

DUCT-LOCK SYSTEM

THE DUCT-LOCK SYSTEM is utilised to connect a wire rope suspension to rectangular ductwork. This allows for the suspension of ductwork without the need of using a bearer underneath. It consists of a Zip-Clip KL100 locking device and a specially shaped bracket (KV bracket) which encases the device and secures the wire suspension to the ductwork.

AVAILABILITY

Duct-Lock utilises the Zip-Clip S-system wire rope with a 45 kg safe working load (SWL). The system is available for drop lengths of 1 m to 10 m. Load indicated is per individual wire support when coupled with the appropriate Zip-Clip locking device.

END TERMINATIONS

The system incorporates the following end terminations:

1. Loop-end (to create choke knot for wrap around applications).
2. M6 concrete hammer fixing (CLA1).
3. M8 × 25 eye bolt adapter.

FEATURES

- Wire locking device pre-assembled into bracket.
- Adjustment pin to alter height of ductwork.
- 4.5 mm holes to accommodate tek or sheet metal screws.

MATERIALS

KV Bracket:

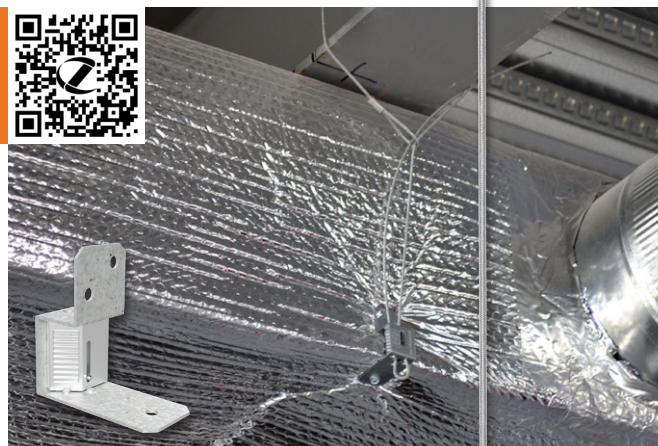
Manufactured from zinc plated mild steel.

Zip-Clip Devices:

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

Wire Rope:

1960 N/mm² grade, 7×7 IWRC construction, manufactured to BS EN 12385.



INSTALLATION

Stages of installation:

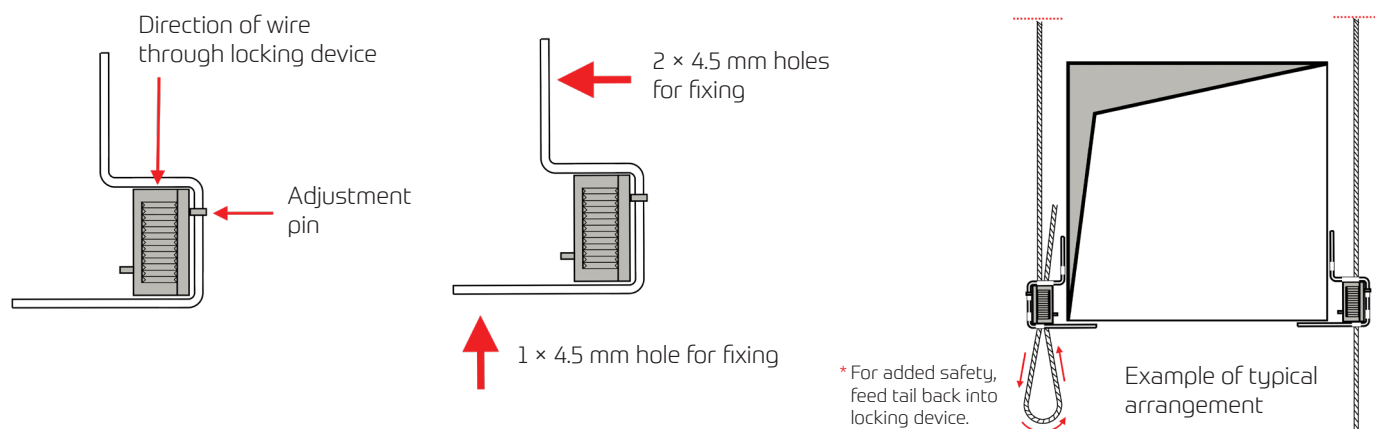
- 1 Install the wire suspension at desired location with the required fixing (loop end, concrete anchor or M8 eye bolt).
- 2 Fix the KV bracket to the rectangular duct at the desired location.
(Note, this can be done at floor level.)
- 3 Join the duct work to the wire suspension.

Ensure the anchor method selected is appropriate for the intended ceiling structure.

- Choke-knot for wrap-around steel work (purlins or i-beams).
- M6 concrete anchor for concrete ceilings.
- M8 eye bolt adapter to link with through holes or female threaded fixing.

Fixing KV bracket

- Position bracket against corner of duct in the desired location. Note, opposing brackets must be perpendicular to each other.
- Utilise suitable sheet metal fixings to fasten the bracket into place (fixings not provided).
- 2 fixings required into the side wall of the duct.
- 1 fixing required into the underside of the duct.



Joining duct with wire suspension

- Insert the wire rope into the top of the locking device.
- Pull wire rope through the locking device so it exits through the bottom of the bracket.
- Position duct to the required height.
- Trim excess wire rope leaving 75 mm to form a tail or coil excess wire to allow for future adjustment.

As an added safety precaution, feed the tail back into the available channel on the underside of the Zip-Clip locking device (see illustration)*. Please note, however, only do this when installation is complete as adjustment will no longer be possible.

Fixings

Please ensure a suitable fixing has been selected that will:

- Correctly fix the bracket to the duct.
- Is appropriate to fix into the gauge of the ductwork.

Important information:

Please note the following:

- The KV bracket is secured to the ductwork with sheet metal screws (tek screws): not supplied by Zip-Clip.
- The Duct-Lock and KV Bracket are for vertical suspensions only – No angular suspension permitted.
- Only use Duct-Lock with Zip-Clip S-system wire rope.
- Ensure exit tails from locking device are 75 mm or more.
- Ensure appropriate and suitable fixings are used to secure KV bracket to duct.
- Follow DW144 with regard to fixing centres and maximum duct size for support arrangement.

MANUFACTURERS RECOMMENDATIONS

The Zip-Clip Duct-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.
- Use for vertical suspensions only – No angular suspension permitted.
- 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.
- 18th Edition Amendment 2 : 2022 compliant.



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