

Project No. 150457

Client: Council of the Isles of Scilly

Tender Issue 10/11/2017

STRIDE TREGLOWN
ARCHITECTURE

Carn Gwavel School

10 November 2017

This document includes:

Code	Section	Revision	Dated
C46	Cavity wall tie renewal/ insertion		

C46 Cavity wall tie renewal/ insertion

5 SURVEY OF EXISTING CAVITY WALLS

- Timing: Before starting remedial work covered in this section.
- Purpose: To confirm nature and extent of remedial work to wall ties.
- Survey report: Submit, stating:
 - Form of construction, materials used and condition of walls.
 - Thicknesses of internal and external leaves.
 - Widths of cavities.
 - Nature and extent of remedial work including requirements for additional ties at, e.g. sloping verges, movement joints and openings.
 - Schedule of services, fixtures and finishes requiring removal to facilitate renewal of wall ties.
 - Any other information considered relevant.

10 INSERTING CAVITY WALL TIES Generally

- Existing cavity wall construction: Assumed Unfilled cavity wall.
 - External leaf: 100 mm solid concrete block with render finish.
 - Internal leaf: 100 mm dense concrete block.
 - Cavity width: 50 ± 5 mm..
- Existing ties: Galvanized vertical twist.
 - Treatment: Bend down or crop off. Submit proposals.
- Remedial cavity wall ties:
 - Type: Contractor's choice.
 - Manufacturer: Contractor's choice.
 - Product reference: Contractor's choice.
 - Diameter: Contractor's choice.
 - Length: Site measurement.

30 INSTALLATION OF WALL TIES GENERALLY

- Masonry:
 - Stable at all times during wall tie installation.
 - Formation of holes: Minimize.
 - Cavities: Clear and free from debris.
 - Fixing holes: Clean.
- Wall ties:
 - Installation: Accurately and securely.
 - Drips: Centred on cavity.
 - Expansion anchor fixings: Set to the correct torque.
 - Bonded fixings: Thoroughly grouted.
- Facework: Keep clean.

40 POSITIONING OF WALL TIES

- Spacing of wall ties: 750 mm maximum horizontal centres (staggered alternate courses) and 450 mm maximum vertical centres.
- Additional ties:
 - Reveals of unbonded openings and edges (including gables and movement joints): Fix additional ties within 225 mm of edges, joints and roof verges at 300 mm maximum vertical centres.
 - Cavities with insulation batts: Not required.

50 REMOVING MASONRY UNITS

- Removal of units for reuse: In one piece. Clean and set aside.
- Units unsuitable for reuse: Obtain instructions.
- Adjacent masonry:
 - Joints: Do not damage or widen.
 - Old mortar: Remove.
 - Cavities: Keep clean.

60 REMOVAL OF EXISTING WALL TIES FROM INTERNAL LEAF

- Wall ties: Remove carefully and completely.
- Internal leaf/ finishes: Minimize disturbance.

65 MAKING GOOD OF CAVITY WALL INSULATION

- Cavities: Clear of dirt and debris.
- New insulation: confirm if insulation is present.
 - Thickness: To match existing.
 - Installation: Secure. No gaps.

70 REPLACING MASONRY UNITS

- Masonry units: 100 mm concrete block.
- Mortar: As section Z21.
 - Mix: 1:1:5-6 cement:lime:sand, colour matched to approval.
- Mortar joints: Control suction. Lay units on full bed and fully fill vertical joints.
 - Profile: Finish neatly to match existing.
- Cavities: Keep clean.

80 MAKING GOOD OF INSERTION/ INSPECTION HOLES IN EXTERNAL LEAF

- Mortar mixes: To approval.
 - Colour and texture: To match existing masonry units/ joints.
- Insertion/ Inspection holes: Clean and fully filled with repair mortar.
 - Finish: Neat and flush.

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90 REPOINTING CRACKED JOINTS

- Extent of repointing: To joints with cracks wider than 1.5 mm.
- Joints:
 - Existing mortar: Remove carefully. Do not damage adjacent masonry or widen joints.
 - Recess to receive pointing: Neat and square, minimum depth twice joint thickness. Remove dust and debris.
- Mortar: As section Z21.
 - Mix: 1:1:5-6 cement:lime:sand, colour matched to approval.
- Repointing: Control suction. Fully fill joints with mortar.
 - Profile: Finish neatly to match existing adjacent joints.
- Facework: Keep clean.

95 DOCUMENTATION

- Submit:
 - Statement of quality control checks.
 - Guarantee certificate.