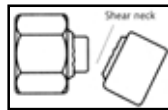


Lectros 'Quick-Fix' Tie

Technical Data Sheet



Description and Use



PN101 FX (with unique Shearnut)

The Lectros PN101FX double expansion remedial wall ties are manufactured from corrosion resistant Austenetic 304 Grade Stainless Steel tie bars with Neoprene sleeves.

The Neoprene sleeves of this tie avoid point loading and are remarkably tolerant to both hole and host material variations. It is sometimes difficult to obtain a good anchor with Stainless Steel expanders in hard materials with a compressive strength over 10N/mm².

The 10mm diameter Neoprene expanding sleeves are uniquely designed, thus ensuring that the compression washers fitted do not pull through the sleeves on expansion. The 10mm diameter Neoprene sleeves fitted to the wall tie gives it a very wide range of fixing, allowing it to fix into softer materials with ease, and gain a grip on particularly hard material such as concrete. Under continuous pressure testing the tie does not creep and lose its grip.

The 'Quick-Fix' tie features a unique 'tall-nut' which when turned with a setting tool, rotates the whole tie bar, forcing the inner leaf Neoprene sleeve to open and grip in the masonry. The inner fix has now been created. At a factory set torque level, the end of the 'tall nut' shears away and the remaining nut is forced down the tie bar to expand the Neoprene sleeve to grip the outer leaf.

The speed of fix of the 'Quick-Fix' tie with a torque set electric drill is probably the fastest tie currently on the UK market.

Application

A 10mm diameter hole is drilled through the outer leaf and into the inner leaf to a minimum depth of 55mm. The quality of fix is enhanced by blowing out the hole to remove drill spoil. The tie is then inserted in the hole and pushed firmly home into the inner leaf. The setting tool is then fitted over the tall nut and then turned clockwise to secure the inner leaf fix. The tie cannot be over tightened at this stage due to the unique design of the shearnut. Undertake a pull-out test (if required) by screwing on a pull test adaptor to the tie bar end.

To complete the outer fix, continue turning the setting tool clockwise until hand tight. Ensure correct tightness by checking with a torque wrench set to approx. 4N/m. Alternatively a Torque drill set to 4N/m can be used.

Below are listed typical tensile failure loads of this tie under testing in accordance with BSI DD140 Part 1 and provide indicative values of tie performance.

BASE MATERIALS	COMPRESSIVE STRENGTH (N/mm ²)	TIE ANCHORAGE KN/PN101FX
Common Brick	20-27.5	4.56
Deep Frogged Brick	20-27.5	4.00
Dense Concrete Block	7-10.5	4.56
Lightweight Concrete Block	2.8-3.5	1 .78

Note

The above are mean failure loads or are the load at a deformation of 5mm, which ever occur first.

DATA

Mechanical Mechanical

Tie

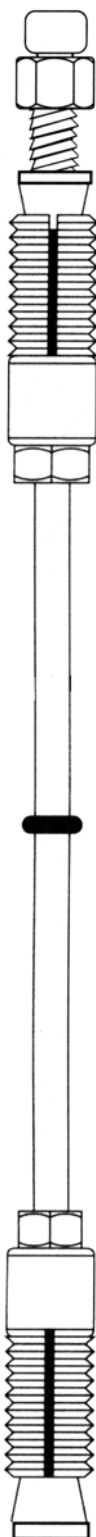
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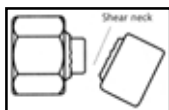
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Lectros 'Quick-Fix' Tie

Technical Data Sheet



Description and Use



PB101 FX (with unique Shearnut)

The Lectros PB101 FX double expansion remedial wall ties are manufactured from corrosion resistant Austenetic 304 Grade Stainless Steel tie bars with Brass expanders. The Brass expander is offered as an alternative to stainless steel expanders due to the malleable nature of Brass and the improved grip of the masonry that this tie affords. It is sometimes difficult to obtain a good anchor with Stainless Steel expanders in hard materials with a compressive strength over 10N/mm².

The 'Quick-Fix' tie features a unique 'tall-nut' which when turned with a setting tool, rotates the whole tie bar, forcing the inner leaf expander to open and grip in the masonry. The inner fix has now been created. At a factory set torque level, the end of the 'tall nut' shears away and the remaining nut is forced down the tie bar to force the cone into the outer leaf expander.

The speed of fix of the 'Quick-Fix' tie with a torque set electric drill is probably the fastest tie currently on the UK market.

Application

A 10mm diameter hole is drilled through the outer leaf and into the inner leaf to a minimum depth of 60mm. The quality of fix is enhanced by blowing out the hole to remove drill spoil. The tie is then inserted in the hole and pushed firmly home into the inner leaf. The setting tool is then fitted over the tall nut and then turned clockwise to secure the inner leaf fix. The tie cannot be over tightened at this stage due to the unique design of the tall nut. Undertake a pull-out test (if required) by screwing on a pull test adaptor to the tie bar end.

To complete the outer fix, continue turning the setting tool clockwise until hand tight. Ensure correct tightness by checking with a torque wrench set to approx. 4N/m.

Alternatively a Torque drill set to 4N/m can be used.

Below are listed typical tensile failure loads of this tie under testing in accordance with BSI DD140 Part 1 and provide indicative values of tie performance.

BASE MATERIALS	COMPRESSIVE STRENGTH (N/mm ²)	TIE ANCHORAGE KN/PB101FX
Common Brick	20-27.5	7.2
Dense Concrete Block	7-10.5	3.2
Lightweight Concrete Block	2.8-3.5	1.9

Note

The above are mean failure loads or are the load at a deformation of 5mm, which ever occurs first.

Mech Mech Brass Tie Tie

Product
Reference
PB1FX



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