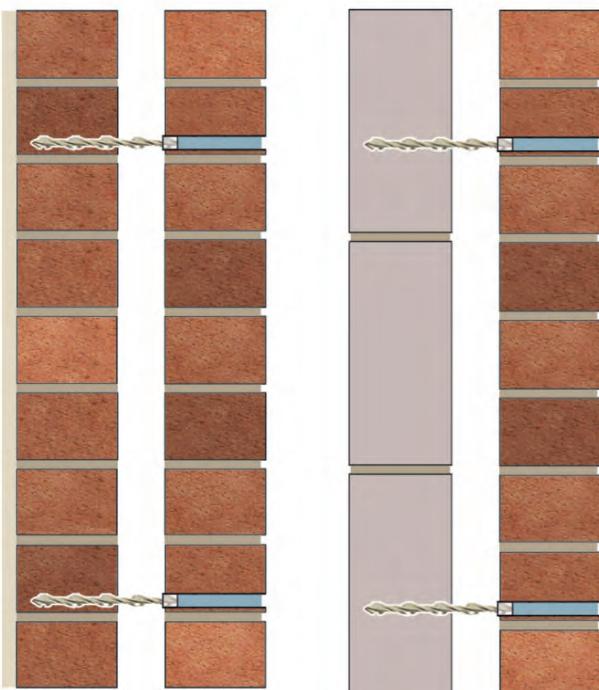


RetroTie

A remedial wall tie with a dry / resin fix

APPLICATIONS

- Versatile replacement wall tie
- Use where there is hard external brick material
- Use where random testing is required of the security of fixing in the inner leaf



Remedial wall tie – brick to brick and brick to block

Over 100 standard repair specifications are available online, covering all common structural faults.

Relevant Repair Details: RDs WT02, WT06, WT08, WT20, WT22, WT25, WT28, WT31



FEATURES

- Quick, easy, non-disruptive installation
- Effective in all common building materials
- Far leaf security of fixing easily proof tested



Injecting resin to complete the RetroTie installation



For full product information, case studies and downloadable repair details go to:
[www.helifix.co.uk /products/remedial-products/retrotie/](http://www.helifix.co.uk/products/remedial-products/retrotie/)

TECHNICAL SPECIFICATIONS

DRYFIX ASYMMETRIC TIE

Material	Austenitic stainless steel Grade 304 (1.4301) or 316 (1.4401)
Diameter	8mm (6mm available – suitable for timber far leaf)
Length	3/4 of near leaf thickness + cavity width + far leaf penetration depending on material, typically 70mm
Standard lengths	170mm, 195mm, 220mm, 245mm, 270mm and 295mm – in packs of 100
Depth of pilot hole	Near leaf thickness + cavity width + far leaf penetration + 10mm
Minimum fixing density	Ties should be at 900mm centres horizontally by 450mm vertically, in a staggered pattern, or as specified
Bonding agent (near leaf only)	PolyPlus resin (or HeliBond if required)

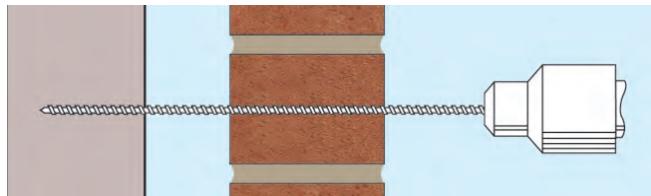
Near Leaf Material	Far Leaf Material	Near Leaf Pilot/ Clearance Hole	Far Leaf Pilot/ Clearance Hole	Penetration into far leaf	Pull Out
Clay Brick	Aircrete	12mm	None	75-90mm	1.0kN
Clay Brick	Timber Stud	12mm (10mm if 6mm tie)	None	55mm	1.0kN
Clay Brick	Clay Brick	12mm	5-6mm	70mm	2.0kN
Clay Brick	Concrete Block	12mm	6mm	70mm	2.0kN
Clay Brick	Concrete	12mm	6-6.5mm	35mm	2.0kN

NOTE: All figures quoted are indicative dependent on the exact nature of the substrate. Testing should always be undertaken on site using the Helifix Load Test Unit. Compression Resistance should be checked with the Helifix Technical Department. Fixing Density should be calculated by the Helifix Technical Department

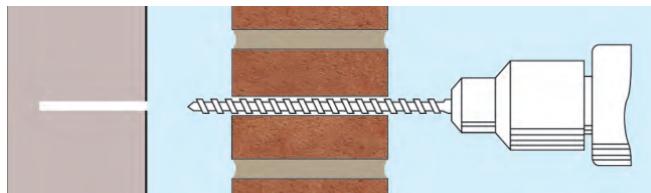
RECOMMENDED TOOLING

For drilling pilot hole	Rotary percussion 3-jaw-chuck drill
For drilling clearance hole	SDS hammer drill or rotary percussion drill
For installing RetroTie	Power driver or hand held Support Tool

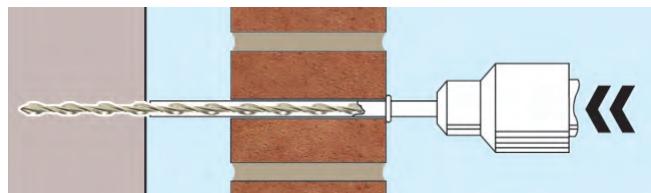
INSTALLATION PROCEDURES



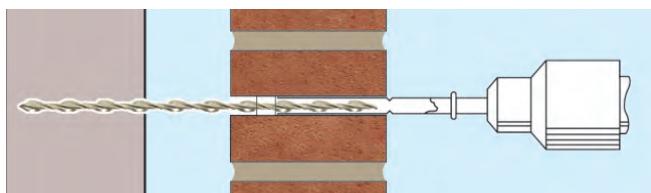
1. Mark the points for RetroTie insertion on the face of the near leaf brickwork. Drill an appropriate diameter pilot hole through the near leaf brick and to the required depth into the far leaf. The hole should be drilled about half way up the brick and around 15mm from the end to avoid frogs and core holes.



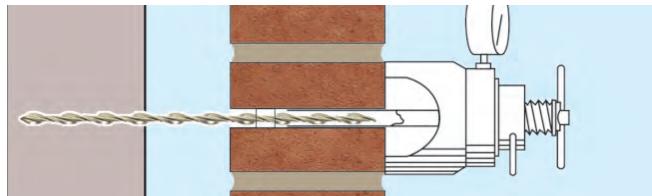
2. Widen the hole, through the near leaf only, to 12 mm diameter. Clean the hole in both the near and far leaves.



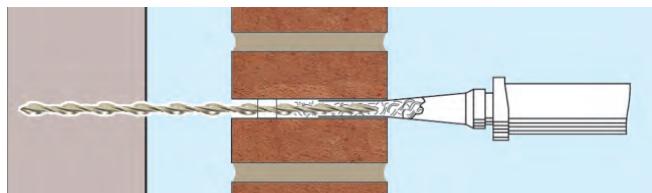
3. Load the RetroTie into the support tool, insert through the near leaf and drive home into the far leaf. The 'O' ring marker allows the cavity width to be measured and avoids over-driving.



4. Position the plastic sleeve over the outer end of the RetroTie and slide it down the tie with the support tool until the mark on the tool stem is flush with the outer face. The sleeve centres the tie and seals the hole adjacent to the cavity.



5. Security of fixing in the far leaf can be tested with a Helifix Load Test Unit.



6. Inject PolyPlus resin until the hole is filled and then make good.