



# Product Guide

Wire suspension and bracing systems for building services



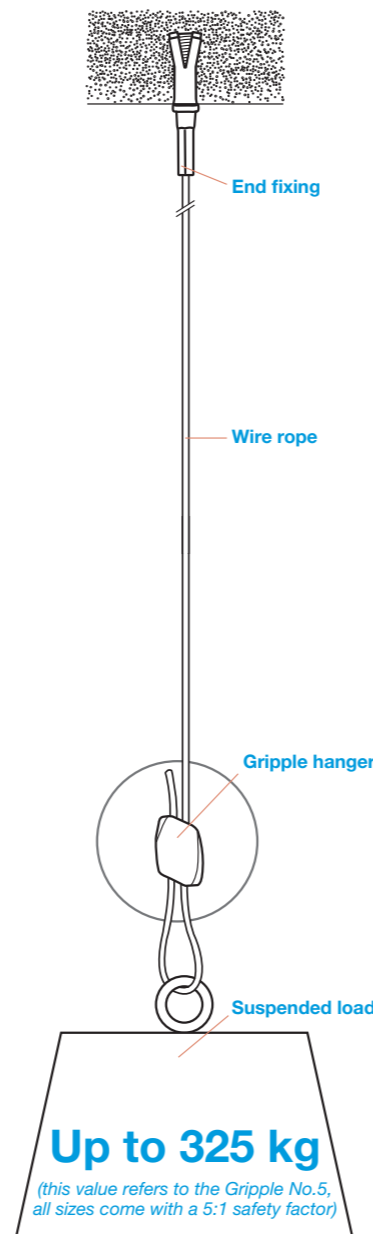
- Easy to install
- Versatile approved systems
- Time, cost and labour savings

# What is a Gripple hanger?

The Gripple hanger is supplied as part of a complete suspension kit, comprising of the hanger and a high-tensile wire rope with a choice of fixing attached to it. The Gripple hanger incorporates a patented self-locking fastener mechanism that not only secures the wire rope, but also allows adjustment of the installation height.

The Gripple hanger is specifically designed to enable quick and easy installation of a variety of MEP (mechanical, electrical and plumbing) services, HVAC, signage, acoustic baffles and much more, and is a proven replacement to traditional threaded rod and chain solutions.

Gripple hangers are manufactured in a range of five standard sizes, all with an individual safe working load (from 10 kg up to 325 kg) and a safety factor of 5:1.



## How does it work?

When the wire rope is inserted into the Gripple hanger channel and pulled through the other side, it is held in place by a spring-loaded high precision serrated wedge, allowing the wire to go one way, but not the other. The wire rope is then looped through the identical channel on the opposite side, providing a means of suspension. The Gripple hanger allows full adjustment to position the object being suspended.

## Why Gripple?

### Saves time and reduces costs

Up to six times faster to install than threaded rod and chain suspension systems meaning projects can be completed in less time

### Environmentally friendly

Fewer components means a reduction in embodied CO<sub>2</sub> of up to 97%

### Strong and versatile

Available in 5 load rated sizes from 10 kg to 325 kg, with designated safe working loads

### Supplied in ready-to-use kits

No hot works required on-site, and lightweight so easier to handle, improving site safety

### A third-party approved system

Certification worldwide SMACNA, UL, DW144, TUV, Lloyds Register, and ISO9001, offering safety, quality and durability assurances

### Technical support available

Support from design to installation including CAD designs and take-offs, CPD seminars, product and installation training

# Technical information

## Load Ratings

Gripple hangers are available in 5 load rated sizes. Each size is designed to carry a specific weight range and has a designated safe working load (SWL). The SWL gives a minimum 5:1 safety factor in a vertical plane and applies to all lengths and end fixings, unless stated otherwise.

Table 1

Wire rope size	Weight Range	Safe Working Load
No.1	0 - 10 kg	10 kg
No.2	11 - 45 kg	45 kg
No.3	46 - 90 kg	90 kg
No.4	91 - 225 kg	225 kg
No.5	226 - 325 kg	325 kg

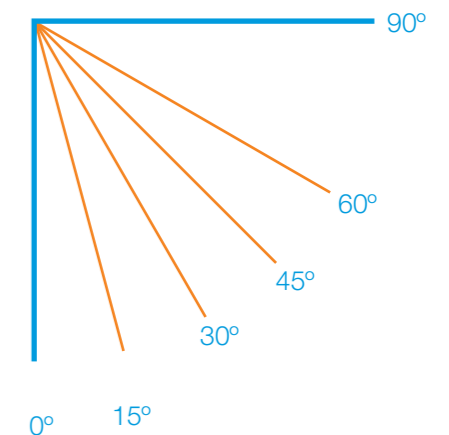
## Hanging at angles

The load rating for a Gripple hanger is based on the suspension being hung vertically. If the wire rope is suspended at an angle, an additional sideways load is applied which reduces the load capacity of the overall suspension. The net effect is shown in the table below.

Table 2

Hanger size	Maximum load (kg) at an angle from vertical				
	0°	15°	30°	45°	60°
No.1	10	9.6	8.6	7	5
No.2	45	43	39	32	22
No.3	90	87	78	64	45
No.4	225	217	195	159	113
No.5	325	314	281	230	163
Load %	100	96	86	70	50

No Gripple hanger should be hung at an angle in excess of 60° from vertical



## Quality and approvals

Quality is everything to Gripple; not just in the products we make and the manufacturing process we employ, but the way we do business. Our compliance to BS EN ISO9001 at our Sheffield manufacturing plant is the backbone of our own quality management system achieved under the auspices of the reputable LRQA.



Gripple's policy is one of continuous development and innovation. We therefore reserve the right to alter specifications, etc. without notice.

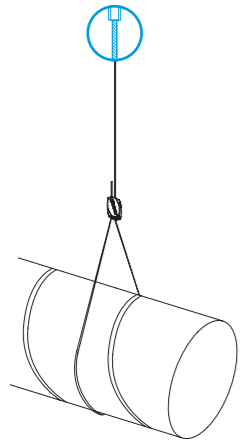


# Applications- HVAC: Ventilation

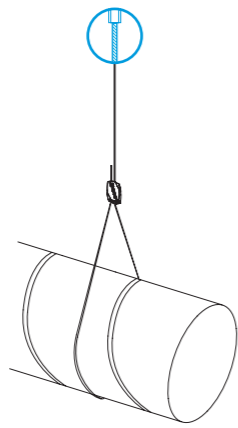
Rectangular ducting, spiral ducting, oval ducting and PI foam ducting



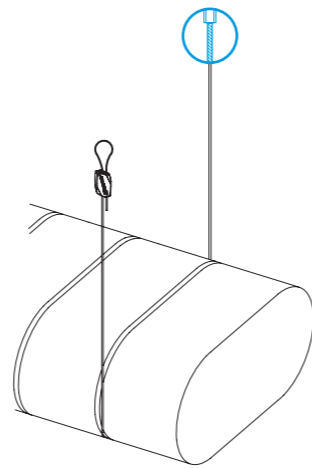
Spiral ducting



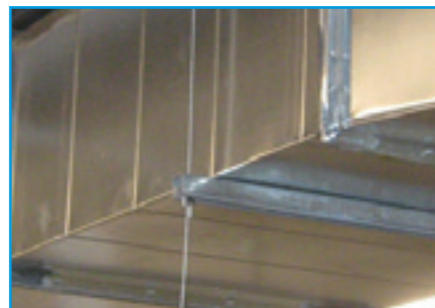
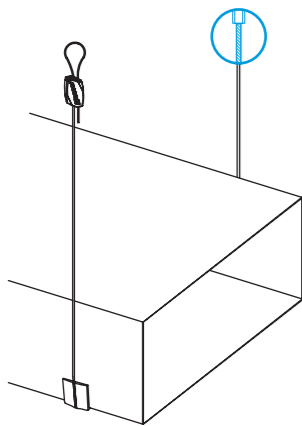
Metal/steel ducting



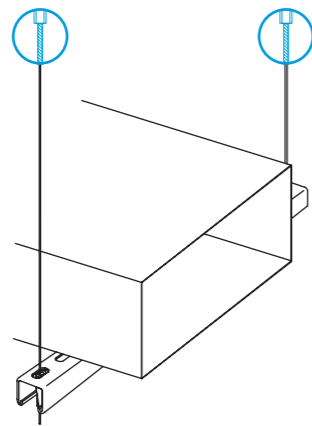
Oval ducting



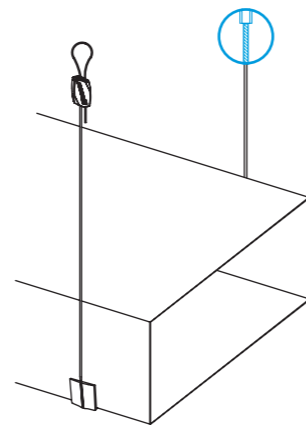
Rectangular ducting



Rectangular ducting



PI foam ducting

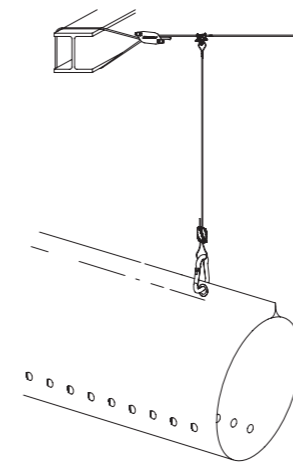


# HVAC: Air Conditioning

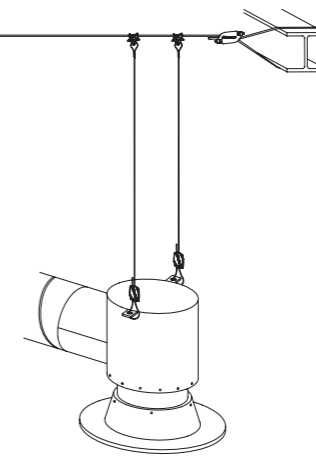
Fabric ducting, swirl diffuser, plenum boxes, air conditioning units, refrigerant pipes and condensate pipes



