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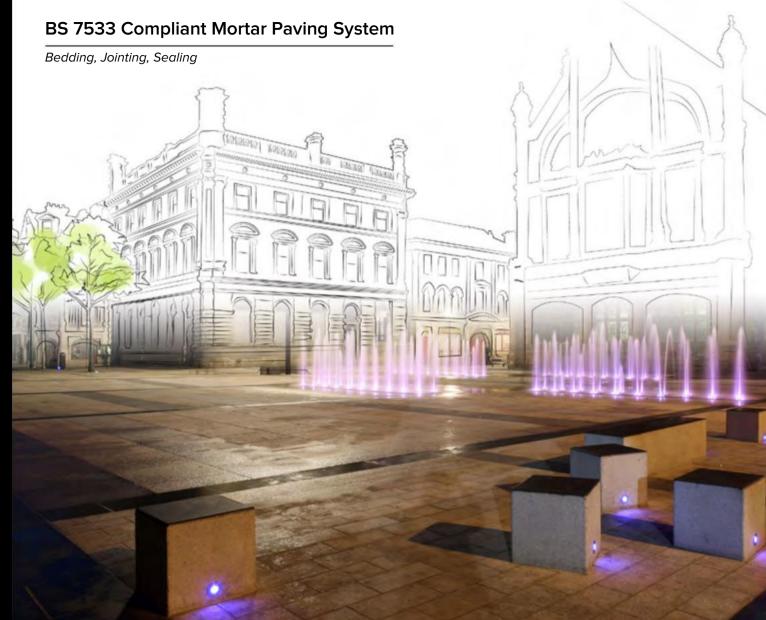
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Urban Regeneration Specialists



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BS 7533 Rigid Construction

Bedding

UltraScape eco-bed

UltraScape eco-bed is a fine bedding concrete manufactured to meet and exceed the strict requirements of BS 7533. It contains 20% recycled material, significantly reducing the consumption of virgin aggregates.



UltraScape eco-bed is ideal for schemes looking to achieve an 'excellent' CEEQUAL award, or where a BREEAM assessment is to be conducted on your building.

Meeting the requirements of BS 7533 (Type A and B mortar) is no easy feat, which is why UltraScape provide full and current independent test data, from UKAS accredited laboratories, to show full compliance.

UltraScape eco-bed can be laid from 10mm to 100mm (with greater depths achieved using successive layers).

Mixed solely with water, eco-bed takes away the uncertainty of using a multi-component system.

The extremely fast strength gain of eco-bed also sets it apart from its counterparts; meaning that pedestrian areas can be trafficked in as little as **12 hours** and vehicular in as little as **24 hours**.

Test	Requirement of BS 7533-7;2010	eco-bed	Pass / Fail
Compressive Strength	35N/mm ²	45N/mm ²	✓
Adhesive Strength	>2.0N/mm ²	2.5N/mm ²	\checkmark
Flexural Strength	>4.5N/mm²	6.3N/mm ²	✓
Modulus of Elasticity	18,000N/mm² +/- 3,500	19,200N/mm ²	\checkmark
Shrinkage	=/<0.1%	0.09%	✓

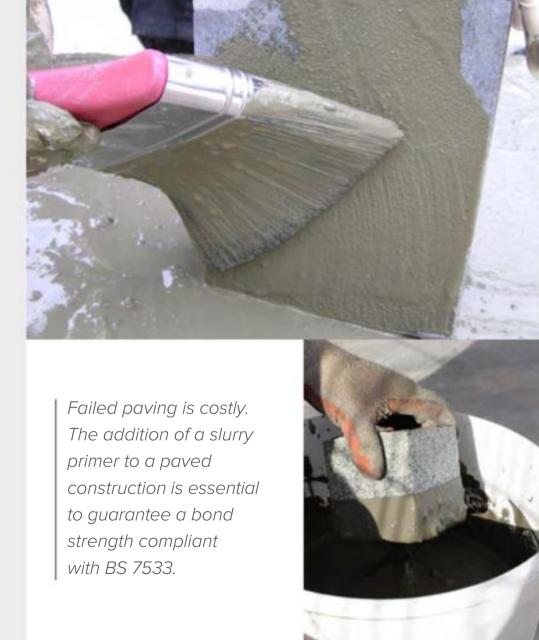


Priming

UltraScape pro-prime

UltraScape pro-prime slurry primer is used to provide an exceptional bond between your paving element and UltraScape eco-bed, perma-bed and pro-bed HS bulk fine bedding concrete, and can also be used to promote bond between your roadbase and the bedding mortar layer.

Traditionally paving elements would be laid directly onto bedding mortar, but due to ever-increasing traffic loading, street cleaning and general wear and tear, the paving would often break away from the mortar bed, resulting in many high profile, costly failures and associated litigation.



