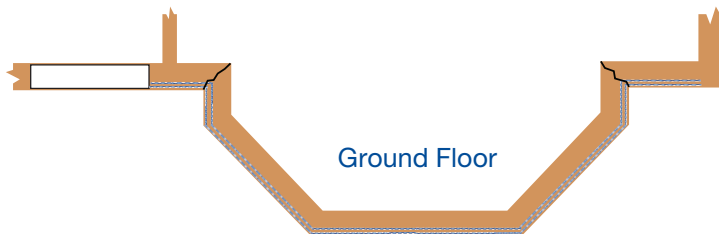
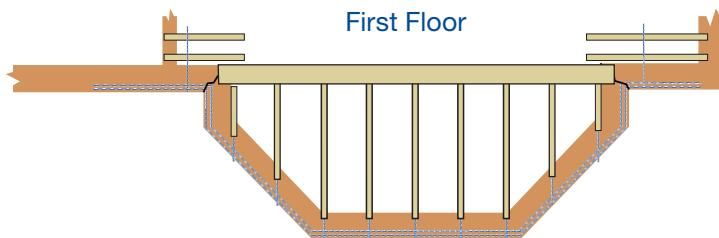


TYPICAL BAY WINDOW REPAIR IN CAVITY OR SOLID WALL, EXTERNAL REPAIR ONLY, USING STRUCSOL ULTRABAR AND LATERAL RESTRAINT TIES (2 of 2)



SPECIFICATION NOTES

A	Depth of slot: 45-55mm plus any plaster. Solid wall: 55-70mm plus any plaster.
B	Height of slot: Full mortar joint height (minimum 10mm).
C	If StrucSol Ultrabar is to be joined in a straight run, overlap the Ultrabars a minimum of 500mm.
D	Top and bottom reinforcements should be positioned as far apart as practicable, up to a maximum distance equivalent to 12 brick courses (approx. 900mm).
E	StrucSol Ultrabar is to extend a minimum of 500mm on each side of the bay.
F	Any fractures in the masonry within the 'beam zone' MUST be stabilised by crack-stitching, TE resin or replacement of the masonry.
G	Any missing or poor quality masonry MUST be replaced.
H	Minimum Lateral Restraint Tie penetration into the end grain of timber is 75mm.
I	Each joist in the area of concern is to be secured with a Lateral Restraint Tie (i.e. spacing of Lateral Restraint Ties is to correspond with the original joist spacing).
J	If joists run parallel to the front of the bay, refer to StrucSol Repair detail SBW03 for the Lateral Restraint Tie installation.
K	In hot conditions, ensure the masonry is well wetted or primed to prevent premature curing of the StrucSol HSGrout due to rapid de-watering.
L	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.

TYPICAL BAY WINDOW REPAIR IN CAVITY OR SOLID WALL, EXTERNAL REPAIR ONLY, USING STRUCSOL ULTRABAR AND LATERAL RESTRAINT TIES (1 of 2)

Recommended Tooling

- ✦ For cutting slots 40mm deep or over: Twin-bladed cutter with a vacuum attachment.
- ✦ For cutting slots. A 9" Angle Grinder
- ✦ For drilling: SDS rotary hammer drill 650 / 700w.
- ✦ For mixing Struc sol HSGrout: 3-jaw chuck drill with a mixing paddle.
- ✦ For injecting the StrucSol HSGrout into slots, use the StrucSol Crack-stitching Gun and Mortar Nozzle.
- ✦ For injecting the StrucSol HSGrout into holes, use the StrucSol Crack-stitching Gun and Pinning Nozzle.
- ✦ For installation of Lateral Restraint Ties: Lateral Restraint Tie Support Tool.
- ✦ For injection of StrucSol resin: Applicator gun with nozzle.
- ✦ For Injection of the StrucSol Crack Filler: A 400ml Mastic Gun is required.
- ✦ For injection of StrucSol Resin: StrucSol Resin Applicator Gun + Nozzle.
- ✦ To smooth the pointing, use the StrucSol Finger Trowel.
- ✦ 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.

Method Statement:

1. Using a twin bladed wall chaser, cut horizontal slots into the mortar joints to the specified depth and at the required vertical spacing. An angle grinder might be needed to remove the mortar on the internal returns of the bay. Make sure that no mortar is left in the cut slots in order to give an excellent bond.
2. Remove all dust and thoroughly flush with water. Make sure the slots are damp prior to injecting the StrucSol HSGrout.
3. Lay the StrucSol Ultrabar into the external slots, bending the Ultrabar at both the external and internal returns of the bay to fit the slots.
4. Mix StrucSol HSGrout cementitious grout and put into the StrucSol Crack-stitching Gun.
5. Ease the StrucSol Ultrabar out of the slot and inject a bead of StrucSol HSGrout, approx. 15mm deep, into the back of the slot.
6. Push the first StrucSol Ultrabar into the grout to obtain good coverage and inject a second bead of StrucSol HSGrout over the exposed StrucSol Ultrabar.
7. Push the second StrucSol Ultrabar into the grout to obtain good coverage.
8. Inject a third 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.
9. Mark the positions of the joists on the external wall.
10. Drill clearance holes for the Lateral Restraint Tie (normally 12mm) through the masonry in line with the centre of the joists. Clean out the hole to clear any dust or debris.
11. Fit the Lateral Restraint Tie Power Support Tool into an SDS rotary hammer drill and insert the Lateral Restraint Tie into the support tool. Drive the Lateral Restraint Tie into the support tool. Drive the Lateral Restraint Tie into the timber to the required depth.
12. Inject StrucSol resin to fill the hole completely. Allow the resin to gel (normally 15-20 minutes).
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.

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