

SUSPENSIONSOLUTION DATASHEET

THE CON-LOCK SYSTEM

THE CON-LOCK SYSTEM is a wire suspension solution that can suspend applications from a concrete ceiling.

The system consists of an M6 hammer fixing that can be installed into a number of different base materials to provide a strong secure anchor point over head, and a pre-determined length of wire rope supplied complete with an appropriate Zip-Clip locking device.

AVAILABILITY

Zip-Clip offer three different Con-Lock systems each allocated a letter to differentiate between the available safe working loads (SWL). Each systems comprises of a specific diameter of wire rope and comes with the required Zip-Clip locking device.

- **CLG** system 15 kg SWL
- CLS system 50 kg SWL
- **CLY** system 90 kg SWL

Note: G-system should not be used for HVAC.

Con-Lock is available for drop lengths of 1 m to 10 m. Loads indicated are per individual wire support when coupled with the appropriate Zip-Clip locking device.

Important Note: Overall SWL of the Con-Lock system is governed by the strength of the base material as well as the quality of the fixing into that base material. The Con-Lock system must be de-rated appropriately if either of these factors are applicable.

PROOF LOAD TESTING

- Zip-Clip recommend that Proof Load Testing should be carried out prior to installation in order to confirm system suitability.
- For assistance with Proof Load Testing (UK) contact Zip-Clip Technical Department.

SUITABLE BASE MATERIALS

- Cracked concrete.
- Non-cracked concrete C12/15 to C50/60.
- Concrete with re-enforcement bar.
- Solid sand lime brick.
- Pre-stressed hollow core concrete slab.



FEATURES

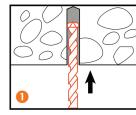
- ETA approved fixing, BS8539 compliant.
- Nail anchor for hammer set installation.
- Shallow embedment, avoiding re-bar.
- No claw back required as the installed nail anchor expands automatically under load.
- Key-free release suspension for height adjustability.
- High tensile galvanised steel wire rope.
- Available as a double wire rope drop.

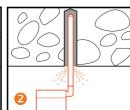
INSTALLATION

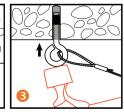
- The first step of the process is to install the concrete fixing.
- The second step is to connect wire support to the application using the Zip-Clip locking device.

STEP 1:

- Drill 6 mm hole into base material, to a minimum depth of 35 mm.
- Clean dust and debris from the drill hole appropriately.
- 6 Locate fixing into drill hole and hammer until set Anchor is now fixed, no claw back required.



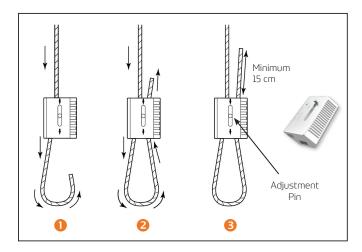






STEP 2:

- Pass the wire rope through the Zip-Clip device in the direction of the arrow.
- Pass wire rope through or around your required fixture/application and back through the Zip-Clip leaving 15 cm of wire protruding.
- Confirm engagement of the Zip-Clip on the wire by pushing the pin in the opposite direction to the arrows indicated.



ADJUSTMENT

Please note: Before any adjustments can be made it is necessary to take all weight off the Zip-Clip device. It will not be possible to make adjustment if this is not done.

To shorten the suspension:

- 1. Push the Zip-Clip device further up the live (load) wire This will make the loop bigger.
- 2. Pull on the dead wire (exit tail) to make the loop smaller This will shorten the suspension.
- 3. Trim the dead wire tail to minimum 15 cm or coil the wire neatly to allow for future adjustment.

To lengthen the suspension:

- 1. Select the channel that holds the dead wire.
- 2. Make sure there is enough spare dead wire to allow for adjustment whilst maintaining an exit tail.
- 3. Push the adjustment pin in the direction of the arrow. This will release the dead wire (exit tail).
- 4. Allow the dead wire to feed back through the Zip-Clip. This will make the loop bigger.
- 5. Now select the channel that holds the live wire (load).
- 6. Push the adjustment pin in the direction of the arrow. This will release the live wire.
- 7. Allow the Zip-Clip to travel down the live wire. This will make the loop smaller.

MATERIALS

M6 Hammer Fixing with Eye:

Manufactured from zinc plated steel, ETA approved to ETA-06/0175. Requires drilled hole of 6 mm diameter to 35 mm depth. Anchor length is 54 mm.

Zip-Clip Devices:

Zamak 5 zinc alloy main body with internal stainless steel spring and sintered steel locking wedge(s).

Wire Rope:

Galvanised mild steel electro-galvanised wire rope, 1960 N/mm² grade, 7×7 IWRC construction, manufactured to BS EN 12385.

AREAS FOR USE

The standard Con-Lock range is predominantly for in-door applications. Regular galvanised systems should not be used in areas that have levels of corrosion or elevated levels of heat or moisture.

For applications that are outside or near areas such as the sea, it is recommended to use stainless steel – Zip-Clip can provide Con-Lock in a stainless steel version.

For installations that are within corrosive areas and require a stainless steel Loop-It, consult with Zip-Clip Technical Department.

MANUFACTURERS RECOMMENDATIONS

The Zip-Clip Con-Lock system is designed to support **STATIC loads only**. Dynamic and shock loads must be avoided and can greatly increase the overall weight of the product being suspended and therefore compromise the safe working load of the suspension. To ensure integrity and safety of the system only Zip-Clip wire should be used.

- Do not exceed the safe working load (SWL) of the product.
- Do not use locking devices with a coated wire.
- Do not paint or apply any other coating.
- Do not lubricate.
- Do not use for lifting applications.
- Remove any frayed cable prior to inserting into the locking devices.
- Do not shock load.
- Do not use for dynamic loads/installations.
- Do not overload.
- Do not mix Zip-Clip systems with other wire suspension manufacturers products.
- Do not use in corrosive environments, e.g. chlorinated environments – For specialist applications, such as corrosive environments, please contact Zip-Clip Technical Department.



For further information on Zip-Clip suspension solutions, for technical or sales enquiries, contact us on Tel: +44 (0)1686 623366 • Email info@zip-clip.com