

REPAIR OF STONE QUOINS ON RANDOM STONE WALLS USING GROUT TIES AND STRUCSOL ULTRABAR (1 OF 2)

Recommended Tooling

- ∅ For cutting slots 40mm deep or over: Twin-bladed cutter with a vacuum attachment.
- ∅ For drilling: SDS rotary hammer drill 650 / 700w or diamond core drill.
- ∅ For mixing StrucSol HSGrout: SDS Rotary percussion 3-jaw chuck drill with mixing paddle.
- ∅ For injection of StrucSol HSGrout into slots: Applicator gun + Mortar Nozzle.
- ∅ For insertion of Grout Ties: Grout Tie Pointing Gun.
- ∅ 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 +44 (0) 01162374394. We can supply a full support service which includes:

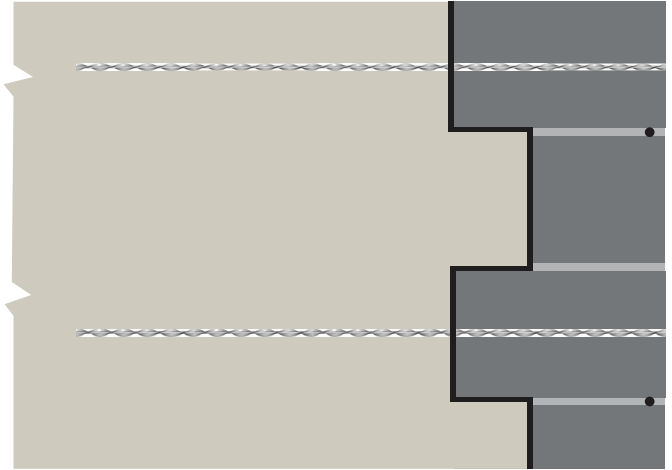
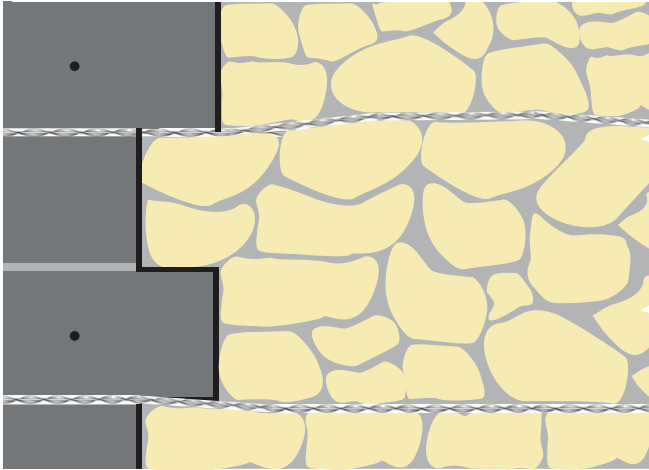
- ∅ Advice and assistance on all structural matters.
- ∅ Preparing repair proposals for specific projects.

Method Statement:

1. For the Grout Ties, mark the position and the positions for the holes on the outer face of the wall.
2. Drill a 16mm clearance hole at the required location through the brick stone and into the back-up material to the specified depth.
3. For the StrucSol Ultrabars, using a twin bladed wall chaser and vacuum attachment, cut slots into the horizontal mortar joints to the specified depth and at the required vertical spacing, once into the random stone, follow the mortar joint between the stones in as straight a line as the stones allow. Make sure that no mortar is left attached to the exposed brick and stone surfaces in order to provide a good masonry / grout bond. This operation may require the use of hand tools to remove the mortar due to the random nature of the stone.
4. Clean out all dust from the holes and slots and thoroughly flush with water. Ensure the holes and slots are damp prior to commencing steps 8 and 9.
5. Attach the required length of the Grout Tie Pinning Nozzle to the gun.
6. Mix StrucSol HSGrout using a power mixer and load into the Grout Tie Pointing Gun.
7. Pump grout to fill the nozzle.
8. Wind the Grout Tie into the nozzle and ensure that it is fully covered in grout.
9. Insert the nozzle to the full depth of the drilled hole and pump the grout.
10. In the horizontal slots, inject a bead of StrucSol HSGrout, approx. 15mm deep, into the back of the slot using the Mortar Nozzle.
11. Push the 6mm StrucSol Ultrabar into the grout to obtain good coverage.
12. Insert a second bead of StrucSol HSGrout over the exposed StrucSol Ultrabar and iron it into the slot using a finger trowel. Inject additional StrucSol HSGrout as necessary, leaving 10-15mm for new pointing.
13. 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.
14. Clean tools with clean, fresh water.

∅ *Pointing may be carried out as soon as is convenient after the StrucSol HSGrout has started to gel.*

REPAIR OF STONE QUOINS ON RANDOM STONE WALLS USING GROUT TIES AND STRUCSOL ULTRABAR (2 OF 2)



SPECIFICATION NOTES

The following criteria are to be used unless specified otherwise.

- A** Grout Ties and StrucSol Ultrabar to be installed at a vertical spacing of 450mm.
- B** Grout Ties and StrucSol Ultrabar to extend at least 500mm past the join between the quoin and wall.
- C** Depth of hole to be Grout Tie length +25mm.
- D** Grout Ties are to be installed within the centre third of the wall.
- E** Depth of slot into the masonry to be 35-45mm.
- F** Height of slot to be equal to full mortar joint height, (minimum 8mm). For thin mortar joint specifications refer to the StrucSol Technical Dept..
- G** In hot conditions, ensure the masonry is well wetted or primed to prevent premature curing of the StrucSol HSGrout due to rapid de-watering.
- H** Do not use StrucSol HSGrout when the air temperature is 4°C and falling, or apply over ice. In all instances, the hole MUST be thoroughly damp or primed prior to injection of the StrucSol HSGrout.

The above specification notes are for general guidance only and StrucSol reserve the right to amend as necessary.