

BowTie

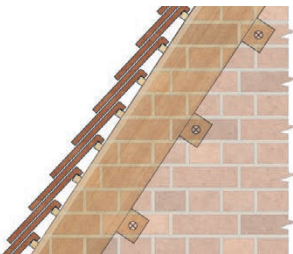
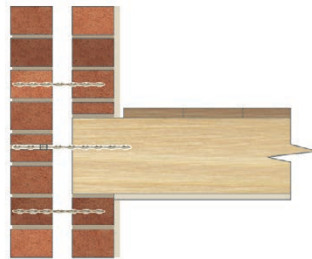
Remedial ties for restraining bowed walls



BowTie into joist end through a solid wall



BowTie into joist end through a cavity wall



Restraining gable walls using mini retrofit purlins and BowTies

Applications

- For stabilizing bowed external building walls by securing them to internal floor and ceiling joists
- Standard BowTies are recommended when installing into joist ends

Features

- Quick, easy, non-disruptive external installation
- Self-tapping design – no splitting of wood
- Effective in all common building materials
- Suitable for hardwood use
- Easily tested for security of anchoring
- Fully concealed – no unsightly external plates



For full Product Information, Case Studies and downloadable Repair Details, giving specifications for many common structural faults, go to:

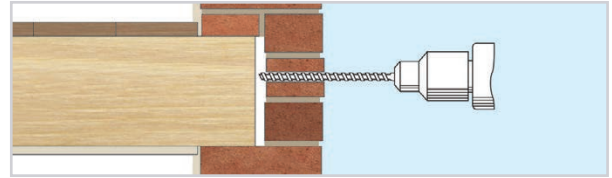
www.helifix.com/products/retrofit-products/bowtie



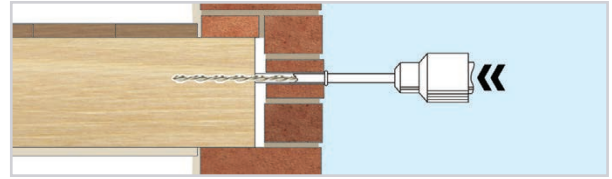
Drilling clearance hole for installing BowTie into joist end

Installation Procedures

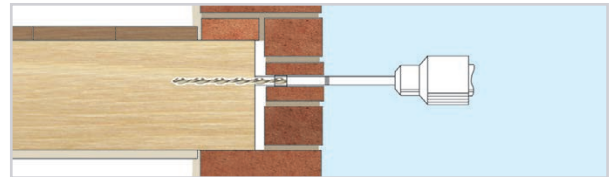
1. Mark the positions of the joists on the external wall.
2. Drill clearance holes (normally 1/2”), **through the masonry only**, in line with the centre of the joists.
3. Clean out the hole to clear any dust or debris.
4. Fit the power support tool into an SDS rotary hammer drill and insert the BowTie.
5. Drive the BowTie into the joist to the required depth (3” minimum).
6. Fit the sleeve over the tie and push it to the back of the hole in the masonry (use the support tool).
7. Inject Helifix HeliBond grout into the hole to fill it completely.
8. Make good all holes at the surface with brick dust or matching mortar or leave ready for any decoration.



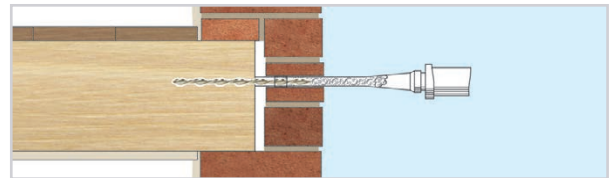
1. Mark the position of the joist centre on the external wall and then drill a clearance hole (normally 1/2”) through the wall (and first joist if parallel to the wall). Clean out the hole



2. Fit the BowTie Support Tool to an SDS rotary hammer drill, insert the BowTie and drive it into joist end to the required depth – at least 3” (or through the second joist if parallel)



3. Fit the plastic sleeve over the BowTie and use the support tool to push it to the back of the hole in the masonry (in the outer wythe in a cavity wall)



4. Inject HeliBond grout to fill the hole and bond the BowTie to the masonry and then make good

Technical Specifications

Material:	Austenitic stainless steel Grade 304 or 316
Diameter:	8mm
Length:	Thickness of the wall + any cavity + sufficient to drive 3” minimum into the joist end
Standard lengths:	155mm, 170mm, 195mm, 220mm, 245mm, 270mm, 295mm, 325mm and 350mm – in packs of 10
Diameter of masonry clearance hole:	1/2”
Fixing density:	Every joist in the affected area is to be secured
Bonding agent (facade only):	HeliBond grout
RECOMMENDED TOOLING	
For drilling clearance holes and insertion of BowTies:	SDS rotary hammer drill
For injection of HeliBond grout:	Helifix Pointing Gun Kit