Technical Data Sheet

ACS Two Part Tie

- ✓ Type 2 Capacity (PD 6697: 2010) (Up to 300mm Cavity)
- **✓** Austenitic Stainless Steel (Grade 304)
- ✓ CE Marked (EN 845-1)
- ✓ CERAM Tested
- ✓ Masonry Masonry Tie
- √ 150-400mm Cavities





Technical Data

The ACS Two Part tie is a standard duty cavity wall tie designed to exceed the requirements of a Type 2 Tie up to a 300mm cavity as described in PD 6697: 2010 when installed in line with the following guidance. The tie is resistant to water crossing a cavity due to the unique connection feature. This feature serves to prevent the transgression of water from the outer to the inner leaf of a building even when installed with an angle of up to 5° in an unfavourable direction. The minimum mortar joint thickness for which this tie is intended for use is 10mm.

Compressive 300 1452 1300 Tensile 1860 1800 Compressive 1040 1300 Tensile 1860 1800	Test Results	Mode of Test	Max Cavity (mm)	Maximum Declared Value (N)	BS EN 845-1 Required Value (N)	Mortar Class
Tensile		Compressive	200	1452	1300	
Tensile 400 1860 1800		Tensile	300	1860	1800	M2 (iv)
Tensile 400 1860 1800		Compressive	400	1040	1300	
		Tensile	400	1860	1800	

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Installation

Cavity walls constructed with a large clear cavity can often be problematic when the inner and outer leaves are built independently. Issues with overturning of blocks due to the weight of the tie and maintenance of a horizontal level may arise.

It is also advisable to avoid using long protruding ties when building the outer leaf separately to the inner as they may cause injury and are susceptible to damage.

The two-part tie allows a separate inner section to be built into the block or internal leaf, leaving a short slotted connection exposed for the connection of the outer sections, which are installed during the construction of the outer leaf. The standard inner sections are available in two standard lengths, either 170mm or 220mm in length to suit a maximum insulation board thickness of 70 or 120mm consecutively (alternative lengths are available upon request). The two-part tie requires an embedment of 62.5mm into the bed joint in both leaves. The outer sections are available in a range of lengths to suit cavities from 150 - 400mm

Tie Density & Spacing

Wall ties should typically be installed at a density of at least 2.5 ties/m2 for walls in which both leaves are thicker than 90mm. ACS recommend spacing the ties at 900mm horizontal centres and 450mm vertical centres staggered at alternate courses up to a 300mm cavity and 600 x 450mm at larger cavities to maintain a Type 2 load capacities at the larger cavities.

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.



ACS Multi-Purpose Insulation Retaining Clip

For further information or technical assistance please contact the ACS Technical Department on 0870 850 0860 or email technical@acsstainless.co.uk

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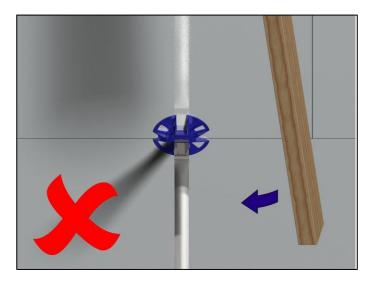
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Best Practice

Care should be taken when cleaning mortar drops and debris from the ties after installation. DO NOT strike the ties from the side to avoid opening the jointed connection. Test data has proved the ties have a good resistance to low-level lateral impact but recommend that it be avoided where possible to maintain the ties structural integrity.

Tie References

Tie Reference	Cavity Range (mm)	Outer Length for 170mm Inner (mm)	Outer Length for 220mm Inner (mm)
ACSTPT/150	*150	139	89
ACSTPT/175	151-175	164	114
ACSTPT/200	176-200	189	139
ACSTPT/225	201-225	214	164
ACSTPT/250	226-250	239	189
ACSTPT/275	251-275	264	214
ACSTPT/300	276-300	289	239
ACSTPT/325	301-325	314	264
ACSTPT/350	326-350	339	289
ACSTPT/375	351-375	364	314
ACSTPT/400	376-400	389	339

* For smaller cavities use the ACS 2000 range heavy-duty cavity tie

