

## **BS 7533 Compliant Mortar Paving System**

*Bedding, Priming, Jointing, Adhesive and Pointing.*







# Contents

About us .....	4
BS 7533 .....	7
Resinous Mortar .....	8
Bedding .....	10
Bulk Bedding.....	12
Bonding/Priming .....	14
Jointing .....	16
Pointing.....	20
Stone and brick slip adhesive .....	22
Ironwork installation materials .....	24
Reducing our environmental impact.....	26
Why choose UltraScape?.....	28
Training .....	30
Product selection guide.....	34





# Award winning. Global. Experienced. Employee and Client focused.

We are a multi award-winning market leading company. A specialist manufacturer of cement and bitumen based products to the world market for over 40 years. We have built a solid reputation based on the research, development and production of innovative materials for use in urban regeneration, highway maintenance, tiling, commercial flooring and internal finishing.

We are committed to providing high specification products that are durable, proven and independently tested and supported by first class customer, technical and site service.

Manufacturing has been at the heart of Instarmac since 1977 and today products are produced in a modern, automated facility and sold to contractors, distributors and stockists worldwide.

Our own research and development laboratory means that we are always at the forefront of today's technology. Rigorous testing in-house and through certified external bodies offers you the reassurance of a quality guarantee.



## Excellence as standard

We are committed to continuously re-evaluating and reducing our environmental impact to encourage a positive, long-term future and have been recognised and awarded several times for our initiatives. UltraScape's eco products contain recycled glass, supporting our customers' own sustainability targets without compromising product quality or performance. By continually working with suppliers to take advantage of the most energy and waste efficient products

and procedures, and employing the latest available technologies, means we are always achieving a year-on-year improvement in our performance. All our products and systems are certified to ISO 9001, 14001 and ISO 45001. We have been commended for our health and safety processes winning the highly coveted Gold Award from RoSPA (Royal Society for the Prevention of Accidents) eleven years running.

## Site support

Whether at contractor or early planning stage, our Site Support Team is always available for one-to-one dedicated assistance tailored to suit your needs. Our help with problem solving, practical use and product performance, ensures that you have the ability to experience our products at your convenience, and guarantees confidence of application throughout your project.

## Delivery

All processed orders are automatically confirmed by email to you. Our privately owned fleet is managed and fully tracked in-house. Live tracking technology means that we can tell you exactly where your delivery is. Our system will automatically text you when your delivery is only 30 minutes away.



## Case Study

### Angel Building, Islington:

Office refurbishment

#### Materials used:

UltraScape's BS 7533

Compliant pro-bed HS,  
pro-prime and flowpoint

#### Main contractor:

J Browne Construction Company Ltd

# Strength. Durability. Style.

## The Benefits of Compliance

UltraScape's Mortar Paving System is fully BS 7533 compliant and also offers the reassurance of being tested by independent UKAS accredited laboratories, which verify its capabilities.

BS 7533 has developed over 20 years to offer clear, consistent and tested methods for designing and constructing rigid and flexible paved areas offering a minimum construction life of 40 years.



All of our products are  
available on NBS Plus for  
ease of specification.

## BS 7533

# The Mortar Paving System of Choice

### BS 7533 Mortar Paving System

A range of high performance, rapid strength bedding, bonding and jointing materials that meet and exceed the strict demands of BS 7533.

#### Stone and Brick Slip Adhesive

A flexible, polymer modified cladding adhesive, specially formulated with exceptional bond, for fixing brick slips and natural stone to a range of vertical and horizontal surfaces. Slipbond is A1 fire rated meaning it is non combustible and does not contribute to the development or spread of fire or smoke.

