

Application Data Sheet

DESCRIPTION

The BoundWorx® system can be used on a number of hard surfaces such as bituminous macadam, hot rolled asphalt and concrete.

In all cases, the surface must be clean, dry and free from contamination. All surfaces to be dressed must be strong enough to withstand the anticipated loadings.

PREPARATION OF CONCRETE

Concrete should be clean, dry, free from dust, and have a strong surface. Concrete surfaces must be laid to falls and have appropriate drainage in place.

Prior to application, weak areas should be removed and repaired. Any expansion joints in the concrete base must be mirrored in the resin surface.

New concrete must be completely dry and cured for a minimum of 2 days.

Concrete primers are available for new, porous or particularly hard and smooth surfaces. For further advice on priming please contact us.

PREPARATION OF BITUMINOUS MACADAM OR HOT ROLLED ASPHALT

The ideal base is a 14mm open graded permeable tarmac.

Close graded, non-permeable, tarmac can also be used but it must be laid to falls with appropriate drainage in place.

Tarmac should be laid 2 to 3 days prior to application.

The base must be strong enough to take the anticipated loading. If unsure, take core samples and consult an engineer.

EDGING

You must always work to a solid edge. Ideally, granite setts or a solid edging stone should be used. We can supply straight or flexible aluminium edging strips if necessary. These can also be used for decorative designs and day joints.

Be aware that aluminium edging strips are not suitable for exposed edges such as where a drive or path meets a lawn area, or the entrance of a driveway where vehicles will be driving on and off.

MIXING OF THE RESIN AND AGGREGATE

Each unit consists of:

- 1 x Part A (Resin)
- 1 x Part B (Curing Agent)
- 4 x 25kg bags kiln dried aggregate
- 1 x 6.25kg kiln dried sand

Refer to the formulation email sent on the day of despatch for the specific aggregate ratios for your chosen blend.

You MUST use Forced Action Mixer with a minimum capacity of 120L

You MUST follow a consistent order for the mixing process. Step by step instructions as follows:

1. Add the 4 x 25kg bags to the Forced Action Mixer. Be sure to add the largest sized stone first.
2. Pour the Part B (Curing Agent) into the Part A (Resin). Mix thoroughly with a 110V Drill and Paddle mixer for 45 seconds. Ensure that there is a consistent colour in the resin. Take care to mix right to the bottom and into the corners of the bucket.

Mixing of the resin and curing agent is a very important part of the process. Short cuts must NOT be taken.

3. Add the mixed resin to the aggregate in the Forced Action Mixer. Ensure all the resin has been removed from the container.
4. Allow the resin and aggregate to mix for 30 seconds and then slowly add the bag of sand.
5. Allow to the materials to mix for a minimum of 2 minutes. Make sure each unit of material is mixed for the same amount of time. Maximum recommended mixing time is 3 minutes.

Be cautious not to over mix the materials to avoid colour variation and darkening of different mixes.

6. Empty the materials through the chute into a lined wheelbarrow and take it to the area where the material is being trowelled.
7. After repeating this mixing process 5 times, **turn the machine off and clean down your Forced Action Mixer.** See the "CLEANING MIXER" section for further instructions.

COVERAGE RATES

When mixed with the correct ratios of resin to aggregate, the application rates per unit are as follows:

Depth	Coverage
15mm	4.2m ²
18mm	3.5m ²
20mm	3.15m ²

The formulation for your chosen finish will be indicated on the email sent to you on the date of despatch.

APPLICATION OF THE MATERIALS

Materials are delivered to the installation team in a wheelbarrow and emptied onto the surface ready for trowelling. If using a pre-set sledge/screed box, fill it with the materials and then pull it across the surface to release the product. Be sure to overlap the previous unit by approx. 30mm to tie them together.

When trowelling the material use a firm downward pressure until well compacted and level. The surface should be smooth when you run your trowel over it. There should be no undulations or scuffs caused by trowel marks or material that hasn't been compacted thoroughly.

Always work to a wet edge.

Pay close attention to the joining section of each unit – this is where trowel marks are easily overlooked. Finish with lighter strokes to eliminate ridges.

To learn a thorough trowelling technique we recommend our on-site training option.

If work cannot be completed in one application, form a day joint using an aluminium edging strip which **we recommend be left in the surface**. If the aluminium day joint is removed the next day, this will create the appearance of a hairline crack in the surface where the fresh material is up against the already cured section.

Alternatively, prior to starting the installation process, divide the area into more manageable sections using a solid edging stone or similar.

CLEANING MIXER

The walls of the mixer should be cleaned every five mixes. Ensure the mixer's delivery door, chute, centre shaft, and the sides are cleaned with a square ended trowel. This will prevent any cured material jamming the gate of mixer. Once the aggregate mixed has been emptied into the wheelbarrow, remove any residual material from the chute and the gate to keep it clear and free of build-up.

USEFUL HINTS

- 1 Read and re-read the safety data sheets to ensure that you have a clear picture of how you are going to work
- 2 **AGGREGATE MUST BE KEPT DRY.** Please ensure that they are securely covered with Tarpaulin, off the ground – ideally on a pallet - or stored inside when delivered.
- 3 The working time of the mixed resin and aggregate is limited so you will need **to work quickly.** On a hot day, start work in the morning when temperatures are lower to maximise working time. **Store materials in the shade.**
- 4 To avoid staining the wheelbarrow use a pallet wrap to line the wheelbarrow. Secure with tape and discard after use.
- 5 ALWAYS tape the edges of the application area to avoid trowelling resin onto and staining any edging stones. Cover any walkways to avoid resin footprints staining those areas.
- 6 To ensure a consistent colour through each batch of material, **ALWAYS add the aggregates in the same order and maintain a consistent mixing time.**
- 7 Set out each unit of material in advance in rows of 5 in the following order to avoid delays: sand at the bottom, 4 x 25kg bags aggregate, Part A, Part B at the top.
- 8 When mixing, add the aggregate to the machine on one side, and the mixed resin on the opposite side to prevent the top grill clogging.
- 9 **ALWAYS** work to a wet edge.
- 10 **RESIN BONDED SOLVENT CLEANER** should be used as a clean tools and for resin spillages. **Not White Spirit.** Prepare a pot of solvent cleaner in advance to use to clean your trowel occasionally while you're installing.
- 11 Wear protective clothing and a suitable padded pair of gloves for trowelling. Disposable gloves should be used when mixing. Change the gloves frequently to avoid sticking or staining of tools.

Please refer to the “Cleaning a Forced Action Mixer” guide for more detailed instructions