Technical Data Sheet

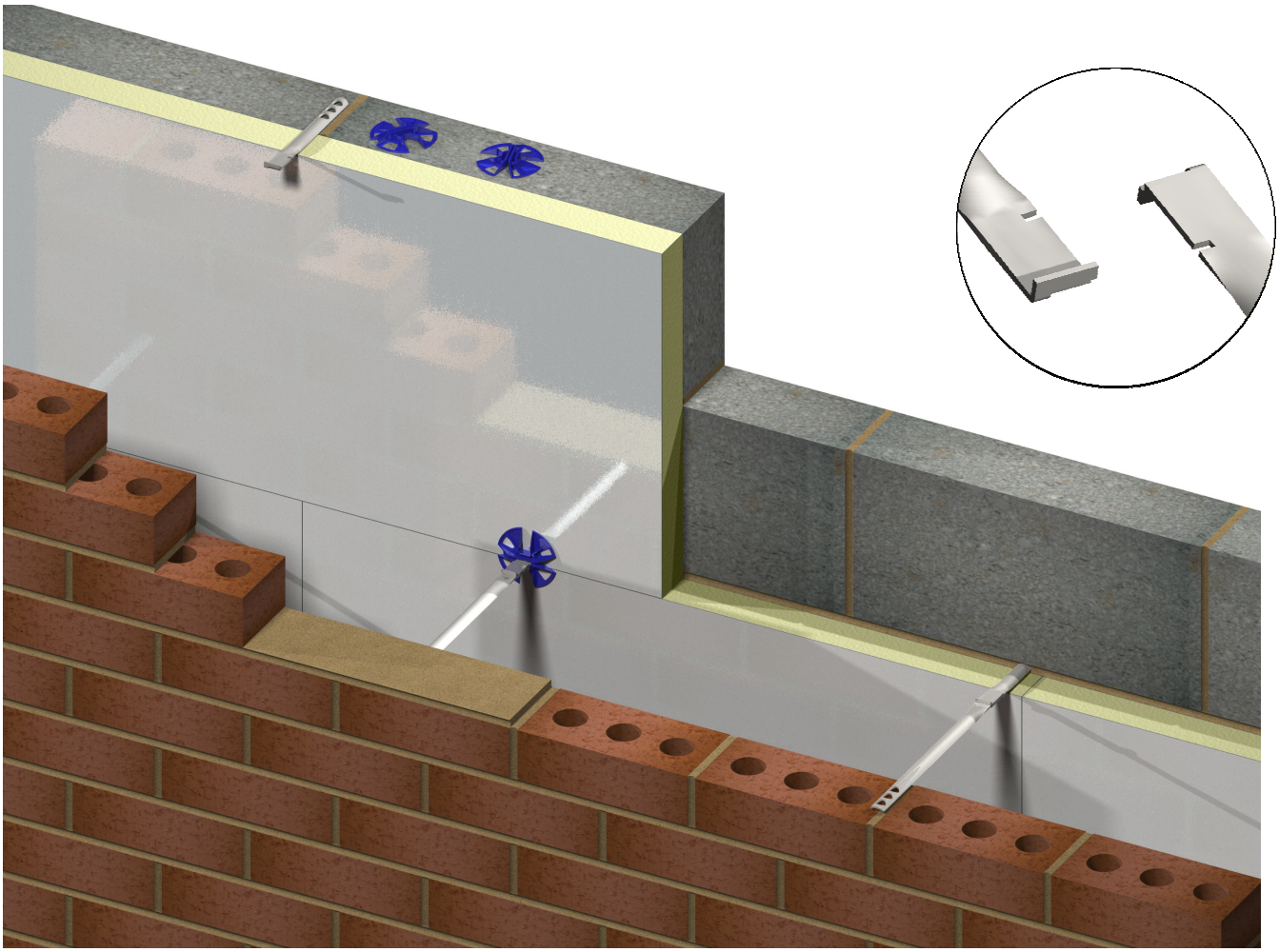
ACS Two Part Tie

- ✓ **Type 2 cavity wall tie**
- ✓ **BS EN 845-1:2003 compliant**
- ✓ **Masonry – Masonry**
  - Symmetrical tie
- ✓ **Austenitic Stainless Steel**
  - Grade 304 - Material Reference 3
- ✓ **150 – 400mm Cavity**

Technical Data

The ACS Two Part tie is a multi purpose cavity wall tie designed to exceed the requirements of a type 2 tie as specified in BS EN 845-1: 2003 and DD140. The tie is resistant to water crossing a cavity due to the unique connection feature 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. The minimum mortar joint thickness for which this tie is intended for use is 10mm.

Minimum mortar class and designation	Tensile load capacity N	Compressive load capacity N
M2 (iv)	1800	1300



For further information or technical assistance please contact the ACS Technical Department on 0844 850 0860 or email 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

ACS
inner strength in construction

Technical Data Sheet

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.

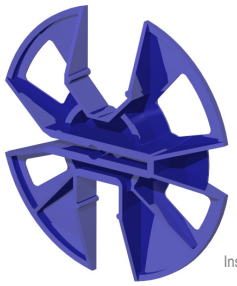
The two-part tie allows a separate inner section to be built into the block or internal leaf, leaving a short slotted connection exposed for the connection of the outer sections, which are installed during the construction of the outer leaf. The standard inner sections are available in two lengths, either 170 or 210mm in length to suit a maximum insulation board thickness of 50 or 100mm consecutively. The two-part tie requires an embedment of 75mm 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

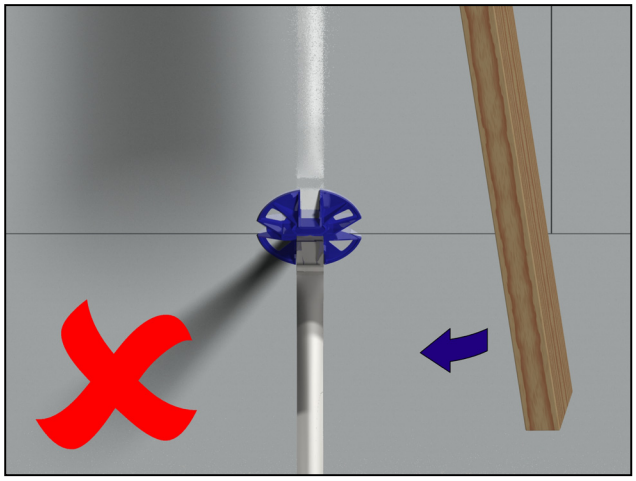
Wall ties should typically be installed at a density of at least 2.5 ties/m^2 for walls in which both leaves are thicker than 90mm. ACS recommend spacing the ties at 600mm horizontal centres and 450mm vertical centres, staggered at alternate courses.

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.

Additional Associated Products



ACS Multi-Purpose Insulation Retaining Clip



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	Suitable Cavity Range (mm)	Outer Length 170mm Inner (mm)	Outer Length 220 Inner (mm)
TPT150	*150	130	80
TPT175	151-175	155	105
TPT200	176-200	180	130
TPT225	201-225	205	155
TPT250	226-250	230	180
TPT275	251-275	255	205
TPT300	276-300	280	230
TPT325	301-325	305	255
TPT350	326-350	330	280
TPT375	351-375	355	305
TPT400	376-400	380	330

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

For further information or technical assistance please contact the ACS Technical Department on 0844 850 0860 or email 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

ACS
inner strength in construction