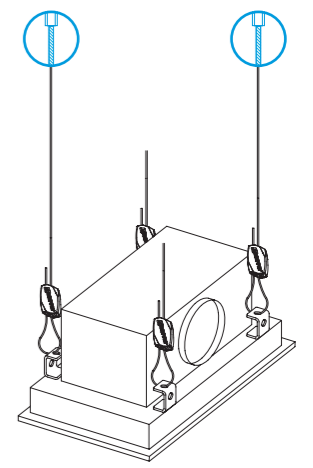
Fabric ducting



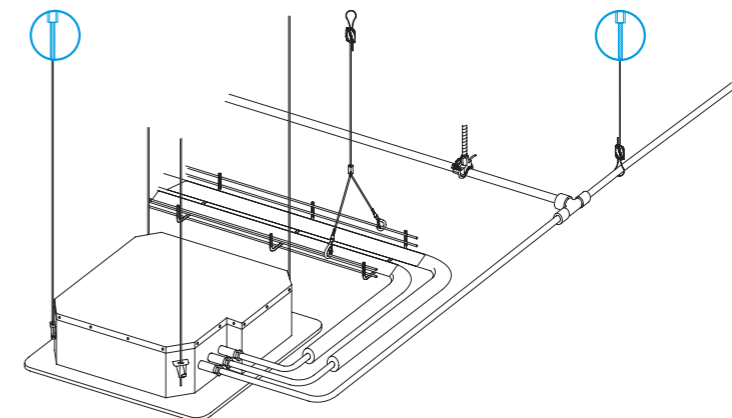
Swirl diffuser



Plenum boxes



Air conditioning units



Refrigerant pipes



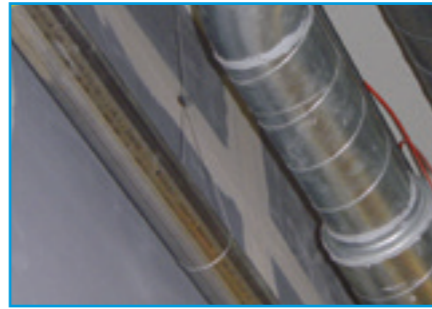
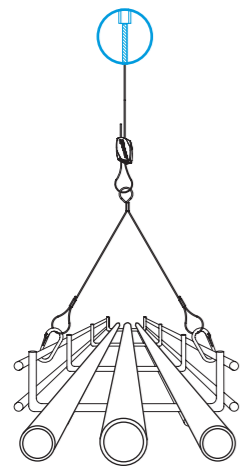
Condensate pipes

# Mechanical

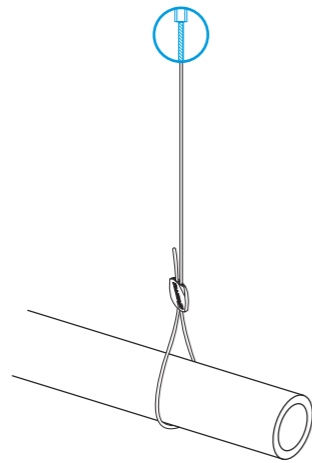
Copper pipes, steel pipes, intermediary supports, bracing and pipe rack



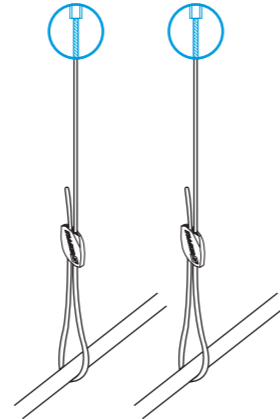
Copper pipes



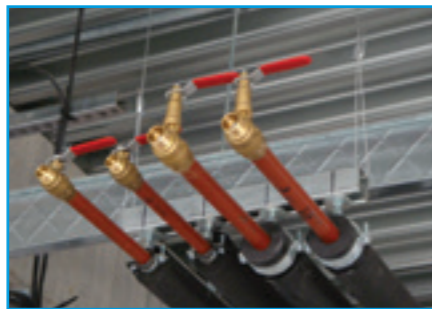
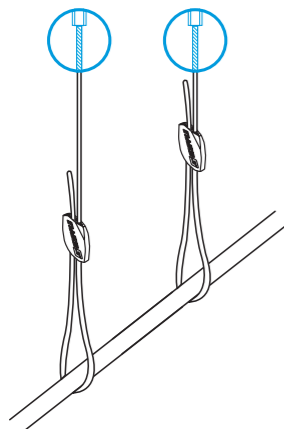
Steel pipes



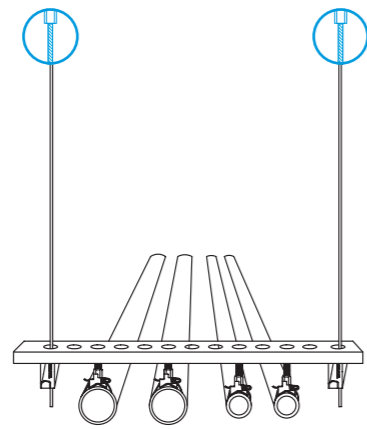
Plastic pipes



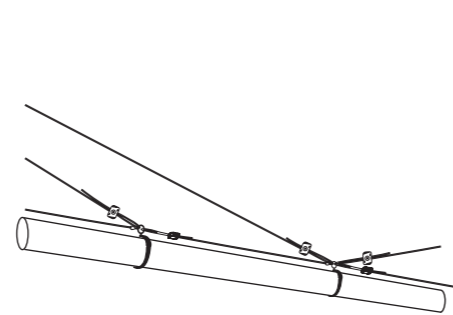
Intermediary supports for steel pipes



Steel pipes



Bracing for steel pipes

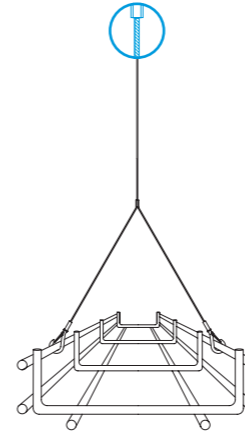


# Electrical: Cable Containment

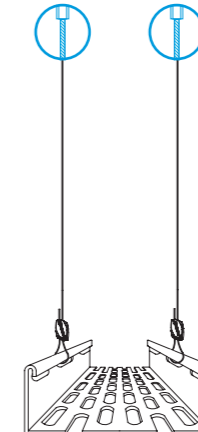
All types of cable containment on ladder, basket or tray



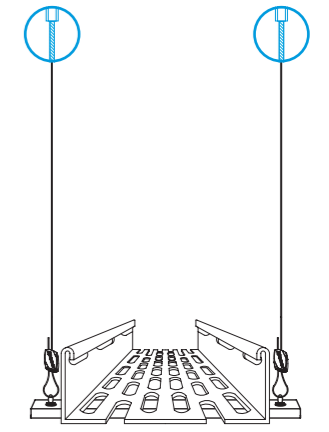
Cable basket



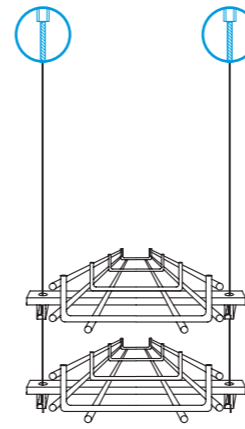
Cable tray



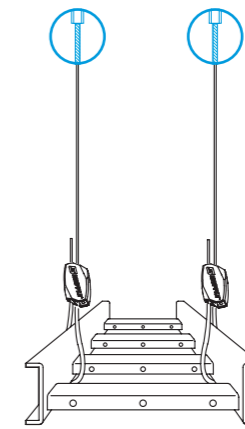
Perforated cable tray on channel



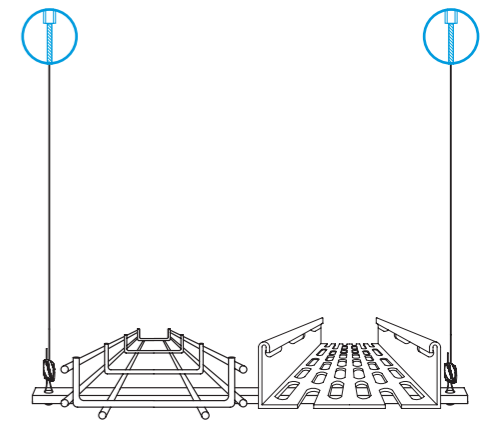
Multi-tiered cable basket on Trapeze



Ladder



Multiple cable trays on single channel



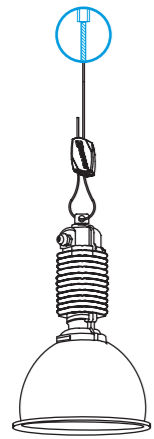


# Electrical: Lighting

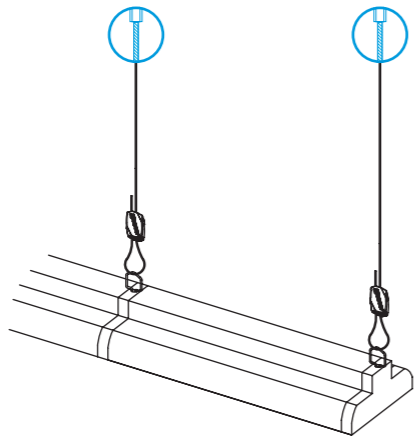
All types of hanging solutions for lighting



