

Please pass this information to site fixing Manager

HJA Secret Fix... the wall capping system

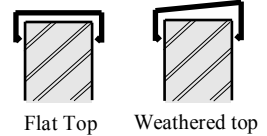
Description: HJA Secret Fix is a fabricated aluminium capping system designed for fixing to the top surface of free standing

walls & parapets on all buildings. The product is designed to give a visual finish & also prevent water ingress into the wall structure.

Design : HJA Secret Fix is a branded system & custom made in a range of size parameters for individual buildings.

All components are produced from aluminium to prevent bimetal corrosion.

Components: Wall Capping: Straight OR curved-on-plan standard lengths
 Size options: Width: 300 to 750 mm. Height : 100 to 300 mm
 Capping lengths : 1250 / 1500 / 2000 / 2500 / 3000 mm
 Optional *Flat* or *Weathered* top surface.



Corner Capping: Fabricated to specific size. Angles from 0 to 179 deg.

General Fixing Notes. See also HJA Secret Fix product literature.

Positioning & fixing the wall brackets : See sketches below

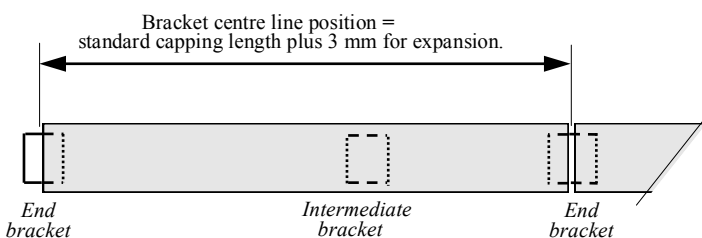
The channel shaped aluminium wall brackets should be fixed to the top surface of the walls.

The upper surface of each bracket should be in line with all other brackets along the complete length of the wall.

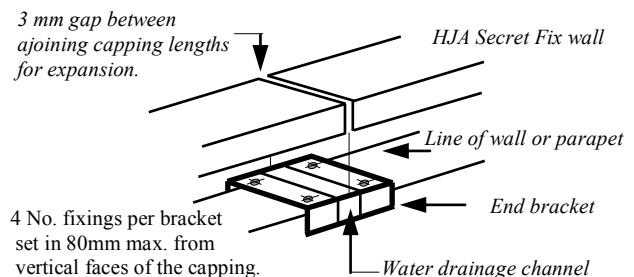
Number of brackets required: See sketch below

Each length of wall capping is clip-fixed to 2 no. wall brackets positioned to support the ends of adjoining lengths of capping. The bracket centre line positions must therefore be set out to match the lengths of capping being used plus an extra 3 mm allowance for expansion.

Depending on the wind loading requirement for each installation wall capping lengths may require additional intermediate brackets. All brackets are identical in design. For further information please contact 01905 820393 / 01905 820305



Note: The number & position of intermediate brackets depends on wind loading requirements.



Standard wall capping length showing bracket positions.

Joint between 2 no. lengths of HJA Secret Fix wall

IMPORTANT :

The wall capping joints must be positioned directly over the centre line of a wall bracket. This enables the water drainage channel in the wall bracket to safely drain away any ingress of water from the capping joints.

Do not drill any holes in the wall bracket central drainage channel.

To secure the wall brackets to the walls each bracket requires 4 No. fixings **positioned a max of 80 mm** from each vertical face of the wall capping. See sketch

Fitting Corner capping :

2 no. standard wall fixing brackets required for each corner capping. Fitting procedure similar to straight lengths of capping. Corner cappings over 400 mm wide require an additional single sided wall bracket to secure the outer corner to the wall.

Fitting wall capping to brackets :

The capping lengths are located over the top of the wall & finally press-clipped down onto the brackets. No other fixings are normally required.

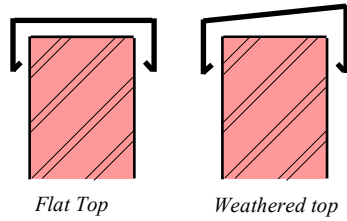
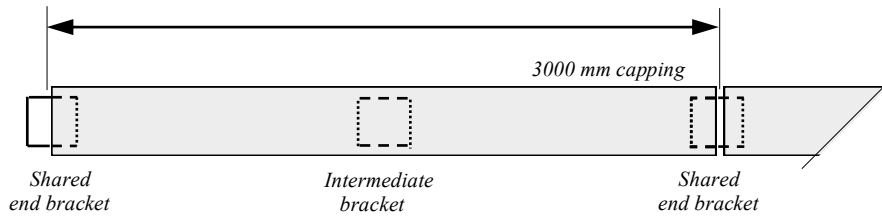
Extra resistance will be felt when pressing into the final position due to the capping bedding down onto flexible weather sealing gaskets on the top & sides of the wall brackets. This is a built in design feature & keeps the clip location in position.

Remember to leave 3 mm clearance between each length of capping for expansion.

IF IN DOUBT PLEASE ASK

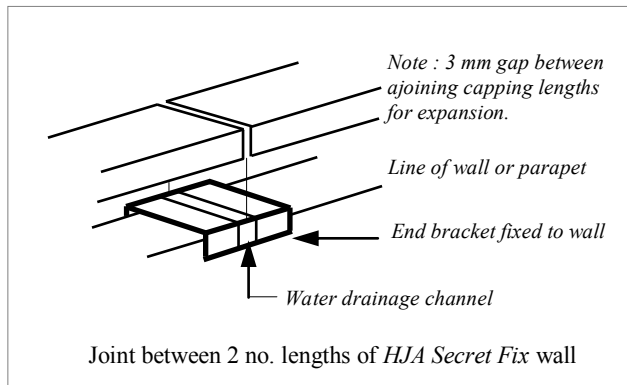
Data sheet: PC/01408

Bracket centre lines 3003 mm for standard 3000 mm length wall capping



Plan of wall cappings showing bracket positions.

