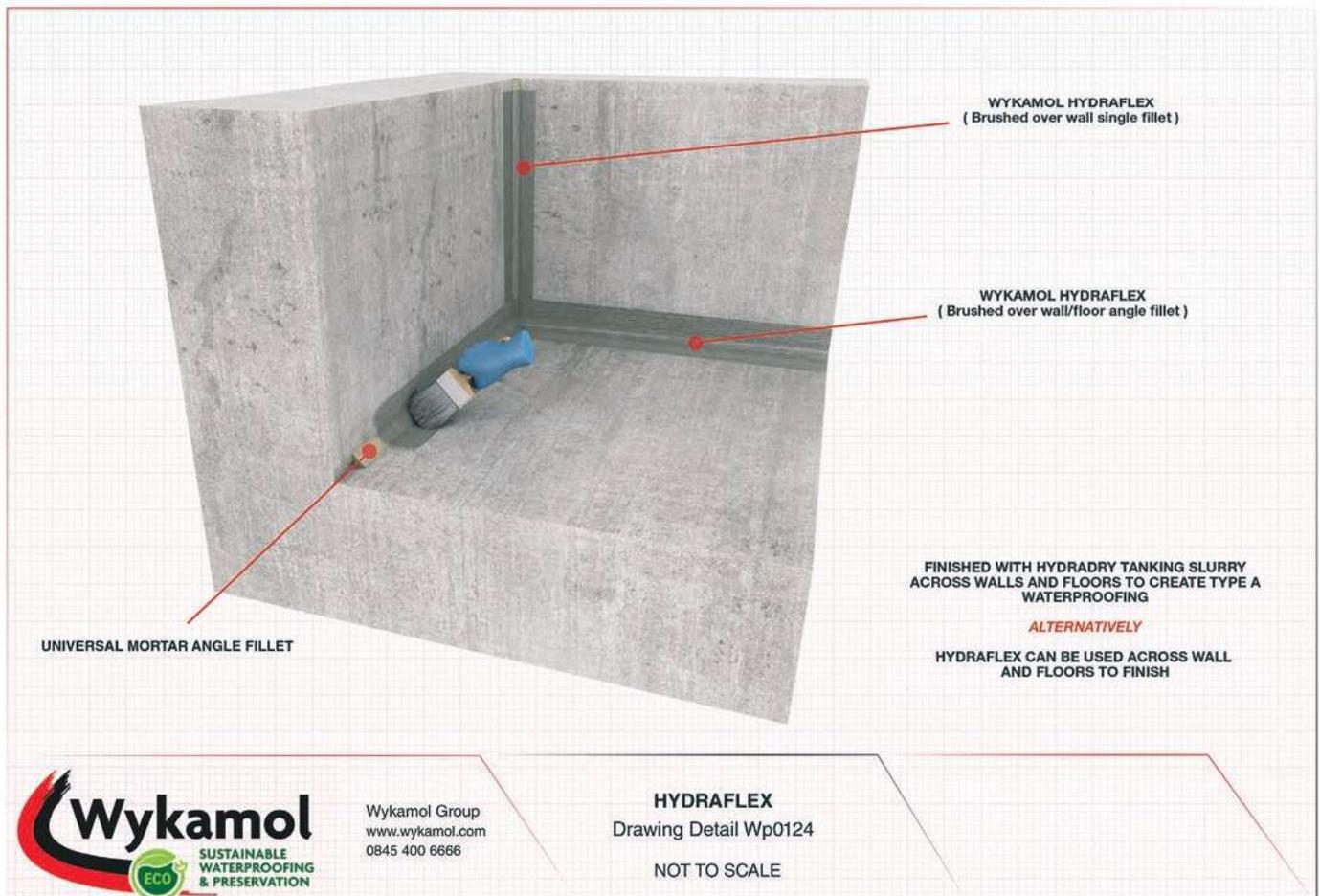
1. Remove contents from bucket.
2. Shake Polymer B and then let it settle for 10-20 seconds.
3. Pour Polymer B into empty bucket.
4. Using an electric paddle, gradually start to add Powder A into bucket whilst mixing under low shear to reduce dust generation.
5. Add all Powder A and increase mixing shear so vigorous mixing is achieved.
6. Mix for approximately 2 minutes, stop to scrape the powder stuck to the sides of the mixing vessel back into the mix.
7. Mix for a further 1 minute to achieve a uniform, lump free product.
8. Tap water can now be added into bucket, and mixed in, to provide the desired consistency. A **maximum** of 0.5 L of tap water can be added without affecting the crack-bridging properties.

