

## ARCHITECTURAL STONework FLOORING & PAVING

Haddonstone offers a range of flooring and paving designs for interior and exterior use. Weight: 89kg per m<sup>2</sup> (18 lb per ft<sup>2</sup>)

For interior use, the conservatory and orangery flooring ranges are etched and a seal applied at our manufactory before dispatch. Both then require sealing by the client after installation.

Like quarried stone, Haddonstone can exhibit slight shade variations from piece to piece, reflecting the colour of the natural materials used in the production process.



### Conservatory Flooring

Suitable for indoor use. Standard sizes can be combined to create many different patterns.

HN722A: 300 x 300 x 25mm (11<sup>13</sup>/<sub>16</sub>" x 11<sup>13</sup>/<sub>16</sub>" x 1")

HN725A: 450 x 450 x 25mm (17<sup>3</sup>/<sub>4</sub>" x 17<sup>3</sup>/<sub>4</sub>" x 1")

HN726A: 450 x 225 x 25mm (17<sup>3</sup>/<sub>4</sub>" x 8<sup>7</sup>/<sub>8</sub>" x 1")

For exterior applications, see Smooth Paving on page 199.

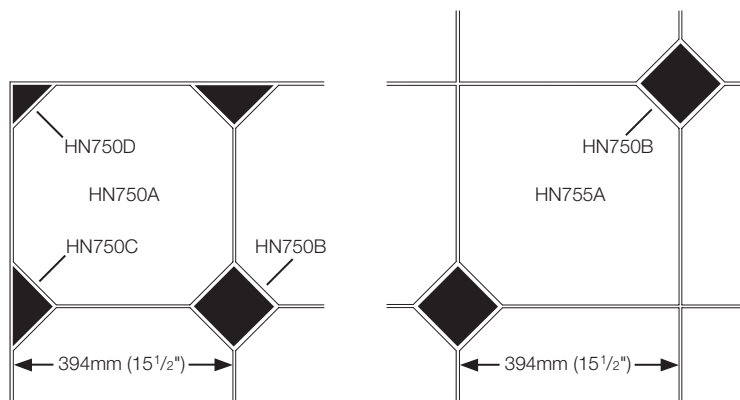


### Orangery Flooring

Suitable for indoor use. A traditional Victorian-style flooring system which can be seen to best effect if ordered in contrasting colours as shown above.

HN750A / HN755A: 394 x 394 x 38mm (15<sup>1</sup>/<sub>2</sub>" x 15<sup>1</sup>/<sub>2</sub>" x 1<sup>1</sup>/<sub>2</sub>")

HN750B: 102 x 102 x 38mm (4" x 4" x 1<sup>1</sup>/<sub>2</sub>")



# ARCHITECTURAL STONEWORK PAVING

## Textured Paving HN800/HN801/HN805

Haddonstone manufactures a range of paving with a subtle texture which is available in the following sizes:

HN800A: 600 x 600 x 38mm  
(23<sup>5</sup>/<sub>8</sub>" x 23<sup>5</sup>/<sub>8</sub>" x 1<sup>1</sup>/<sub>2</sub>" )

HN801A: 600 x 300 x 38mm  
(23<sup>5</sup>/<sub>8</sub>" x 11<sup>13</sup>/<sub>16</sub>" x 1<sup>1</sup>/<sub>2</sub>" )

HN802A: 300 x 300 x 38mm  
(11<sup>13</sup>/<sub>16</sub>" x 11<sup>13</sup>/<sub>16</sub>" x 1<sup>1</sup>/<sub>2</sub>" )

HN805A: 450 x 450 x 38mm  
(17<sup>3</sup>/<sub>4</sub>" x 17<sup>3</sup>/<sub>4</sub>" x 1<sup>1</sup>/<sub>2</sub>" )



