

## REPAIR OF FAILED EXPANDED METAL LATH (EML) LINTELS USING STRUCSOL ULTRABAR AND MECHANICAL REMEDIAL WALL TIES (1 OF 2)

### Method Statement:

1. Using a twin-bladed diamond-tipped wall chaser with vacuum attachment followed by a hand or power chisel, cut slots into the horizontal mortar joints to the specified depth and at the required vertical spacing. Ensure that NO mortar is left attached to the exposed brick surfaces in order to provide a good masonry / grout bond.
2. Mark the positions for the Mechanical Remedial Wall Tie pilot holes on the underside of the bottom course.
3. Drill 6mm pilot holes (this may need adjusting depending on the strength of the masonry), at the required angle and to the specified depth, using a rotary percussion, 3-jaw chuck drill. The angle of drilling should be such, that the hole will pass behind the lower StrucSol Ultrabar (where installed) and penetrate at least 50mm into the course of masonry above the reinforcement.
4. Remove ALL dust and mortar from the slots and holes and thoroughly flush with water. Ensure the slot and holes are damp or primed prior to commencing step 7.
5. Mix StrucSol HSGrout using a power mixer and load into the Pointing Gun CS.
6. Fit the appropriate Mortar Nozzle.
7. Inject a bead of grout, approx. 15mm deep, into the back of the slot.
8. Push the first 6mm StrucSol Ultrabar into the grout to obtain good coverage.
9. Inject a second bead of grout over the exposed StrucSol Ultrabar.
10. Push the second 6mm StrucSol Ultrabar into the grout to obtain good coverage.
11. Inject a third bead of grout over the exposed StrucSol Ultrabar and iron it into the slot using a finger trowel. Inject additional grout as necessary, leaving 10-15mm for new pointing.
12. Repeat steps 6 to 10 for the installation of the StrucSol Ultrabar in the lower slot.
13. When the grout has fully cured (normally 7 days) the EML can be removed, either by cutting out the bed joint containing the EML with a suitable grinder or by totally removing the bottom course of bricks and EML by hand.
14. Install the Mechanical Remedial Wall Ties into the pre-drilled pilot holes using a Mechanical Remedial Wall Tie Power Driver Attachment fitted to an SDS hammer drill, to secure the bottom two courses of bricks.
15. Point up the slots using a matching mortar, then make good all the holes at the surface and cracks using StrucSol TE resin or StrucSol Crack Filler and leave ready for decoration. To achieve a near perfect look, use StrucSol Stain Colour Matching mortar.
16. Clean tools with clean, fresh water.

☐ *Pointing may be carried out as soon as the StrucSol HSGrout has started to set and gel.*