Note: The user must not include any additional components of their own into this product, e.g. sand, cement, etc. It will dramatically impact the properties of this product.

APPLICATION

- After mixing HydraFlex has a pot life of 40 minutes.
- Apply a tight coat of HydraFlex by trowel, brush, or roller to a minimum thickness of 1 - 1.5 mm in the first layer. **For use as a radon barrier, apply at a minimum thickness of 2 mm in the first layer.**
- It is essential the first coat is well worked into the substrate, free of entrapped air as far as possible, and is applied in one continuous direction.
- Allow the first coat sufficient time to cure to a state where it will accept the second layer (approximately 5 hours at standard room temperatures, longer at lower temperatures).
- HydraFlex can accept light foot traffic after 24hrs.
- No more than 48 hrs should be allowed between coats, if this time has elapsed please contact Wykamol Technical Department for advice.
- Apply a second coat of HydraFlex at a 90° angle to the first, ensuring complete coverage and a minimum overall thickness of 2 mm. **For use as a radon barrier ensure a minimum overall thickness of 4 mm.**

HYDRADRY TANKING SLURRY



CONDITIONS & LIMITATIONS

- Substrate and ambient temperature must be over 5°C at time of application and for the following 24 hours.
- Avoid application in direct sunlight to prevent rapid drying out.
- Aquatic environments should be finished with Technoseal DPM.
- Not tested for use in swimming pools or in contact with potable water.
- If product is used in an external environment it should be covered after 72 hours and not left as the final finish.
- Gypsum plaster must not be used in direct contact with HydraFlex.

CLEANING OF EQUIPMENT

Tools should be cleaned immediately after use with warm soapy water. If the product has cured it must be mechanically removed.



CURING & VENTILATION

Curing procedures should be strictly adhered to. It is important that the surface of the coating is protected from strong sunlight and drying winds, use either a suitable curing compound or polythene sheeting, for a minimum of 48 hours, if necessary.

OVERCOATING & FINISHING

HydraFlex is suitable for overcoating once a certain level of curing has been achieved. Plastering should take place using Wykamol's Renovation Plaster, at least 48-72 hours after the final coat of HydraFlex has been applied. Refer to relevant data sheet for application instructions, which is available upon request or can be downloaded from our website.

If HydraFlex has been applied as part of a DPC, breathable paint must be used on top of any finish. If redecoration is to occur 12 months after the DPC installation, non-breathable finishes may be considered. However, the moisture content of the plaster and background must be in line with the recommendations of the supplier of the chosen finish.

Note: HydraFlex must not be punctured by wall fixings, e.g. dry lining work etc.

PACK SIZE AND COVERAGE

Pack Size	Product Code	Coverage
20 kg	HYDRAFLEX20	up to 6m ²
Supplied as Powder & Polymer, coverage at 2mm thickness		

STORAGE & SHELF LIFE

Store in cool, dry conditions, off the ground. Protect from all sources of moisture and frost. Shelf life is 6 months from date of manufacture, when unopened, undamaged and stored correctly.

HEALTH AND SAFETY

For further information and advice, please contact the Wykamol Technical Department and consult the safety data sheet, which is available upon request or can be downloaded from our website.