### High Performance Resinous Mortar

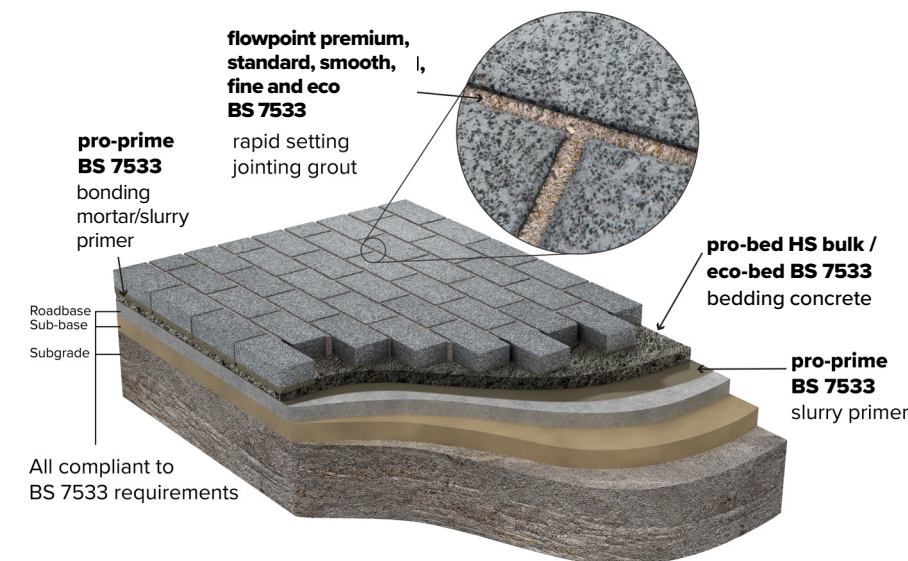
An extremely high bond, chemical resistant and waterproof (once cured) mortar for use in heavily trafficked environments, recessed access covers and water features.

#### Specialist Jointing Compound

A next generation, high specification decorative, brush-in pave jointing solution, made with coloured quartz. Suitable for use with granite, porcelain and other premium quality natural stone.

## Trusted reputation

UltraScape has developed a trusted reputation for quality and value added service. UltraScape provides products with guaranteed BS 7533 compliant performance which deliver results time and time again. Our premium products have been specified by contractors, architects and engineers for an ever-expanding portfolio of major schemes across the country because we support our customers with technical advice and work closely with them at specification stage.





# Resinous Mortar

## UltraScape

### resi-bed

UltraScape resi-bed is a resinous mortar, which provides exceptional strength and bond for areas under extreme stresses. It is perfectly suited for use on metal stairs and bonding to steel, such as recessed manhole covers allowing the paving to continue through the cover.

*A resin mortar has exceptionally high bond strength and is a long lasting solution for areas subject to extreme wear and tear.*