## Riven Paving HN855

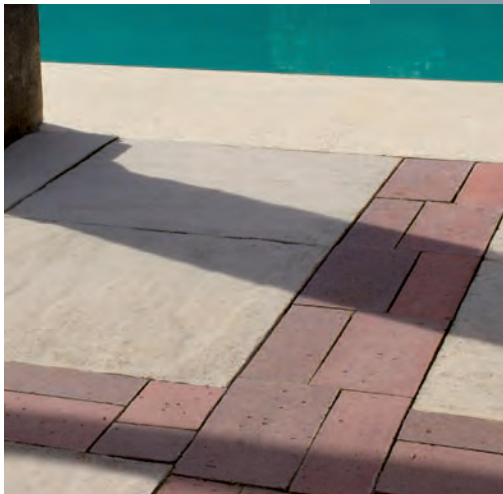
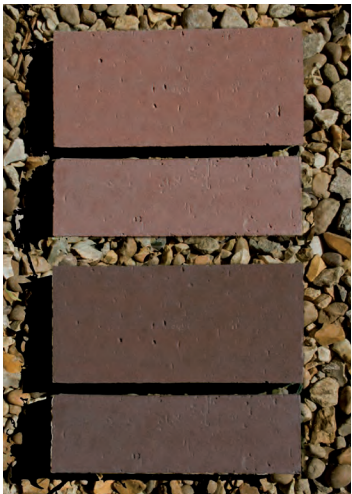
Customers can achieve a random effect by alternating the grain direction. In addition to the standard colours, Riven Paving is also available in York colour as shown above. Available in one size only:

Size: 450 x 450 x 38mm (17<sup>3</sup>/<sub>4</sub>" x 17<sup>3</sup>/<sub>4</sub>" x 1<sup>1</sup>/<sub>2</sub>" )

## Smooth Paving

Suitable for exterior use. Standard sizes can be combined to create many different patterns, see photograph page 200.  
For interior applications, see Conservatory Paving on page 198.

HN700A: 600 x 600 x 38mm (23<sup>5</sup>/<sub>8</sub>" x 23<sup>5</sup>/<sub>8</sub>" x 1<sup>1</sup>/<sub>2</sub>" )  
HN701A: 600 x 300 x 38mm (23<sup>5</sup>/<sub>8</sub>" x 11<sup>13</sup>/<sub>16</sub>" x 1<sup>1</sup>/<sub>2</sub>" )  
HN702A: 300 x 300 x 38mm (11<sup>13</sup>/<sub>16</sub>" x 11<sup>13</sup>/<sub>16</sub>" x 1<sup>1</sup>/<sub>2</sub>" )  
HN705A: 450 x 450 x 38mm (17<sup>3</sup>/<sub>4</sub>" x 17<sup>3</sup>/<sub>4</sub>" x 1<sup>1</sup>/<sub>2</sub>" )  
HN706A: 450 x 225 x 38mm (17<sup>3</sup>/<sub>4</sub>" x 8<sup>7</sup>/<sub>8</sub>" x 1<sup>1</sup>/<sub>2</sub>" )



## Haddon Pavers HN870/HN871

Haddonstone offers simple paver-style blocks that can be used to compliment the company's various paving ranges.

These are only available in two special colours: Brindle Red -10 (top) and Brindle Blue -11 (bottom), as illustrated, in the following sizes:

HN870A: 210 x 100 x 38mm (8<sup>1</sup>/<sub>4</sub>" x 3<sup>15</sup>/<sub>16</sub>" x 1<sup>1</sup>/<sub>2</sub>" )  
HN871A: 210 x 65 x 38mm (8<sup>1</sup>/<sub>4</sub>" x 2<sup>9</sup>/<sub>16</sub>" x 1<sup>1</sup>/<sub>2</sub>" )

### General Note: Paving

A well-laid foundation is essential for effective and lasting results. A fall of at least 1 in 60 is recommended. For a clean architectural appearance, the joints can be mortar-pointed. For a softer, natural appearance, paving should be laid edge to edge, unpointed, with sand brushed into the joints. This method also facilitates drainage. Cement and mortar stains are difficult to remove from paving so extreme care must be taken to keep surfaces clean. Four clear days should be allowed to elapse after construction before foot traffic is allowed over all laid areas. For vehicular traffic, special laying instructions are available on application.



## ARCHITECTURAL STONEWORK PAVING & STEPS

Haddonstone's standard paving and steps can be used to great effect in numerous garden and landscape applications.