The addition of a priming layer between the paving element and bedding mortar yields an extremely high bond strength which prevents this type of failure. This increases the life expectancy of your paved area and reduces its ongoing maintenance and potential litigation costs.

The British Standard BS 7533 was modified to reflect and remedy this issue, stipulating a bond strength requirement of greater than 2N/mm², double the previous requirement. This can only be achieved by using a priming agent such as pro-prime slurry primer. Simple to mix and apply, the addition of pro-prime slurry primer to your construction ensures it meets the latest requirements of the British Standard.

Case Study

MediaCity UK

Materials used:

UltraScape's BS 7533 compliant pro-bed HS, flowpoint and pro-prime.

Main contractor:

English Landscapes



Jointing

UltraScape flowpoint standard, eco, smooth and fine

UltraScape flowpoint grout exceeds all of the requirements of the latest British Standard. It is also available in eco, an environmentally friendly formulation, offering all the benefits of flowpoint, but containing 20% recycled material, significantly reducing the consumption of virgin aggregates.

The third variation of this award winning grout, flowpoint smooth, is ideally suited to smooth paving stones and slabs, providing a seamless surface to your construction.

The latest addition to our flowable grout range, flowpoint fine, can be applied to joints from 2-50mm and is ideal for use with porcelain. **See page 28 for further information**



For over 25 years, flowpoint has been exceeding the demands of clients. It has been used in a variety of project environments including public realm, landscaping and domestic. UltraScape flowpoint is now synonymous with fast application, cost effective and robust jointing.

Paving grouted with flowpoint can be opened to pedestrian traffic in just 1 hour and vehicular traffic in 4 hours (tested at 20°C).

The product is available in three alternatives: regular, eco and smooth. Overall all three offer the same great features; however you can choose to benefit from recycled material or a smooth surface finish. **Bespoke colours available upon request, minimum order quantity applies.**

UltraScape flowpoint eco is ideal for schemes looking to achieve an 'excellent' CEEQUAL award, or where a BREEAM assessment is to be conducted on your building.

All three alternatives are sold individually as pre-mixed dry packs, which only require the addition of water on-site. Once the desired consistency has been achieved, the product is poured over the paving, filling joints with ease and then the surplus is simply washed off. The nature of this method causes many to worry about staining; however this flowable grout leaves a perfect **stain free** finish.



Visit UltraScape products to see flowpoint in action





Flowpoint Smooth Natural Grey



Flowpoint Smooth Charcoal

Jointing

UltraScape premjoint

UltraScape premjoint is a next generation, high specification, decorative, brush-in pave jointing solution, ideally suited to porcelain, granite and other premium quality natural stone. The product is available in 3 bespoke colours – Cosmic Black, Storm Grey and Natural Cashmere – the perfect choice for a seamless transition for paving inside to outside living spaces.



It can be used all year round, in any weather and is suited for use on domestic paving applications or light non-trafficable commercial areas.

Available in 2 grades – fine and coarse – it can be used to fill joints from **3-20mm** or **5-20mm** respectively. The area can accept pedestrian traffic in as little as **24 hours**.

There's no waste on site; any leftover material can be re-used (see storage instructions on technical datasheet).





Packaging made from recycled material and is fully recyclable



UltraScape flowpoint fine

Ideally suited for use with a range of premium stone, including 20mm Porcelain tiles, this fourth alternative of our award winning flowable grout, provides a flawless joint designed to be extremely durable and resistant for the long-term.

Available in a handy 20kg bucket, in natural grey or charcoal, it can be opened to foot traffic in just 1 hour.





Ironwork reinstatement materials

We manufacture a range of reinstatement materials for the installation and repair of access covers, galvanised covers, tree pits and gully gratings and for the installation of electric charging points. Our bedding and surfacing materials are manufactured to the highest standards and deliver long-term performance and construction life.





M60

Rapid Strength Bedding Mortar

For use with all access covers and the bedding and profiling of kerbs.

- Open to traffic: 1 hour
- Set time: 20 minutes
- 24N/mm² compressive strength in 1 hour
- PAS approved
- Packaging made from recycled material and is fully recyclable



Why choose UltraScape?

Whilst there are many manufacturers claiming their bedding, priming and jointing materials are the best in the market, UltraScape has the independent technical results to back up its claims.

UltraScape eco-bed, fine bedding concrete outperforms the requirements set out in British Standard 7533 and all other materials available on the market. Precision, and the latest advances in manufacturing techniques, means that eco-bed has a guaranteed minimum compressive strength of 45N/mm²



For larger projects, pro-bed HS bulk is available in 28 tonne silos. When UltraScape's fine bedding concrete is manufactured in bulk, an additive is blended into the mix which guarantees the same performance as small batched material.

Every silo of pro-bed HS is delivered with test results to show the quality control measures in place throughout the manufacturing process and, where requested, UltraScape's Technical Manager can provide assistance with Cube Tests and advice on best practice when carrying out your own testing on-site.

