

Arthur Cottage - Ballymena, Northern Ireland





Arthur Cotta, the Ancestral Home of Chester Alan Arthur, 21st President of the United States has recently been opened to the public.

Before this, a survey had indicated that two external walls showed signs of moving outwards. (see photograph)

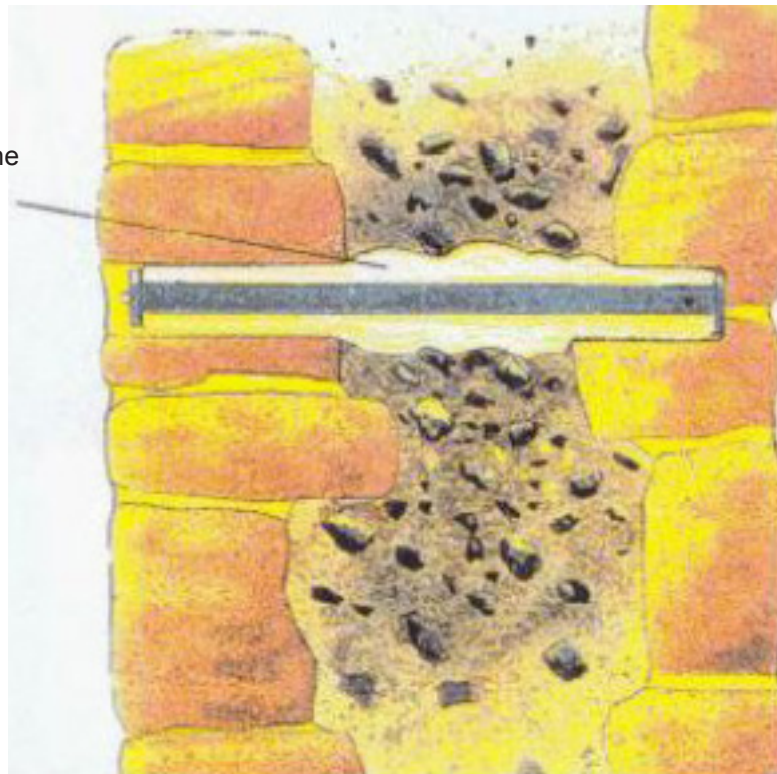
Before the cottage could be opened to the public it was necessary to reinforce these external walls to prevent further movement.

Obviously to preserve the character of the cottage, no external Pattress Plate could be used, this presented a problem as there did not appear to be any way of doing the job satisfactorily.

Ace Fixings were approached and suggested the Cintec Harke WSA stitching anchor for the following reasons:

- (1) After painting, no external signs of repair would be visible thereby preserving the original character.
- (2) The cementitious grout nature of the anchor would mean that a good fix can be obtained in a rubble filled wall.

Socks expansions into the soft friable core



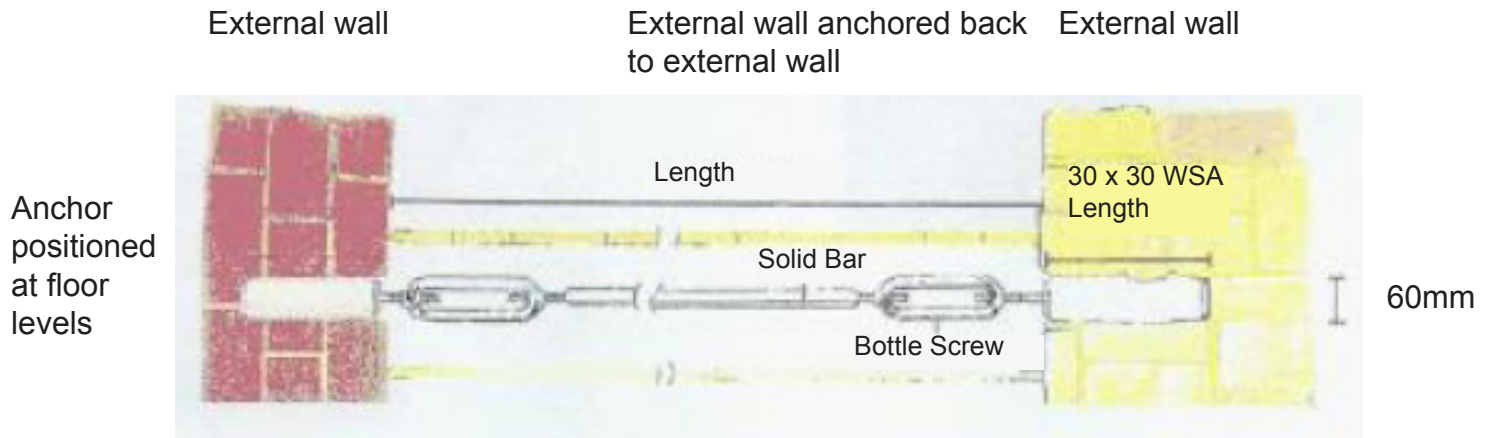
Anchor body design dependent on lead but normally -

15x15
20x20
or 30x30 Square Hollow Section

Number and position dependent on structural condition

- (3) The stress free nature of the anchor means no stresses are exerted on the structure
- (4) The WSA anchor is quickly and easily fixed in place.
- (5) The anchor is unaffected by any dampness or moisture within the stone wall.
- (6) The metal components of the anchor are all stainless steel ensuring a very long life.

This suggestion was accepted by the Architect and two 30mm x 30mm x 450 long WSA anchors were installed tied together with 16mm rod, tensioned using two bottle screws. (See diagram below).



Installation

The anchor is installed into a 60mm diameter hole drilled with a Diamond Drilling Rig.



(a) Drilling Rig Base Plate fixed to wall.



(b) Drilling Rig in place.

(c) Drilling one of two 60mm holes.



(d) Installing the anchor.



(d) Inflating the anchor with grout. (Note the photograph taken of the actual operation did not come out.)



(e) Internal view of one installed anchor with the bar (connecting to the other anchor) and showing the bottle screws.