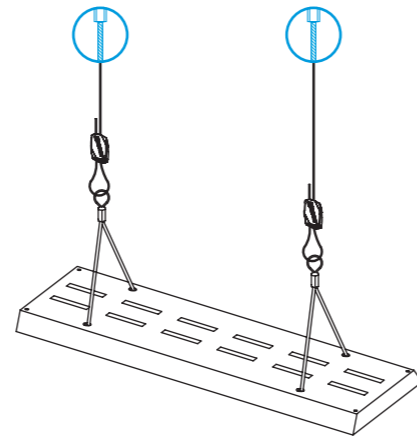
Industrial high bay



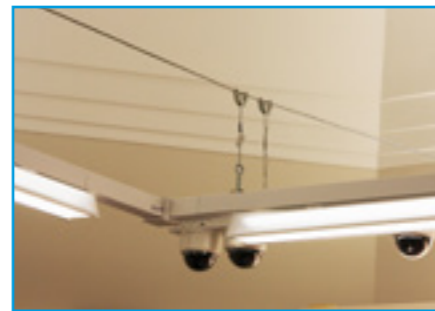
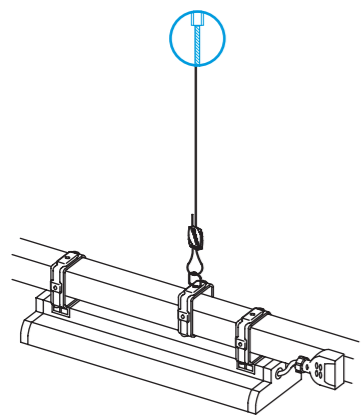
Strip lighting



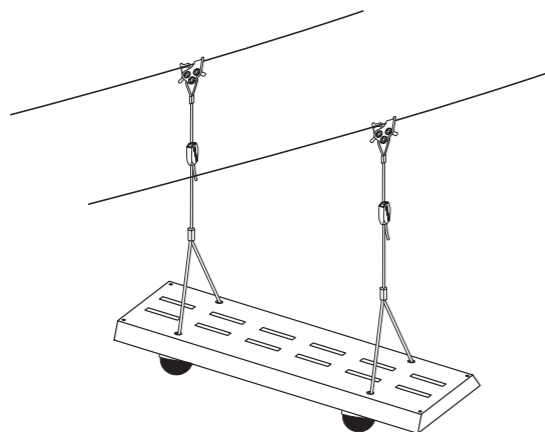
Panel lighting



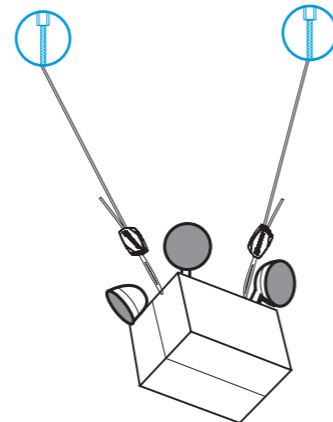
Busbar



Lighting and Camera on Catenary



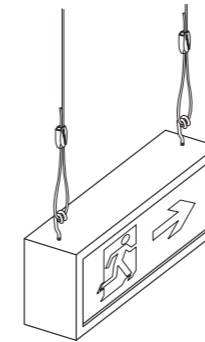
Emergency Lighting



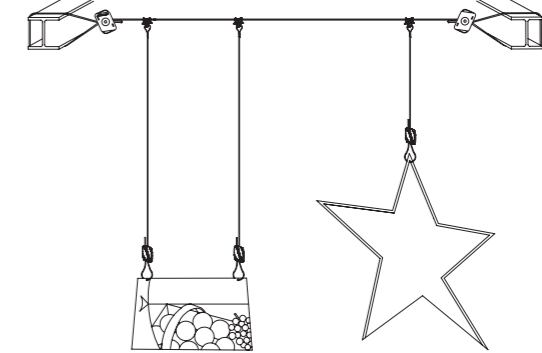
# Signage and Decorations



In store signs



Information signs



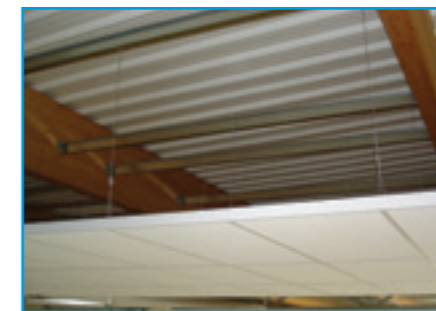
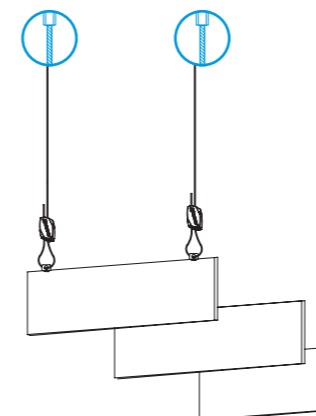
In store decorations

# Suspended Ceilings

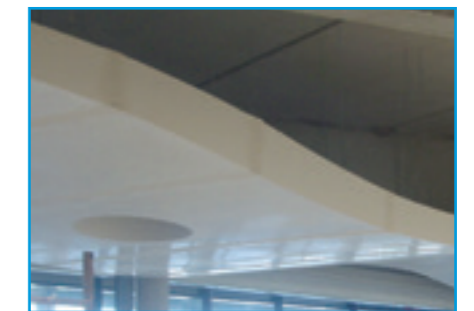
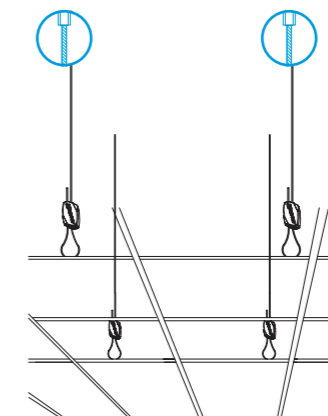
Suspended ceilings, acoustic baffles and decorative panels



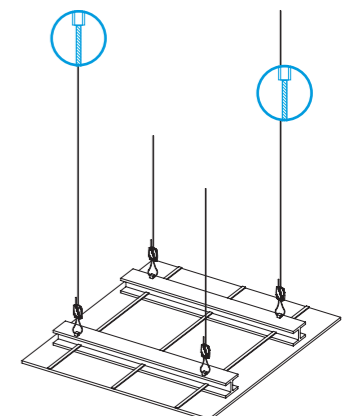
Acoustic baffles



Suspended raft ceilings



Contoured raft ceilings



# Catenaries

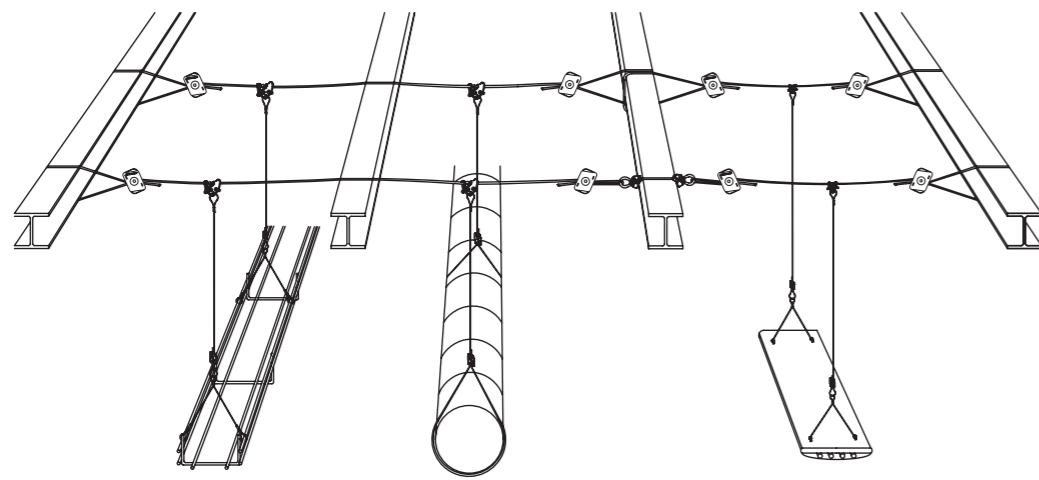
Horizontal wire rope solution where no direct vertical anchor point is available



