

# **SUSPENSION**SOLUTION DATASHEET



# THE RIZE SYSTEM

THE RIZE SYSTEM consists of wire rope which is supplied on reels in a variety of diameters and lengths, along with the corresponding Zip-Clip locking devices.

The system is designed to give installers the flexibility to custom-fit desired drop lengths on-site for both lightweight or heavy-duty installations.

Zip-Clip devices are utilised to anchor the wire rope to a ceiling or anchor point, as well as being used to attach the wire rope to the desired fixture or fitting.

# **AVAILABILITY**

Zip-Clip have five different systems which are allocated a letter to differentiate between the available safe working loads (SWL).

Each system comprises a specific diameter of wire rope, and comes with the required Zip-Clip device.

SYSTEM	DEVICE	Wire Rope	SWL (KG)
G	KL50	R200G	15
		R100S	
S	KL100	R200S	50
		R500S	
Υ	KL150	R100Y	120
Р	KL200	R100P	300
N	KL600	R100N	500
<b>Note:</b> G-system not for use with HVAC.			

- Loads indicated are per individual wire rope support when coupled with the appropriate Zip-Clip locking device.
- Third-party test certificates available upon request.
- All safe working loads and certifications are based on the Zip-Clip Rize devices being used in conjunction with Zip-Clip high tensile wire rope.
- Zip-Clip cannot guarantee the safe working load of a product when used with non Zip-Clip wire rope and cannot support projects where non Zip-Clip wire rope has been used.



## **FEATURES**

- 18th Edition Amendment 2: 2022
- Key-free release mechanism on each device for easy adjustment.
- Single die-cast locking devices (zinc alloy).
- High tensile wire rope with 7×7 and 7×19 construction.
- Ideal for both short drop lengths in small void spaces and for very long wire rope supports.
- Only wire rope cutters are required.
- Wire rope supplied on reels in dispensing box avoids birds nesting.
- Can be used as a wrap-around solution for applications such as I-beams or purlins.
- Can be used in conjunction with a number of different brackets or fixings, including eyebolt adapters, concrete eyebolts, rib-deck fixings, purlin clips.

#### **SUITABLE FOR**

- Electrical and mechanical containment
- HVAC installations
- Signage and displays
- Bracing
- Catenaries

# **APPLICATIONS** ... INCLUDE BUT NOT LIMITED TO

- Trunking and busbar supports
- Trapeze brackets
- Pre-fabricated module supports
- Secondary light supports



## ZIP-CLIP RIZE – HOW IT WORKS

#### Standard Devices

- Pass the wire rope through the Zip-Clip device in the direction of the arrow.
- Loop the wire rope through or around the anchor point.
- Pass the wire rope back through the Zip-Clip allowing 15 cm of wire rope protruding.
- · Apply tension.
- Always confirm engagement of the zip clip device on the wire rope by pushing the adjustment pin in the opposite direction of the arrows indicated on the side of the Zip-Clip device.

#### Lockable Devices

Zip-Clip devices are also available in a lockable version offering a more secured method of wire rope suspension.

- Unscrew the M4 locking nut and bolt until the adjustment pin is pushed back fully.
- Pass one end of the wire rope through the Zip-Clip in the direction of the arrow and draw enough wire rope to go around your fixing point.
- Pass the wire rope back through the Zip-Clip leaving at least 15 cm of wire rope protruding.
- Tighten the M4 locking bolt and nut until the adjustment pin can no longer be moved.
- Always confirm engagement of the Zip-Clip device on the wire rope by pushing the adjustment pin in the opposite direction of the arrows indicated on the side of the Zip-Clip device.

## **ADJUSTMENT**

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

# Standard device illustrated Adjustment Pin





# To shorten the suspension:

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

# To lengthen the suspension:

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

# THE FLEXIBILITY OF A ZIP CLIP RIZE DEVICE

Due to the unique way in which the Zip-Clip device is manufactured, each channel can be utilised in different ways to perform a number of different functions.

Each locking channel within a Zip-Clip device works independently of the other. This allows a Zip-Clip to be used in a variety of different ways.

# Clip Top and Bottom

Zip-Clip's RIZE system offers the flexibility to customise your own drop lengths and is ideal for long drops with no limit on length.

