



Waterblok Systems

Guidelines for the Application of Waterblok Multi-Purpose Rubberized Bitumen Waterproofing Compound

Outdoors Elevated Water Tank

Mixing of Material

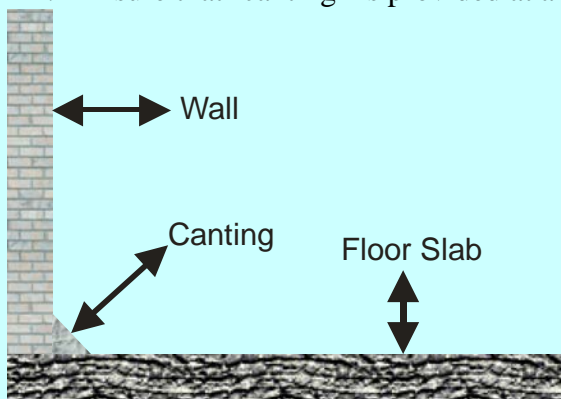
The pail of Waterblok Multi-Purpose must be stirred well until totally smooth and all solids dissolved. It must resemble a smooth chocolate-like paste. Water is already added to the pail in the factory so there is no need to add any water. However, should the compound be too solid a small quantity of water (not exceeding 1 liter) can be added but this is rarely necessary.

Geotextile to be Used

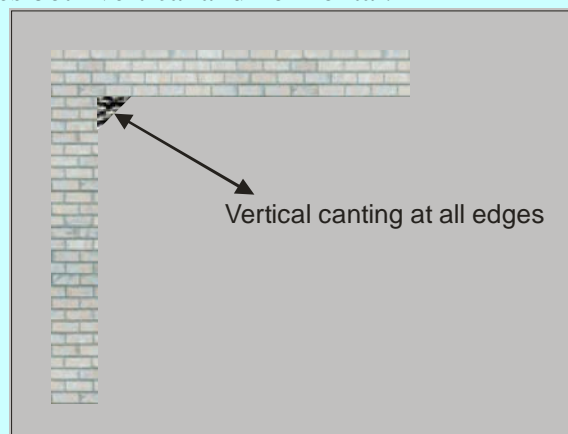
An 110gsm (grams per square meter) non-woven polyester needle punched geotextile must be used where a flashing is installed, a construction joint sealed and for all other detail work. For embedding over the entire area, a “tissue” geotextile is used.

Surface Preparation

1. Ensure that ‘canting’ is provided at all edges both vertical and horizontal.



Canting dimensions 1" x 1" to 2" x 2"

