

# ACS 3000 Range Tie

- ✓ **Multi-Purpose Frame Cramp**
- ✓ **De-Bondable**
- ✓ **BS EN 845-1 compliant**
- ✓ **Structure – Masonry**
- ✓ **Austenitic Stainless Steel** (Grade 304)
  - Asymmetrical tie
- ✓ **0 – 187.5mm Cavity**
  - Material Reference 3
- ✓ **CE marked** (EN 845-1)
- ✓ **Lucideon Tested**



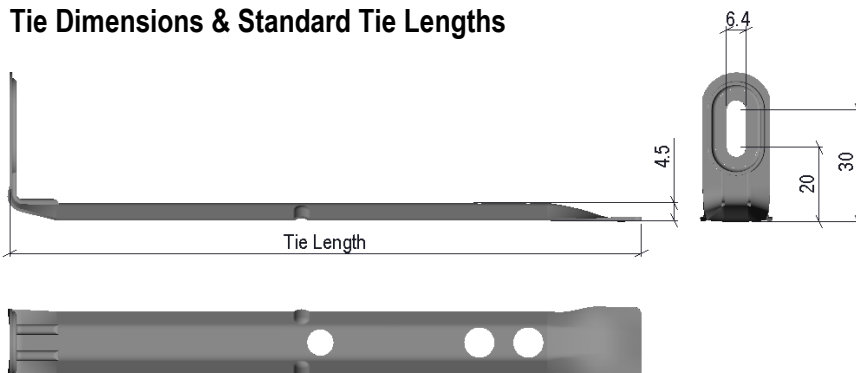
Approved (Type B)



## Technical Data

The ACS 3000 range tie is a multi purpose frame cramp designed in accordance with the requirements of BS EN 845-1. The tie is designed to allow a masonry panel to be tied back to a range of structures/substrates meaning one tie can fulfil a range of applications on site. The advanced punched and pressed profile of the tie means that it is capable of withstanding high loads as a result of its increased sectional properties. The tie is resistant to water crossing a cavity due to the integrated 'drip' features that serves to prevent the transgression of water from the outer leaf to the inner leaf of a building even when installed with an angle of up to 5° in an unfavourable direction. A standard de-bonding sleeve can be supplied for use at movement joints. The minimum mortar joint thickness for which this tie is intended for use is 10mm.

## Tie Dimensions & Standard Tie Lengths



Nominal cavity width mm	Tie length mm
0 – 20	75
21 – 45	100
46 – 70	125
71 – 95	150
96 – 120	175
121 – 145	200
146 – 170	225
171 – 187.5	250

For further information or technical assistance please contact the ACS Technical Department on 0870 850 0860 or email [technical@acsstainless.co.uk](mailto:technical@acsstainless.co.uk)

**LEEDS**  
Cross Green Approach  
Cross Green Industrial Park  
Leeds LS9 0SG  
  
Tel: +44 (0)113 391 8200  
Fax: +44 (0)113 391 8209

**LONDON**  
Crown House  
Home Gardens  
Dartford  
  
Tel: +44 (0)1322 424 510  
Fax: +44 (0)1322 424 504

**GLASGOW**  
Festival House  
150 Brand Street  
Glasgow G51 1DH  
  
Tel: +44 (0)141 314 0048  
Fax: +44 (0)141 314 0026



# Technical Data Sheet

## Installation & Best Practice

Wall ties should typically be installed at a density of at least 2.5 ties/m<sup>2</sup> for walls in which both leaves are thicker than 90mm. This can be achieved by spacing the ties at 900mm horizontal centres and 450mm vertical centres, staggered at alternate courses.

Wall ties should be evenly distributed over a wall except around openings or at an un-bonded panel edge where the tie density should be increased to 225mm vertical centres within 225mm of the opening or edge.

The length of the tie should be sufficient to allow an embedment of at least 62.5mm meaning that the minimum embedment of 50mm is always achieved after allowing for site tolerances.

## Recommended Fixings

Substrate or Structure	Recommended Fixing
Concrete	M6 S/S Coach Screw & SX8 Plug
	M6 S/S Expansion Anchor
Steel	M5.5 BZP Self Drilling Tech Screw
Block	M6 S/S Coach Screw & SX8 Plug
Timber	M6 S/S Coach Screw
	Nº 12 Posi Pan Head S/S Wood Screw

ACS can supply a range of corrosion resistant fixings to suit various applications. The list in the table above represents typical fixings used. For more information or alternative fixings please contact the ACS Technical Department.

## Declared Load Capacity

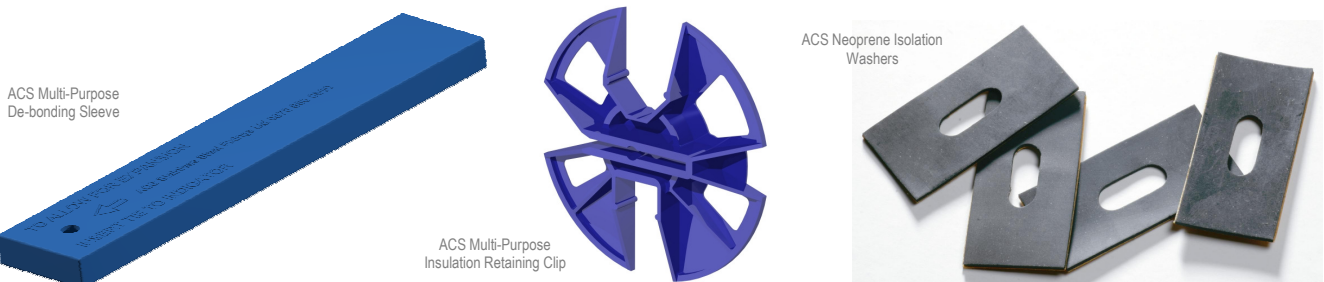
The ACS 3000 Range Tie has been tested in accordance with BS EN 846-6 for the determination of tensile and compressive load capacity and load displacement characteristics of wall ties (single end test). Based on the results from the tests the capacities declared in the table below were established.

Fixing Position in Slot	Tensile load capacity N	Compressive load capacity N	Shear load capacity N
Top	500	1160	500
Middle	790	1160	1000
Bottom	1000	1160	1500

## Dynamic Stiffness

Tests performed at Lucideon proved that the 3000 range tie has a measured dynamic stiffness of 8.8MN/m<sup>3</sup> in a 100mm cavity and therefore is classed as a Type B tie in line with guidance of Approved Document E of the Building Regulations.

## 3000 Range Accessories



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Tel: +44 (0)141 314 0048  
Fax: +44 (0)141 314 0026