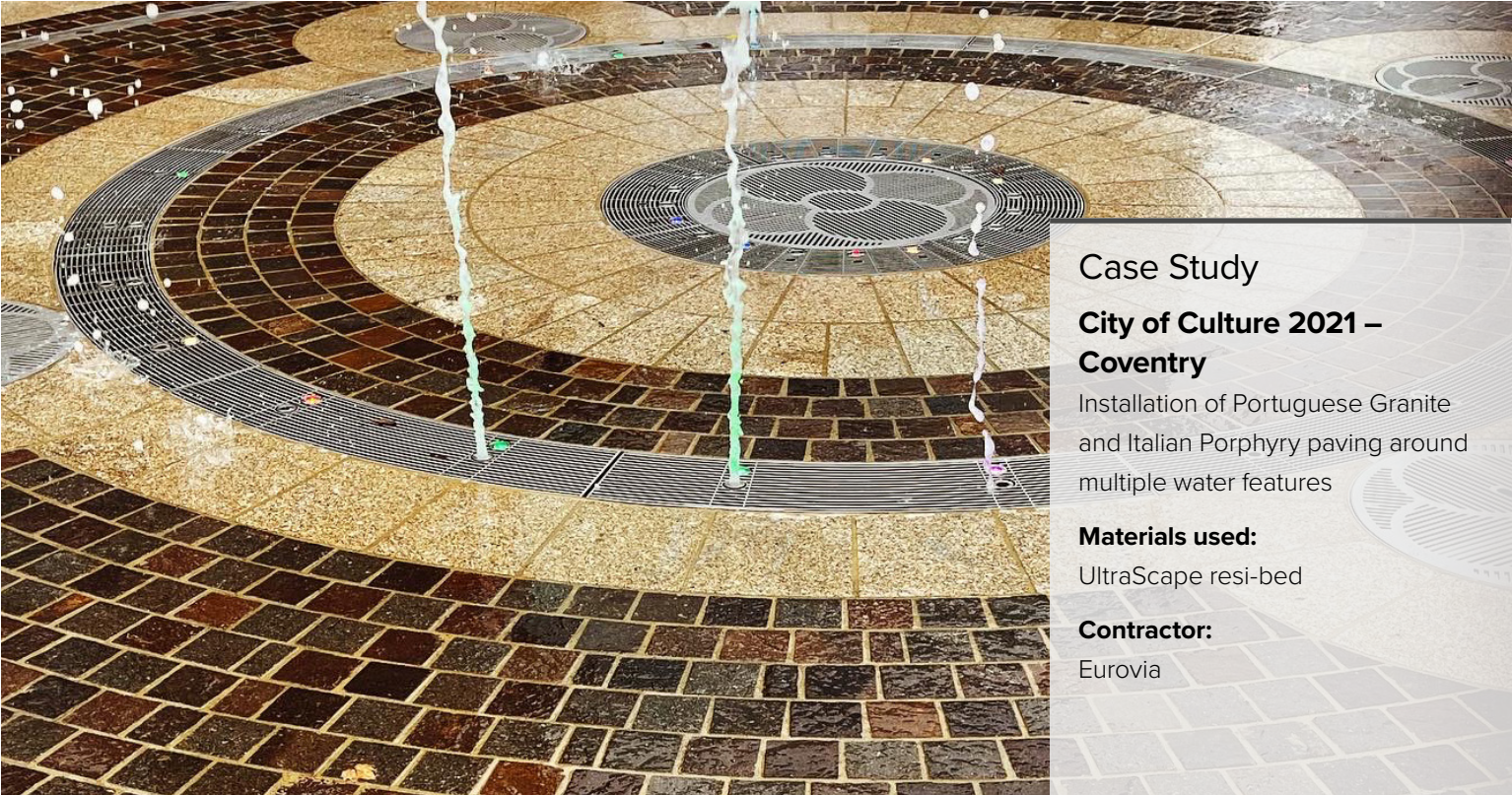


UltraScape resi-bed is entirely waterproof and chemical resistant once cured, making it ideal for use in water features. It has an exceptionally high bond strength and the ability to withstand higher flexural strain than traditional sand and cement mortars. Recessed manhole covers have long been a source of frustration for designers, contractors and maintenance managers

alike. Sand and cement mortars have difficulty resisting the inherent 'flex' of the cover under traffic loading and also have equal difficulty bonding to the steel of the cover itself. resi-bed offers a lasting solution which overcomes both of the issues.

UltraScape resi-bed is also often used on raised carriageway, or 'table' construction,

at the leading edges, where exceptional forces can be experienced. Using conventional mortars on the leading edges of raised tables leads to early failure, which also encourages failure in the surrounding paved area. UltraScape resi-bed can prevent this failure ensuring the table remains intact.



### Case Study

#### City of Culture 2021 – Coventry

Installation of Portuguese Granite and Italian Porphyry paving around multiple water features

#### Materials used:

UltraScape resi-bed

#### Contractor:

Eurovia



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 project.

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 bedding mortar.

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 <sup>2</sup>	45N/mm <sup>2</sup>	✓
Adhesive Strength	>2.0N/mm <sup>2</sup>	2.5N/mm <sup>2</sup>	✓
Flexural Strength	>4.5N/mm <sup>2</sup>	6.3N/mm <sup>2</sup>	✓
Modulus of Elasticity	18,000N/mm <sup>2</sup> +/- 3,500	19,200N/mm <sup>2</sup>	✓
Shrinkage	=/<0.1%	0.00%	✓
Permeability	....	≥5x10-5 m/s	✓



Laid from 10mm - 100mm



Foot traffic in 12 hours



# Bulk Bedding

## UltraScape pro-bed HS bulk

Our 28 tonne silos for larger sites, offer the ability to mix the product on-site at the touch of a button. Perfect for large pedestrianisation or commercial regeneration projects.

Ideal where your site has limited storage, a bulk mortar silo from UltraScape can accommodate over 28 tonnes of material in a single load - all in a footprint area of less than 3m x 3m\*.

Also available, pro-bed HS in 1 tonne bulk bags. Ideal where site delivery is restricted to rigid vehicles. Contact us to discuss your requirements and feasibility.

\*Please contact us to check installation requirements.



*Our unique bulk mortar silos feature a ‘single chamber’ design, meaning that the product you find within the silo is the same, single part, pre-blended, high quality material you find in our smaller 25kg bags.*

***There are no rental, maintenance or delivery charges\*.***

A bulk mortar silo from UltraScape not only offers a significant cost saving over traditional bagged material, but also has the added benefit of reducing packaging waste to zero.