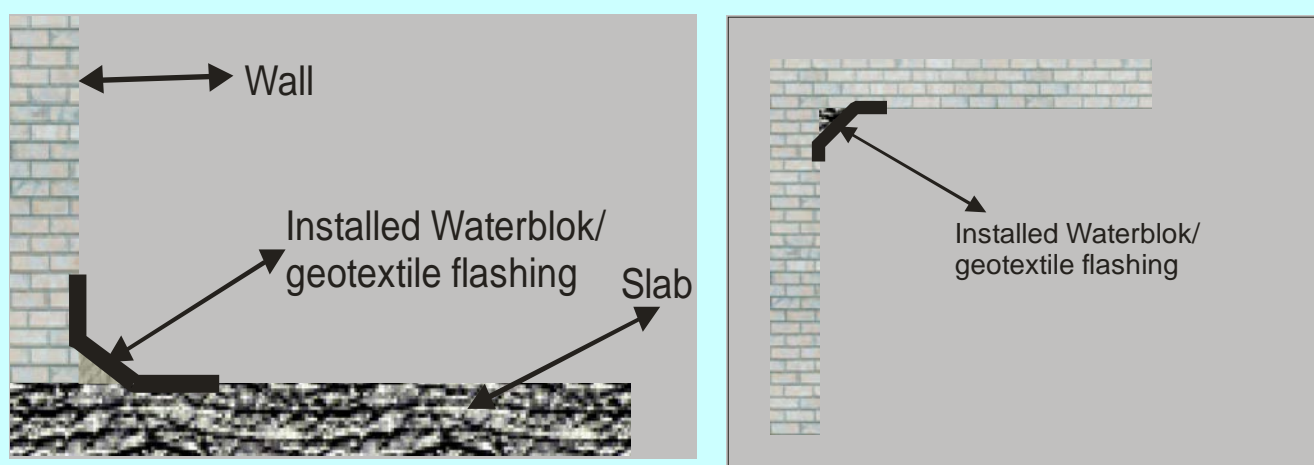


2. Ensure that all cavities, exposed pipes, exposed CHB with gaps in the wall be filled and smoothly plastered to ensure proper installation and adhesion of the flashing.
3. Chip off all plaster, irregularities and loose sections from concrete slab and walls. If any of this will come loose at a later stage the waterproofing will come loose with it and create a breach which could lead to leaks.
4. Check concrete slab and walls for structural and/or other defects such as “honeycombs”. Best method is through light chipping and pounding with a hammer. If such defects are found it must be repaired.
5. Check concrete slab and walls for cracks. All cracks wider than 2mm should be filled with a grout, bituminous putty or water base structural epoxy.
6. Thoroughly clean the area to be waterproofed and ensure that all dirt, moss, dust and all other foreign matter are removed and the area is totally clean. It is sometimes a good idea to wash the area with water (no detergents added) after cleaning leaving the substrate moist prior to application of primer. If there is any dirt or dust on the substrate, the

waterproofing will adhere to the dust or dirt and not penetrate the substrate to ensure proper adhesion. This could lead to waterproofing failure at a later stage.

Detail Work Flashing

A flashing must be installed at all edges between the floor slab and the wall as well as at all edges of any elevated area such as pedestals, etc. The dimensions of a flashing are normally 200mm vertically against the wall and 300mm horizontally on the floor. This can vary dependant on the site conditions and requirements but should be 150mm vertically and 200mm horizontally at the barest minimum. It is also imperative that canting (see notes above) be installed to ensure proper embedding and optimum adhesion of the geotextile flashing in the Waterblok Multi-Purpose.



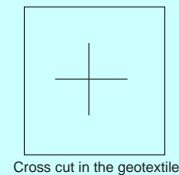
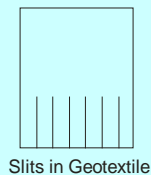
The installation is as follows:

1. Prime the entire area where the flashing is to be installed with a 50/50 mix of clean water and Waterblok Multi-Purpose. Application of the primer should extend at least 25mm more vertically and 25mm more horizontally than the flashing requirements. If the flashing is 200mm vertically, the primer must be applied 250mm vertically and if 300mm horizontally, the primer must be applied 350mm horizontally. Allow the primer to dry for 2 hours or longer period until it turns totally black.
2. Cut the geotextile in strips (if flashing is 200mm vertically and 300mm horizontally the width of the strip shall be 500mm).
3. Apply a thick coat of Waterblok Multi-Purpose (extending the same height and horizontal elevation as the primed area) 150mm to 200mm at a time and immediately embed the geotextile (**FURRY SIDE DOWN**) in the wet Waterblok by pushing down hard with the hands and brushing hard with the hands to ensure that there are no creases. The Waterblok should penetrate the top of the geotextile through this method. Special care should be taken that all geotextile edges are 100% embedded and that there are no loose areas.
4. Repeat the above until the entire flashing is installed.
5. Where joins need to be made, allow an overlap of 50mm.
6. Special care should be taken in corners. The horizontal section of the geotextile may have to be cut and overlapped to ensure smooth embedding.

7. Apply a “saturation coat of a mix of 60 to 70% Waterblok Multi-Purpose with 40 to 30% clean water over the entire area. Ensure that the entire geotextile section is saturated with this application.
8. Allow to dry for a minimum of 6 to 8 hours or preferably overnight.