Busbar and Lighting

Spiral ducting

Cable tray



# Other Applications

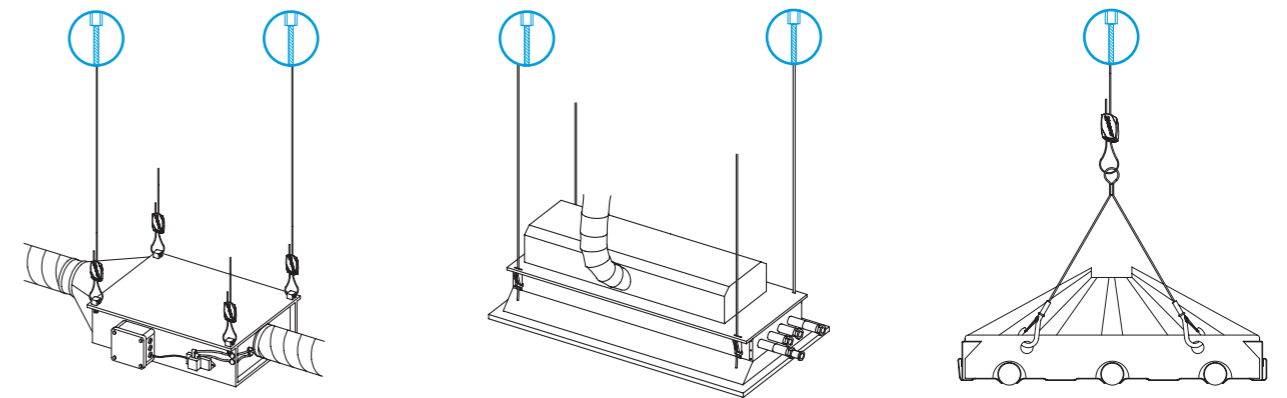
Versatile hanging kits for fan coil units, chilled beams, radiant panels and much more



Fan coil units

Chilled beams

Radiant panels



# Seismic Bracing

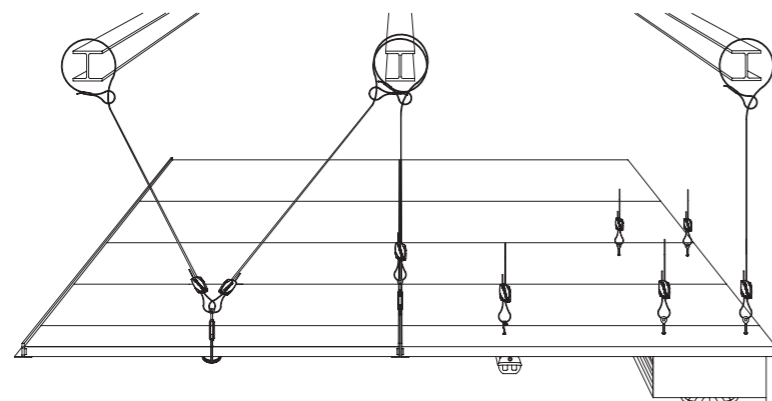
For non-structural building components



Sandwich panel

Under panel lighting

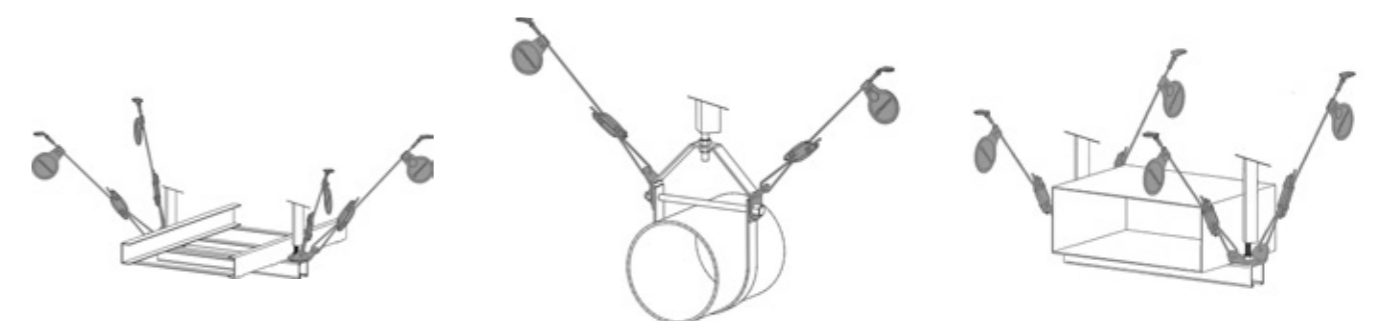
Under panel evaporator



4 way bracing

Transverse bracing

Longitudinal bracing





# Standard Hanger

Used to suspend a variety of HVAC, pipework and electrical services from different substrates, complete with end fixings.

- Ideal for fast suspension of cable containment, pipework, air conditioning and lighting
- Up to 6 times faster to install than traditional hanging systems
- Versatile and simple to use
- Strong, safe and industry approved
- Aesthetically discreet and lightweight
- Available with Spreader Band (see page 25) to spread load of various suspended services



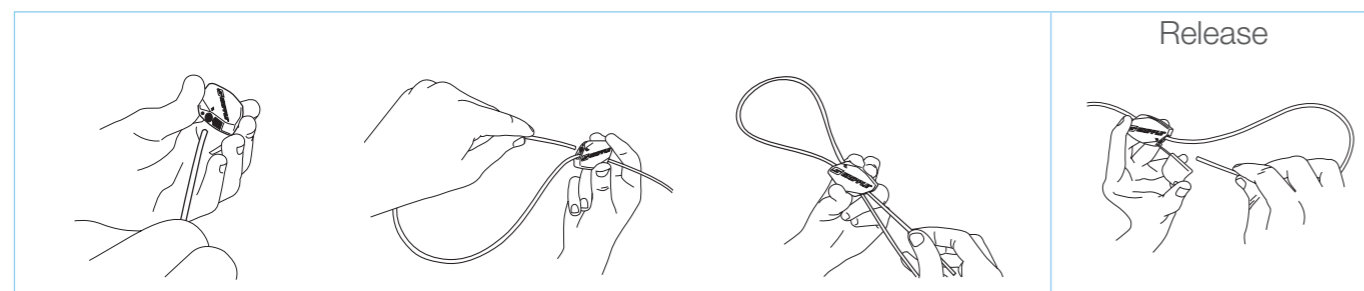
Available in sizes No.1 - No.5



All hangers are supplied as ready-to-use kits with a length of wire rope and end fixing of your choice.



## Installation



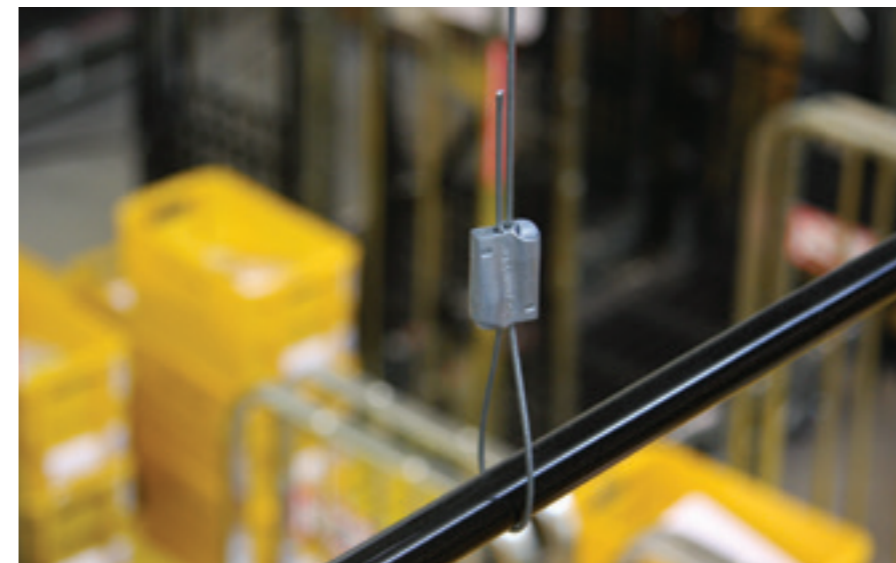
# Express

The Express No.1 and No.2 offers an instant locking system to make adjustment even easier.

