BowTie

Long series tie for restraining bowed building walls

Applications

Used to stabilise bulging walls by securing them to internal floor joists

Features

- Grade 304 or 316 stainless steel
- Unique, one-piece, self-tapping design
- Rapid, easy, installation
- Easy on-site testing for security of fixing
- Rotational flexibility accommodates normal building movement
- Fixes into side or end of joist as appropriate

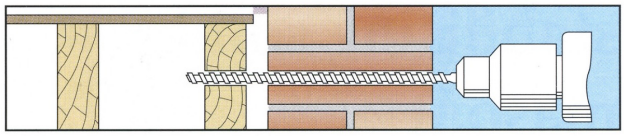
Benefits

- Very effective and economical
- Non-disruptive external installation
- Minimal inconvenience to occupants
- Visibly unobtrusive - no external plates
- No splitting of timbers

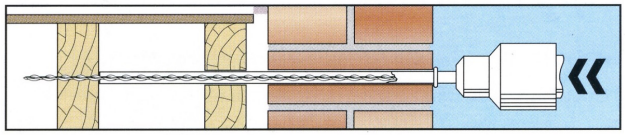
Bonding Agent

PolyPlus polyester resin

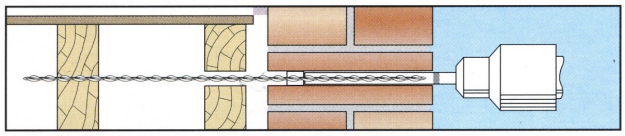
Installation



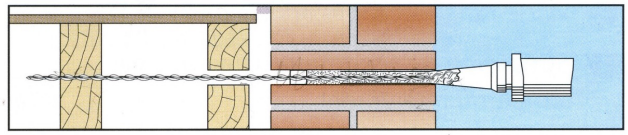
1. Drill clearance hole through wall and first joist.



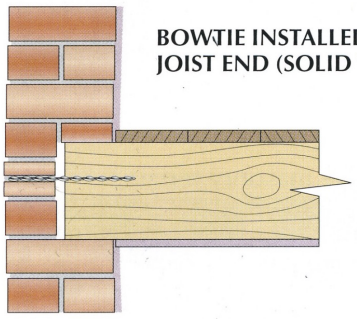
2. Drive BowTie into second joist (or joist end).



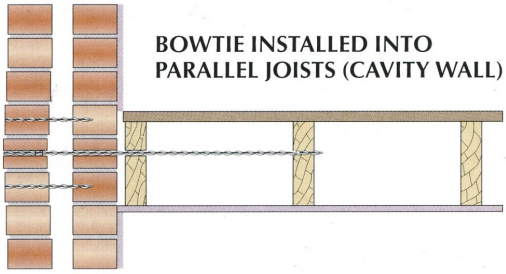
3. Fit sleeve and test security of fixing.



4. Bond to masonry and make good.



BOWTIE INSTALLED INTO JOIST END (SOLID WALL)



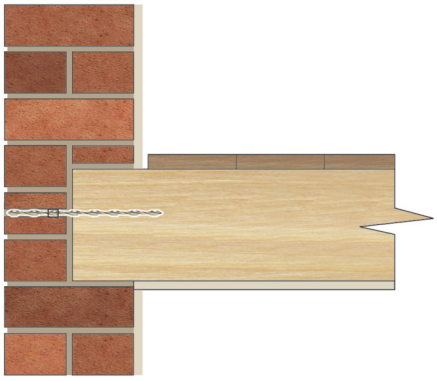
BOWTIE INSTALLED INTO PARALLEL JOISTS (CAVITY WALL)

RB04

Restraining a Bowed Solid Wall using BowTies into Joist Ends

METHOD STATEMENT

1. Mark the positions of the joists on the external wall.
2. Drill clearance holes for the BowTies (normally 12mm), **through the masonry only**, in line with the centre of the joists.
3. Clean out the hole to clear any dust or debris.
4. Insert the BowTie into the support tool. If a power support tool is to be used, first fit it into an SDS rotary hammer drill.
5. Drive the BowTie into the timber to the required depth (75mm minimum).
6. Place the sleeve over the tie and push it to the back of the hole in the masonry (use the support tool).
7. Inject Helifix PolyPlus resin into the hole to fill it completely.
8. Allow the resin to gel (normally 15 to 20 minutes).
9. Make good all holes at the surface with brick dust or matching mortar or leave ready for any decoration.



RECOMMENDED TOOLING

For drilling and insertion of BowTies .....SDS rotary hammer drill 650/700w with roto stop

For installation of BowTies .....BowTie support tool

For injection of PolyPlus resin .....Applicator gun

Specification Notes

The following criteria are to be used unless specified otherwise:

A. BowTie penetration into the end grain of the timber joist must be a minimum of 75mm.

B. Each joist in the area of concern is to be secured with a BowTie (i.e. spacing of BowTies is to correspond with the original joist spacing).

C. Ensure that all joists into which BowTies are to be installed are both sound and secure.

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

GENERAL NOTES

If your application differs from this repair detail or you require specific advice on your particular project, call the Helifix Technical Sales Team on **020 8735 5222**. Our Technical Department can provide you with a full support service including:

- Advice, assistance and recommendations on all structural repair matters
- Devising and preparing complete repair proposals for specific situations
- An insurance-backed warranty via our Approved Installers scheme