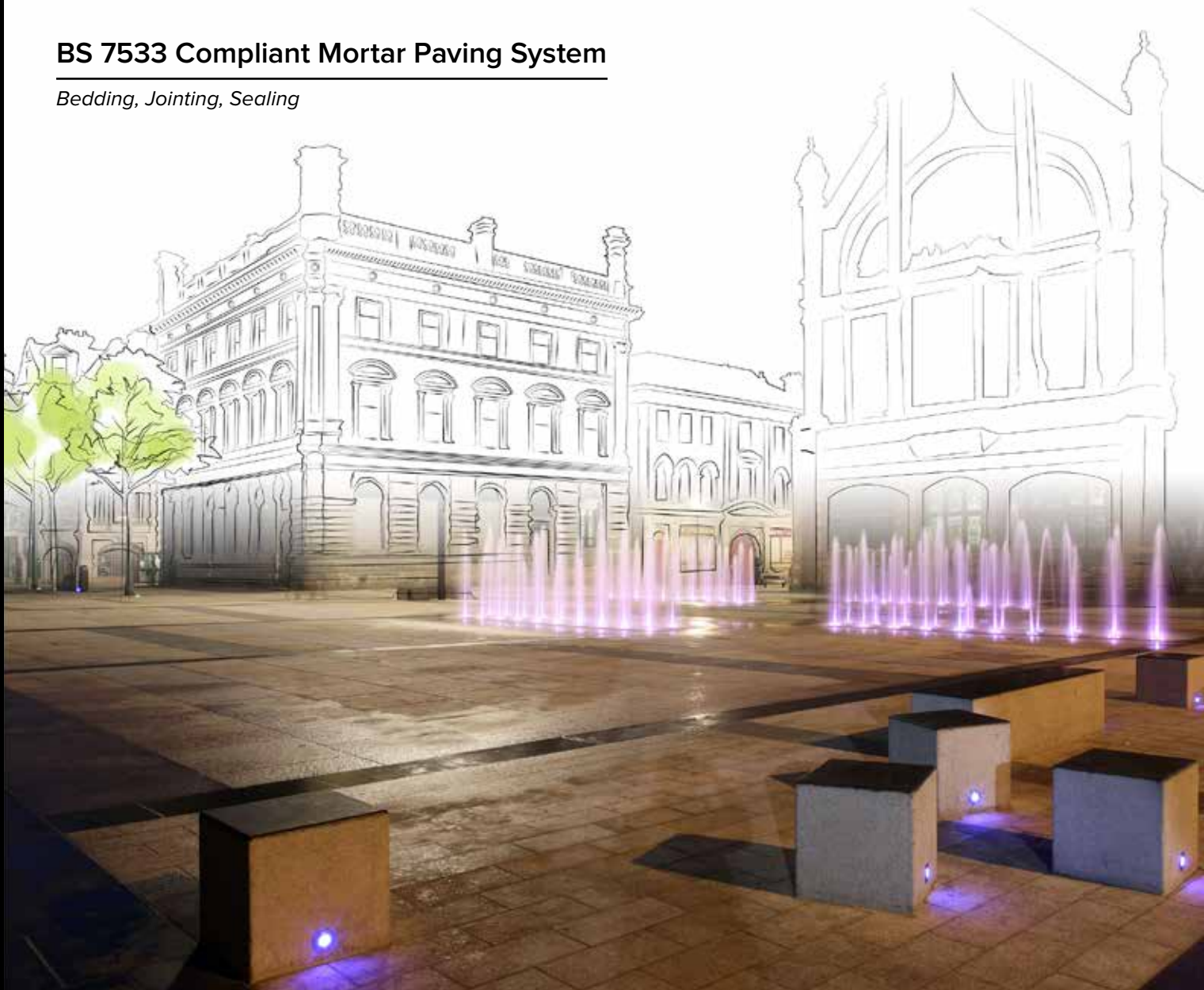


**ULTRA  
SCAPE**

An **INSTARMAC** Brand

## BS 7533 Compliant Mortar Paving System

*Bedding, Jointing, Sealing*



Urban  
Regeneration  
Specialists

## Case Study

### **Castle Green, Taunton:**

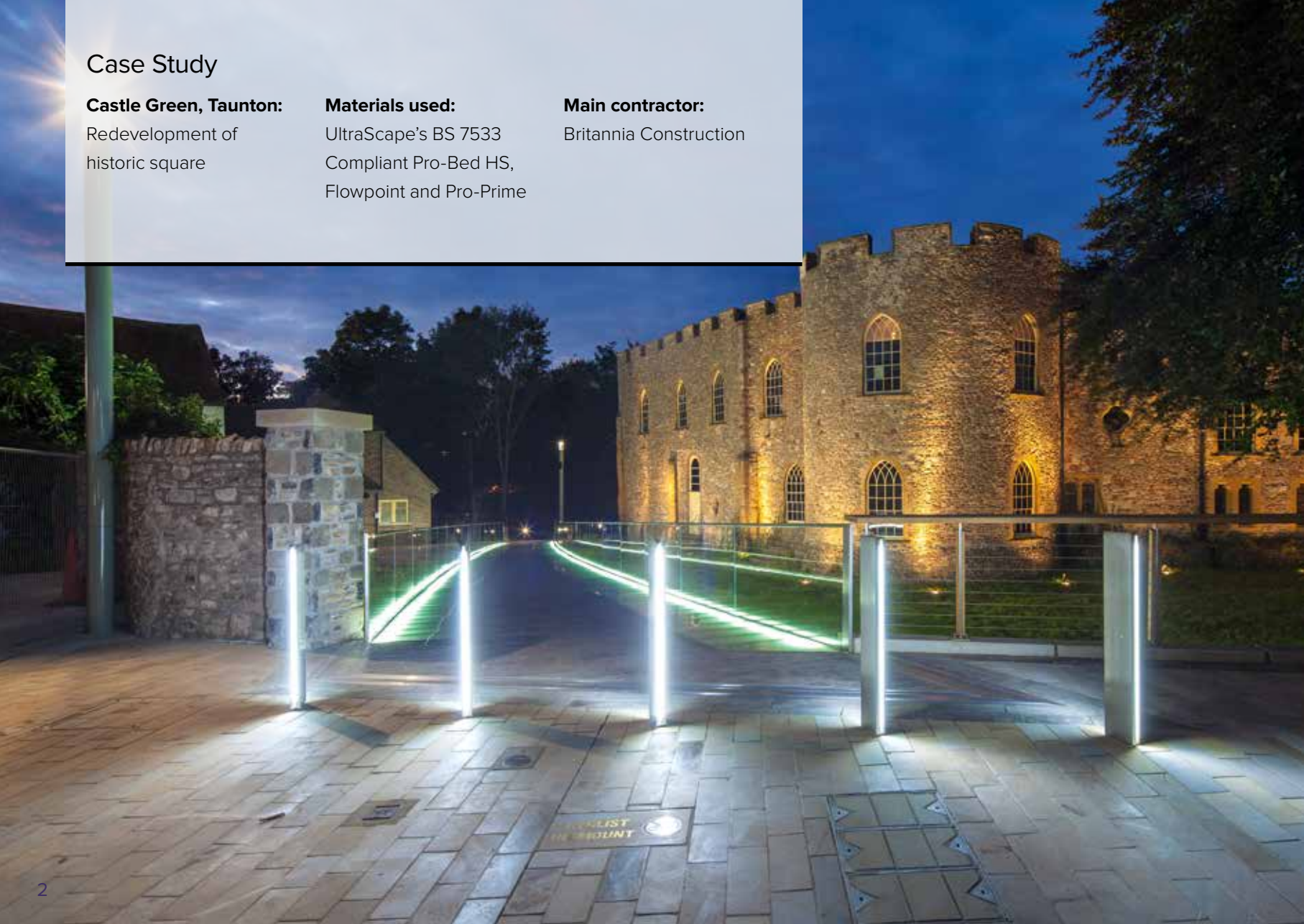
Redevelopment of  
historic square

### **Materials used:**

UltraScape's BS 7533  
Compliant Pro-Bed HS,  
Flowpoint and Pro-Prime

### **Main contractor:**

Britannia Construction



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

We are a multi-awarding winning market leading company. A specialist manufacturer of cement and bitumen based products to the world market for over 35 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 backed up by first class customer, technical and site support.

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.

