



THE DEC-LOCK SYSTEM

THE DEC-LOCK SYSTEM is a wire suspension solution that will suspend applications from a concrete over rib-deck ceiling. They offer a none-destructive way of anchoring a wire suspension to the base material and utilise specific wedges that are designed to fit into the profile channels that are found running along the underside of the rib-deck.

Each Dec-Lock support consists of a deck wedge coupled with an eye bolt adapter, nut and washer along with a pre-determined length of wire rope supplied complete with an appropriate Zip-Clip locking device.

AVAILABILITY

There are many different types of rib-deck available, therefore it is necessary to ensure the correct wedge has been selected for the rib-deck in question. Complete site tests prior to installation to confirm suitability.

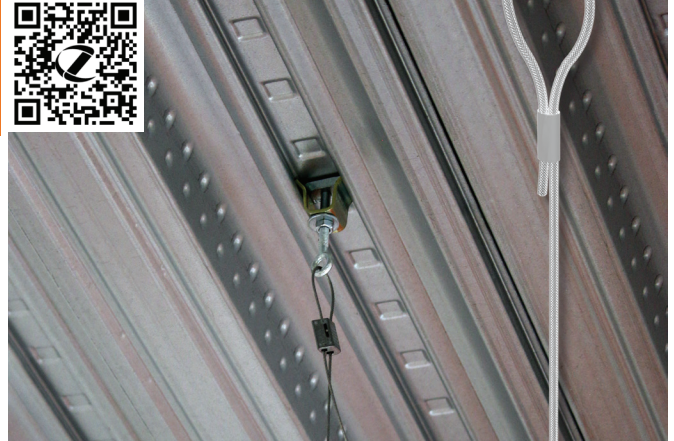
Zip-Clip offer two different Dec-Lock systems each allocated a letter to differentiate between the available safe working loads (SWL). Each systems comprises of a specific diameter of wire rope and comes with the required Zip-Clip locking device.

- **DLG** system – 15 kg SWL
- **DLS** system – 50 kg SWL

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

Dec-Lock can also be produced using Y-wire rope – Please consult with Zip-Clip.

Dec-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.



APPLICATIONS

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

DECK WEDGE OPTIONS

V-NUTS

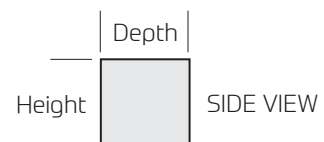
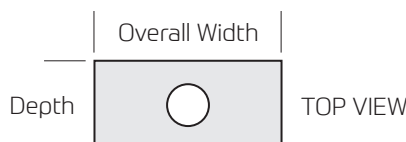
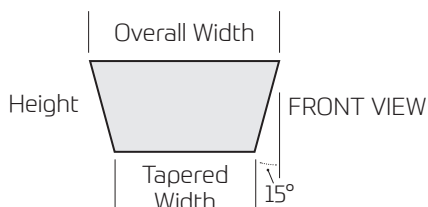
Dec-Lock fixings are supplied with V-Nut deck wedges. These are tapered components. V-Nut wedges are available in two sizes Standard and Mini Mini for smaller deck profiles.



Please refer to table below for clarification on the correct selection of V-Nut for the intended decking.

To confirm: A standard Dec-Lock is supplied with a Standard V-Nut. Smaller Mini Mini wedges must be requested.

Note: Wire suspension is factory swaged to eyebolt adapter. Eye bolt adapter is then coupled with V-Nut.

V-Nut Wedge	Overall Width (mm)	Tapered Width (mm)	Depth (mm)	Height (mm)	Available Hole Sizes (mm)			Recommended Tightening Torque (Nm)		
					M6	M8	M10	M6	M8	M10
Standard	25	19	12	12	●	●	●	5	7	10
Mini Mini	18.5	9.7	9.4	9.4	●	●	–	5	–	–



V-Nut Wedge	Compatible Zip-Clip Eye Bolts					
	 Round Head			 Square Head		
	M6	M8	M10	M6	M8	M10
Standard	●	●	●	●	●	–
Mini Mini	●	●	–	●	–	–

Installation

- 1 Push the V-Nut into channel of decking profile and turn through 90 degrees.
- 2 Screw the eyebolt to the top of the decking profile.
- 3 Tighten locking nut with the appropriate spanner.
- 4 Pass the wire through the Zip-Clip locking device in the direction of the arrow.
- 5 Pass through or around your required suspension and back through the Zip-Clip device leaving a minimum of 15 cm of wire protruding.
- 6 Confirm engagement of the Zip-Clip device on the wire by pushing the pin in the opposite direction to the arrows indicated.

