

# 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 30 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 with great simplicity.

- **Reliable in all types of masonry**
- **Robust & corrosion free**
- **Engineered product upgrade**
- **Unique thread 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**

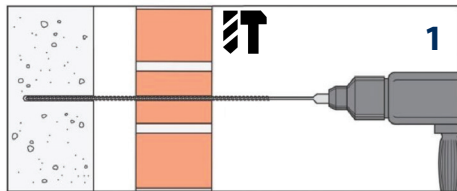
## Distinction

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 twisting die technology to accurately control the pitch of each thread. The advanced twist consistency of the Thor Helical CD Tie (Patent GB2589694) forms tightly mating threads within masonry to ensure a superior interlock performance.

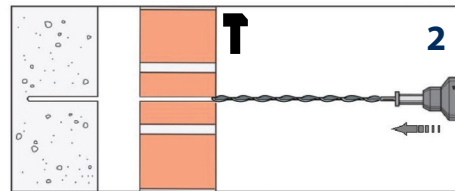
A unique driving end arrangement permits safe, controlled and close-quarter installation of the CD Tie, allowing the operator to maintain both hands on his drill. This eases installation and eliminates the need for cumbersome and expensive telescopic tooling arrangements. The CD Tie is protected under Patent GB2439633.



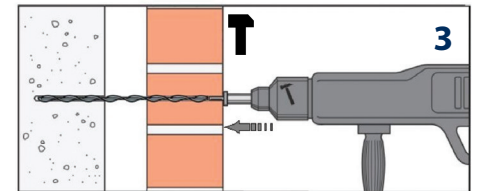
## Method statement



- 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 hammer 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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## PERFORMANCE CHARACTERISTICS

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	2780	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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