Our latest efforts have meant the successful implementation of zero waste to landfill from January 2014. We strive to be pioneering in our corporate social responsibility activities, the working environment we maintain, our culture and the rewards we provide.

We are a Sunday Times Top 100 Small Company with a 3-star Best Companies rating and have been recognised in their international Track 200 which ranks Britain's mid-market private companies with the fastest growing international sales. All our products and systems are certified to ISO 9001, 14001 and OHSAS 18001. 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) four years running.

## 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,

Flowpoint and Pro-Prime

#### 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.

# The Mortar Paving System of Choice

## **BS 7533 Mortar Paving System**

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

## **Sand Stabiliser, Surface Sealant & Gum Adhesion Inhibitor**

A single product with 3 uses, solvent free and suitable for flexible or rigid paving constructions.

## **High Performance Resinous Mortar**

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

## **Stone and Brick Slip Adhesive**

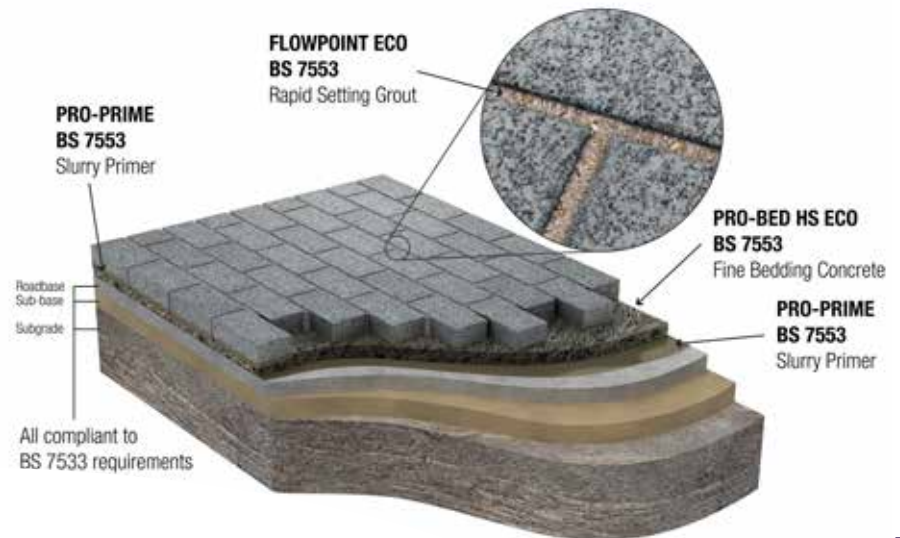
A flexible, polymer modified cladding adhesive, specially formulated with exceptional bond, for fixing brick slips and natural stone to a range of vertical and horizontal surfaces.

## **Specialist Jointing Sand**

A jointing compound that provides a flexible, yet durable finish when cured. Suitable for use on pavements and lightly trafficked pedestrianised areas with occasional vehicular use.

## 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.



## BS 7533 Rigid Construction

### Bedding

# UltraScape Pro-Bed HS and Pro-Bed HS ECO

UltraScape Pro-bed HS is a fine bedding concrete manufactured to meet and exceed the strict requirements of BS 7533. It is also available in ECO, offering all the benefits of Pro-Bed HS, but containing 20% recycled material, significantly reducing the consumption of virgin aggregates. It is ideal for schemes looking to achieve an 'excellent' CEEQUAL award, or where a BREEAM assessment is to be conducted on your building.

*Sustainability is aided with the use of recycled components. 30 tonnes of Pro-Bed HS ECO contains up to 6 tonnes of recycled glass.*

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.

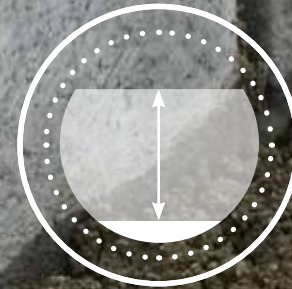
UltraScape Pro-Bed HS can be laid from 10mm to 75mm (with greater depths achieved using successive layers).

Mixed solely with water, Pro-Bed HS takes away the uncertainty of using a multi-component system.

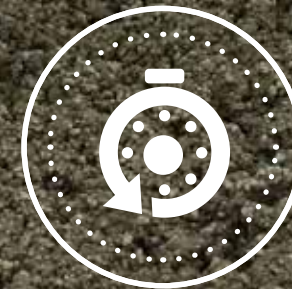
The extremely fast strength gain of Pro-bed HS also sets it apart from its counterparts; meaning that pedestrian areas can be trafficked in as little as **12 hours** and vehicular in as little as **24 hours**.

