



Steintec[®]
paving systems
by **tuffbau**[®]

Construction | Bound Paving Solution

In simple terms there are two types of paving system, Unbound and Bound. Both can be used to create either a permeable or non-permeable solution. Here we look at Bound Paving, commonly referred to as 'rigid' paving.

Bound paving is where the paving elements are primed, bedded and jointed with mortar-based materials that cure hard, resulting in what becomes visually a single conjoined area.

The strength, flexibility and adhesion characteristics of each component contribute massively to the final success of a project. This modern style of paving construction is widely used in large-scale, natural stone or pre-cast paving projects designed to last and cope with persistent high volumes of heavy traffic. The BS minimum design life is 20 years though we work to a minimum of 40 years.

Non-permeable Bound: **tuffbau's** non-permeable bound system is the most widely used and most durable of the SteinTec paving systems.

It is made up of a fully permeable bedding layer, formed by mixing the same **tuffgriit** aggregate blend with **tuffbed 2-pack** natural hydraulic high performance mortar and water.

Paving elements are painted with **tuffbond**, a high adhesive priming mortar and pushed firmly onto the bedding layer, before the joints are all filled to the top with non permeable **tufftop**, a high performance all-natural slurry grout.

The bedding is permeable to prevent frost damage and hydraulic failure under load by displacing any water that manages to get through the porosity of the paving units such as granite. The jointing material is designed to prevent as far as possible the ingress of water.

Because the **tufftop** grout prevents the passage of water from the surface through the paving, it is a non-permeable system.



Permeable Bound:

This paving is constructed in almost exactly the same way as the non-permeable bound, but the non-permeable **tufftop** slurry grout is substituted with a mixture similar to the bound bedding layer, allowing water to pass freely all the way through from the surface. The permeable system is **SuDS** compliant as part of a sustainable drainage system.



O'Connell Street, Dublin

To find out more about our products and projects visit our website www.steintec.co.uk
Our special mortar calculator will tell you exactly how much product you need and we can provide specialist machinery and technical assistance on site to make sure your project runs smoothly.

For technical enquiries or to find out about our CPDs for architects, specifiers and other construction professionals, call us now on **+44 (0)1708 860049**

