

# **RB02** Restraining a Bowed Solid Wall using BowTie HDs into Joist Side

- 1. Mark the positions for the BowTie HD clearance holes on the external wall.
- 2. Drill the clearance hole (normally 16mm) through the masonry to line up with the joist in the middle third of the timber away from the edges.
- 3. Clean out the hole to clear any dust or debris.
- 4. Fit the driver into an SDS hammer drill, set to rotary only. Insert the BowTie HD into the driver.
- 5. Screw the BowTie HD through the first and second joists (and the third if specified).
- Place the sleeve over the tie and push it to the back of the hole in the outer leaf masonry.
- 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.
- 10. Clean PolyPlus tools with a suitable solvent.

N.B. Ensure ceiling void is free of pipes and cables.

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Larrow and remaining .	4

For drilling and insertion of BowTies	SDS rotary hammer drill 650/700w
For installation of BowTies	BowTie HD drive
For injection of PolyPlus resin	Applicator gur

- The following criteria are to be used unless specified otherwise: A. BowTie HD penetration into the side grain of the last timber joist must be a minimum of 75mm or the tie should be driven through the joist.
- B. The maximum horizontal spacing between BowTies is 600mm.

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

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

## **RW04** Reconnecting a Cracked Party Wall to an External Solid Wall using CemTies

- 1. Mark positions for holes on the outer face of the
- 2. Drill a 16mm clearance hole through the outer wall and to the required depth.
- 3. Clean out ALL dust from the hole and thoroughly flush with water. Where the substrate is very porous or flushing with water is inappropriate, use HeliPrimer WB. Ensure the hole is damp or primed prior to commencing step 8.
- 4. Attach the required length of CemTie pinning nozzle to the gun.
- Mix HeliBond cementitious grout using a power mixer and load into the Helifix Pointing Gun HD. 6. Pump grout to fill the nozzle.
- 7. Wind the CemTie into the nozzle and ensure that it is fully covered in grout.
- 8. Insert the nozzle to the bottom of the drilled hole and pump the grout.
- Make good all holes at the surface with matching mortar and brick dust make good the crack using an appropriate Helifix bonding agent depending on the width of the crack or leave ready for any decoration.
- 10. Clean tools with clean, fresh water.

N.B. If diamond core drilling is used, the internal surface of the hole must be roughened to ensure a good bond.



or drillingSDS rotary	y hammer drill 650/700w or diamond c
For mixing HeliBond	3-jaw-chuck drill with mixin
or insertion of the CemTies	Helifix Pointing (
	with pinnin
or smoothing pointing	Standard finge

- The following criteria are to be used unless specified otherwise: A. CemTies are to be installed at a vertical spacing of 450mm. B. CemTies are to extend at least 500mm past the crack.
- C. Depth of hole to be CemTie length +25mm.D. CemTies are to be installed within the centre third of the wall.
- E. In hot conditions ensure the masonry is well wetted or primed to prevent premature drying of the HeliBond due to rapid de-watering. Ideally additional wetting of the hole should be carried out just prior to inserting
- the CemTie. F. Do not use HeliBond when the air temperature is +4°C and falling or apply over ice. In all instances the hole must be thoroughly damp or primed with HeliPrimer WB prior to injection of the HeliBond grout.

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### **RB02**

Add new solid timber block strutting at bearing ends and at mid span. Set 25mm below from top of joist to allow for services, pipes, etc

Existing joist

**RW04** 'L' Shaped ties





ISSUE

OCT 16

COMMENT

Issue for planning and listed building consent

Callender <b>Howorth</b>	Morelands 5-23 Old Street London EC1V 9	16 8560 19 21 52 ilenderhoworth.com		
Job no.	Job title			
1198 4 OVAL		l ROAI	D	
Drawing no.	Drawing title			
122.01	PROPOSED WALL PINING			
Scale	Size	Drawn	Revision	
1:1 All works to be in accordance with relevant star	A3	ML	-	