- The Express No.1 is ideal for signage, shopfitting, lighting and other lightweight fixtures
- The Express No.2 is ideal for mechanical and electrical applications
- Up to 6 times faster to install than traditional methods
- Keyless - no tool required for adjustment
- Ergonomic buttons allow rapid adjustment
- Discreet and aesthetic design



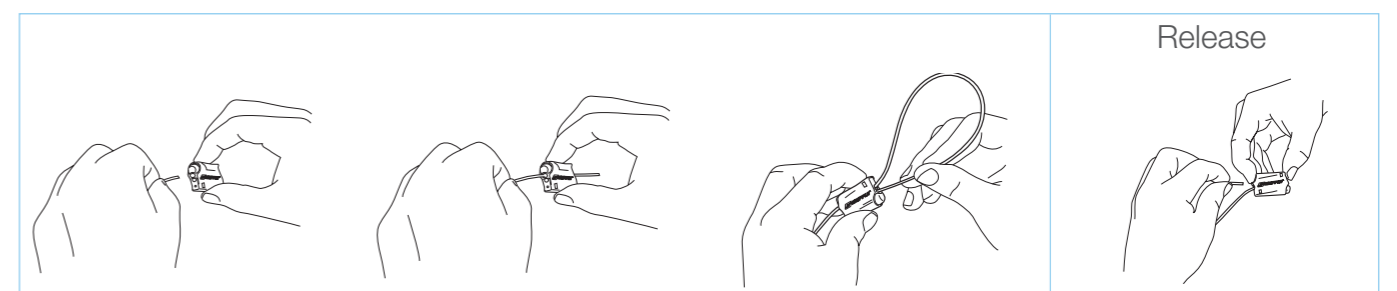
Available in sizes No.1 & No.2



All hangers are supplied as ready-to-use kits with a length of wire rope and end fixing of your choice.



## Installation



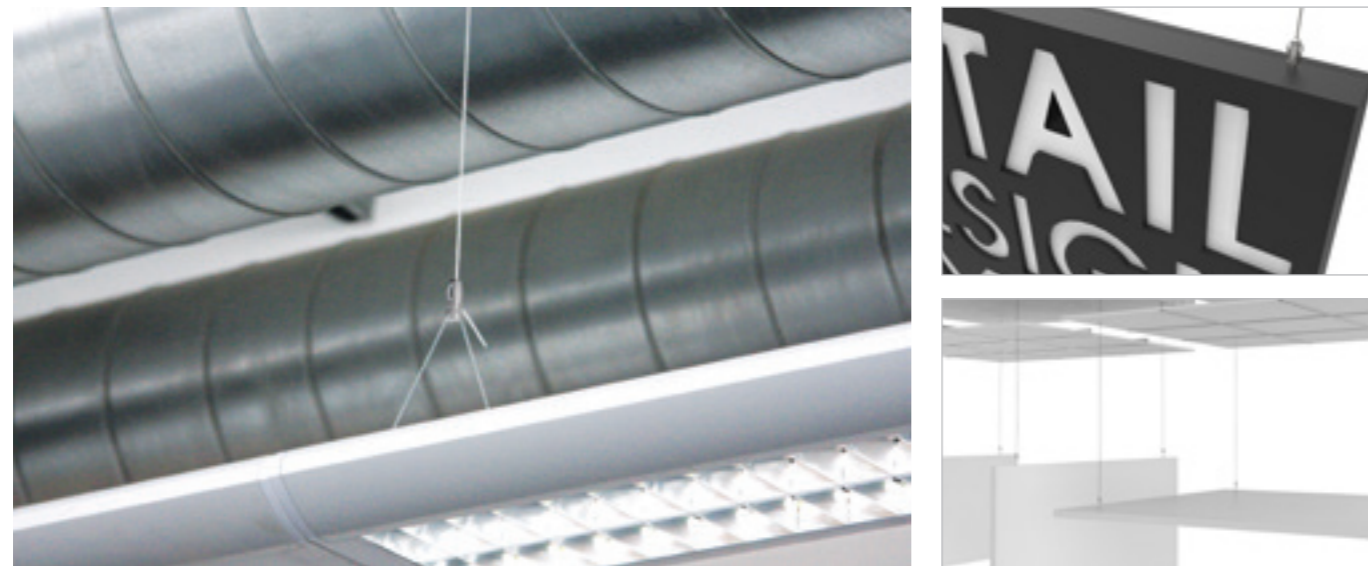
# Angel

Designed for architectural lighting suspensions, signage, acoustic baffles and installations where aesthetics are important.

- Simple one handed operation for easy adjustment
- Contemporary design to complement the overall suspension
- Extensive range of end fixings allowing installation in most locations
- Variety of feet fixings to enable attachment to different fixing points
- Uses 1.5 mm wire rope to make the suspension as discreet as possible



Available in size No.1  
0 - 15 kg

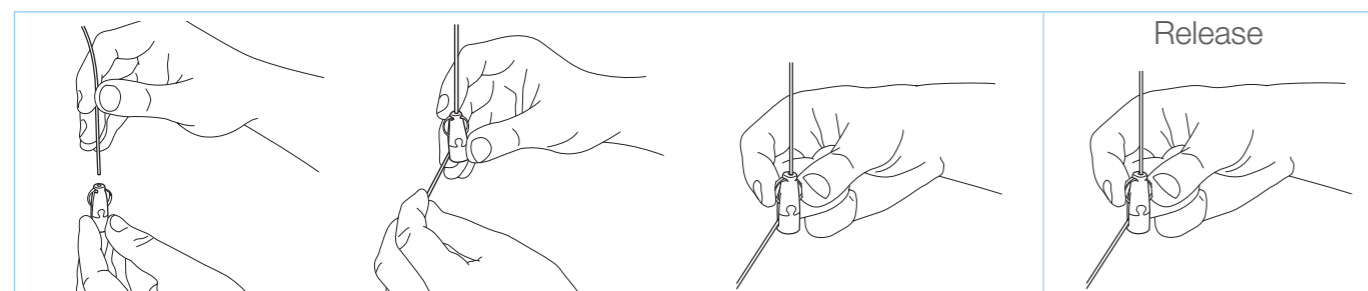


All hangers are supplied as ready-to-use kits with a length of wire rope and end fixing of your choice.

- Available with a range of feet fixings



## Installation



# Y-Fit & Y-Fit Accessory

Single point suspension, improving stability and centre of gravity for balanced services.

- Ideal for cable tray or basket
- One leg can be detached to allow cable installation
- Available with a range of end fixings, and a variety of leg lengths
- Snap Hook version is ideal for use with the Gripple G-Bracket
- Accessory version available, ideal for longer drops

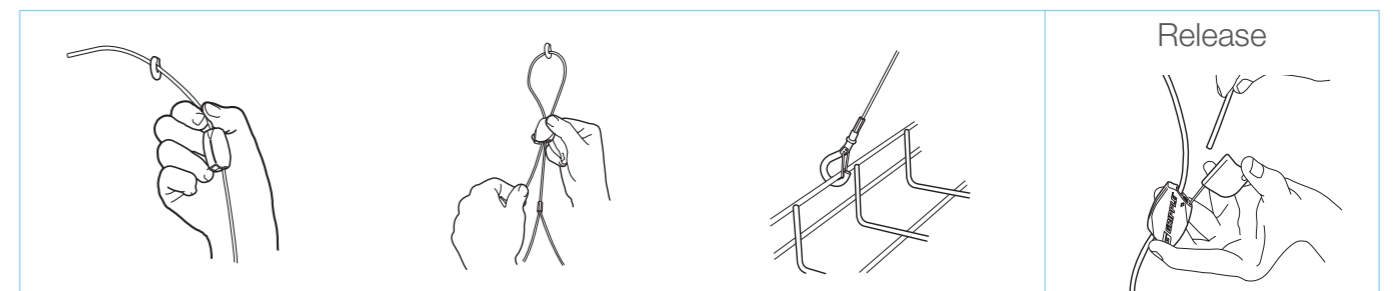


All hangers are supplied as ready-to-use kits with a length of wire rope and end fixing of your choice.



Accessory version available

## Installation





# Catenary Kit & C-Clip

Create secure, overhead spans by running high strength wire rope between two fixing points. Ideal for applications where no direct vertical anchor point is available. The Gripple C-Clip, an innovative twist-on/off device, allows you to suspend from anywhere along the span.

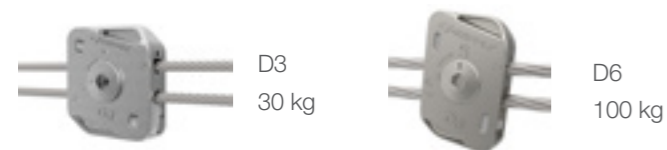
- Visually discreet and lightweight
- Can be fitted retrospectively
- No tools needed to install
- Available in 3 mm and 6 mm wire rope diameters, for suspensions up to 100 kg per span
- C-Clip End Fixing allows horizontal and vertical adjustment
- Cams lock solidly in place, even at angles up to 60°



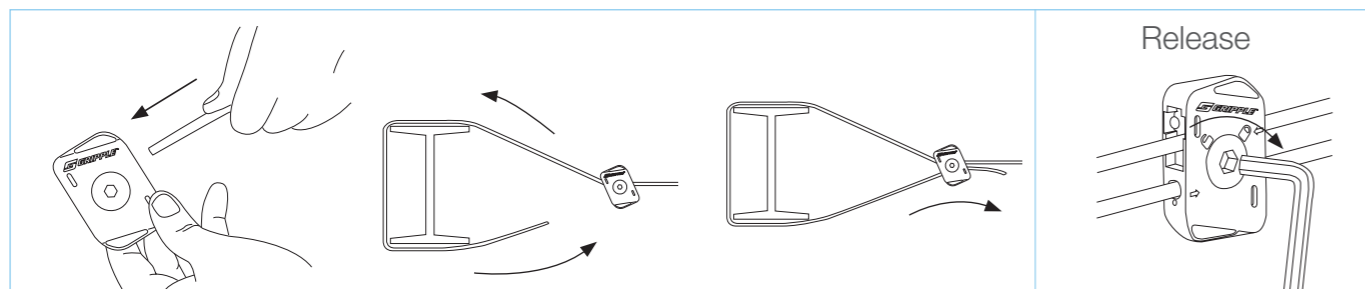
Available in sizes No.3 & No.6



Supplied as ready-to-use kits, including galvanised wire cut to bespoke lengths, a hex locking and release key.