\*subject to our fair use policy and part loads.



### Case Study Rochdale, Manchester

Town Hall

#### Materials used:

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

#### Main contractor:

Wright Landscapes





# Priming

## UltraScape pro-prime

UltraScape pro-prime bonding mortar/slurry primer is used to provide an exceptional bond between your paving element and UltraScape eco-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.



*Failed paving is costly. The addition of a slurry primer to a paved construction is essential to guarantee a bond strength compliant with BS 7533.*



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/mm<sup>2</sup>, 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



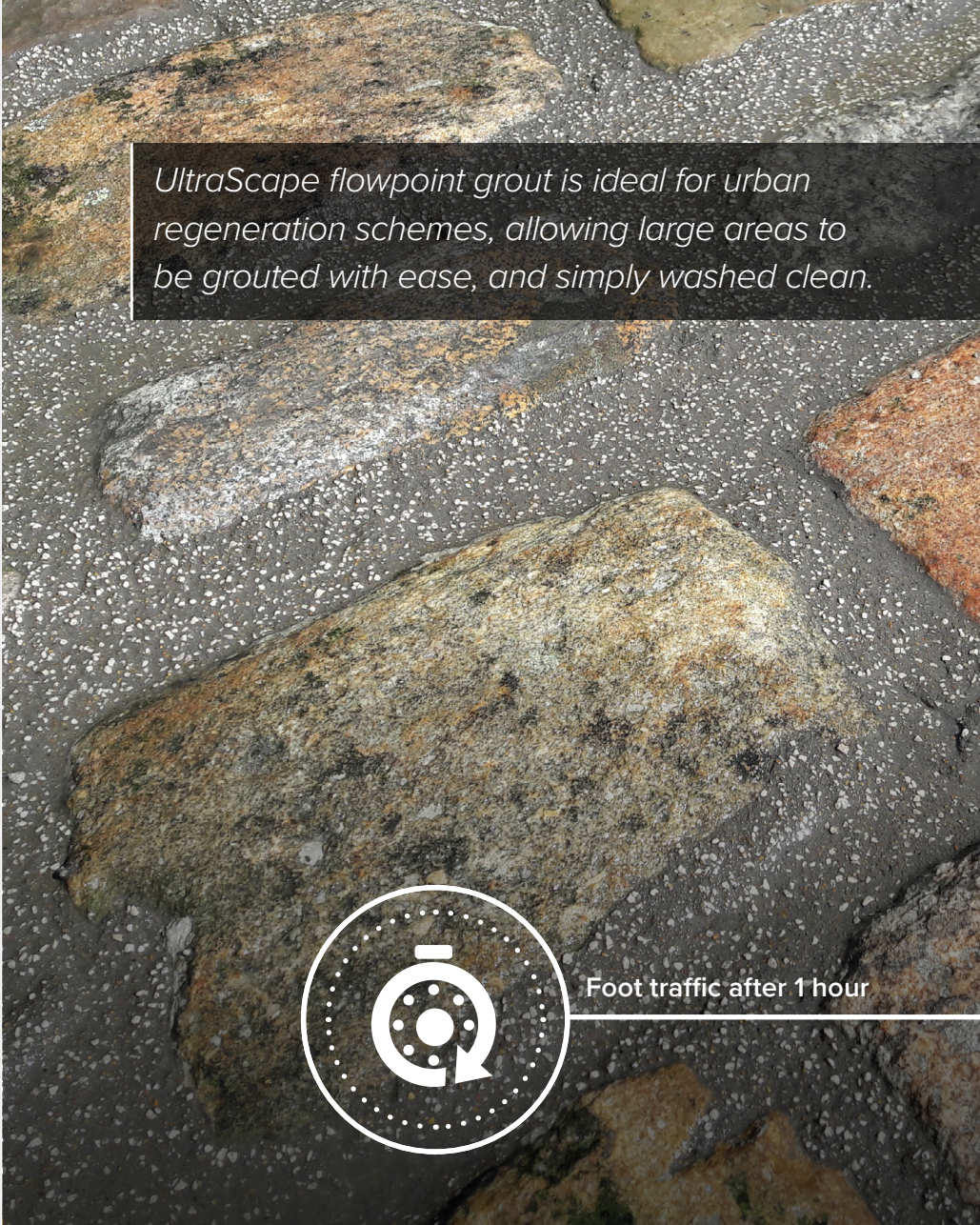


# Jointing

## UltraScape flowpoint standard, eco, and smooth.

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.



