

perma-bed permeable bedding mortar for paving installations

Applications

UltraScape perma-bed is specifically formulated to meet and exceed the strict demands of BS 7533. The product provides a perfect bound base for natural stone paving and cobbles, concrete paving, flags and block paving, which once laid with UltraScape Perma-bed are able to accept foot traffic after just 12 hours and vehicular traffic after 24 hours. The material is specifically designed to drain away any water migrating into the pavement via cracks or damaged areas. Water that is not removed can cause failure of the pavement ultimately via hydraulic action from repeated trafficking.

Technical

UltraScape perma-bed is formulated from selected cements and graded fillers. UltraScape Perma-bed is supplied pre-blended in 25kg bags. The product can be laid from 10mm to 100mm in one pass with greater depths achievable using successive layers. The material mixes easily on-site with the addition of water and provides a compressive strength of $>35\text{N/mm}^2$ after 28 days complying fully with BS 7533.

UltraScape perma-bed is fully permeable and is frost resistant. The free passage of water through the cured matrix of the product ensures that correctly laid paving should not suffer from reflective staining emanating from the underside of the paving elements.

This material along with most standard setting cementitious products should not be used in temperatures below 5°C^* .

(* UltraScape bedding mortars can be used below 5°C , only if the following conditions are met.

- The ground to be laid upon is not frozen.
- The temperature is 2°C and rising.
- The product must be protected from frost.)

Preparation

It is of vital importance that the supporting layer that is to receive UltraScape perma-bed is stable and not liable to settlement or heave. Supporting structures must be cleaned, pre-soaked and all ponded water must be removed prior to application. To promote bond, the supporting layer can be primed using UltraScape pro-prime slurry primer. Please note that this product is suitable only for bound/rigid construction, not for unbound/flexible applications.

Mixing

Add 1.75 litres of clean water to a suitable mixing vessel. Slowly add the contents of one 25kg bag. Mix mechanically for a minimum of 3 minutes and a maximum of 5 minutes. Do not add extra water or part mix bags.



Features & Benefits

- Can be laid from 10-100mm in one pass
- Shrinkage compensated
- BS 7533 compliant –allows the free passage of water through it.
- Reduces water penetration related pavement failures
- Reduces the likelihood of reflective staining
- Freeze/thaw resistant
- Small contractor friendly units
- Pre-blended- just add water
- Open to pedestrian traffic in 12 hours
- Open to vehicular traffic in 24 hours



Priming

To increase overall product performance, prime the supporting layer with UltraScape pro-prime before applying UltraScape perma-bed. Priming the roadbase is not a requirement of the British Standard for pavements constructed on a bound base. It is of vital importance that the underside of all paving elements are primed in accordance with BS 7533. For full details consult the manufacturer or refer to the UltraScape pro-prime datasheet. Note: The bonding characteristics of UltraScape perma-bed will only be achieved when the product is used in conjunction with UltraScape pro-prime.

Provision of Joints

Consideration must be given to movement joints within a bound or rigid construction. Always consult the Project Engineer/Architect for details regarding movement joints Engineer/Architect for details regarding joints.

Shelf Life

Shelf life from date of manufacture in correct conditions for sealed bags is 8 months. Please note: the use of this product after the end of the declared storage period may increase the risk of an allergic reaction.

Storage

Store in closed original container at temperatures between 5°C and 30°C. Avoid frost. This product must be stored in unopened bags, clear of the ground in cool dry conditions and protected from excessive drafts.

Health, Safety and Environmental

Please ensure that appropriate PPE is used when preparing, mixing and applying products. Always wash hands before consuming food and make sure that materials are kept safely out of reach of children and animals. Please dispose of packaging and waste responsibly and in accordance with local authority requirements. A full material safety data sheet relating to this product is available from instarmac.co.uk

Quality Assurance

All products are manufactured in a plant whose quality management system is certified / registered as being in conformity with BS EN ISO 9001, ISO 14001 and OHSAS 18001. Our products are guaranteed

Physical Properties (UKAS Accredited)

Test Age	Compressive Strength*	Flexural Strength	Adhesion* (with primer)	Shrinkage %	Modulus of elasticity	Water permeability
28 days	>35N/mm ²	>4.5N/mm ²	>2N/mm ²	<0.1%	<21500N/mm ²	>2x10 ⁴ m/s

*Depending on temperatures - tests carried out at 20°C. Cool temperatures retard, warm temperatures accelerate product performance. As with all raw materials, colour variation may occur. Please note that this does not affect the consistency or characteristics of the product.

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against defective materials and manufacture and will be replaced or money refunded if the goods do not comply with our promotional literature. We cannot however accept responsibility arising from the application or use of our products because we have no direct or continuous control over where and how projects are used. All products are sold subject to our conditions of sales, copies of which may be obtained upon request.

Product Details	
Unit/Packaging	25kg paper bags delivered on shrink-wrapped pallets.
Coverage	1 X 25kg bag = 1m ² @12.7mm (approximately)
Yield	12.7 litres (approximately) per 25kg bag
Colour	Grey*

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