### Recommended Tooling

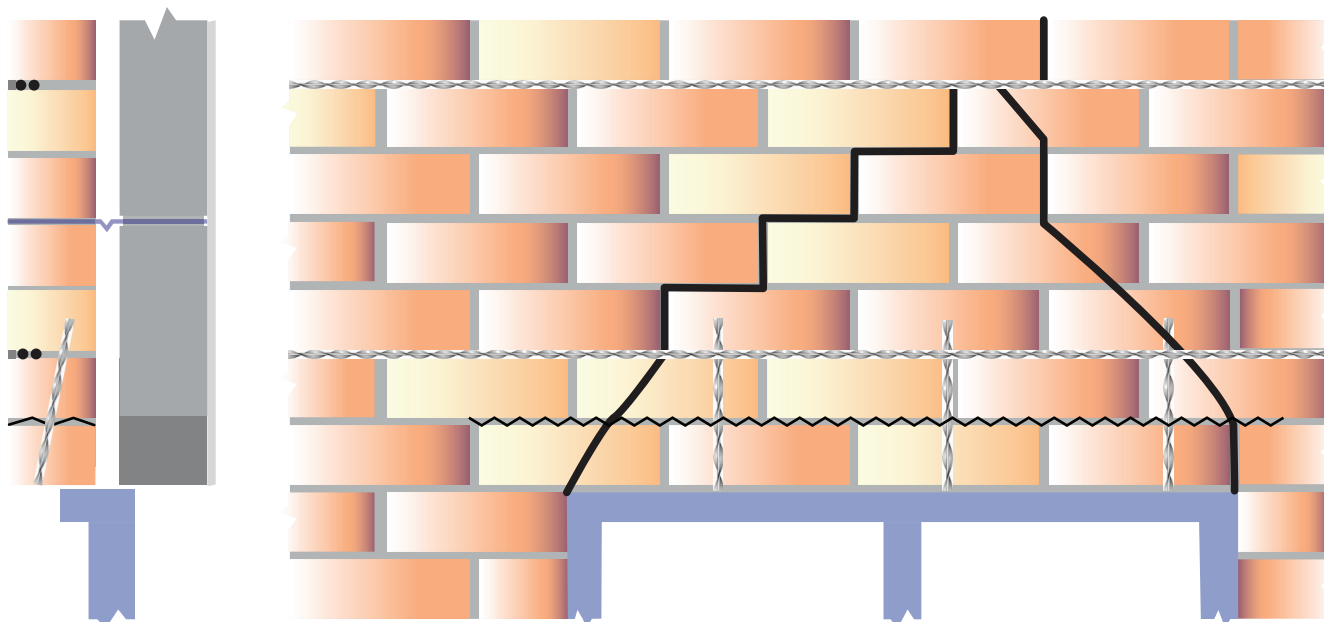
- ☐ For cutting slots 40mm deep or over: Twin-bladed cutter with a vacuum attachment.
- ☐ For mixing StrucSol HSGrout: 3-jaw chuck drill with a mixing paddle.
- ☐ For injection of StrucSol resin: Applicator gun with nozzle.
- ☐ For installation of Mechanical Remedial Wall Ties: Mechanical Remedial Wall Tie Power Driver Attachment.
- ☐ For smoothing pointing: Standard Finger Trowel.
- ☐ For Injection of the StrucSol Crack Filler: A 400ml Mastic Gun is required.
- ☐ PPE Clothing and Protection.

### General Notes

If you require specific advice on your project, please call the StrucSol technical help line 0116 2375082. We can supply a full support service which includes:

- ☐ Advice and assistance on all structural matters.
- ☐ Preparing repair proposals for specific projects.

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### SPECIFICATION NOTES

<b>A</b>	Depth of slot into the masonry to be 45mm to 55mm.
<b>B</b>	Height of slot to be equal to full mortar joint height, (minimum 10mm). For thin mortar joint specifications refer to the StrucSol Technical Dept..
<b>C</b>	Top and bottom reinforcements should be positioned as far apart as practicable, up to a maximum distance equivalent to 12 brick courses (approx. 900mm).
<b>D</b>	StrucSol Ultrabar to be long enough to extend a minimum of 500mm beyond each side of the EML to be removed.
<b>E</b>	Any fractures in the masonry within the 'beam zone' MUST be stabilised by crack-stitching, TE resin or replacement of the masonry.
<b>F</b>	Any missing or very poor quality masonry MUST be replaced.
<b>G</b>	If existing wall ties are defective in any way, additional ties should be installed.
<b>H</b>	In hot conditions, ensure the masonry is well wetted to prevent premature curing of the StrucSol HSGROUT due to rapid de-watering. Ideally additional wetting of the slot should be carried out just prior to injecting the StrucSol HSGROUT.
<b>I</b>	Do not use StrucSol HSGROUT when the air temperature is 4°C and falling, or apply over ice. In all instances, the slot MUST be thoroughly damp or wetted prior to injection of the StrucSol HSGROUT. Grout should be stored in a shaded area, prior to use.
	The above specification notes are for general guidance only and StrucSol reserve the right to amend as necessary.