

DATASHEET

## Installation guide **Stone Heads**





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Decorative heads are not load bearing therefore suitable support will be required. The supporting lintel will be visible on the soffit. It is important to maintain the free movement of the head by separating it from the supporting steel and surrounding brickwork. Decorative heads over 1500mm will generally be supplied in pieces.

## Laying the lintel.

Follow the lintel manufacturers installation advice.

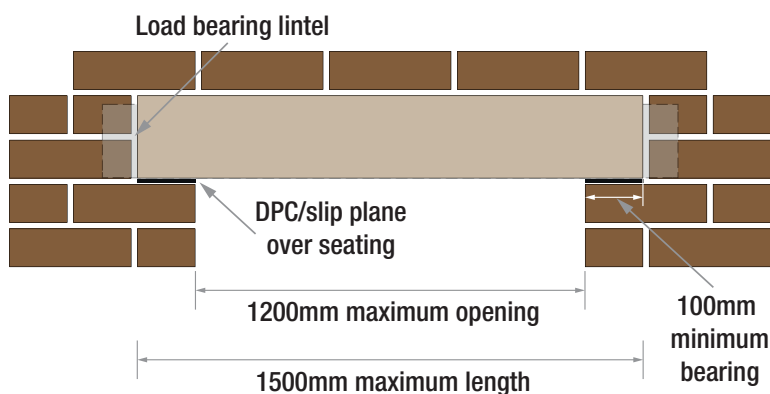
1. Lintels should be installed with a minimum end bearing of 150mm, bedded on mortar and levelled along its length and across its width.
2. Raise the inner and outer leaves simultaneously to avoid excessive end loading, the masonry should be laid on a mortar bed and all perpendicular joints should be filled.
3. The external lintel flange must project beyond the window/door frame and it is recommended that a flexible sealing compound is used between the underside of the lintel flange and the frame.
4. In accordance with BS EN 1996-2 and NHBC requirements all external wall lintels must be installed with a flexible DPC (with the exception of those adequately protected by an eaves overhang or similar form of protection). Stop ends should be provided to avoid moisture entering the cavity near the reveals.
5. Form an integral stop end at the end of the head or incorporate proprietary stop ends. Provide weep holes at each end and at joints in the head if supplied in pieces. Place DPC slip plane along full length.

## Laying the decorative head and secondary DPC.

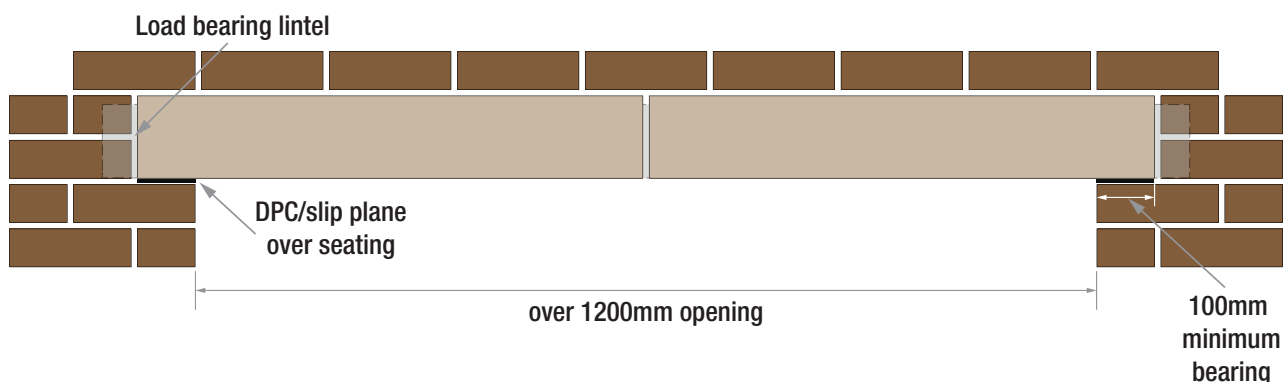
1. Mortar the head onto the slip plane on a full bed of mortar but leave the ends clear.
2. Lay DPC slip plane then the second cavity tray with stop ends extending to a suitable mortar perpendicular joint to suit the brickwork course above.
3. The DPC cavity tray should extend a minimum 150mm up toward the inner leaf.
4. Ensure weep holes are positioned at each end and at additional recommended spacings when required.
5. Lay surrounding brickwork on a full bed of mortar on top of the slip plane as normal ensuring it is in line and plumb.
6. To maintain free movement at the end of the head insert backing cord above weep vent and apply flexible sealant to match.

Generally, when laying cast stone products mortar strength should not exceed designation (iii), 1:1:5/6 cement:lime:sand proportional mix.

