

Remedial wall ties - 9mm CD Tie

Description

Thor Helical remedial wall ties have longitudinal threads with sufficient reactive interface angle to cut an accurate self-tapping penetrative path into a wide variety of masonry elements when driven by a series of axial impacts.

The 9mm diameter CD Tie is typically driven into a tiny pilot hole to minimise disturbance to the masonry as installation proceeds at remarkable speed and with great simplicity.

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.

- **Reliable in all types of masonry**
- **Robust & corrosion free**
- **Engineered product upgrade**
- **Rapid cost effective installation**

Benefits

The mechanical interlock anchorage of the Twistfix helical wall tie exerts no expansive stress, does not rely on adhesion and is fire resistant. The continuous helix prevents migration of water across the cavity.

Independent testing programs show that when used in retrofit situations, our replacement wall ties conform to BS EN 845-1 2013 and meet UKCA and CE Marking conditions in cavity widths of up to 225mm.

Further testing at Oxford Brookes University demonstrates the ongoing performance of the tie system after being subjected to daily thermal and moisture movements over a replicated 100-year period and following a 3-minute seismic event.

- **Precise helical interlock anchorage**
- **Combines axial strength with flexibility**
- **Long lasting performance**
- **Conforms to BS EN 845-1 2013**

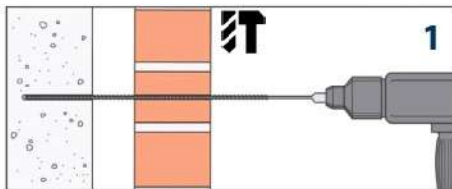
Distinction

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.

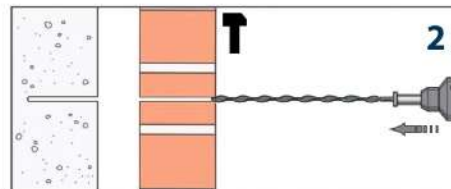
A unique driving end arrangement permits safe, controlled and close-quarter installation of the CD Tie, allowing the operator to maintain both hands on his drill. This eases installation and eliminates the need for cumbersome and expensive telescopic tooling arrangements. The CD Tie is protected under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



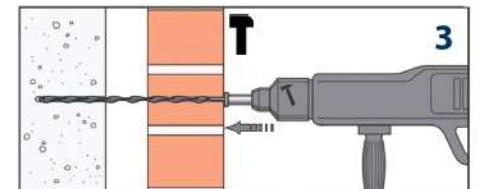
Method statement



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 an 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, camouflage the entry bore with suitable filler compacted around the ties' driving-shank portion.

Product specification

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

Length: 180, 205, 230, 255, 280, 305, 330, 355mm

Material: Austenitic Stainless steel - (304 & 316)

Cross-Sectional Area: 16mm²

Tensile Strength Band: 1025 - 1225N/mm²

PERFORMANCE CHARACTERISTICS

Substrate Type	Substrate Strength (N/mm ²)	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