Custom sizes can be created to meet customer requirements or the slabs can be cut on site by professional contractors.

Smooth Paving in custom sizes at the Army Air Corps Memorial, Hampshire.



HN1 Treads with HN3 Risers.



Terracotta coloured HN1 Treads with HN3 Risers.



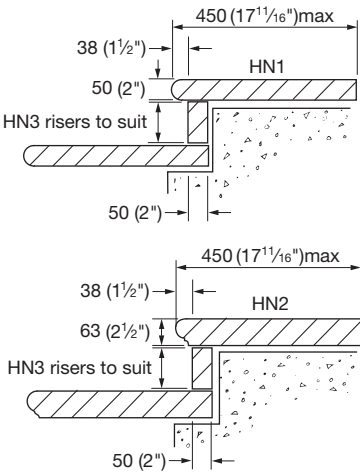


# Steps

**IMPORTANT:** Haddonstone steps must be continuously bedded.

Treads are available, as standard, in a plain bull nose or a moulded design as shown, in lengths of 1000mm (39<sup>3</sup>/<sub>16</sub>"") and in standard widths of 300mm (11<sup>13</sup>/<sub>16</sub>""), 375mm (14<sup>3</sup>/<sub>4</sub>"") and 450mm (17<sup>11</sup>/<sub>16</sub>""). These treads can be supplied with mouldings returned to left or right-hand ends. Square-edged risers are also available to suit. We have a range of curved treads and risers to meet individual requirements.

Treads and risers are produced in TecStone as standard.



HN1 Treads with HN3 Risers.



HN1 Treads with HN3 Risers.

# Spiral Steps

Haddonstone has introduced a spiral staircase that is both simple and elegant.

With the riser and locating ring being an integral part of each step, a complete staircase can provide a functional design solution for both traditional and contemporary projects. Designed for interior and exterior use, the steps are available in widths up to 1200mm (47 1/4").

We strongly recommend that professional advice is taken to ensure that any proposal is designed to be structurally sound. For further information please contact your nearest Haddonstone office.





# HADDONSTONE

## MATERIAL DATA SHEET

### TecStone® WET-CAST MATERIAL Samples marked "T"

Haddonstone Ltd., The Forge House, Church Lane, East Haddon, Northampton, NN6 8DB, UK.  
Tel: +44(0)1604 770711, Email: [info@haddonstone.co.uk](mailto:info@haddonstone.co.uk), Web: [www.haddonstone.com](http://www.haddonstone.com)



Haddonstone "TecStone"® Wet cast Limestone material consisting of over 60% large sized crushed limestone (up to 10mm particle size) together with fine crushed limestone and other fine aggregates. These aggregates are mixed together with white cement as the binder plus specialised admixtures and cement pigments if colours other than Portland are required. These admixtures include integral water proofers to reduce water absorption and specialised self-compacting additives. The consistency of the mix achieved is fluid to ensure that the mix penetrates into all the fine details of the mould.

Criteria	Technical Performance
Trade Name	Haddonstone "TecStone"®
Manufacturer	Haddonstone Ltd, The Forge House, East Haddon, Northampton, NN6 8DB
Material Density	2,350 kg/m <sup>3</sup>
Compressive Strength **	Minimum Compressive Cube Strength at 28 days is greater than 45 N/mm <sup>2</sup> (MPa)
Aggregate Size	0-10mm continuously graded
Finish	Light Acid Etched
Thermal Conductivity	1.63 W/mK
Water Absorption **	In accordance with UKCSA Technical Manual and BS 1217:2008, last 12 months testing no result above max permitted mean of 1.0mg/mm <sup>2</sup> nor any individual result exceed 1.3mg/mm <sup>2</sup>
Slip Resistance	"Smooth" Finish Paving tested to BS EN 1339 Unpolished Slip Resistance Value (USRV) was average 86: "Extremely low" potential for slip. Surface Micro-roughness test (Rz) was average 33.3µm: "Low" potential for slip.
Fire Resistance	Non-Flammable, Non-Combustible, does not give off Toxic Gases Reaction to Fire: Euroclass A1
Freeze / Thaw Resistance	Complies with UKCSA Standards so products deemed Freeze/Thaw Resistant
Handling Reinforcement	Where appropriate units may contain one or more high tensile, stainless steel, synthetic fibre or extruded Basalt reinforcement bar (30mm minimum cover)
Cast In Lifting Sockets available	Yes (on request) - Stainless Steel to BS EN 1090 and CE Marked
Cast In Fixings available	Yes (on request) - Stainless Steel to BS EN 1090 and CE Marked
Structural Reinforcement available	Yes (on request) - subject to submittal of Structural Engineers design
Colours Available	Portland, Bath, Ivory Limestone, Slate, Terracotta, Coade (special colour match service also available)