Test	Requirement of BS 7533-7;2010	Pro Bed HS / Eco	Pass / Fail
Compressive Strength	35N/mm <sup>2</sup>	40N/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>	7.5N/mm <sup>2</sup>	✓
Modulus of Elasticity	18,500N/mm <sup>2</sup> +/- 3,500	18,333N/mm <sup>2</sup>	✓
Shrinkage	=/<0.1%	0.09%	✓





Laid from 10mm - 75mm



Foot traffic in 12 hours

## Bulk Bedding

### UltraScape Pro-Bed HS in bulk

Offering all of the benefits of bagged UltraScape Pro-Bed HS, our 30 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 30 tonnes of material in a single load - all in a footprint area of less than 3m x 3m\*.

Also available, Pro-Bed HS ECO in 1.4 tonne bulk bags. Ideal where site delivery is restricted to ridged 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

### **Piccadilly Place, Manchester**

Central Plaza

#### **Materials used:**

UltraScape's BS 7533 compliant Pro-Bed HS, Flowpoint and Pro-Prime

#### **Main contractor:**

Carillion



## Priming

# UltraScape Pro-Prime

UltraScape Pro-Prime slurry primer is used to provide an exceptional bond between your paving element and UltraScape Pro-Bed HS fine bedding concrete, and can also be used to promote bond between your roadbase and the Pro-Bed HS 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 the Pro-Bed HS 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  $2\text{N/mm}^2$ , 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, Pro-Prime and Flowpoint.

#### Main contractor:

English Landscapes



## Jointing

### UltraScape Flowpoint, 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.

*Flowpoint grout is ideal for urban regeneration schemes, allowing large areas to be pointed with ease, and simply washed clean.*



Foot traffic after 1 hour

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).

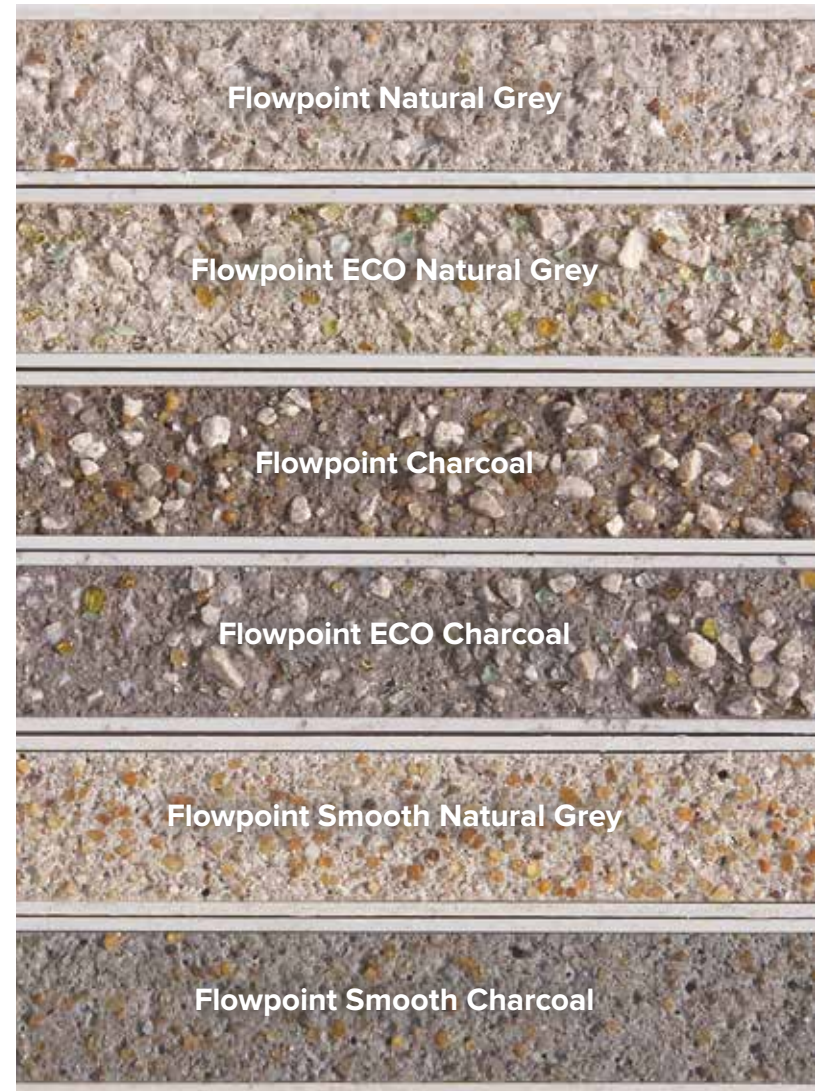
The product is available in three alternatives: regular, ECO and Smooth. Overall all three offer the same great features; however you can choose to benefit from recycled material or a smooth surface finish. Bespoke colours available upon request, minimum order quantity applies.