A device is used to anchor the wire rope to the soffit/ceiling structure and another to attach to the fixture/application.

# **2** All-Round Loop

A Zip-Clip device can be used to create an all-round loop by joining two free ends of wire rope together. This can be coupled with a fixing or fixings of choice in order to create one full suspension.

- Cut double the length of wire rope required for the final drop length.
- Pass or feed one end of wire rope around your chosen anchor point and return this wire rope into one locking channel of the device. Ensure the exit tail is 15 cm.
- Take the other end of wire rope and pass/feed this around your chosen fixture/application, returning the wire rope back into the other available locking channel. Ensure the exit tail is 15 cm.

# **10** In-Line Joint

By following the arrows on each side of the Zip-Clip device, an inline joint can be created. This can be used to extend a drop length that is too short. Ensure the exit tails are 15 cm.

# **4** Stop-End for Trapeze Brackets

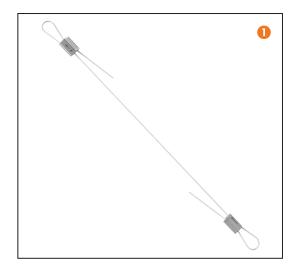
As each Zip-Clip device has a flat face across its smallest axis, it can be used as a stopper unit by feeding the wire rope through just one channel. Adjustment can be made by the key-free release mechanism.

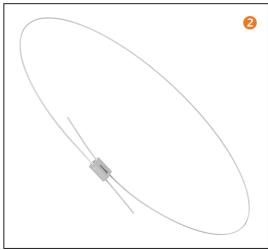
By incorporating an optional penny washer/channel nut above each device, the supporting surface area can be increased.

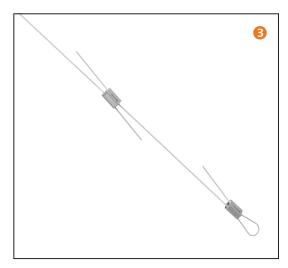
This method is ideal for multi-tier trapeze drops offering a quick, cost-effective and simple solution which can be used in two different guises, see diagram.

Installers must ensure that 10-15 cm of wire rope exits through the back of each device once locked off, known as the dead wire.

All supports must be used within the safe working load.











# FIGURE OF EIGHT SUSPENSION

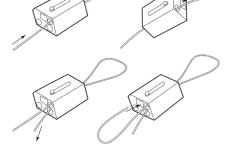
The KL200 can be used to make a figure of eight suspension, using just one device.

• Insert the wire rope into the "through-hole" of the KL200. Note, this through-hole has no locking wedge inside it. The wire rope will move freely through this hole.



- Always confirm engagement of the Zip-Clip device on the wire rope by pushing the adjustment pin in the opposite direction of the arrows indicated on the side of the Zip-Clip device.
- Repeat this process with the other end of wire rope.
- Wrap the wire rope around your chosen fixture/application and return the wire rope back into the KL200 using the available locking channel. Again, ensure the exit tail is 15 cm.





## **MATERIALS**

**Zip-Clip Devices:** Zamak zinc alloy main body with internal stainless steel spring and sintered steel locking wedge(s).

Wire Rope: The standard range of Zip-Clip suspensions utilise galvanised mild steel wire rope which is electro-

galvanised and is predominantly for indoor applications. Regular galvanised wire rope should not be used in areas that have elevated levels of corrosion, heat or moisture. For external applications or those in coastal regions, it is recommended to use stainless steel wire rope. Zip-Clip provide 316

marine grade stainless steel wire rope.

For installations that are within corrosive areas, consult with Zip-Clip Technical Department.

## MANUFACTURERS RECOMMENDATIONS

The Zip-Clip 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 rope should be used.

- Do not exceed the safe working load (SWL) of the product.
- Do not use locking devices with a coated wire rope.
- 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 rope 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.

#### INSTALLATION FACTORS

Installers must pay attention to the nature of the installation process. Certain installations, such as cable pulling, will introduce dynamic forces onto the supports. Where this might be the case, it is advised to select heavier duty systems.

**Ball Strikes** – Where this may be a potential factor, such as installations within sports halls, heavier duty wire rope supports should be utilised to offer maximum resistance to dynamic shock loads. Zip-Clip cannot guarantee its systems against the effects of ball strikes.



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