## Installation



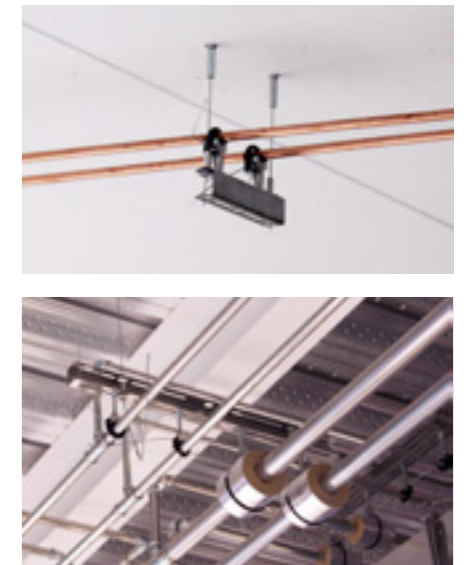
# Trapeze

Ideal for single and multi-tiered suspension of piping, electrical and HVAC services.

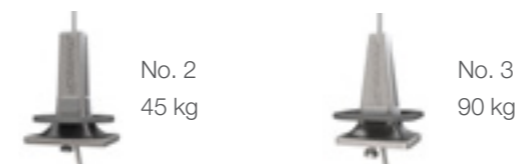
- Ideal for fast suspension of cable containment, pipework, air conditioning cassettes and chilled beams
- Aesthetic, tapered design; accommodates all slots sizes
- Discreet - fits completely inside the channel
- Pre-fits onto channel to ease working at height
- Available as an accessory for multi-tiered installations
- Ideal for use with Gripple Universal Bracket and QT Universal Clamp for mechanical installations



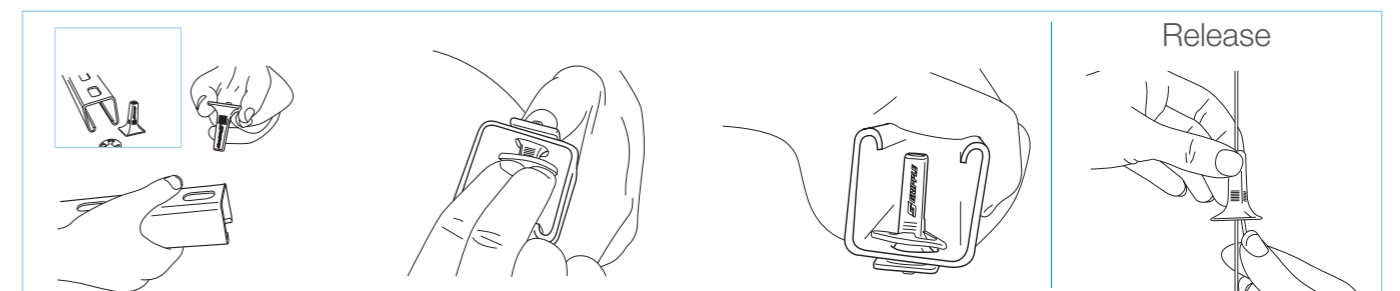
Available in sizes No.2 & No.3



All hangers are supplied as ready-to-use kits with a length of wire rope and end fixing of your choice.



## Installation



\* When releasing: 1. Remove load, 2. Pull tail wire, 3. Activate pin



# Trapeze Plus

All steel Trapeze Plus supplied with galvanised wire rope as standard. Packed with new features to make the suspension of building services even more secure and durable.

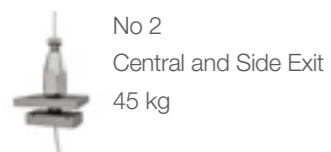
- Simple - easy-to-use integral adjustment button
- Secure - lock screw for ultimate security
- Versatile - can be used with channel or Gripple Brackets
- Safe - available in three sizes, with working load limit up to 225 kg with 3:1 safety factor
- The Trapeze Plus FR is available with Stainless Steel wire for the suspension of services where fire resistance is required



Available in sizes No.2 - No.4



All hangers are supplied as ready-to-use kits with a length of wire rope and end fixing of your choice.



No 2  
Central and Side Exit  
45 kg



No 3  
Central and Side Exit  
90 kg



No 4  
Central Exit  
225 kg

## Installation



\* When releasing: 1. Remove load, 2. Pull tail wire, 3. Activate pin

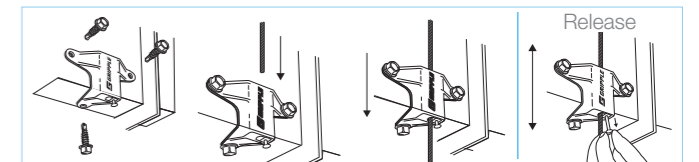
# Duct Trapeze

Ideal for fast suspension of rectangular ducting and attenuators.

- Eliminates channel support
- Suitable for ducting made from 0.6 – 1.5 mm gauge steel
- Spreads the load across 3 fixing points, for self-drilling screws or pop rivets (not provided)
- Rubber pad prevents air leakage and dampens vibration
- Conforms to DW144 class C
- Pin allows rapid adjustment
- Load rated at 45 kg with a 5:1 safety factor



## Installation



All hangers are supplied as ready-to-use kits with a length of wire rope and end fixing of your choice.

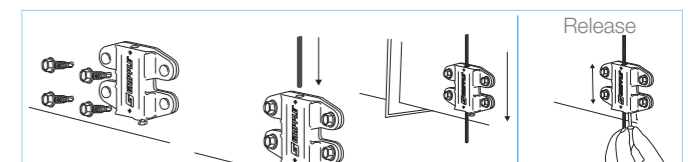
# Butterfly Trapeze

Designed to improve the installation of plenum boxes and duct work.

- Ideal for applications where space is tight - e.g. plenum boxes or rectangular duct where access from below is required
- Simple vertical adjustment using the integral key prior to applying load
- Spreads the load across 4 fixing points
- Rubber pad prevents air leakage and dampens vibration
- Conforms to DW144 Class C
- Load rated at 45 kg with a 5:1 safety factor
- Can be used for multi-tiered installations



## Installation



All hangers are supplied as ready-to-use kits with a length of wire rope and end fixing of your choice.



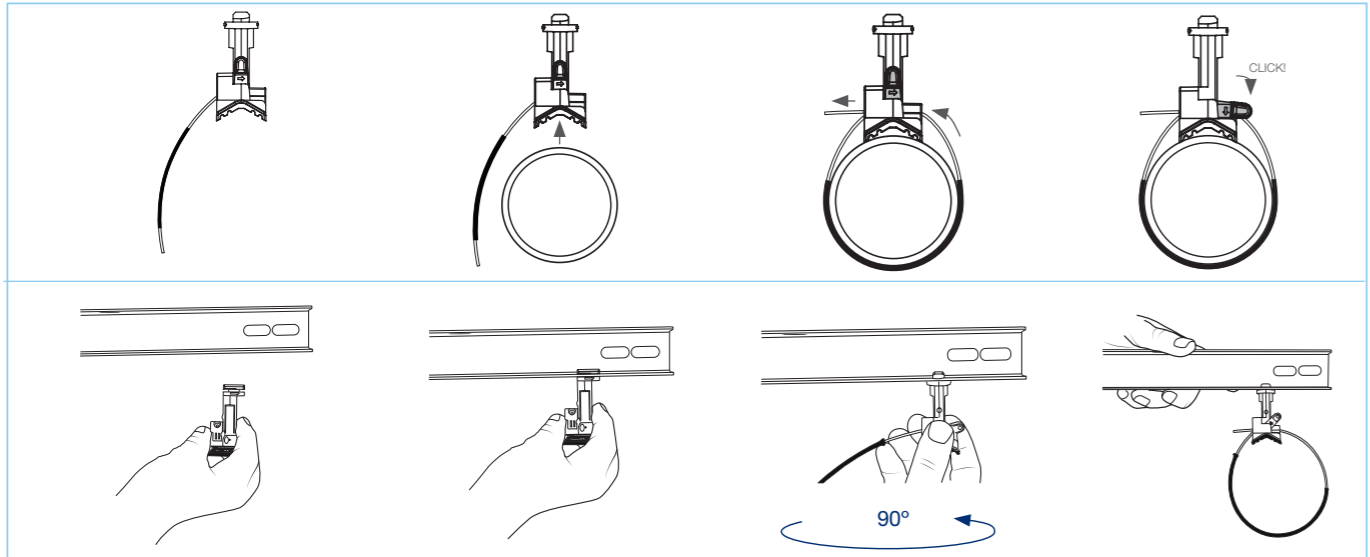
# QT Universal Clamp and Universal Bracket

The Quick Twist Universal Clamp is designed for use with Gripple Universal Brackets to provide quick and easy pipework installation.