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 [UltraScapeproducts](https://www.ultrascapeproducts.com) to see Flowpoint in action





# Jointing 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. Cempoint is not only specially modified to meet the requirements of BS 7533, but is also manufactured with convenience and usability in mind.



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. Cempoint is just as suited to pointing brickwork and stone walling as it is to paving flags and setts.





*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



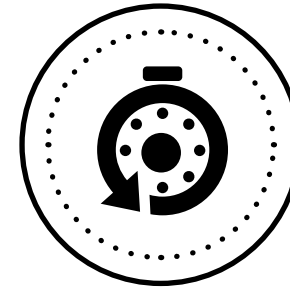
# Resinous Mortar

## 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 bonding to steel, such as recessed manhole covers.

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



Foot traffic after 2 hours

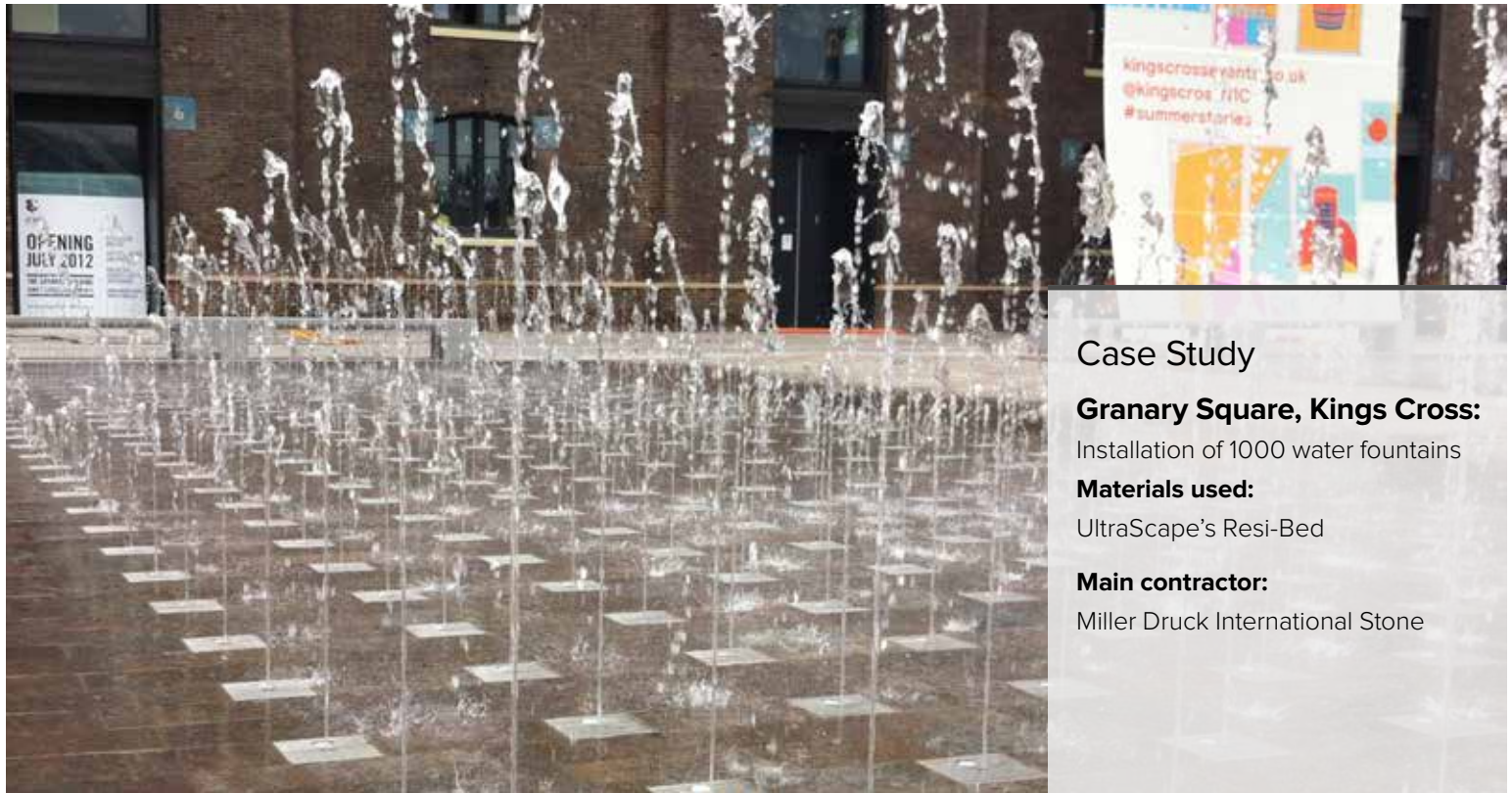


Resi-Bed is entirely waterproof and chemical resistant once cured, making it ideal for use in water features. It has an exceptionally high bond strength and the ability to withstand higher flexural strain than traditional sand and cement mortars. Recessed manhole covers have long been a source of frustration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

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. Resi-Bed can prevent this failure ensuring the table remains intact.



## Case Study

### Granary Square, Kings Cross:

Installation of 1000 water fountains

#### Materials used:

UltraScape's Resi-Bed

#### Main contractor:

Miller Druck International Stone



# Stone and Brick Slip Adhesive UltraScape SlipBond

UltraScape SlipBond is a flexible cladding adhesive for external and internal use. 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.

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.







