

# Remedial wall ties - 9mm CD Tie

## Description

Remedial wall ties are designed by Thor Helical to have longitudinal blades with sufficient reactive interface angle to cut an accurate self tapping penetrative path into a wide variety of masonry elements upon being driven by a series of axial impacts

Proven through independent testing programs and 25 years of use, helical wall ties are identified in B.R.E. Digest 329 (Table 5) as being suitable for use in all remedial situations, irrespective of the buildings substrate or its fire performance criteria.

The CD wall tie has a circumscribed diameter of 9mm and is typically driven into a tiny pilot hole to minimize disturbance to the masonry as installation proceeds at remarkable speed and great simplicity.

- **Reliable in all types of masonry**
- **Robust & corrosion free**
- **Engineered product upgrade**
- **Patented helix consistency**

## Benefits

The mechanical interlock anchorage of the Twistfix helical wall tie exerts no expansive stress, does not rely on adhesion and is not affected by temperature extremes or fire.

The cross sectional profile of the spiral wall tie includes a wide portion, to maximise grip, and a narrow portion, to accommodate differential movements in all directions. The deep and continuous helical troughs prevent migration of water across the cavity.

When under load, the continuous helical blades interact with the host building material to impart an accumulative cone of forces at tangential angles to the helix. Loads are spread evenly along the full penetrative length of the tie to ensure reliability of connection in a wide variety of construction materials.

- **Rapid cost effective installation**
- **Precise helical interlock anchorage**
- **Combines axial strength with flexibility**
- **Stable, reliable & unobtrusive**

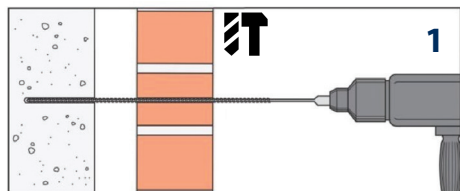
## Distinction

Traditional helical wall ties are twisted by clamping one end of the wire & spinning the other. In contrast Thor Helical wall ties are engineered with advanced twisting die technology to accurately control the pitch of the tie. The advanced precise pitch of the Thor Helical CD Tie (Pat EP1307303) forms tightly mating threads within masonry to ensure a superior interlock performance.

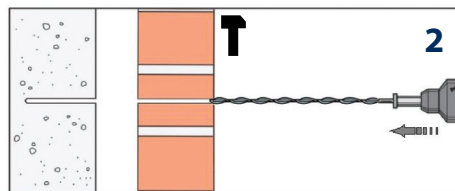
A unique driving end arrangement (Pat GB2439633) permits safe, controlled and close-quarter installation of the CD Tie that, allows the operator to maintain both hands on his drill. This eases installation and eliminates the need for cumbersome and expensive telescopic tooling arrangements.



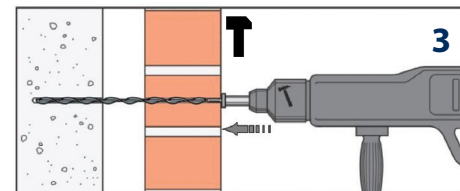
## Method statement



**1. DRILL** pilot hole of appropriate diameter 10mm longer than the tie, using a light percussive hammer drill. Stop drill rotating prior to drilling the remote wall layer to prevent 'whipping'.



**2. Insert** 9mm  $\varnothing$  Thor Helical wall tie into SDS support tool, set drill to "Hammer Action Only" and **DRIVE** the tie into the masonry using a lightweight SDS roto-hammer drill.



**3. Once** tool recesses the tie beneath the wall face **FINISH** by disguising entry bore with suitable filler compacted around the ties driving shank portion.

## Product specification

**Product:** Thor Helical 9mm  $\varnothing$  CD Tie

**Lengths (mm):** 180, 205, 230, 255, 280, 305 & 330

**Material:** Austenitic Stainless steel - (304 & 316)

**Ultimate Tensile Strength:** => 15kN

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BS EN 845-1:2013

## DECLARATION OF PERFORMANCE (CONFORMS WITH BS EN 845-1:2013)

Substrate Type	Substrate Strength (N/mm <sup>2</sup> )	Pilot Hole Diameter (mm)	Tested Embedment (mm)	Cavity Width (mm)	Mean Load Capacity (N)		Recommended Tie Embedment (mm)
					Tension	Compression	
Aircrete (AAC)	3.5	0	85	225	1490	1500	85
Dense Aggregate Concrete	7	6	60	150	2870	2700	60-75
Common Brick	30	6	60	150	1940	2680	60-75
Perforated Brick	40	5	60	150	1990	2790	60-75
Structural Concrete C30	30	7	40	150	2370	2690	40-50

technical helpline

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sales line

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