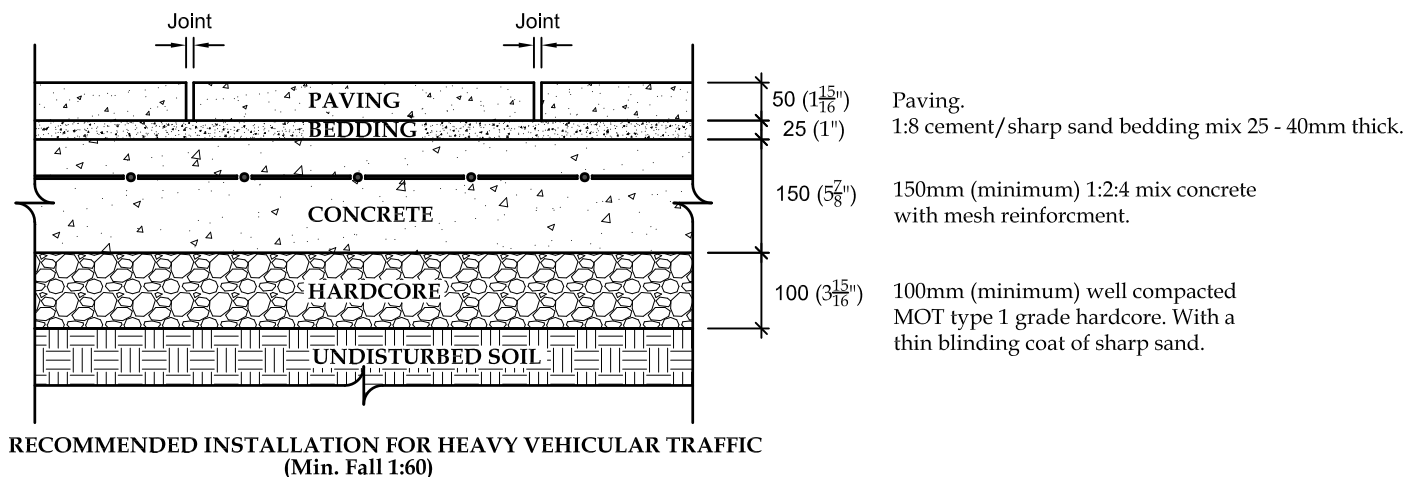
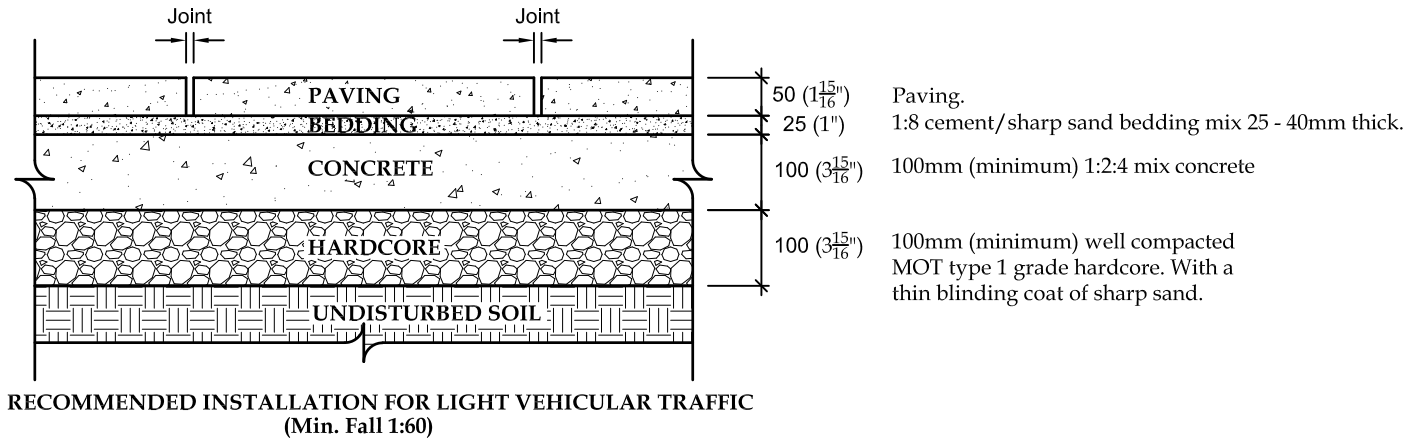
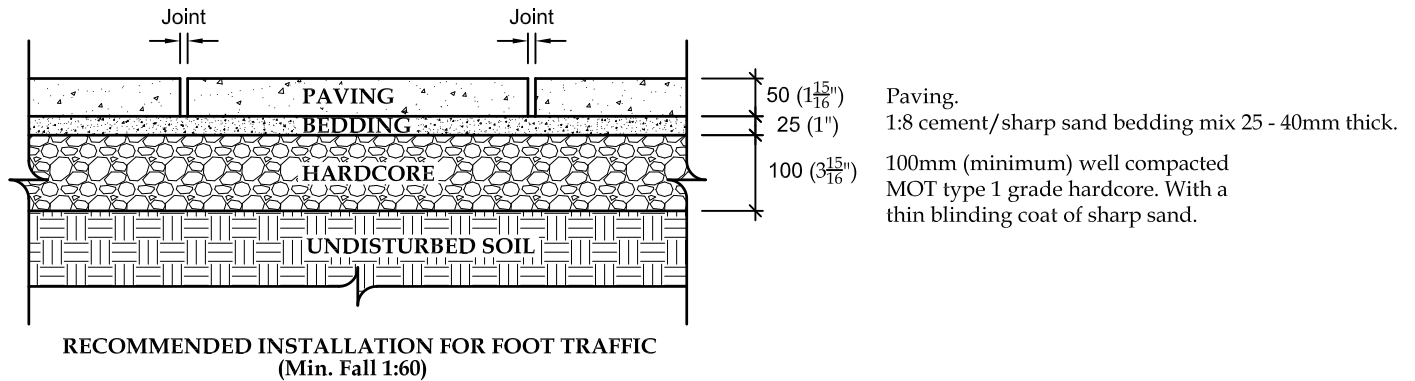
**\*\* Testing is carried out in house, or periodically by outside independent laboratories in accordance with UKCSA standards**

