

# Installation Guide for Waterproof Blue<sup>®</sup> Liquid DPM



**NBS Plus**

## 1. Area of use:

Waterproof Blue® dries to form a flexible high crack bridging solution for concrete and cement-based surfaces of the following building parts:

- Showers
- Bathrooms
- Steam/wet rooms
- Areas that need waterproofing before tiling

## 2. System:

Waterproof Blue® dries to a flexible vapour closed membrane with high crackbridging properties. Waterproof Blue® is a polymer-based coating applied with a roller, paintbrush, or airless spray machine for the waterproofing of concrete and cement-based surfaces in showers, bathrooms, steam areas, and wet rooms that need waterproofing prior to tiling with no corner reinforcements needed.



Kicker block



Concrete window cill

## 3. Materials and tools commonly used:

- Stanley Knife, bag for waste.
- Masking tape.
- Vacuum cleaner (also for removing standing water).
- Airless pump + accessories + extension cord.
- Empty buckets, water for cleaning of tools.
- Handheld paddle mixer.
- Products: Waterproof Blue®, Waterproof Blue® Brush, 3" paintbrush.
- Surface temperature meter, substrate must not be below 5°C.
- Personal safety equipment: Safety glasses, gloves, helmet, overalls, and masks.



Vacuum all debris.



Tools you will need.



Waterproof Blue Liquid DPM

#### 4. Individual protection:

Consult the Materials Safety Data Sheet prior to application. Always work in well-ventilated areas. Avoid direct skin contact when product is in wet conditions. You are advised to wear eye protection, overalls, mouth mask, gloves, and safety wear during application.



Gloves.



Goggles.



Spray suit.

#### 5. Inspection and preparation:

**While Waterproof Blue® is applied rapidly the successful sealing depends on thorough preparation of the substrate. The following preparation instructions need to be followed.**

- Standing water, dust and free particles are removed with the vacuum cleaner. Waterproof Blue® may be applied to humid surfaces.
- The ambient and substrate surface temperature must be above 5°C.
- Fill holes and gaps bigger than 2mm Waterproof Blue® Brush or if larger above 7mm occur, then treat with foam or mortar. When using polyurethane foam, cut off excess after hardening.
- For joints where movements are expected during the lifetime of the construction, apply Waterproof Blue® brush over the joint which will then later be overcoated with Waterproof Blue®.
- Apply Waterproof Blue® Brush to connections such as between the wall and damp course or joints and penetrations on the OSB/MGO or blockwork.



Vacuum all debris.



Applied to kicker block.

#### 6. Setting up the airless spray machine:

**Open the tub of Waterproof Blue® and mix till a smooth consistency with a handheld paddle mixer at low speed.**

- Prime machine.
- Place airless spray device above pail with product.
- Pump wastewater into waste bucket until product is circulating.
- Build up pressure to 120 – 150 bar.
- Repeat for spray hose/gun until product is circulating.
- A commonly used tip is the 517-spray tip.
- After use, clean airless spray device with water, in the way same as set up.
- Clean filters.

## 7. Application:

- Open the tub of Waterproof Blue and mix for a smooth consistency with a handheld paddle mixer at low speed, do not add water or solvents.
- For connections, fill the joints between the surface, the draining, and tubes, with a paintable waterproof sealant. When these joints are below 5mm, enlarge these before applying the sealant.
- Apply Waterproof blue with an airless spray machine in two coats. Coverage in 2 layers is minimal. 800gr/m<sup>2</sup> (800microns) or 2 layers of approx. 400gr/m<sup>2</sup> (400 microns) depending on the roughness of the substrate.
- Suitable tiling glues, cement glue class C2 or dispersion glue class D2TE, according EN12004.
- Protect Waterproof Blue against damages until tiling is applied. Ensure ventilation in case of high humidity.
- During the drying process typically allow 24-48 hours to fully dry. (Weather dependant)
- In case of using an airless machine for the application of Waterproof Blue, spray at 30-65cm from the surface at a 90 degree angel on the surface, as to minimize overspray.
- Avoid layer thickness of over 1500 microns for example in joints/openings in the surface which have not been properly prepared.
- Thickness is verified with a wet film thickness gauge, to ensure minimum total coverage of 800 microns. In general, when the substrate is not visible anymore, the coverage of min 800 microns is more than likely reached.
- Clean gauge with water.
- Lap onto adjoining areas.



