Thor Double Resin Tie - Threaded bar & nut

Features

Resin bonded ties are widely accepted to provide a good fixing to most substrates, ideal for where the quality of the substrates are in doubt. The Thor double Resin tie manufactured from 6mm Austenitic 304 grade stainless steel bar has a thread at each end with a nut to centre the ties in place and retain the resin and a neoprene drip. A 5mm diameter bar option allows greater flexibility of thermal movement. Comprehensively used tested and proven.

Application

- Thor P Resin is effective in bonding almost all building materials i.e. brick, lightweight block, timber frame, mortar and where the quality of the substrates is in doubt.
- For tying and pinning masonry Ideal for conventional street housing.

Method Statement

1. Method Statement Set depth gauge to allow the 11mm drill bit to penetrate into the inner leaf. Drill until the depth gauge meets the face of the outer wall. Minimum penetration to the inner leaf brickwork should be 65mm.

2. Blow out the inner leaf pilot hole. using a pneumatic spoil blower. This process is essential to ensure fixing resin obtains a bond with the inner leaf material.

3. Insert the mixer nozzle and extension tube to the back of the inner leaf pilot hole. Squeeze the gun trigger to force the resin into the pilot hole, slowly withdraw the tube until it is clear of the inner leaf. Release back pressure on the gun and extract the nozzle.

4. Push the tie into the back of the resin primed hole in the inner leaf. The resistance created by the resin, is an indication to the installer that sufficient resin is in place to form an adequate bond.

5. To finish outer leaf installation, place the end of the mixer nozzle into the outer leaf hole and pump until the hole is visibly filled.

6. The outer leaf installation is then finished using colour matched mortar of mastic.

TYPICAL TENSILE FAILURE IN ACCORDANCE WITH BSI DD 140 PART 1

BASE MATERIAL	COMPRESSIVE STRENGTH	6MM TIE ANCHORAGE	MINIMUM EMBEDMENT
Common Facing Brick	20 – 20.75	8.60	65
Deep Frogged Brick	20 – 20.50	6.00	65
Dense Concrete Block	7 – 10.	4.60	65
Lightweight Block	2.8 – 35.	3.21	75
Mortar Bed Joint 1:1:6		5.26	75
Clearance Hole 10mm	Available lengths mm : 175 ; 200 ; 225 ; 250, 300		

Test provide indicative values of the tie performance. The couplet test produces results of a conservative nature compared to actual wall tests

SPECIFICATION NOTES

The following criteria are to be used unless specified otherwise:

RE-TYING - Locate and mark in white chalk the position of the old ties using a metal detector. Use these marks to establish the spacing of an alternative grid for the new wall ties.

It is important to ensure that the replacement wall ties are installed before treating the existing ties.

The drilling method adopted must ensure accuracy of the diameter of the hole and avoiding appreciable spalling.

Ties will be fitted into the centre of an external brick wherever possible.

It is imperative that the holes drilled should be to a recognised pattern i.e. diamond grid 900mm between centres horizontally and 450mm vertically. Generally the diamond pattern will commence with the first lines of holes 300mm up from damp proof course and 300mm in from the gable end. In brick columns of 300 mm or less a centre line will be drilled, spacing of 300mm vertically and 250mm horizontally out from the edge of the fenestration.

Existing Tie Treatment

Depending on the specifiers recommendations ties can be isolated by either:-

A) Uncovering the existing ties, and sleeving the ties in accordance with the Thor sleeve specification. This method has the advantage of containing the works within the mortar bed joint, and is less destructive than alternative methods.

B) Ties can be cropped or removed. This method requires the removal and replacement of a brick adjacent to the tie.

General Notes

These notes are for general use only. Should these notes not apply to your specific project, please consult the Thor Helical Remedial Technical Support Team on 0870 6006164. Thor Helical Remedial are able to offer a full project design service by either our in house design team or our National network of Approved installers. In most instances this service is provided free of charge. Projects completed by our network of approved installers offer the benefit of a fully underwritten insurance backed guarantee.