## Flexible Construction

# Jointing Compound

## UltraScape PaveJoint *plus*

UltraScape PaveJoint *plus* is a specialist jointing compound that provides a flexible yet durable finish when cured. It is suitable for use with most types of paving including natural stone, concrete, slate, clay, terracotta and granite. It can be used on pavements and lightly trafficked pedestrianised areas with occasional vehicular use. Water is used to pre-soak the surface and this also helps the sand to penetrate deep into the paving joint. Staining of the paving is prevented by keeping the area wet during application.





*The all weather jointing compound. Protects paving from weed growth.*

UltraScape PaveJoint <sup>plus</sup> can be used to fill joints from 3-20mm. The area can accept pedestrian traffic in as little as 18-24 hours and its all weather formula means it is resistant to freeze/thaw conditions.

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



# Joint Protection

## UltraScape

### Paving Guard

UltraScape Paving Guard is a solvent free liquid sand stabiliser, surface sealant and chewing gum adhesion inhibitor.

Paving Guard provides a versatile solution for joint protection in domestic, commercial and public realm projects.

The product is an acrylic polyurethane hybrid and as such provides both a user-friendly application and an extremely robust and durable finish, normally only achieved with solvent stabilised products.

*Joint protection is essential for the longevity of large public realm projects.*

#### **Sand Stabiliser**

When used on flexibly constructed paved areas, the product bonds the particles of jointing sand to one another preventing wash-out during cleaning cycles, whilst maintaining the necessary degree of flexibility required for this construction type.