Walcapping shape options.



Joint between 2 no. lengths of HJA Secret Fix wall

**DO NOT DRILL holes in this
water drainage channel**

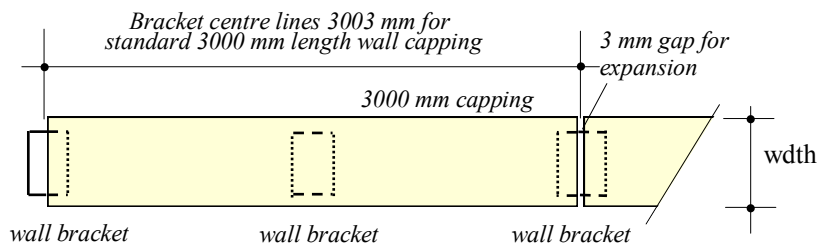
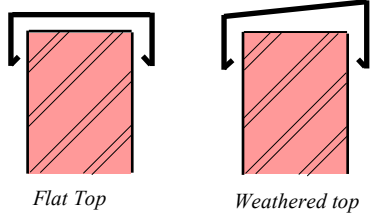
HJA Secret Fix *Wall capping*

**DO NOT DRILL holes in this
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HJA Secret Fix *Wall capping*



Drawings for HJA Secret Fix 2 page leaflet

PRODUCT TEST SHEET :

Product:

HJA Secret Fix Aluminium capping for walls & parapets

Description: *HJA Secret Fix* is a fabricated aluminium capping system designed for fixing to the top surface of free standing walls & parapets on all buildings. The product is designed to give a visual finish & also prevents water ingress into the wall structure.

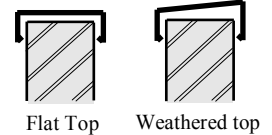
Design : *HJA Secret Fix* is a branded system & custom made in a range of size parameters for individual buildings. All components are produced from aluminium to prevent bimetal corrosion.

Components: The system components include :

Wall Capping: Straight OR curved-on-plan standard lengths
Size options: Width: 300 to 750 mm. Height : 100 to 300 mm
Capping lengths : 1250 / 1500 / 2000 / 2500 / 3000 mm
Optional Flat or Weathered top surface.

Corner Capping: Fabricated to specific size. Angles from 0 to 179 deg.

Wall brackets: Extruded alum. secret fix brackets with weather sealing gaskets.



General information:

Extruded aluminium brackets are securely fixed to the upper surface of walls at pre determined positions and lengths of aluminium wall capping sized to suite specific buildings are then clip fixed onto the brackets for a secure and clean appearance. No fixings are visible when the system is installed.

The brackets have sealing gaskets to prevent the ingress of water through the capping joints and also eliminate wind rattle.

TEST DATA: *HJA Secret Fix* has been designed & independently tested for both mechanical and UK wind loading requirements .

Introduction:

An aluminium wall capping system was tested under simulated wind suction load when fixed with two thickness of brackets.

Results:

The maximum load achieved by the capping with each bracket thickness is given in Table 1 along with the mode of failure and the equivalent wind speed. (Load deflection is given in Charts 1 and 2 are not shown on this sheet for clarity)

TABLE 1 Maximum loads achieved by capping System with Two Bracket Thickness.

Bracket Size (mm)	Maximum Load kN/m ²	Wind speed (m/sec)	Loads per fixing (N)	Mode of failure
120 mm	1.52	49.8 m/sec	428	Bending out bracket. Cantilevered out from fixing position.
142 mm	2.56	64.6 m / sec	720	

It must be noted that the capping remained fixed to the brackets even at failure no detachment of the capping occurred. The 2.75 mm bracket achieved simulated wind suction load of 2.56 kN/m² and the 1.8 mm bracket achieved 1.52kN/m².

According to CP3 Chapter V, 1.68 kn/m² is the maximum wind load expected in the Outer Hebrides once every 10 years at 10m above sea level. Although CP3 has been replaced by BS6399 this is still a good guide as to the required performance of the capping system under extreme load.

Design Loading capability:

The test results above show loads at failure for max available capping size of 750mm wide. When a safety factor of 0.5 is applied to the max wind speed the max design load capability of the capping is as follows.

64.6 m/sec at failure at 1.5 safety factor = 43.0 m / sec max wind load = 155 kmh or 96mph (Gale force winds are 40mph.)

Fixings:

The method of fixing wall brackets to the building structure must be capable of with standing the loads shown in Table 1. The loads show a value for each fixing. A minimum of 2 No. fixings required for each bracket.

Read in conjunction with product data sheet . For further information please ask

PRODUCT TEST SHEET :

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Average wind speed in UK is in the order of 5 to 18mph. Gale force winds are 40mph.

Max load on Wall capping 71mph with a safety factor of 2.

Fixings:

The method of fixing wall brackets to the building structure must be capable of with standing the loads shown in Table 1. The loads show a value for each fixing. A minimum of 2 No. fixings required for each wall bracket.

Read in conjunction with product literature & data sheet . For further information please ask