

BRT03

Replacing wall ties using ResiTies

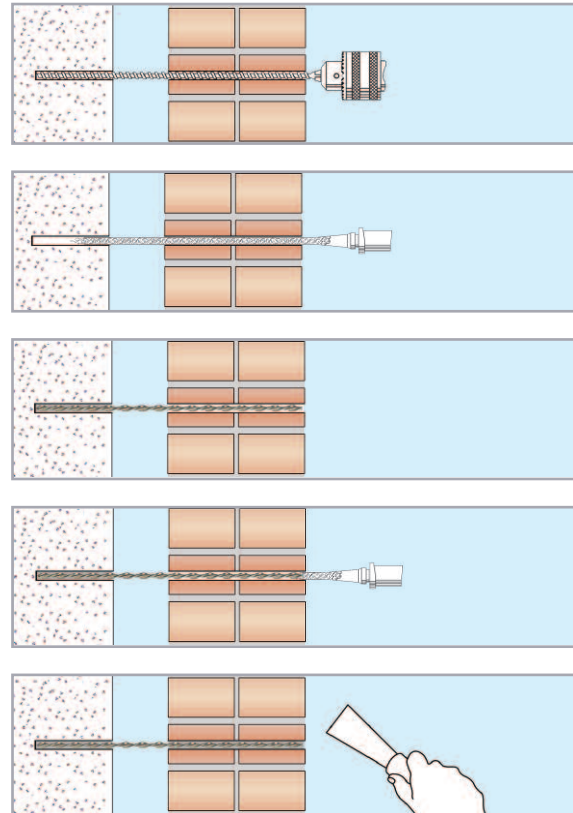
Product	Description	Code
ResiTie	Grade 316 stainless steel remedial wall tie	HRS
EpoxyPlus	High performance pure epoxy resin	HTE

METHOD STATEMENT

1. Mark the locations for the ResiTies onto the face of the wall at the required spacing.* Wherever possible, the holes should be drilled directly into the masonry, but they may also be driven into the existing mortar provided that this is strong and in good condition.
2. Drill a 10mm Ø clearance hole through the near masonry leaf and into the remote leaf to the specified depth using a light-weight electric drill.* A rotary percussion drill, 3-jaw-chuck type, should be used as standard. An SDS-type hammer drill set to a slow speed and light hammer may be preferred if the masonry is sufficiently dense to withstand the heavier SDS hammer action.
3. Clean the hole of spoil using an airjet or brush.
4. Push the nozzle of the Helifix EpoxyPlus resin applicator through the near leaf and into the clearance hole in the remote wall.
5. Pump the applicator to inject resin into the hole in the remote leaf. Inject resin until the hole is filled completely.
6. Push the ResiTie through the clearance hole in the near masonry leaf and into the resin-filled hole in the remote leaf.
7. Place the end of the nozzle of the resin applicator over the exposed end of the ResiTie in the near leaf. Masking tape may be placed around the hole to protect the surface of the wall from resin spillage. Cloth may also be wrapped around the nozzle to help seal the opening during injection and protect the wall face from resin spillage.
8. Pump the resin applicator to inject Helifix EpoxyPlus resin into the hole. The resin will track down the tie, following its helical profile. Inject resin until the hole in the near leaf is filled completely.
9. Allow the resin to gel (normally 15 to 20 minutes).
10. Make good the hole using either a mixture of sand, cement and oxide colouring to match the original surrounding brick surfaces or a silicone sealant coated with brick dust or drillings.

NOTE. Avoid leaning or pushing heavily on the drill during operation to ensure the accuracy of the hole's diameter and to limit spalling of the near leaf as the drill breaks into the cavity.

CAUTION. Always locate, identify and isolate any electrical, water or gas services which may be present in the wall or the wall cavities and can pose a safety risk before drilling or cutting. Always take the necessary safety precautions. Use electrical safety gloves and wear appropriate footwear and eyewear.



RECOMMENDED TOOLING

- For drillingSDS rotary hammer drill 650/850w
or rotary percussion drill
- For cleaning the clearance holeAirjet or brush
- For injection of Helifix EpoxyPlus resin.....Applicator gun with nozzle

* Specification Notes

The following criteria are to be used unless specified otherwise:

- ResiTies are to be installed at 600mm vertical and horizontal centres into continuous brickwork. Ties are to be installed at 300mm centres around openings and articulation joints.
- Depth of clearance hole to be ResiTie length + 10mm.
- ResiTie length to equal:

$$\text{Minimum } 3/4 \text{ of near leaf thickness} + \text{cavity width} \\ + \text{minimum } 55\text{mm far leaf penetration}$$
- Ties may be installed from either side of the wall.

The above specification notes are for general guidance only and Helifix reserves the right to amend details/notes as necessary.

GENERAL NOTES

- Helifix product details available at www.helifix.com.au.
- If your application differs from this repair detail or you require specific technical information, call Helifix on 1300 66 70 71.