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: standard, eco and smooth. Also available in fine for domestic applications. Overall all three offer the same great features; however you can choose to benefit from recycled material or a smooth surface finish.

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 flowable grout leaves a perfect **stain free** finish.


[Visit UltraScape products to see flowpoint in action](#)





# Jointing

## flowpoint premium

flowpoint premium slurry jointing mortar is available in two premium colours - Stone Grey and Limestone. Flowpoint premium exceeds the requirements of BS 7533 and can receive light foot traffic after 1 hour. Also available in standard, smooth and ECO grades.



Paving grouted with flowpoint premium 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: standard, eco and smooth.

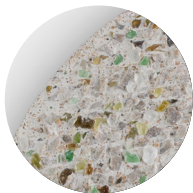
flowpoint premium offers a whole new way of bringing a sense of modern tones with our Stone Grey which pairs perfectly with paving stones and a mix of dark and light natural stone whilst our Limestone introduces a countrified aesthetic which pairs fantastically with lighter, more rustic toned natural stone such as Indian sandstone paving. Our ECO variant is the go to variant when looking to achieve an ‘excellent’ CEEQUAL award, or where a BREEAM assessment is to be conducted on your project.



flowpoint Standard Limestone



flowpoint Smooth Limestone



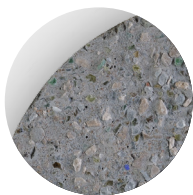
flowpoint Eco Limestone



flowpoint Standard Stone Grey



flowpoint Smooth Stone Grey



flowpoint Eco Stone Grey



Available in:  
Limestone and Stone Grey





# Pointing

## UltraScape cempoint



UltraScape cempoint provides a quick and clean method of jointing both horizontal and vertical faces (such as cladding and steps). Still meeting the strict demands of BS 7533, cempoint combines all the benefits of this exacting standard with the convenience of being installed using a hand-held mortar gun.

As with the rest of the products in the UltraScape BS 7533 compliant mortar paving system, cempoint is supplied as a pre-blended product, requiring only the addition of water on site; thus reducing the potential for colour variance and workmanship issues during installation. UltraScape cempoint is not only specially modified to meet the requirements of BS 7533, but is also manufactured with convenience and usability in mind.



Friars Walk, Newport



The light and pliable texture of cempoint makes it fast and convenient to work with. The hand-held mortar gun allows intricate areas to be grouted neatly. UltraScape cempoint is just as suited to pointing brickwork and stone walling as it is to paving flags and setts.



**Available in 10 colours:**  
 Natural, Light Brown, Light Grey, Dark Grey, Sandstone, Yorkstone, White, Dark Brown, Brick Red, Black.



*UltraScape’s cempoint gun injected mortar is perfect for those smaller areas which can be difficult to grout. Fast and easy to apply, with no wastage, it neatly and directly fills the paving joint.*



### Case Study

#### Bullring Birmingham

**Materials used:**  
 UltraScape’s BS 7533 compliant flowpoint and cempoint

**Main contractor:**  
 P.J. Carey Ltd



# Stone and Brick Slip Adhesive

## UltraScape slipbond



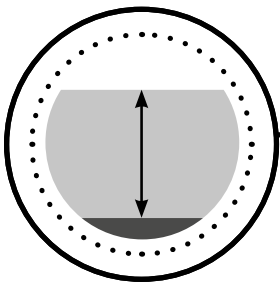
UltraScape slipbond is a flexible cladding adhesive for external and internal wall and floor installations. It consists of blended cements, graded fillers and additives and a high level of redispersible powder polymer.



*Polymer modified for increased strength, exceptional bond and enhanced performance.*

It is specially formulated with extended workability for fixing brick slips and natural stone to a range of substrates including sand/cement render, brick and block work and can be used for wall and floor applications as well as with external and internal wall installation systems.

UltraScape slipbond's frost resistant formula makes it ideal for use in all weathers. It has extended workability allowing large intricate areas to be covered. It can be applied to a thickness of 3mm - 20mm up to 1m<sup>2</sup> at a time.



Laid from  
3mm - 20mm

**Reinvent your garden space with the UltraScape Domestic Range now available at a stockist near you!**

Get your hands on a Domestic Range brochure by contacting [UltraScape@instarmac.co.uk](mailto:UltraScape@instarmac.co.uk)





# 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.



## Envirobed® CD534

High Performance Bedding Mortar

The environmentally friendly alternative to resin-based material, suitable for use in heavily trafficked areas for bedding access covers.



