



PRODUCT SHEET PS/RS01

ResiTie

A remedial wall tie with a resin / resin fix

APPLICATIONS

- Replacement tie for cavity walls where a resin bond is required at both ends of the tie
- Recommended for small jobs requiring 200 ties or less
- Pinning multi-layer masonry



Remedial wall tie – brick to structural block

Standard repair specifications are available online, covering common structural faults.

Relevant Repair Detail: RT03. Refer also to BPIR Helifix DryFix, ResiTie, RetroTie and BowTie Product Information Sheet.



FEATURES

- Quick, easy, non-disruptive installation
- Effective in all common building materials
- Far and near leaf security of fixing easily proof tested
- Flexibility accommodates normal building movement



Injecting **Epoxy**Plus resin into near leaf to complete the ResiTie installation



For full product information, case studies and downloadable repair details go to: **www.helifix.co.nz /products/remedial-products/resitie/**



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TECHNICAL SPECIFICATIONS

RESITIE	
Material	Austenitic stainless steel Grade 316 (as standard)
Diameter	8mm (10mm available)
Length	¾ of near leaf thickness + cavity width + 55mm
Standard lengths	155mm, 170mm, 195mm, 220mm, 245mm, 270mm, 295mm, 325mm and 350mm
Diameter of clearance hole	10mm (12mm for 10mm tie)
Depth of clearance hole in far leaf	55mm
Minimum fixing density	In accordance with project specification
Bonding agent	EpoxyPlus or CrackBond epoxy resin
RECOMMENDED TOOLING	
For drilling clearance hole	SDS hammer drill or rotary percussion drill, where possible
For installing ResiTie	Helifix Support Tool
For injecting resin into the far leaf	Nozzle extension
For proof testing	Helifix Load Test Unit

INSTALLATION PROCEDURES



 Mark the points for the ResiTies on the near leaf brickwork. Using a 10mm drill bit and rotary percussion drill, where possible, drill a clearance hole through the near leaf and 55mm 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. Clean both holes of debris using a brush and airjet.



3. Inject resin to fill the hole in the far leaf.



4. Using the hand-held support tool, insert the ResiTie, with plastic sleeves fitted, into the clearance hole until the far sleeve enters the far leaf.



5. After the resin has cured, security of fixing in the far leaf can be tested with a Helifix Load Test Unit.



6. Inject resin into the near leaf until the hole is filled and then make good the outer face.





PRODUCT SHEET PS/LTU1

Load Test Unit

Used on site to test tie pull-out loads

The Helifix Load Test Unit is used on site to test the pull-out loads from the actual masonry units within the structure in question.

These loads will be more meaningful than laboratory performance figures using selected materials.

 ${\bf NB}$ Each substrate (leaf) must be tested separately







PRODUCT SHEET PS/LTU1

OPERATING INSTRUCTION

- 1. Unpack the unit from the box. Any minor oil leakage should be wiped clean. In the event of significant leakage contact Helifix.
- 2. Check the enclosed calibration certificate to ensure calibration is current.
- **3.** Select the appropriate test key to fit the item to be pull-tested.
- **4.** Fit key over the end of the tie/pin to be tested and wind down at least one full turn. Remove cross pin if fitted.
- 5. Slide the Load Test Unit over the key and replace the cross pin through the key, engaging it in the castellation on the top of the centre stud.
- 6. Turn load nut by hand until the initial load is applied. This can be judged by feel or by seeing the pointer on the gauge start to move from zero.
- Turn load nut slowly using the "tommy" bar provided, until proof or maximum load has been reached.
 DO NOT enter the red zone on the gauge and DO NOT OVERLOAD.
- 8. Note the reading and release the tension on the tested Wall Tie The Helifix Load Test Unit is used on site to test the pull-out loads from the actual masonry units within the structure in question. These loads will be more meaningful than laboratory performance figures using selected materials.
- **9.** Remove the cross pin and detach the unit from the test key.
- **10.** Detach the test key from the Wall Tie.
- **11.** Refer to the Calibration Chart to convert the indicated load to the actual load.

After the load has been applied it is possible that the collet in the test key will deform the fins (particularly with the 8mm products) and be difficult to disengage. Patience and working the key to and fro will ultimately disengage the key.

The weight of the unit should always be supported with one hand when used on vertical surfaces (e.g. walls) as leaving the unit hanging on the Load Test Key is to be avoided.

After use re-pack the unit into its carrying case for protection.

When re-calibration is due, return the Load Test Unit to Helifix.



1. Install tie into inner or outer leaf masonry.



 Place the cross pin through the LTK and take up the slack on the central nut.



2. Fit the appropriate sized Load Test Key (LTK)at least 50mm (normally one full turn) over the end of the tie. Remove the cross pin, if fitted.



5. Turn the Tommy bar slowly until the proof or maximum load is achieved. **DO NOT** enter the red zone and **DO NOT OVERLOAD**.



 Slide the Load Test Unit (LTU) over the LTK and replace the cross pin, engaging it in the castellation on the top of the centre stud.



 Note the reading and then release the tension on the tested wall tie.