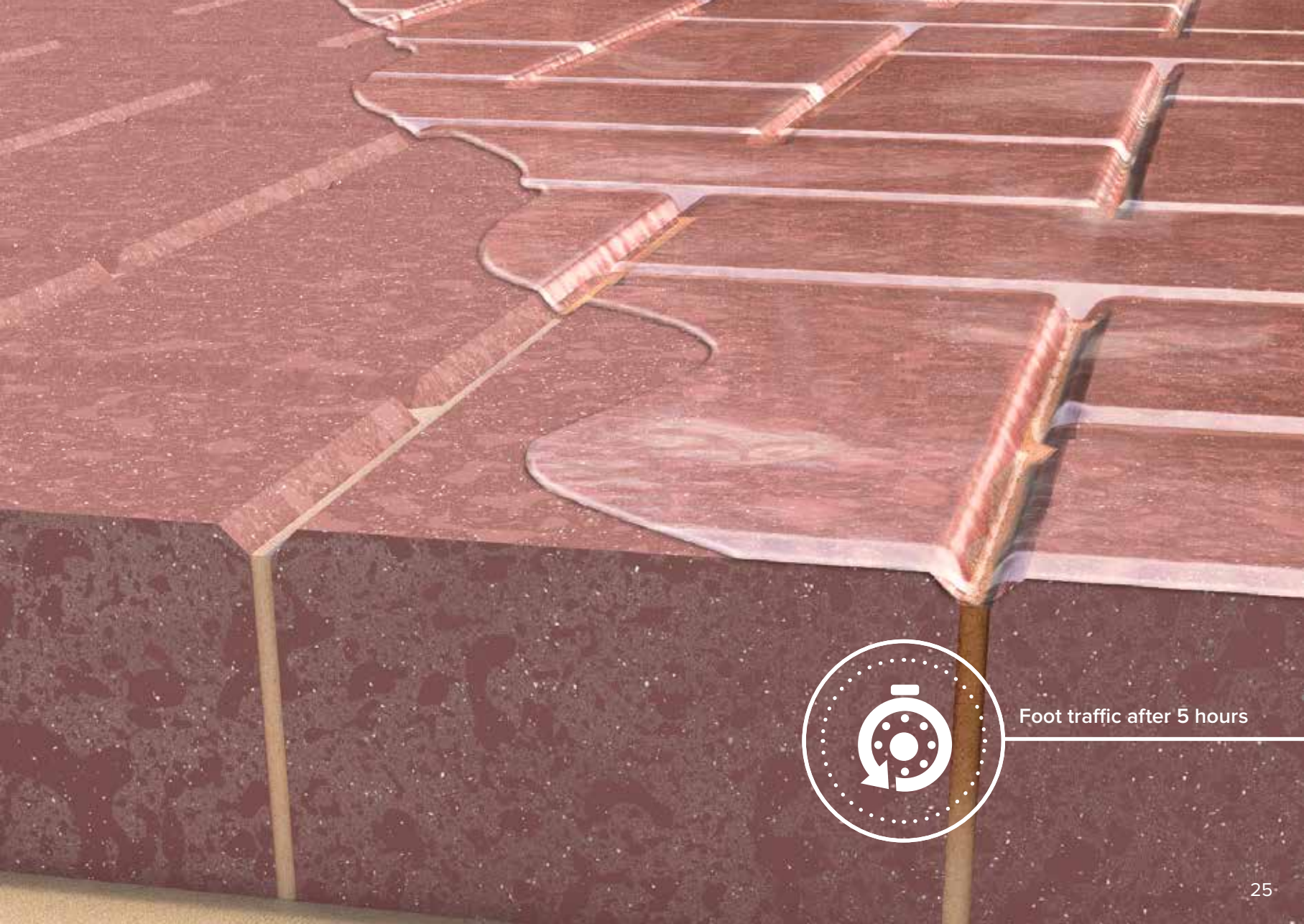
#### **Surface Sealant**

When applied the product forms a protective barrier to many common stain agents (oil, grease, foodstuffs etc.) and reduces the effects of such stains whilst also facilitating easier subsequent cleaning of treated areas.

#### **Chewing Gum Adhesion Inhibitor**

Paving Guard reduces the ability of chewing gum to adhere to the surface of paving; making it easier to remove during normal cleaning cycles.





Foot traffic after 5 hours

Training & Site Support

UltraScape’s Accredited CPDs Providing Regeneration Solutions

Instarmac is an approved CPD provider to the Royal Institute of British Architects and the Royal Institute of Architects of Ireland. ‘Streetscape Installation Solutions’ and ‘Paving the Way’ training sessions are delivered by our staff at either your premises or at our purpose built facilities. These sessions define the benefits and intricacies of flexible and rigid construction and deliver a greater understanding of the products, materials and design possibilities.