- Open to traffic: 1 hour
- Set time: 30 minutes
- Can be used in all weather and in temperatures as low as 1°C
- 53N/mm<sup>2</sup> compressive strength in 3 hours
- PAS approved 



## 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/mm<sup>2</sup> compressive strength in 1 hour
- PAS approved 
- Packaging made from recycled material and is fully recyclable 

## QC10 F

Rapid Set Flowable Concrete

A fibre reinforced concrete designed for thick section repairs, haunching reinstatements, ironwork backfilling and sign post installation.

- Open to traffic: 90 minutes
- Set time: 10-20 minutes
- 20N/mm<sup>2</sup> compressive strength after 90 minutes
- PAS approved 



## QC6

Surface Reinstatement Concrete

A non-shrink concrete designed for the surface reinstatement of ‘picture frames’ or fillets around access covers and surface areas around street furniture.

- Open to traffic: 4 hours
- Set time: 15 minutes
- Excellent workability
- Anti-vandal



# Reducing our environmental impact

We are committed to continuously re-evaluating and reducing environmental impact to encourage a positive, long-term future.

## Resources

Where feasible, we use recycled materials, such as glass in our products, and over the last 12 months, have supplied customers with over 800,000 tonnes of recycled material contained in market leading products such as Envirobred® CD534 and flowpoint eco. We look to do this wherever possible to reduce our reliance on declining raw materials, producing more sustainable products.

The rise in building developments has seen open ground across the UK vastly reduce and consequently, rainwater that would have naturally drained away through the earth, no longer has anywhere to go, increasing the pressure on our sewerage network and causing flooding. Our permeable paving installation materials have been formulated to help reduce the impact of these increasing volumes of water.

## Manufacturing

We take all the necessary measures needed to ensure our products are manufactured efficiently and with as little environmental impact as possible. We are working hard with our packaging suppliers to introduce as much recycled content as possible and many of our products are now available in recycled packaging.



## Recycling

No waste: we have been a zero waste to landfill site since 2014, meaning all our post production waste is reused or recycled. We operate a successful pallet recycling scheme and we are in the process of converting our plastic product packaging to recycled packaging which is fully recyclable.

## Transport

Delivering efficiently: We now own a 37-strong fleet and invest in the most up-to-date logistics technology and efficiency procedures to ensure that we offer an award-winning delivery service with a minimal carbon footprint.

Our vehicles are regularly replaced to guarantee we are using modern, smart lorries. We will be running our newly anticipated trucks on Compressed Natural Gas (CNG), which will result in a reduction of CO<sub>2</sub> emissions by 115 tonnes per truck per year.

## Usage

Expert guidance: Our highly skilled and experienced training team annually deliver over 100 customer training sessions to ensure the correct installation of our products, increasing the lifespan and reducing waste.



# Why choose UltraScape?

UltraScape has been offering premium, reliable products for over 25 years. 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/mm<sup>2</sup>.



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/mm<sup>2</sup> - 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/mm<sup>2</sup> and an overall flexural strength of 7.5N/mm<sup>2</sup>.

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.

2,000m<sup>2</sup> 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/mm<sup>2</sup> Compressive Strength on 28 tonne silos of pro-bed HS fine bedding concrete – **this exceeds the requirements of BS 7533**
- 45N/mm<sup>2</sup> Compressive Strength on 25kg bags of eco-bed – **this exceeds the requirements of BS 7533**
- 19200N/mm<sup>2</sup> Modulus of Elasticity – **this exceeds the requirements of BS 7533**
- 2.18N/mm<sup>2</sup> Adhesive Bond Strength – **this exceeds the requirements of BS 7533**
- 7.5N/mm<sup>2</sup> 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.



# Virtual CPDs

Instarmac is an approved CPD provider to the Royal Institute of British Architects (RIBA) and the Royal Institute of the Architects of Ireland (RIAI). Our CPDs, Paving the Way and The Environmental Benefits of installing Permeable Paving, are delivered by our staff via our training portal or in person, either at your premises or at our purpose built facilities in Staffordshire. We offer a range of CPD packages so you can complete the session using the most convenient method to suit your needs.



