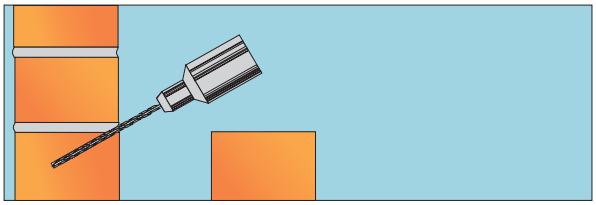
Re-Tie

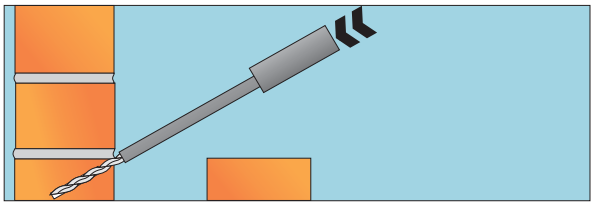
WALLFAST Limited

For tying cavities, when rebuilding unstable outer leaves to existing inner leaves.
Forming cavities by adding outer clad brickwork to existing masonry walls.
Joining cavity or abutting masonry walls when adding extension to properties.

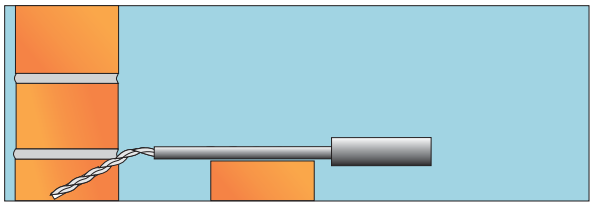
Installation Procedure



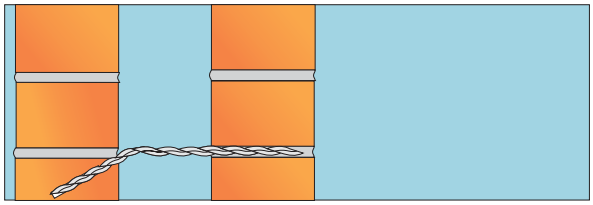
(1) To avoid fixing into weak mortar joints drill 30° down with recommended pilot drill to required depth, see Table A.



(2) Drive tie into hole by hammering support tool with a hammer or SDS power drill.



(3) Using support tool, bend tie until level with outer mortar bed.



(4) Embed outer tie end in mortar of new outer leaf masonry.

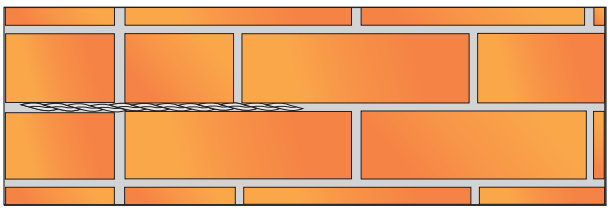
Re-Ties need not be installed at an angle and then bent back when fixing to strong mortar beds or in the middle of blocks or concrete beams, they can be installed parallel with mortar joints of new masonry walls.

Benefits

- Quick installation.
- Lateral flexibility over cones any misalignment.
- Allows for close to edge fixing.
- Allows for thermal movement.
- Multi water drips.
- Easily installed through cavity insulation.
- Designed and tested to DD140.
- Stress free fixing.

Features

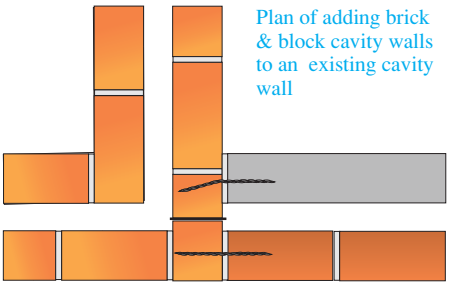
- Easily and problem free installation.
- Austenitic 304 or 316 Stainless Steel.
- Effective in tying cavity and solid walls.
- Small cross area gives good sound proofing.