The advanced formulation of UltraScape eco-bed and pro-bed HS bulk means we can provide you with a bedding concrete which boasts strengths exceeding the requirements set out in BS 7533 and a Modulus of Elasticity of 19200N/mm² - this means our bedding concrete will continually absorb the thermal dynamic stresses found in all paving schemes.

Whilst the latter is extremely important, high strengths and Modulus of Elasticity are of little use without a high level of Adhesion. By using pro-prime slurry primer on your paving scheme, you will get a guaranteed bond strength of 2.18N/mm² and an overall flexural strength of 7.5N/mm².

The mixing of UltraScape materials are also a fraction of the cost compared to other materials available on the market. Whilst smaller projects will only require small batch mixing, larger projects can opt for silos which means you can receive product which is pre-mixed and ready to lay, all at the touch of a button. Please see a small calculation opposite to further demonstrate this cost saving.

2,000m² project at 30mm will require 112.3 tonnes of material.

If you mix 4 x 25kg in each stage, you will need to do 1,123 mixes.

The industry recommends that each batch of material is mixed for between 3 and 5 minutes.

Based on 3 minutes of mixing, a total of 56 hours would be needed to prepare the bedding mortar ready for laying – this does not include loading and cleaning of machinery!

Another benefit to using UltraScape's BS 7533 Mortar Paving System is each product in the system is delivered pre-blended eliminating on-site mixing errors and allowing product to be mixed and applied quickly.

In summary

- 38N/mm² Compressive Strength on 28 tonne silos of pro-bed HS fine bedding concrete – this exceeds the requirements of BS 7533
- 45N/mm² Compressive Strength on 25kg bags of eco-bed this exceeds the requirements of BS 7533
- 19200N/mm² Modulus of Elasticity this exceeds the requirements of BS 7533
- 2.18N/mm² Adhesive Bond Strength this exceeds the requirements of BS 7533
- 7.5N/mm² Flexural Strength this exceeds the requirements of BS 7533

- Additive manufactured in laboratory conditions for increased bulk performance
- Available in 28 tonne silo reducing costs on mixing
- Manufactured in the UK using UK aggregate
- UltraScape flowpoint eco jointing mortar provides the highest specification on the market containing 20% recycled material. A certificate will be provided at the end of each project to show the amount of virgin aggregate saved throughout the duration of the project.

Product Selection Guide	eco-bed	pro-prime	flowpoint / eco	flowpoint smooth	flowpoint fine	premjoint
Product overview	Single part, pre-blended, BS 7533 compliant, fine bedding concrete. Contains 20% recycled glass	Single part, pre-blended, BS 7533 compliant slurry primer	Single part, pre-blended, BS 7533 compliant slurry grout. Also available with 20% recycled glass	Single part, pre-blended, BS 7533 compliant slurry grout, with a smooth surface finish	Single part, pre-blended BS 7533 compliant slurry primer, with a seamless finish	A high specification, decorative, brush-in pave jointing solution, suitable for use with granite, porcelain and other premium quality natural stone
Working time at 20°C	40-50 minutes	90 minutes	5-15 minutes	5-15 minutes	5-15mins	
Set time for foot traffic at 20°C	12 hours	N/A	1 hour	1 hour	1 hour	24-48 hours
Set time for vehicular traffic at 20°C	24 hours	N/A	4 hours	4 hours	4 hours	N/A
Unit size	25kg bag		25kg bag	25kg bag	20kg bucket	15kg bucket
Product yield	13.36 litres	16.9 litres/14.37 litres	13.9 litres	13.9 litres	11.12 litres	
Coverage	0.45m² per bag at 30mm bed depth	15m ² per bag and 13m ² per bucket	1m ² per bag using 100 x 100 x 100mm setts (8mm joint) 7m ² per bag using 600 x 400 x 60mm flags (8mm joint)	1m ² per bag using 100 x 100 x 100mm setts (8mm joint) 7m ² per bag using 600 x 400 x 60mm flags (8mm joint)	1m² per bag using 100 x 100 x 100mm setts (6mm joint) 7m² per bag using 600 x 400 x 60mm flags (6mm joint)	Joint width x joint depth: 8-9.5 sqm based on a paving size of 450mm x 450mm x 25mm (depth) for an 8mm joint gap.
Minimum and maximum width/depth	10-100mm	N/A	5-50mm width, up to 200mm depth	3-50mm width, up to 200mm depth	2-50mm width, up to 200mm depth	3-20mm (fine grade) 5-20mm (coarse grade)
Compressive strength	45N/mm² (28 days)	N/A	49.6N/mm² (28 days)	49.6N/mm² (28 days)	49.6N/mm² (28 days)	6.70N/mm² (28 days)
Adhesive strength	2.5N/mm² (28 days)	2.2N/mm² (28 days)	> 1.5N/mm² (28 days)	1.5N/mm ² (28 days)	1.5N/mm² (28 days)	