# Specification Aid

When specifying the UltraScape BS 7533 approved mortar paving installation system, the specification template you are completing should include information on packaging type and size, application data, material strengths and setting times.

We have created a condensed, yet comprehensive performance specification clause for each of our materials. Whilst also including all options for bedding, so that the best material for your job can be easily compared and then selected. Download your copy by visiting [instarmac.co.uk/support/download-centre](http://instarmac.co.uk/support/download-centre)







To support our customers, we operate the Instarmac Training Academy, which is a calendar of in-person and online training events.

The academy has its own website where all events are loaded to a calendar with full session details provided, and an online form included for you to register to attend.

The calendar is regularly updated with a variety of sessions, including RIBA accredited CPDs: 'Paving the Way' and 'The Environmental Benefits of Installing Permeable Paving'.

Quite often, we invite co-hosts to join our panel of training experts and have previously run webinars with Landscaping & Paving Consultant, Gareth Wilson; award-winning Garden Designer, Manoj Malde; and Mark Youde, Director of The Landscape Academy Ltd..

Our in-person training events are also hugely popular! They take place at our training facility in Tamworth, Staffordshire, and include theory and practical content on topics such as flowpoint, BS 7533 construction and domestic paving solutions.



Here is just a small selection of feedback comments the academy has received:

Excellent webinar. Very well run and the panel of experts worked well together to make the presentation informative and fun. They answered the questions very effectively and the presentation itself was clear and comprehensive.

It was great to be able to talk about such an issue in the industry, with people that have similar views.

Well presented and interactive, which allowed queries to be raised and discussed. An hour worked well to allow questions without being rushed.

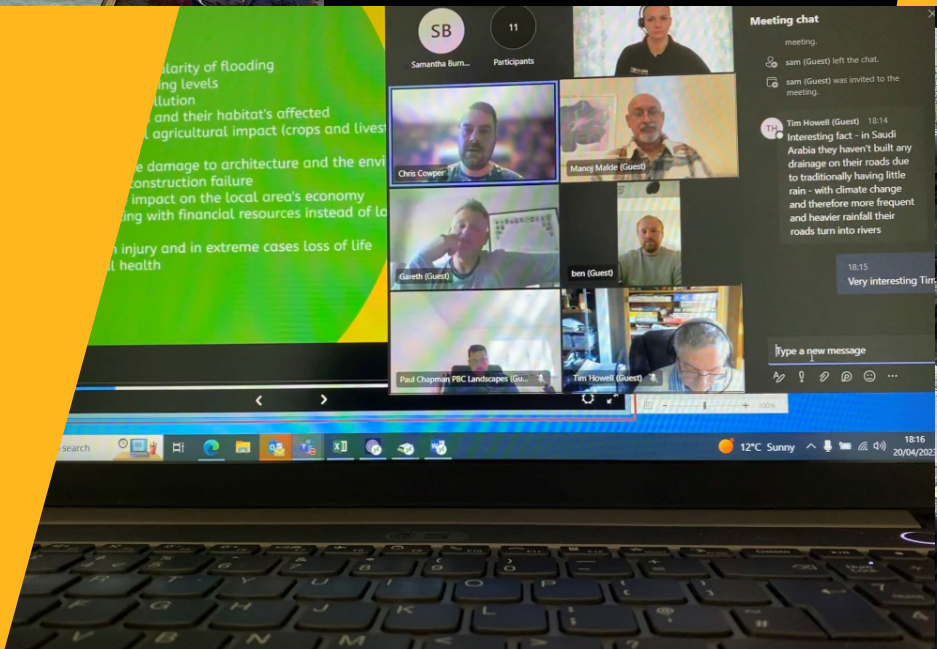
"The training was very well organised and full of knowledge. I would definitely attend another training course and recommend the training days as well. The lunch was delicious and the staff were really helpful throughout the day."

Very well organised, knowledgeable staff who interacted really well with everyone present. Definitely worth taking a day off from a busy diary to attend.

Excellent content, excellent delivery. I was dubious as I'm not one for classrooms etc but the team were down to earth, knowledgeable and personable. Food was also good!

Great expert panel and very well run webinar.

