

Method Statement:

Laying natural stone & precast concrete paving using SteinTec mortars:

Using **tuffbed**[®] bedding mortar, **tuffbond**[®] priming/bonding mortar and **tuffgrout**[®] jointing mortar, laid upon a concrete roadbase or supporting structure.

Laying paving units:

Laying work must not be carried out in ambient temperatures of less than 2°C and night frosts must be guarded against.

The concrete surface must be sound and free of loose material and be thoroughly cleaned and rinsed using clean water.

SteinTec **tuffbed**[®] bedding mortar is mixed with water to form a plastic consistency. Typical minimum volume of water to add per 25 kg bag of SteinTec **tuffbed**[®] is 2.5 litres. It is recommended that sufficient water is added to the bedding mortar to achieve the 150 mm slump recommended in BS7533-4:2006 section 5.4.4.2. Do not mix more than will be used within approximately 2 hours at an ambient 20°C.

SteinTec **tuffbond**[®] priming mortar is to be mixed with water to form a liquid, pasty slurry. Typical volume of water to add per 25 kg bag of SteinTec **tuffbond**[®] is 6 litres. Do not mix more than will be used within approximately 1 hour at an ambient 20°C.

SteinTec **tuffbond**[®] is spread onto the roadbase/supporting structure surface with a thickness of approximately 1.5 mm immediately prior to the bedding mortar being laid.

Paving units should have been thoroughly cleaned and washed with water prior to use.

The underside of paving units should be coated with a layer of SteinTec **tuffbond**[®] with a thickness of approximately 1.5 mm immediately prior to the paving units being laid. This may be done using a brush or by dipping.

Paving units should be laid immediately, set out and positioned firmly into place to levels.

After laying, the surface must be thoroughly washed with water to remove surplus mortar laying on the surface of the paving units.

The surface should be quarantined to prevent access, including pedestrian access, for a period of at least one day in order to avoid disturbance and displacement of paving units on the fresh bedding mortar. However, jointing may be carried out on the same day as laying if it is possible to be carried out by operatives not standing upon the freshly laid surface; small or narrow areas only.

Jointing the paving:

Jointing work must not be carried out in ambient temperatures of less than 2°C and night frosts must be guarded against.

Immediately prior to jointing it must be ensured that the joints are free of debris.

The paving surface should be very thoroughly wetted and must be kept wet until jointing has been completed.

A 25 kg bag of SteinTec **tuffgrout**[®] will typically require the addition of 5.5 litres of water to achieve the correct flow properties. No less than 4.5 or more than 6 litres should be added. Water should be added progressively to the batch as mixing proceeds.

Immediately after mixing is completed, the mortar is spread onto the surface and carefully forced into the joints using a suitable soft rubber squeegee.

Apply the mortar without delay, do not store liquid mortar other than in transit from mixer.

A quantity of mortar should be maintained upon and constantly moved over the surface in order to repeatedly top up joints in which the mortar may have slumped following initial placement.

When the joints are full and will accept no more jointing mortar a suitable squeegee should be employed to remove as much mortar as possible from the surface.

The surface must be kept constantly moist, using a soft spray or mist of water, as required.

The surface may be rinsed clear of the thin film of mortar remaining, based upon the judgement of the operatives carrying out the work.

If it is decided to delay the cleaning for a short time it is important that the surface being jointed is kept constantly moist using a soft spray or mist of water.

When the joint mortar has hardened sufficiently the surface can be thoroughly cleaned with a brush and copious amounts of water to remove all traces of mortar from the surface of the paving

Cleaning must be carried out very thoroughly and no mortar must be allowed to remain on the surface of the paving.

The use of a proprietary cleaning machine employing power-driven sponge belts is widespread among specialist contractors but is not essential for good results.

We can provide details of these machines on request.

Quarantine periods and opening to traffic:

Figures quoted by SteinTec for strength gain are prudent and take into account typical construction site conditions. However we recommend that batch samples are taken and allowed to cure on site, for testing in respect of strength gain prior to opening areas to vehicular traffic, making reference to the requirements for minimum compressive strengths for a specific project.