

# Installation Instructions

## Restraint System for tying Brickwork to Steel Studwork



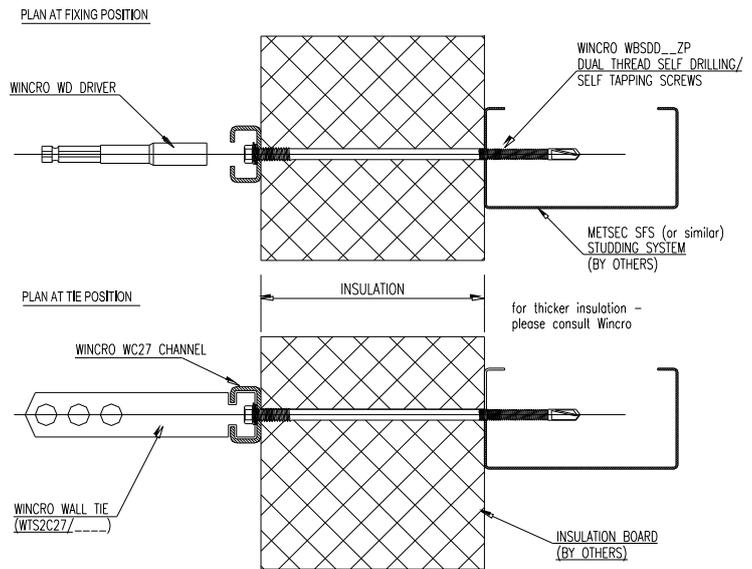
Designed for use with SFS/Metsec steel channel studwork, the WC27 masonry restraint system facilitates the tying back of brickwork to the steel channel studwork.

The 3-part system comprises of a vertically installed Wincro WC27 25/14 Channel with pre-punched holes for use with WBSDDZP dual thread self-drilling self-tapping screws and WTS2C27 Safe ties to restrain masonry.

### Installation:

WC27 channel incorporates pre-punched holes at 112.5mm close centres to ensure a fixing position is always located near the end of a length. It should be fixed to steel studwork at 450mm (max.) vertical centres.

The channel is fixed back to the steel stud using the Wincro WBTLWD driver and WBSDD#ZP screws (without deforming the insulation).

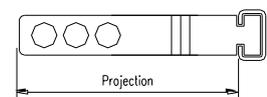
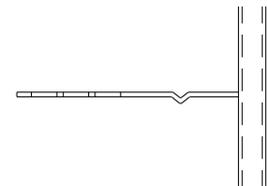


WTS2C27 wall ties are inserted at any point along the channel's length and are built into the bed joints of the outer leaf as work proceeds. The spacing of ties is based on the height of the building and its geographical location, as table below.

### Vertical Tie Spacing

Based on WC27 Channels at 600mm Horizontal centres.  
Basic Wind Speed <25 m/s

Altitude and Distance from coast	Vertical Tie Spacing (mm) for Heights of Brickwork		
	15m	25m	40m
Altitude < 150m, and Distance from coast >50km	450	225	225
Altitude <25m, and Distance from coast <50km	450	300	225



Wincro WC27 CHANNEL with WTS2C27 TIE



Wincro WBSDDZP SCREWS

Fixing Screw Product Code	Insulation thickness (mm)	Wincro Tie Product Code	To suit Cavity Width (mm)
WBSDD65ZP	25-40 thick	WTS3C2775	15-40
WBSDD82ZP	35-55 thick	WTS3C27100	40-65
WBSDD98ZP	40-70 thick	WTS2C27125	65-90
WBSDD120ZP	55-90 thick	WTS2C27150	90-115
WBSDD130ZP	65-100 thick	WTS2C27175	115-140
WBSDD150ZP	85-115 thick	WTS2C27200	140-165

Note, cavities are calculated from face of insulation and make allowance for depth of WC27 (14mm). We recommend that wall ties achieve a minimum embedment of 62.5mm in the outer leaf of brickwork (min. 50mm BS5628). Applications with a 50mm open cavity require 100mm long ties.

### GENERAL

All Wincro products are produced from Type 1.4301 (304) Stainless Steel u.n.o. and are generally produced from sheared plate. As with all similar industrial fabrications, these may present sharp edges and suitable personnel protective equipment should be worn at all times during handling and installation. In all cases, installation should be entrusted to appropriately qualified/experienced persons.

All contact between dissimilar metals must be isolated using isolation patches/washers.

All bolts specified must be installed and torqued to Manufacturers Recommendations / Guidelines.

The Construction applications and details provided in this guide are indicative only.