- Quick and easy installation - Brackets are supplied with QT Universal Clamps featuring ¼ turn attachment
- Saves labour time - Eliminates the need for cutting channel on site, allowing more productive use of labour
- Universal – Replaces more than 11 different pipe rings
- Versatile – Designed to be bolted directly to soffit or wall or suspended from soffit using threaded rod or Gripple Hanger e.g Trapeze No.2
- Improves health and safety - No tools or “Hot Works” permit required for installation
- Safe – 45 kg SWL with a 5:1 safety factor (equivalent to 3” / OD 89 mm steel pipe filled with water)
- Available with Spreader Band (see page 25) to spread load of various suspended services



## Installation



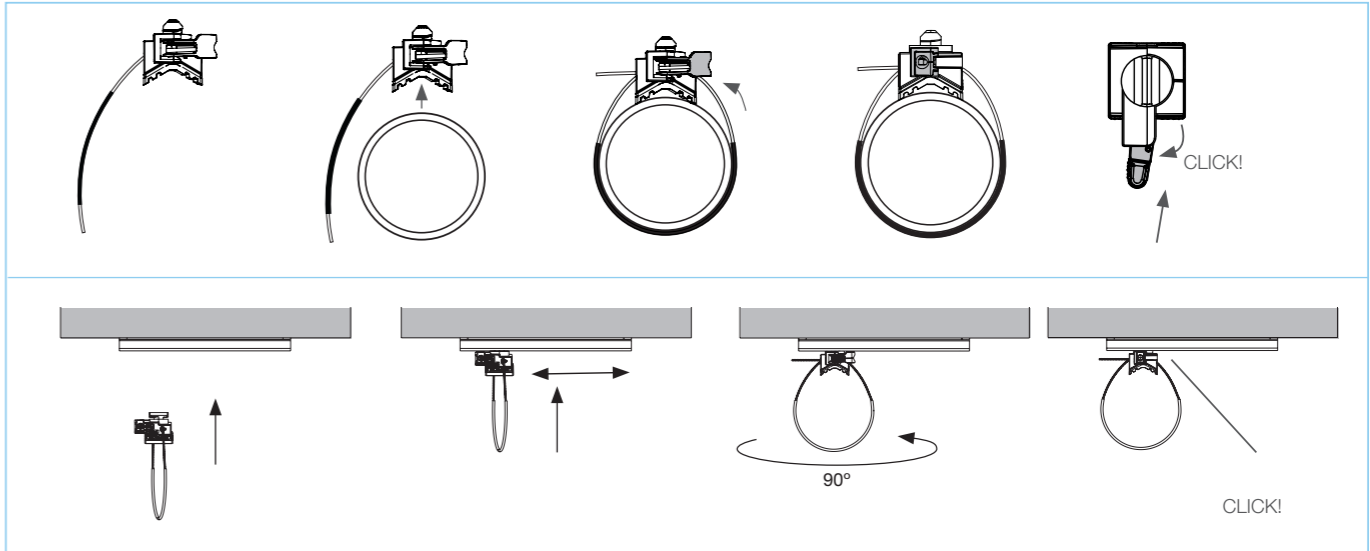
# QT Compact Clamp & Low Profile Bracket

A reduced height version of the Quick Twist Universal Clamp and specifically developed bracket for applications where space is restricted or mounting close to the soffit wall is required.

- Quick and easy installation - Brackets are supplied with Low Profile Clamps featuring ¼ turn attachment
- Saves labour time - Eliminates the need for cutting channel on site, allowing more productive use of labour
- Universal – Replaces more than 11 different pipe rings
- Versatile – Designed to be bolted directly to soffit or wall
- Improves health and safety - No tools or “Hot Works” permit required for installation
- Safe – 45 kg SWL with a 5:1 safety factor (equivalent to 3” / OD 89 mm steel pipe filled with water)
- Available with Spreader Band (see page 25) to spread load of various suspended services



## Installation



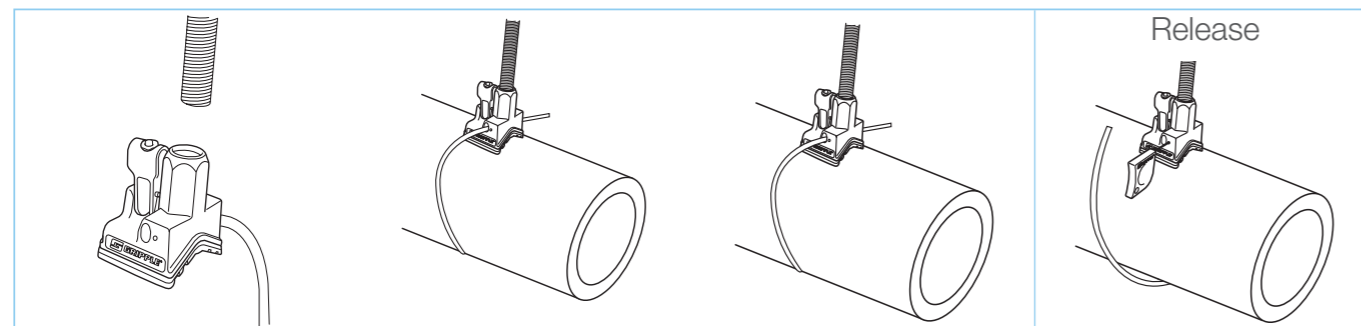
# Universal Clamp

The Universal Clamp is engineered for hanging all types of pipework within mechanical and plumbing services.

- Universal - for pipe sizes 15 mm Copper (OD15) to 3 in Steel (OD89) pipework
- Replaces more than 11 different pipe ring sizes
- Retractable, removable sleeve is pre-fitted to wire rope to prevent galvanic corrosion
- Improved insulation against vibration
- Easy site storage, reduces waste
- Simplifies 'take-off' process
- Available up to 45 kg SWL, with a 5:1 safety factor
- Available with Spreader Band (see page 25) to spread load of various suspended services
- Suitable for M8 & M10 threaded rod



## Installation



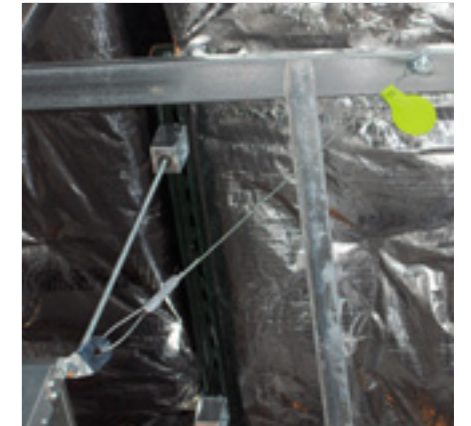
# Seismic Bracing Kits

Specifically designed and engineered to brace and secure suspended non-structural equipment (VAV boxes, fans, unit heaters, small in-line pumps etc) and components (HVAC duct, conduit/cable tray and piping) within a building or structure to minimise damage from seismic activity or blast events.

- Complete pre-engineered systems
- No field swaging of wires
- Up to 10 times faster to install
- No tools required
- Colour coding allows easy field verification
- Suitable for new or retrofit installations
- Can be used in a variety of bracing configurations
- OSHPD OPA 2123-10 approval (GS10, GS12 and GS19 systems)
- SMACNA verified
- UL NEBS GR 63 Core Certification



Available in GS10, GS12, GS19 & GS25



## Seismic Rod Stiffener

An innovative alternative used to prevent threaded rod from buckling vertically during seismic activity or blast events.

- Faster installation time
- Lightweight solution
- No tools required
- Enhances health and safety
- Versatile design
- Resilient materials





# End Fixings

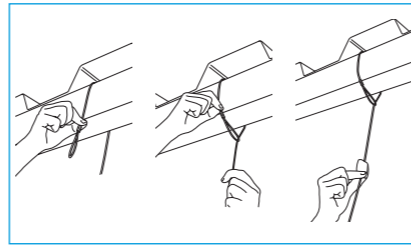
Each ready-to-use kit comes with an end fixing of your choice, ranging from the popular and versatile Loop, to more bespoke fixings designed for specific applications. A selection of our most popular end fixings are detailed below.