Graco ST Max II 495 airless spray machine.



Kicker block.

## 8. Joining with other airtightness systems:

- If an area to be sealed with Waterproof Blue® needs to be joined with another membrane, make sure that it's sealed according to the membrane system manufacturer's specifications, so there is no gap on the sides of the membrane onto which Waterproof Blue® will be sprayed.
- In case of doubt, consult the technical department of Intelligent Membranes®
- If an area to be sealed with Waterproof Blue® needs to be joined with another area where airtightness is achieved with engineered wooden boards with taped seams, any gap between the two areas needs to be treated as outlined in paragraph 4. If the joint is made between concrete or masonry structures and wooden framed walls or roofs that are subject to shrinking and other movements butyl tape should be provided before final application of Waterproof Blue®.

## 9. Quality control:

- Check visually to ensure complete coverage; If needed, apply an additional coat.
- Thickness is verified with a wet film thickness gauge for each layer to ensure minimum total coverage of 800 microns.
- If required: use a wet film thickness gauge to:
- Identify level and smooth patches of substrate.
- Select the appropriate side of the thickness gauge for thicknesses around 800 microns.



- Press the appropriate side of the gauge into the wet film immediately after application.
- Remove gauge and inspect the underside of the comb fingers. The last wetted finger indicates the wet film thickness value printed by this finger.
- Repeat the measurements to make a reasonable number of spot checks. As a rule of thumb one measurement should be taken for each 5m<sup>2</sup> of coating.
- Clean gauge with water

## 10. Dont's:

- Do not apply Waterproof Blue® on a polluted or dusty substrate.
- Do not apply Waterproof Blue® on bitumen or asphalt-containing surfaces, or on surfaces with continuous water contact or water pressure to cover moving cracks.
- Do not dilute Waterproof Blue® with water or solvents; avoid contact with any type of liquid during drying. Do not leave the lid off the container for long periods, please re-seal immediately after use.
- Do not use a heat source at close range to aid drying.
- Avoid any contact with water or other liquids during the drying phase of Waterproof Blue®.
- In case of damage to the Waterproof Blue® coating after drying, simply restore by cleaning the surface of the coating and re-applying an extra layer which is easily done with the brush version if it gets damaged when drying.

## 11. Storage:

- Store all containers in a dry, frost-free environment between 5 and 35, avoid direct sunlight or contact with a heat source.
- Seal part used containers by pushing down firmly in the centre of the lid when closing to expel air, ensure lid is closed tightly.
- Do not use product from damaged or broken containers.
- Shelf life: product will keep for 12 months from the date of manufacture if kept according to these instructions in unopened containers. See batch number for date of production: ddmmyxx ( dd:day/mm:month/yy:year/xx:product code)

## 12. Disposal:

- Please refer to product SDS information. Please recycle all used tubs.

### 13. Other areas of use:

- Fill gaps bigger than 2mm with Waterproof Blue® brush. Any gaps greater than 7-10mm, please repair using non-shrink polyurethane foam or mortar.



**Kicker block.**



**Timber frame, kicker block and sole plate.**



**Kicker block.**

#### *Precautions:*

*Consult the Materials Safety Data Sheet prior to application. Always work in well-ventilated areas. Avoid direct skin contact when product is in wet condition. You are advised to wear eye protection, face mask, gloves and safety wear during application*

#### *Further advice:*

*This advice is based on the experience of the Intelligent Membranes® for further information, please contact our head office. Product sheets, safety data sheets and independent test reports are available on request.*

*Intelligent Membranes®*

*United Kingdom*

*Clopton Farm*

*Croydon*

*Cambridgeshire*

*SG8 0EF*

*INFO@INTELLIGENTMEMBRANES.CO.UK*

*WWW.INTELLIGENTMEMBRANES.COM*

*UK (+44) 01223 208174*

*Canada +1 (613) 927 1011*

*USA +1 (347) 220 8403*