

# Thor Drive Fix Tie 7mm & 9mm

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## Features

The Thor Drive Fix Tie - Unique helical slim design 304 stainless steel bar, that self-taps directly into a small pilot hole drilled into the substrate, requires no bonding agent or mechanical expansion. Provides a quick and simple stress free fixing with the minimum of disturbance. Helical design provides multiple drip points, rotational flexibility and accommodates normal building movement. Usable in all weather temperatures and environments. Comprehensively used tested and proven.

## Application

- For tying and pinning masonry
- Effective in, brick, block, concrete, hard mortar, timber, hollow materials and delicate masonry.
- Quick and easy to install



## Method Statement

1. Mark the area to be tied with the approved drilling pattern.
2. Drill 5mm (for 7mm ties) 7mm (for 9mm ties) Pilot Holes through the outer leaf into the inner leaf to the appropriate depth. Minimum 70mm
3. Install the Drive ties through the pilot holes using a Thor Drive fixing tool attached to a 2.5KG SDS hammer drill.  
**Note.** The tie should be long enough to allow a minimum embedment of 70mm to the inner leaf with a tie countersink depth in the outer leaf of 10mm.
4. Make good the installation holes using colour matched mortar or mastic

## Recommended Tooling

- A. For drilling a 2.5KG rotary percussion (3 jaw chuck) drill or an SDS hammer drill.
- B. For Installation of Ties. A Thor Drive installation tool of appropriate diameter.



## TYPICAL TENSILE FAILURE IN ACCORDANCE WITH BSI DD 140 PART 1

BASE MATERIAL	COMPRESSIVE STRENGTH	TENSILE PROOF LOAD	MINIMUM EMBEDMENT
Common Facing Brick	20 – 20.75	3.16	70mm
Deep Frogged Brick	20 – 20.50	2.98	70mm
Dense Concrete Block	7 – 10.	3.38	70mm
Lightweight Block	2.8 – 35.	1.76	70mm
Mortar Bed Joint 1:1:6		2.66	70mm
Pilot Hole 5mm & 7mm	Available lengths mm : 175 ; 200 ; 225 ; 250 ; 275 ; 300		

Test provide indicative values of the tie performance. The couplet test produces results of a conservative nature compared to actual wall tests

## SPECIFICATION NOTES

The following criteria are to be used unless specified otherwise:

**RE-TYING** - Locate and mark in white chalk the position of the old ties using a metal detector. Use these marks to establish the spacing of an alternative grid for the new wall ties.

It is important to ensure that the replacement wall ties are installed before treatment of the existing ties takes place.

The drilling method adopted must ensure accuracy of the diameter of the hole and avoid appreciable spalling.

Ties will be fitted into the centre of an external brick wherever possible.

It is imperative that the holes drilled should be to a recognised pattern i.e. diamond grid 900mm between centres horizontally and 450mm vertically. Generally the diamond pattern will commence with the first lines of holes 300mm up from damp proof course and 300mm in from the gable end. In brick columns of 300 mm or less a centre line will be drilled, spacings of 300mm vertically and 250mm horizontally out from the edge of the fenestration.

### Existing Tie Treatment

Depending on the specifiers recommendations ties can be isolated by either:-

- A) Uncovering the existing ties, and sleeving the ties in accordance with the Thor sleeve specification. This method has the advantage of containing the works within the mortar bed joint, and is less destructive than alternative methods.
- B) Ties can be cropped or removed. This method requires the removal and replacement of a brick adjacent to the tie.

## General Notes

These notes are for general use only. Should these notes not apply to your specific project, please consult the Thor Helical Remedial Technical Support Team on 0870 6006164. Thor Helical Remedial are able to offer a full project design service by either our in house design team or our National network of Approved installers. In most instances this service is provided free of charge. Projects completed by our network of approved installers offer the benefit of a fully underwritten insurance backed guarantee.