For a full list of standards please refer to UK Cast Stone Association (UKCSA), of which Haddonstone is a Full Member:  
This Technical Data Sheet was produced by Haddonstone Ltd, The Forge House, East Haddon, Northampton, NN6 8DB, United Kingdom. At the time publication all information to our knowledge is specified correctly. The company reserves the right to change the specification of the product at any time without prior notice to third parties.





### PAVING INSTALLATION RECOMMENDATIONS



Haddonstone paving is not a pressed product, each paving slab is individually poured into a dedicated mould, resulting in minor variations of thickness. Given these minor variations, Haddonstone paving is not suitable for paving support systems, or being laid onto a screeded bed. It is recommended that each paving slab is bedded individually with a 6mm ( $\frac{1}{4}$ " ) minimum joint between each slab to accommodate manufacturing tolerances, and **never** installed with butt joints.

To improve adhesion and prevent reflective staining, it is recommended that the back of the paving slab is coated with a primer/bond coat prior to bedding.

Reflective staining is a result of migration of moisture and mineral through porous paving from the bedding mix, which results in permanent staining of the finished face.

Proprietary primers/bond coats are available.

Recommended minimum fall 1:60 for paving

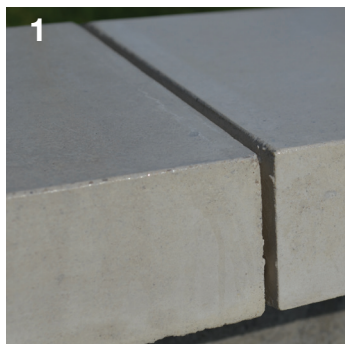


# HADDONSTONE

## TECSTONE POINTING RECOMMENDATIONS

Required: pointing mix, pointing trowel, masking tape (if required), mixing bowl, water, sponge.

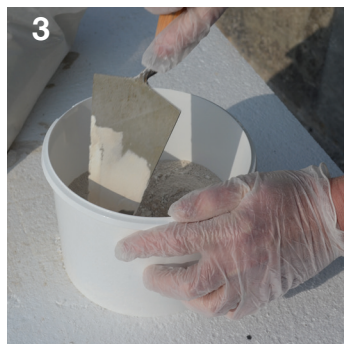
Please note: all text and photographs relate to TecStone pointing mix.



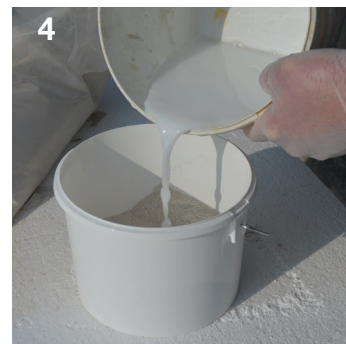
1  
Before pointing ensure each 6mm ( $\frac{1}{4}$ " ) joint is free from loose particles. Avoid pointing in extreme conditions, particularly wet and cold.



2  
The TecStone pointing mix is supplied as separately bagged cement and aggregate with an information leaflet.



3  
The cement and aggregate should first be mixed together dry in the ratio of 1 part cement to 4.5-6.5 parts aggregate.



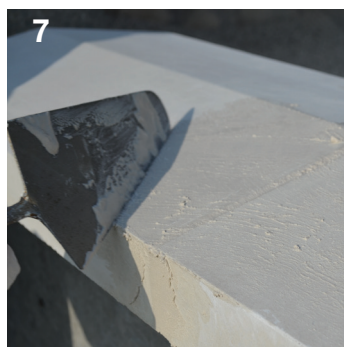
4  
Carefully add small quantities of water to the TecStone pointing mix, mixing thoroughly to ensure the water is fully dispersed. \*See note below.



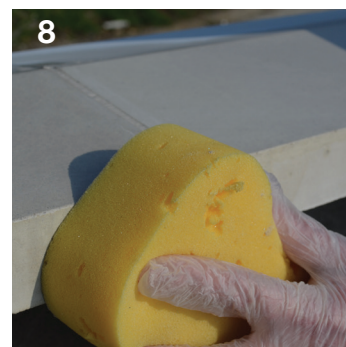
5  
The TecStone pointing mix is ready to use when it has the consistency of putty. \*See note below.



6  
Scoop the mix into the joint, pressing with a trowel to ensure an even fill.



7  
Smooth the pointing mix to the profile of the stone, removing any excess pointing mix.



8  
Wipe over the surface of the joint and surrounding area with a dampened sponge to remove all surplus pointing material off the surrounding areas and ensure a flush finish to the joint.



9  
If necessary trowel over the joint once more to ensure a flush finish.



10  
Any mix residue may be rubbed away with fine abrasive paper 2-3 days after completion.



11  
The finished joint.

\* NOTE: It would be advantageous to use a waterproofing additive in the mixing water (SBR or other proprietary mortar admixture). The use of too much water can lead to the pointing mix colour and texture becoming unsightly, and the possibility of the mix bleeding into the adjacent cast stone.

### Haddonstone Ltd

The Forge House, East Haddon, Northampton NN6 8DB, England  
Telephone: 01604 770711 Fax: 01604 770027 [info@haddonstone.co.uk](mailto:info@haddonstone.co.uk)

### Haddonstone (USA) Ltd

32207 United Avenue, Pueblo, CO 81001, USA  
Telephone: 719 948 4554 Fax: 719 948 4285 [stone@haddonstone.com](mailto:stone@haddonstone.com)

[www.haddonstone.com](http://www.haddonstone.com)