Drains and Pipes

- a) Prime a 500mm area around the drain or pipe with a Waterblok and water mix.
- b) Cut a section of geotextile sufficient to go around the pipe and overlap by 50mm. The length of the geotextile will normally be 150mm for vertical installation and 150mm for horizontal installation, i.e. a length of 300mm. Cut 150mm long slits 50mm apart in the length of the geotextile. Cut another 300mm by 300mm geotextile section and make a cross cut in the bottom to tightly fit the diameter of the pipe.



- c) Apply a thick coat of Waterblok Multi-Purpose on the pipe (to a height of 150mm – dependant on the height of the concrete topping to be installed) and wrap a section of geotextile (**FURRY SIDE DOWN (INSIDE)**) around the pipe allowing a 50mm overlap. Apply a thick coat of Waterblok on the floor and securely embed the strips of geotextile in it. Apply a saturation coat and allow to dry for 4 hours.
- d) Apply a thick coat of Waterblok Multi-Purpose in a 350mm square around the pipe, pull the section of geotextile with the cross cut (**FURRY SIDE DOWN**) over the pipe and firmly embed in the wet Waterblok. Apply a thick coat of Waterblok on the pipe to embed the geotextile triangles. Apply a saturation coat and allow to dry for 6 to 8 hours – preferably overnight.

Cracks in concrete surface

Embed 100mm width strips of geotextile extending 50mm longer than the crack on each side over the crack following the methodology outlined above.

Construction Joins

If there are any construction joins a geotextile (0.5m each side of the join – total strip width 1 meter) must be embedded in Waterblok Multi-Purpose over the entire length of the join following the methodology outlined above.

Priming the entire area

Prime the area (ensure that it is 100% clean) with a 50/50 mix of Waterblok Multi-Purpose and clean water. Allow the primer to dry for 2 to 4 hours (longer if needed until it turns totally black)

Full Waterproofing Application

Reinforcement of tissue geotextile will be used over the entire area if the construction is of Concrete Hollow Blocks (CHB) if the tank is constructed of reinforced concrete (RC) the tissue geotextile reinforcement is optional.

1. Apply a thick coat of undiluted pure Waterblok Multi-Purpose extending 50mm more each side than the width of the tissue geotextile and not more than 0.5m of the length at a time and immediately embed the tissue geotextile in the wet Waterblok Multi-Purpose by pushing down hard with the hands and brushing hard with the hands to ensure that there are no creases and ensuring that the Waterblok Multi-Purpose fully penetrates the geotextile (no white spots must be seen). Immediately cover with a further but lighter (thinner) application. Repeat until tissue geotextile is embedded over the entire area. Allow to dry for 6 hours (overnight will be better).
2. Apply further 2 thick coats of undiluted Waterblok Multi-Purpose over the entire area and allow to dry for 4 hours between coats.

Please note: **USE BRUSHES THROUGHOUT THE APPLICATION AND DO NOT USE ROLLERS
ENSURE THAT NO AREAS ARE LEFT UNCOVERED AND THAT THE APPLICATION IS SMOOTH.**

Curing

Allow waterproofing to cure for a minimum of 72 hours before water is introduced to the area. **ENSURE THAT NO ONE HAS EXCESS TO THE WATERPROOFED AREA AND THAT NO DAMAGE OCCURS.**

Total Application Rate of Waterblok Multi-Purpose

The specified total application rate is 2.25 liters per square meter.

Hints & Tips

- If it rains during the application and curing period ensure that all ponded water is removed when the rain stops. This will limit wash-out.
- If rain is imminent, stop working.
- During application make sure that the applicator has a small pail of water to dip the brush in from time to time to prevent clogging of the brush.
- When work stops clean the brushes in water and leave it in the water till used again. This will lengthen the lifespan of the brushes as well as ensures good application.

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