

# Stonebond® Surface Dressing



## Description

Stonebond® is a hard-wearing, easy-to-use, cold-applied, polyurethane (PU) resin surface dressing used for bonding specially selected aggregates to macadam, asphalt, concrete, metal or timber surfaces.

The finished Stonebond® surface gives the appearance of shingle but without the nuisance and maintenance problems associated with loose aggregates.

Stonebond® can be used with a wide range of both natural and pigmented aggregates for both decorative and slip-resistant dressings. It can be applied to new construction or to existing surfaces.

The cured Stonebond® system gives a durable, textured surfacing, which is ideal for pedestrian areas, pathways, cycleways, car parks, traffic calming, colour demarcation and anti-skid applications.

Using Stonebond® means no sticky black binder will be seen as can happen with conventional bituminous surface dressing systems. In addition, as Stonebond® is a thermosetting resin, it will not yield under hot conditions or heavy use, so maintaining an integrated stone surface.

Stonebond® is available to all skilled specialist surfacing contractors and via Aytan Products licensed contractors throughout the UK and Eire.

## Typical Uses

Stonebond® surface dressing can be used to give a hard-wearing, decorative, positive-textured surfacing in many applications including:

- Footpaths
- Cycleways
- Pedestrian areas
- Hard landscaping
- Heritage sites
- Car parks
- Driveways
- Traffic calming
- Colour demarcation
- Anti-skid

## Aggregates & Colours

A wide range of natural aggregates are available with Stonebond® including:

- 1-3mm / 2-5mm Corn Flint
- 1-3mm Golden Pea
- 2-4mm Amber Flint
- 1-3mm Red Granite
- 1-3mm Green Granite
- 1-3mm Grey Granite
- 2-4mm Sienna Flint
- 1-3mm Chinese Bauxite
- 1-3mm Guyanan Bauxite

Other aggregates and pigmented versions can also be supplied to meet specific project requirements, further details available on request.

Stonebond® resin is available in both natural and pigmented colours including buff, red, green and grey to give added colour enhancement to the dressed aggregate.

## Projects



■ Footpaths / Driveways



■ Car parks



■ Heritage sites



■ Colour demarcation

## Application

**Stonebond®** resin is conveniently supplied pre-weighed in specially designed containers ready for use on site. Application should only be undertaken on clean and dry surfaces at a temperature no lower than 5°C.

The two components are simply mixed together using the component 2 container as a mixing tub.



The mixed resin is then spread over the surface using a serrated edge squeegee at a typical rate of 1.8 – 2.2 kg per m<sup>2</sup> depending on surface condition and aggregate used.



Aggregate is then broadcast to excess over the spread resin by hand or by mechanical means so that the resin layer is fully blinded (typically at 12 kg per m<sup>2</sup> for 1-3 mm aggregates)



Once the resin is sufficiently cured, typically within 24 hrs of application, excess aggregate is removed by hand brushing or mechanical sweeping.

## Substrates

**Stonebond®** surface dressing can be readily applied to bituminous and concrete surfaces and also timber and metal using the appropriate primer. Existing substrates must be of sound construction and have a regular profile.

For new construction, the depth of the underlying base will be dependent upon whether the surfacing is intended for vehicular or pedestrian traffic. A typical base build up for pedestrian and light traffic areas is:

**Bituminous:** Hot-applied dense binder course and close graded surface course to BS 4987 or hot rolled asphalt to BS 594. All new bituminous surfaces should be allowed to weather for a minimum of 14 days.

**Concrete:** Material to BS EN 206 prepared in accordance with CIRIA Report R184, new concrete must be cured for at least 28 days or have a moisture content below 75% RH. Both new and existing surfaces should be lightly scabbled or shot blasted to remove any friable material and provide a good mechanical key.

The surface regularity of all base courses should be  $\pm 6$  mm and overall surface construction should always be certified by a structural engineer.

## Surface Preparation

### Sealing

Porous surfaces should be sealed using **Stonebond®** sealing compound, prepared by mixing **Stonebond®** sealing additive with fine sand and cement. The sealing compound mix is then applied by brush / squeegee over the surface and should be allowed to dry, typically for at least 24 hrs, before overlay with **Stonebond®** resin.



## Priming

Concrete and dusty surfaces should be treated with **Stonebond®** one-pack PU primer, which is spread over the surface by roller / squeegee and allowed to cure for approx 4 hrs.

Wood and metal substrates should also be treated with an appropriate primer. Please refer to Ayton Products for further details.

## Care and Maintenance

Following on from initial application, the **Stonebond®** surface should be further swept after 1-3 months and as required thereafter to remove any residual loose aggregate. It is important that no excess loose stone remains as this can damage the surface and negate any guarantees.

As with any surface dressing, **Stonebond®** should be regularly swept so as to remove dirt and debris and maintain aesthetic appearance. Heavy contamination including oil and other common stains can be treated with detergent and a stiff brush followed by a light-pressure wash. Chewing gum should be treated using a proprietary gum remover.

## Quality Assurance

**Stonebond®** is supplied within ISO 9001 quality, 14001 environmental and 18001 health and safety management systems certified by LRQA.

## Other Ayton Products

### Clearmac®

Proprietary clear resin bound paving using natural aggregates fully encapsulated in a 15-20mm depth wearing course.

### Colourchip®

Hot clear resin-coated chippings providing effective colour demarcation on conventional hot rolled asphalt.

### Ayton Playsafe®

Coloured EPDM / recycled rubber resin bound, impact absorbing, safety surfacing for applications including playgrounds, play areas and stables.

### Tripave®

Base upon rapid cure methyl methacrylate (MMA) technology, a water impermeable, highly durable, fully bound surfacing with variable texture and colour finishes.