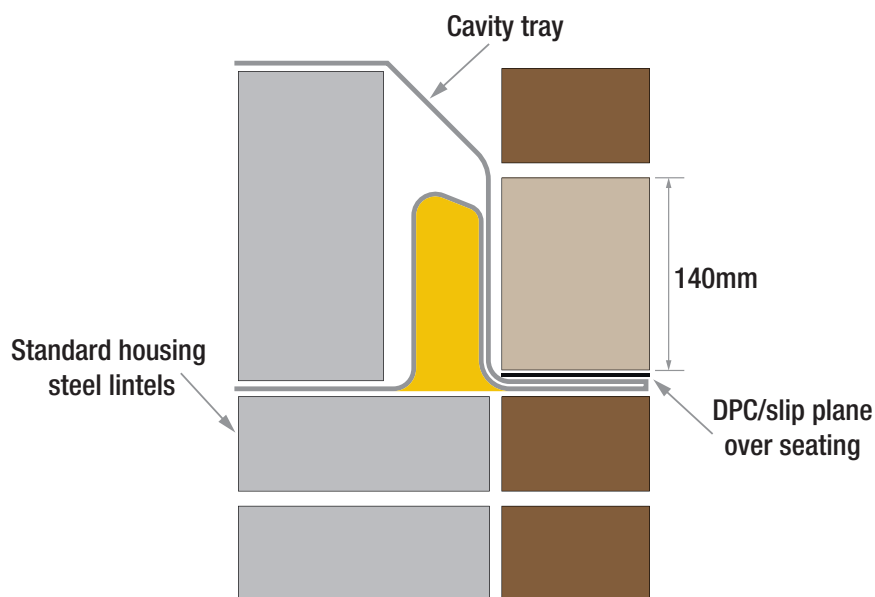
The use of lime is desirable to accommodate movement. Mortar no stronger than strength class M4 can be specified however movement may be restricted if lime is not a constituent element. Cracking can occur if mortar of a higher strength than recommended is used or if movement of the cill is restricted by mortar pointing.



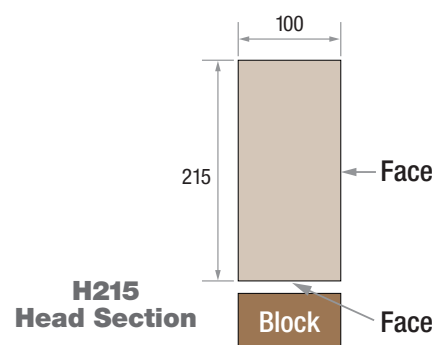
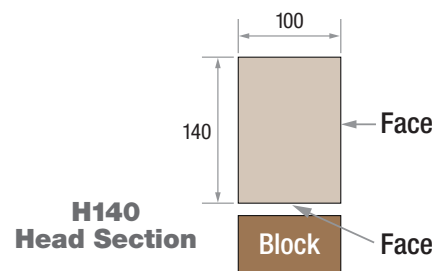
Bekstone Cast Stone Heads are decorative and should be used in conjunction with a suitable load-bearing lintel. To reduce the risk of cracking, the head should be fully bedded on mortar along the entire length of load-bearing lintel. This ensures that any load above the head is fully and evenly distributed on the load-bearing lintel.



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**Installation of cast stone should ONLY be carried out by experienced operatives.**



## Technical Data

All cast stone units are manufactured to BS EN 771-5 (units with all dimensions 650mm or less and not containing reinforcement or fixings).

All units are decorative and are not designed to be load bearing. The structural stability of all units in their finished state should be approved by the structural engineer carrying out the overall design for the project. Wind loading on large window features, sections of stonework, supporting lintels and fixings to cast stone units should also be considered early in the design process.

Due care and attention should also be given to the differential shrinkage and expansion rates between clay and cast stone units when employed in combination. Site operatives must be made aware of the need to support and protect all cast stone units in their temporary state to negate the risk of any load being implied upon them whilst construction is taking place for example window heads.

Consideration must be given to the creation of suitable movement control joints for cast stone. Generally, they should be spaced at a maximum of 6m centres.

### Compressive Strength:

Units to BS EN 771-5:2011 are Category 1 with a mean normalised compressive strength of 25N/mm<sup>2</sup> (perpendicular to the bed face)

### Gross Dry Density:

2000kg/m<sup>3</sup> Tested to BS EN 772-13

### Thermal Conductivity:

1.00W/mK (λ10,dry,unit, S1)  
based on table value from BS EN 1745

### Water Absorption:

p=50%

### Freeze Thaw Resistance:

As Table 15 of PD6697:2010

### Recycled Content:

None

### Tolerance Category:

D1 (±2mm for length & height)



*In keeping with our policy of continual product development, Bekstone reserves the right to alter any specification shown. All products are made from naturally occurring materials and as such, colours depicted are as accurate as photographic and printing process allow. All content is for guidance only with weights and measures being approximates. All recommendations and suggestions made do not constitute a guarantee.*

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