ALL SESSIONS ARE **FREE OF CHARGE**





Product Selection Guide	eco-bed	pro-bed HS Bulk	pro-prime	flowpoint premium	flowpoint smooth	flowpoint / eco	cempoint	resi-bed	slipbond
Product overview	Single part, pre-blended, BS 7533 compliant, fine bedding concrete. Contains 20% recycled glass	Single part, pre-blended,BS 7533 compliant, fine bedding concrete. Supplied in bulk concrete silos or 1 tonne bags.	Single part, pre-blended, BS 7533 compliant slurry primer	Single part, pre-blended BS 7533 compliant premium slurry jointing mortar.	Single part, pre-blended, BS 7533 compliant slurry grout, with a smooth surface finish	Single part, pre-blended, BS 7533 compliant slurry grout. Also available with 20% recycled glass	Single part, pre-blended, gun applied, BS 7533 mortar for vertical and horizontal jointing	Pre-batched resin mortar and primer system for use in areas of high stress or where chemical or water resistance is required	Vertical stone and brick slip adhesive
Working time at 20°C	40-50 minutes	40-50 minutes	90 minutes	5-15 minutes	5-15 minutes	5-15 minutes	45 minutes	30 minutes	2 hours
Set time for foot traffic at 20°C	12 hours	12 hours	N/A	1 hour	1 hour	1 hour	12 hours	5 hours	16 hours
Set time for vehicular traffic at 20°C	24 hours	24 hours	N/A	4 hours	4 hours	4 hours	24 hours	6 hours	N/A
Unit size	25kg bag	28 tonne silo / 1 tonne bag	20kg bag and 17kg bucket	25kg bag	25kg bag	25kg bag	20kg bag	22kg tub	20kg bag
Product yield	13.36 litres	14,963.20 litres / 534.40 litres	16.9 litres/14.37 litres	13.9 litres	13.9 litres	13.9 litres	11.6 litres	9.5 litres	15 litres
Coverage	0.45m <sup>2</sup> per bag at 30mm bed depth	17.8m <sup>2</sup> per tonne at 30mm bed depth	15m <sup>2</sup> per bag and 13m <sup>2</sup> per bucket	1m <sup>2</sup> per bag using 100 x 100 x 100mm setts (8mm joint) 7m <sup>2</sup> per bag using 600 x 400 x 60mm flags (8mm joint)	1m <sup>2</sup> per bag using 100 x 100 x 100mm setts (8mm joint) 7m <sup>2</sup> per bag using 600 x 400 x 60mm flags (8mm joint)	1m <sup>2</sup> per bag using 100 x 100 x 100mm setts (8mm joint) 7m <sup>2</sup> per bag using 600 x 400 x 60mm flags (8mm joint)	1m <sup>2</sup> per bag using 100 x 100 x 100mm setts (6mm joint) 7m <sup>2</sup> per bag using 600 x 400 x 60mm flags (6mm joint)	0.32m <sup>2</sup> per tub at 30mm bed depth	5m <sup>2</sup> at 3mm depth
Minimum and maximum width/depth	10-100mm	10-100mm	N/A	3-50mm depending on variant, up to 200mm depth	3-50mm width, up to 200mm depth	4-50mm width, 4-50mm depth	5-25mm width, 25-100mm depth	5-50mm	3-20mm
Compressive strength	45N/mm <sup>2</sup> (28 days)	38N/mm <sup>2</sup> (28 days)	N/A	49.6N/mm <sup>2</sup> (28 days)	49.6N/mm <sup>2</sup> (28 days)	49.6N/mm <sup>2</sup> (28 days)	49.6N/mm <sup>2</sup> (28 days)	75N/mm <sup>2</sup> (7 days)	N/A
Adhesive strength	2.5N/mm <sup>2</sup> (28 days)	2.5N/mm <sup>2</sup> (28 days)	2.2N/mm <sup>2</sup> (28 days)	> 1.5N/mm <sup>2</sup> (28 days)	1.5N/mm <sup>2</sup> (28 days)	> 1.5N/mm <sup>2</sup> (28 days)	> 1.5N/mm <sup>2</sup> (28 days)	45N/mm <sup>2</sup> ( 7 days)	> 1N/mm <sup>2</sup>





**Instarmac Group plc**

**Head Office**

Danny Morson Way  
Birch Coppice Business Park  
Dordon, Tamworth  
Staffordshire B78 1SE  
United Kingdom

t: +44 (0) 1827 254 400

email@instarmac.co.uk

instarmac.co.uk

All information contained within this brochure was correct at time of print.

**instarmac.co.uk**  
**ultrascape.co.uk**

