# **Technical Data Sheet**



# eco-bed premium environmental bedding mortar for paving installations

#### Applications

UltraScape eco-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 eco-bed are able to accept foot traffic after just 12 hours and vehicular traffic after 24 hours. The material is also not subject to environmental erosion, which can lead to increased point loads on slabs and consequent breakage.

### Technical

UltraScape eco-bed is formulated from selected cements and graded fillers. The pre-blended fine bedding concrete is supplied in 25kg bags or alternatively, for those large projects, in 30 tonne bulk silos. 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 45N/mm<sup>2</sup> after 28 days complying fully with BS 7533. This material should not be used in temperatures below 5°C.

### Preparation

It is of vital importance that the supporting layer that is to receive UltraScape eco-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 between 2.4 and 2.8 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.

### Priming

To increase overal product performance, prime the supporting layer with Ultrascape pro-prime before applying UltraScape eco-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 eco-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.



# Features & Benefits

- Can be laid from 10-100mm in one pass
- Shrinkage compensated
- BS 7533 compliant
- Small contractor friendly units
- Pre-blended just add water
- Open to pedestrian traffic in 12 hours
- Open to vehicular traffic in 24 hours
- Long-term durability

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## 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 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.				
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. If stored correctly and used within 8 months of the date shown on the bag, the activity of the reducing agent will be maintained and this product will contain, when mixed with water, no more than 0.0002% (2 ppm) soluble Chromium (VI) of the total dry weight of the cement.				
Coverage	1 X 25kg bag = 1m <sup>2</sup> @13.36mm Please visit ultrascape.co.uk for a free online product calculator.				
Density	2088kg/m <sup>3</sup>				
Yield	13.36 litres (approximately) per 25kg bag				
Shelf Life	Shelf life from date of manufacture in cor- rect 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.				
Colour	Grey*				

\*\*As with all raw materials, colour variation may occur. Please note that this does not affect the consistency or characteristics of the enclosed product.

# **Physical Properties (UKAS Accredited)**

Test Age	Compressive Strength*	Flexural Strength	Adhesion* (without primer)	Adhesion* (with primer)	Shrinkage %
1 day	20N/mm <sup>2</sup>	-	0.72N/mm <sup>2</sup>	1.73N/mm <sup>2</sup>	0.01%
7 days	36N/mm <sup>2</sup>	6.5N/mm <sup>2</sup>	0.96N/mm <sup>2</sup>	2.02N/mm <sup>2</sup>	0.04%
28 days	45N/mm²	7.5N/mm <sup>2</sup>	1.25N/mm <sup>2</sup>	2.18N/mm <sup>2</sup>	0.09%
Modulus of elasticity	28 days		<21500 N/mm <sup>2</sup>		
Workability	50 minutes @ 20°C				

\*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.

# **Contact Us**

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