MATERIALS

Zip-Clip Devices:

Zamak 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.

Swages (also known as Ferrules):

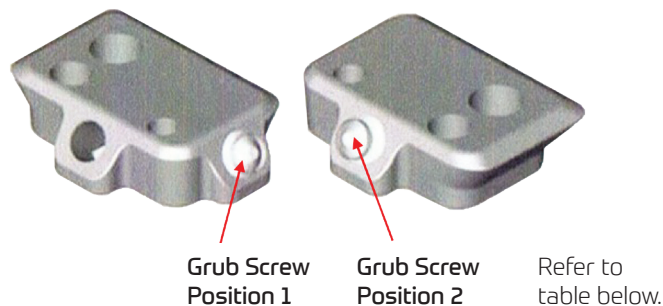
Manufactured from seamless aluminium tube, finished in-house utilising a 25T cylindrical press die with cutting edge. Compliant with BS EN 13411-3 and suitable for wire ropes manufactured to BS EN 12385.

Decking Manufacturer	Decking Type	Multi-Wedge Grub Screw Position	Tensile SWL (kN) 3:1 Safety Factor	4 mm Hexagon Screw Required
Kingspan	Multideck 60	1	1	8
	Multideck 80	1	1	8
Richard Lees	Ribdeck 80	1	1	8
	Ribdeck AL	1	1	8
	Ribdeck E60	1	1	8
SMD	TR60	2	1	8
	TR80	2	1	8

MULTI-WEDGE

The Zip-Clip Multi-Wedge is a flexible decking fixing that can be used into different decking profiles. It is a one-piece unit with an interchangeable grub screw that can be repositioned and tightened against the roof of the decking channel. The width of the fixing can therefore be changed to fit different channels. Refer to table below.

Note: The Multi-Wedge is a made-to-order item, product code MA6810.



Features

- 3 female threaded fixing holes for M6, M8 and M10.
- 2 grub screw hole positions to accommodate different decking profiles: Positions 1 or 2.
- Allows for tolerances in deck profile.

Materials and Finish

Zinc plated iron.

Note: Wire suspension is factory swaged directly to the Multi Wedge.

Installation

- 1 Select position 1 or 2 for grub screw.
- 2 Insert Multi Wedge into deck channel.
- 3 Ensure grub screw is not protruding from fixing.
- 4 Tighten grub screw to 8 Nm torque using 4.0 mm Allen bit.
- 5 Ensure wire support is not trapped between the fixing and the rib deck.

LINDAPTER WEDGES

Dec-Lock suspensions can also be supplied incorporating Lindapter deck wedges.

See table below for confirmation of wedge types.

Lindapter Fixings		
Code	Description	SWL
MAAW/M6	AW Alphawedge M6	100 kg
MAAW/M8	AW Alphawedge M8	100 kg
MAMF60/M6	MF60 decking fixing (met nut and bracket) M6	100 kg
MAMF80/M8	MF60 decking fixing (met nut and bracket) M8	100 kg
MAMW2/M6	MW2 Multiwedge M6	100 kg
MAMW2/M8	MW2 Multiwedge M8	100 kg
MATR60/M6	TR60 wedge c/w locking plate – M6	100 kg
MATR60/M8	TR60 wedge c/w locking plate – M8	100 kg
Note: SWL applicable to fixing ends only, Safety Factor 3:1		

Note: Dec-Locks provided with Lindapter wedges incorporate forged eye bolt adapters, the complete Lindapter wedge anchor, washer and locking nut.

Wedge anchor is manufactured from zinc plated 8.2 grade carbon steel.

Eye bolt adapter sizes: M6, M8 and M10.
Eye bolt adapter head type: Forged – Round head.
Washer sizes: Span approx. 25 mm.



Installation

- Lindapter wedges have specific installation instructions – Manufacturers installation instructions should always be followed.
- For installation instructions please contact Zip-Clip with specifying your chosen Lindapter wedge.
- Always tighten the locking nut with the appropriate spanner to lock the wedge into the decking channel.

ADJUSTMENT OF THE WIRE SUPPORT

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:

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

To lengthen the suspension:

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

MANUFACTURERS RECOMMENDATIONS

The Zip-Clip Loop-It 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.
- 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