To book your free RIBA approved CPD please email: [cpd@instarmac.co.uk](mailto:cpd@instarmac.co.uk)



Covering:

- Urban Regeneration
- British Standard BS 7533
- Rigid and Flexible Pavement Construction
- Reasons for Pavement Failure
- How to Avoid Pavement Failure
- Material Performance
- Material Application



Product Selection Guide	Pro-Bed HS / ECO	Pro-Bed HS / ECO (Bulk Supply)	Pro-Prime	Flowpoint / ECO	Flowpoint Smooth	Cempoint	RESI-BED	Paving Guard	PaveJoint <i>plus</i>	SlipBond
Product overview	Single part, pre-blended, BS 7533 compliant, fine bedding mortar. Also available with 20% recycled glass	Single part, pre-blended, BS 7533 compliant, fine bedding mortar. Supplied in bulk mortar silos or bags. Also available with 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, 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	Solvent free liquid sand stabliser, surface sealant and chewing gum adhesion inhibitor	Specialist Jointing Compound	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	45 minutes	30 minutes	120 minutes	35-45 minutes	2 hours
Set time for foot traffic at 20°C	12 hours	12 hours	N/A	1 hour	1 hour	12 hours	5 hours	5 hours	18-24 hours	16 hours
Set time for vehicular traffic at 20°C	24 hours	24 hours	N/A	4 hours	4 hours	24 hours	6 hours	24 hours	N/A	N/A
Unit size	25kg bag	30 tonne silo / 1.4 tonne bulk bag	20kg bag	25kg bag	25kg bag	20kg bag	22kg tub	25 litre drum	25kg tub	20kg bag
Product yield	13.36 litres	16,090 litres / 745 litres	16.9 litres	13.9 litres	13.9 litres	11.6 litres	9.5 litres	25 litres	N/A	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 per single coat	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	6m <sup>2</sup> per litre	10m <sup>2</sup> per tub using 450 x 450 x 25mm flags (10mm joint)	5m <sup>2</sup> at 3mm depth
Minimum and maximum width/depth	10-75mm	10-75mm	N/A	5-50mm width, up to 200mm depth	3-50mm width, up to 200mm depth	5-25mm width, 25-100mm depth	5-50mm	N/A	3-20mm width, up to 30mm depth	3-20mm
Compressive strength	40N/mm <sup>2</sup> (28 days)	38N/mm <sup>2</sup> (28 days)	N/A	49.6N/mm <sup>2</sup> (28 days)	41.9N/mm <sup>2</sup> (28 days)	49.6N/mm <sup>2</sup> (28 days)	75N/mm <sup>2</sup> (7 days)	N/A	N/A	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)	45N/mm <sup>2</sup> ( 7 days)	N/A	N/A	> 1N/mm <sup>2</sup>
Suitable for	Paving in public realm, light, medium and heavily trafficked environments. Commercial driveways and paved areas. Recycled version is particularly suitable where a CEEQUAL or BREEAM assessment is going to be conducted	Paving in public realm, light, medium and heavily trafficked environments. Commercial driveways and paved areas. Ideal for larger schemes. Recycled version is particularly suitable where a CEEQUAL or BREEAM assessment is going to be conducted	Paving in public realm, light, medium and heavily trafficked environments. Commercial driveways and paved areas	Paving in public realm, light, medium and heavily trafficked environments. Commercial driveways and paved areas. Recycled version is particularly suitable where a CEEQUAL or BREEAM assessment is going to be conducted	Paving in public realm, light, medium and heavily trafficked environments. Commercial driveways and paved areas	Paving in public realm, light, medium and heavily trafficked environments. Commercial driveways and paved areas	Ideal for installing paving into recessed manhole covers, raised carriageways and other areas of high impact or exceptional loading	Suitable for use on most paving types and in most commercial environments, including town centres and pedestrianised areas. Can be used as a sand stabiliser to bond particles of jointing sand to one another. Second use is as a surface sealant; it forms a protective barrier to many common stain agents. Thirdly, Paving Guard prevents chewing gum adhering to the surface of paving	Suitable for use with most types of paving including natural stone, concrete, slate clay, terracotta and granite. It can be used on pavements and lightly trafficked pedestrianised areas with occasional vehicular use	For external use, for fixing brick slips and natural stone to a range of substrates including sand/cement render, brick and block work and can be used with external wall insulation systems

**Flowpoint ECO  
/ Pro-Bed HS ECO**  
Your Waste,  
Paving The Way  
To A Better Environment







An **INSTARMAC** Brand

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