



Instructions For Safe Installation Of 10mm Catenary Span Using An Eye Plate Assembly

This data sheet outlines the safe installation procedure for installing a 10mm stainless steel cable catenary span across a street or Public Highway using our made-for-purpose, easy to install eye plate assembly. Cable, fittings and kits can be ordered on our website, at www.tecni-cable.co.uk.

This guide conforms to the "Code of Practice for the Installation, Operation and Removal of Seasonal Decorations", published by the County Surveyors' Society. All installations must be carried out by a qualified installer operating under the direct instruction of the Highway Authority. Full details relating to catenary installation can be found in the County Surveyor's Code of Practice and should be referred to before carrying out an installation.

Cable And Fittings Required Per Span



NB. All components are made from A4-AISI 316 marine grade stainless steel so are highly corrosion resistant.

Fitting Instructions

Fixing the Eye Plate Assembly

1. The made-for-purpose and easy to install eyeplate has been designed to sit in the middle of, and span three courses of bricks for maximum strength, as in the illustration below.

Having decided where you are going to put the wall plate, using a 10mm drill bit, drill 4 holes 50mm deep in line with the holes in the plate.____



2. Attach the eye plate to the wall using the bolt anchors. Gently tap each anchor through the hole in the plate into the hole in the wall. Cap each one by putting a washer then the Nyloc lock nut onto each anchor over the plate.



Anchorage Testing and Inspection

3. Test the eyeplate assembly using a Hydrajaw eyebolt tester to ensure it is secure.

The Code of Practice requires catenary eyebolts to be tested to a minimum strength of 1500kgs/15kN when supporting a maximum cable diameter of 10mm. Testing should be carried out immediately following installation, and every five years thereafter. In addition, each anchorage should be visually inspected annually to ensure that the anchorage fixing method and material into which it is fixed are still sound and fit for purpose. Record details of testing in the Anchorage and Catenary Wire Register.

For this purpose, Tecni-Cable stocks a Hydrajaw Eyebolt Testing Kit (Cat Code 196.075.150) which will test up to 15kN. A Safe Use Data Sheet demonstrating the correct procedure for safe testing may be downloaded from the Tecni-Cable website here.

Installing And Tensioning The Catenary System



wall with anchor bolts

- 4. Cut 7x19 stainless steel cable (Cat Code 604.000.100) to the required length allowing for fitting lengths and turnback. Tecni-Cable recommends the Felco C16 Professional Wire Rope Cutter (Cat Code 104.000.016) for cutting through 10mm cable.
- 5. Form an eye in each cable end, and reinforce with a 10mm thimble (Cat Code 308.900.100).
- 6. Secure the thimble eye using 10mm DIN 741 cable grips 4 per end (Cat Code 309.010.010). Tecni-Cable publishes a data sheet on our website for the safe fitting of DIN cable grips.
- 7. Remove the safety bolt from the bow shackle (Cat Code 208.684.127) and reeve through the thimble eye. Replace the bolt into the shackle.
- 8. Remove the clevis pins from the rigging screw (Cat Code 208.245.412). Position the jaws over the eyebolt and thimble eye and replace the clevis and pin. Repeat with the shackle bolt on the other side of the road.
- 9. Tension the cable by rotating the rigging screw body in a clockwise direction.
- 10. The span is now ready to support your seasonal decorations.

If in doubt, please contact us: T: +44 (0) 870 7669 562 Email: sales@tecni-cable.com Web: www.tecni-cable.com

The information in this leaflet should be passed to the user of the equipment





Instructions For Safe Use Of Hydrajaws Eyebolt Tester

Hydrajaws 15kN Eyebolt Tester Kit With 270mm Bridge

This testing kit is designed for the safe testing of eyebolts, ringbolts and anchors fitted in masonry and concrete. The tester conforms to BS EN795 Code of Practice For The Installation and Maintenance of Anchor Devices.

It also meets the requirements of the "Code of Practice for the Installation, Operation and Removal of Seasonal Decorations" and is compatible with the systems and fittings offered for sale on the Tecni-Cable website.

Testing The Eye Plate Assembly

 Once the plate assembly is fixed to the wall, it is necessary to test the installation. This will require a pull test of 15kN (1500 kgs) to be applied to the eyebolt. If it passes this test then it is deemed safe to use for the installation of the catenary wire and the decorations. This test must be carried out using a certified testing machine like the Hydrajaws Eyebolt Tester which can be bought or hired.



- 2. Check that the positioning of the eyebolt satisfies the requirements of BS 788:2005 Code of Practice for the design, selection, installation, use and maintenance of anchor devices conforming to BS EN795.
- 3. To test, place the bridge of the eyebolt tester over the plate and eyebolt to be tested. Locate the clevis on the eyebolt and fit the cross pin through the clevis and eyebolt.
- 4. Adjust legs to take up slack in the system and to ensure the load is being applied axially through the eyebolt and structural anchor. Check that the tester is at zero stroke (or near zero) and follower needle set to zero.
- Apply the tensile load gradually via the tension tester until the required proof load of 15kN is reached or failure occurs. (Check that the stroke of the tester has not been exceeded). The load should be applied for a period of three minutes – the test will be successful if no more than 1mm deflection is measured.
- 6. If the load is reached satisfactorily the certificate of installation and test may be issued and signed by a competent person. If the load is not reached the eyebolt must be removed.

Anchorage inspection

Check for signs of corrosion and record in the anchorage and catenary wire register. If there are signs of significant corrosion, the anchor device should be condemned. Unscrew or remove the eyebolt and place to one side so that it cannot be reused.

Each anchorage should be visually inspected annually to ensure that the anchorage fixing method and material into which it is fixed are still sound and fit for purpose. Anchorages are to be tested at least every five years.

If in doubt, please contact us: T: +44 (0) 870 7669 562 Email: sales@tecni-cable.com Web: www.tecni-cable.com

The information in this leaflet should be passed to the user of the equipment