For our full range please visit [www.gripple.com](http://www.gripple.com)



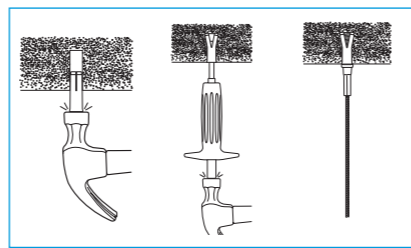
## Loop

- Ideal for looping around purlins, beams, roof trusses and other suitable building features
- Available up to 325 kg SWL, with a 5:1 safety factor
- Available in Stainless Steel



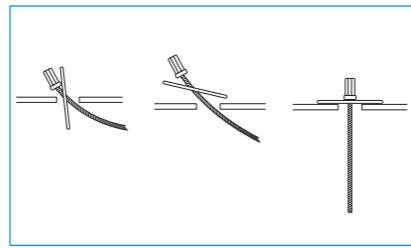
## Stud

- Ideal for anchoring into concrete ceilings
- Supplied with a Drop-In Anchor
- Available up to 225 kg SWL, with a 5:1 safety factor
- Available in Stainless Steel



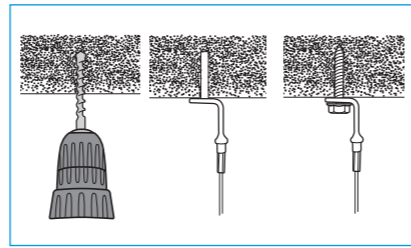
## Toggle

- Ideal for profile roof decking, light fittings and other pre-drilled structures
- Combines a plate and end stop to provide a simple fixing method
- Available up to 90 kg SWL, with a 5:1 safety factor



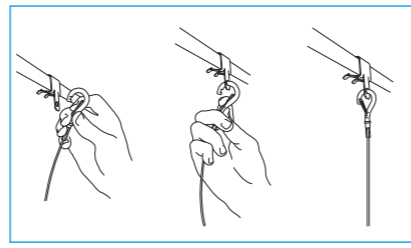
## 90° Eyelet

- Ideal for fixing into concrete, steel or wood using gas or power actuated tools or appropriate screws
- Available up to 90 kg SWL, with a 5:1 safety factor



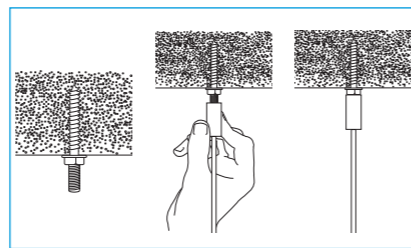
## Snap Hook

- Quick and easy attachment to cable basket, purlin clips, light fittings
- Available up to 90 kg SWL, with a 5:1 safety factor



## Barrel

- Aesthetic fixing for use with any M6 or M8 threaded product
- Available up to 90 kg SWL, with a 5:1 safety factor

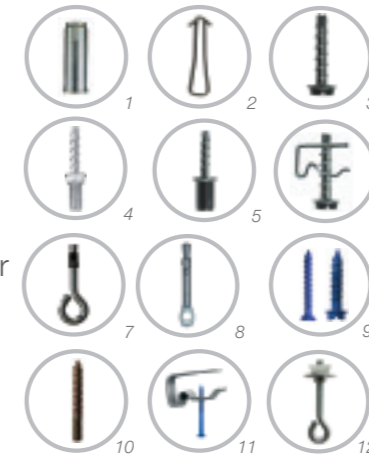


# Accessories

A wide variety of accessories are available, which are specifically designed to suit different substrates on-site.

## Anchoring Solutions

- 1) Drop-in Anchor
- 2) Concrete Wire Anchor
- 3) Concrete Screw
- 4) Barrel Concrete Screw
- 5) Stud Cracked Concrete Screw
- 6) Ceiling Clip Concrete Screw
- 7) Cracked Concrete Ring Anchor
- 8) Concrete Ceiling Anchor
- 9) Concrete Wood Screws
- 10) Barrel Wood Screw
- 11) Ceiling Clip Wood Screw
- 12) Drop-in Anchor



## Beams & Purlins

- 1) Tiger Clip
- 2) Vertical Flange Clip
- 3) Purlin Clip
- 4) Z Purlin Clip
- 5) Beam Clip
- 6) GF Bracket
- 7) M6 & M8 Adaptor
- 8) Catenary Steel Anchor



## Brackets & Attachments

- 1) Universal Bracket
- 2) Low Profile Bracket
- 3) G-Bracket
- 4) G-Spacer
- 5) Trapeze Bracket
- 6) Catenary Wall Bracket



## Adaptors

- 1) Pigtail
- 2) Turnbuckle
- 3) Spring Clip
- 4) LSK Clip
- 5) V-Bracket
- 6) Acoustic Spring Anchor
- 7) T-Bar Twist Clip
- 8) Uni-Wedge
- 9) Wedge Nuts
- 10) Eyebolt
- 11) Link Hook
- 12) Karabiner



## Trapeze Accessories

- 1) Trapeze No.2
- 2) Trapeze No.3
- 3) Trapeze No.4
- 4) Trapeze Plus No.2
- 5) Trapeze Plus No.3
- 6) Trapeze Plus No.4
- 7) Butterfly Trapeze
- 8) Duct Trapeze



## Tools & Finishing Accessories

- 1) Tensioning Tool
- 2) Adjustment Keys
- 3) Drop-In Anchor Punch
- 4) Protective Sleeving
- 5) Driver Bit
- 6) Wire Anchor Installation Tool
- 7) Fixing Tool for Ceiling Clip Wood
- 8) Wire Cutters
- 9) Ceiling Fixing Kit
- 10) Twister
- 11) Corner Saddle
- 12) Thru-In-1® Sleeve Packs
- 13) Spreader Band





# Key Recommendations

Failure to comply with these recommendations may result in product malfunction and possible damage to property or person and will invalidate the Gripple guarantee. Gripple products are guaranteed to be free from defects in materials and workmanship in accordance with our terms and conditions. No other warranty, whether express or implied, including any warranty of merchantability or fitness for purpose shall exist in connection with the sale or use of any Gripple product.

Full technical information and installation instructions should be obtained directly from Gripple Limited, Gripple Europe or Gripple Inc., any regional Gripple office, or via the website [www.gripple.com](http://www.gripple.com).

Please adhere to the following key recommendations:



## Loads

Always operate the product within its stated safe working load range.



## Lifting

Do not use for lifting, either by crane or as part of a pulley system. Suspend static loads only.



## Installation

Do not walk or stand on the Gripple product installation unless expressly designed for this purpose.



## Painting

Do not paint the hanger prior to installation. Ensure that the hanger is in its final position prior to applying any paint to the wire rope assembly. Do not move the fastener after painting.



## Lubrication

Do not apply oil or any other lubricant to the hanger or any other part of the assembly.



## Joining

Never join two ends together in-line.



## Wire Rope

Always use the fastener supplied and specified wire rope. Never use on coated wire rope or other rope. Trim any damaged filaments with the wire cutter before use.



## Environment

Do not use in chlorinated or chemically corrosive atmospheres. Standard hangers are for use in dry and air conditioned environments only. Stainless steel hangers should be considered for high to saturated humid environments after validation by a competent person. Not suitable for swimming pools.



## Impact

If there is potential for impact on the wire rope suspension or suspended services, seek advice from Gripple Ltd. Technical Services prior to installation.



## Hanging at an Angle to Vertical

Ensure that the load calculation considers the effect of 'side load'. For example, at an angle of 60° to vertical the SWL is effectively reduced by 50%



Ducting: When installing included angle teardrop hangers on round/spiral ducting or pipes, the final included angle of the assembly should not exceed 60°.



Y-Fit: Legs on Y-Fit not to be installed greater than 60°.

# About Gripple

## Join the revolution

In the late 1990s Gripple introduced emphatic change to the building services market with a fresh and alternative means of suspension in the construction and industrial sectors. When the original Gripple device was conceived no-one could have predicted that this would lead to the radical approach of using wire rope hangers, which have fast become the benchmark for quick and easy methods of hanging mechanical, electrical, HVAC and plumbing services. As a result of this revolution, Gripple introduced an entirely new way of working to the industrial sector; load-rated hanger kits quickly proved perfect for ducting, cable containment, lighting, piping, false ceilings, signage and much, much more.

Gripple has since been specified and installed on numerous high profile and prestigious projects across the world including Wembley Stadium (UK), Centre Pomidou (France), Melbourne Convention Centre (Australia), MGM City Center (USA) and Mumbai Airport (India). Not only have Gripple's versatile products bought speed, improved site safety and best practice efficiency savings to the installation process, by striving to continually provide the best resolutions for specific needs, the company's capabilities are now recognised, admired and trusted worldwide.



The Old West Gun Works, Sheffield, UK



Gripple Europe SARL, Obernai, France



Gripple Inc, Aurora, USA



Inside the Old West Gun Works



Improved Gripple housings

## Working together from design to installation

We can offer a range of technical and engineering services to help you specify the correct Gripple system for your project. Based on the site drawings and site visits if required, we are able to review project plans and specifications to advise the type and quantity of Gripple products required to meet your exact requirements.

## Environmentally friendly

The Gripple system is more environmentally friendly and up to six times faster to install than threaded rod, helping save money, and the environment. For each tonne of rod you replace with Gripple you can achieve the same results, but with as little as 50 kg of material. This also means fewer journeys, which lowers transportation costs and emissions. What's more, as our products are lighter and easier to carry, on-site safety is also improved.





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