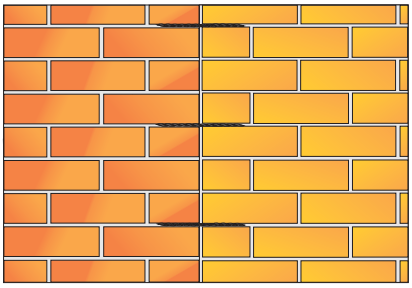
Adding abutted partition walls or continuing cavity walls with a parallel fixing.

Table A Re tie fixing data and DD140 classification

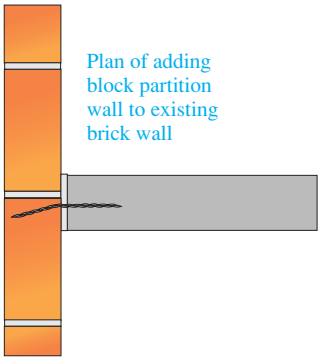
Inner Leaf Material	Tie Size	Fixing Depth (mm)	Pilot Hole	Fixing Density	DD140
Clay Cob walls	Ø 8mm	250mm	N/A	5.0 m²	Class 4
Air-Crete block/Soft brick <4.0N/mm	Ø 8mm	90mm	N/A	2.5 m²	Class 4
				3.4 m²	Class 3
				5.0 m²	Class 2
Standard brick/Lime stone Light concrete blocks 5-20N/mm	Ø 8mm	70mm	5mm-6mm	2.5 m²	Class 3
				5.0 m²	Class 2
Hard brick >20N/mm	Ø 8mm	50mm	6mm-7mm	2.5 m²	Class 2
High strength concrete	Ø 8mm	30mm	6.5mm-7.5mm	2.5 m²	Class 2



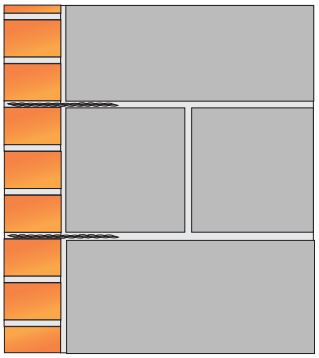
Plan of adding brick & block cavity walls to an existing cavity wall



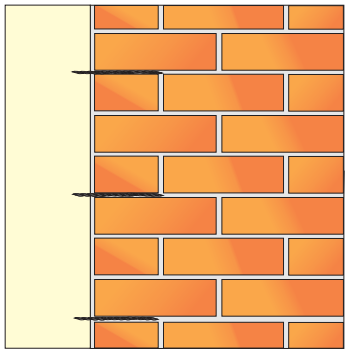
Elevation of adding brick cavity wall to existing cavity wall



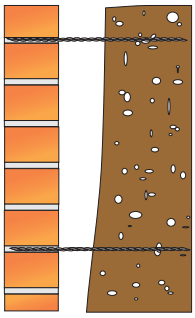
Plan of adding block partition wall to existing brick wall



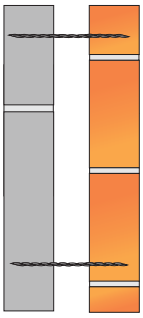
Elevation of adding block partition wall to existing brick wall



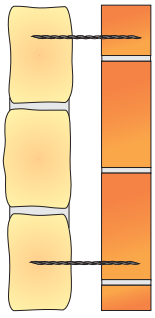
Elevation of adding brick partition wall to existing concrete column



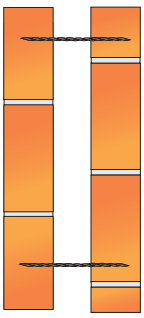
Brick Cavity to Cob



Brick Cavity to Block



Brick Cavity to Stone



Brick Cavity to Brick

Re tie length selection

Cavity mm	Tie Length mm				
50	160	180	200	220	390
75	180	200	220	245	410
100	210	230	245	270	430
125	230	250	275	295	450
Fixing depth	30mm	50mm	70mm	90mm	250mm

Fixing Centres for different Tie Densities

Tie density	Vertical Centres	Horizontal Centres
2.5m	450mm	900mm
3.4m	450mm	650mm
5.0m	450mm	450mm