



**SEISMIC**  
SOLUTIONS  
**FOR BUILDING**  
**SERVICES**

WIRE ROPE SEISMIC BRACING

INTRODUCTION TO THE ATLAS RANGE



A Division of the Zip-Clip Group

*Specialist systems for seismic bracing and vibration isolation*

Distributed by



## ZIP-CLIP COMPANY OVERVIEW



# ZIP-CLIP SOLUTIONS

Zip-Clip is a manufacturer of high specification wire rope suspension and bracing systems with its headquarters in Wales, United Kingdom.

For over 16 years Zip-Clip have been designing and manufacturing a variety of wire rope support systems that are now utilized globally in an ever-increasing range of sectors.

Zip-Clip wire rope systems are typically used within the construction industry for the suspension and/or bracing of:

- Electrical containment trays, baskets or ladders,

- Lighting,
- Heating, Ventilation and Air Conditioning (HVAC) and mechanical services,
- Acoustic and radiant heating panels,
- Signage, screens and partitions.

Our wire locking devices are unique within the industry, being capable of performing a number of different functions, for a variety of applications, including seismic bracing. This flexibility of use is predominantly due to the strong patented design of our internal locking mechanisms.

Our unique systems are robust with the added benefit of being quick and easy to install.

Zip-Clip design and production capabilities allow us to tailor our wire suspension systems to meet exacting customer specifications.



A Division of the Zip-Clip Group

*Specialist systems for seismic bracing and vibration isolation*

For further information email [SEISMIC@ZIP-CLIP.COM](mailto:SEISMIC@ZIP-CLIP.COM)

## THE BRACING SYSTEMS

Zip-Clip Atlas provide 3 different sizes of wire rope seismic brace which are used to restrain non-structural components at regular intervals.

These are:

- **R System (RED)**
- **B System (BLUE)**
- **GY System (GREEN YELLOW)**

The systems are colour coded, which is visible from the top and bottom of each brace to allow for field identification.

Each colour represents a different increasing load bearing capacity.

## System Strengths

Advantages of wire rope seismic braces are:

- Speed of installation and adjustment
- The wire rope can be any length
- Angular adjustment is very easy
- The tensile load on the primary supports are not affected by the use of wire rope seismic braces.



Each system is supplied as a complete kit which includes the following:

- **Seismic bracket** – to anchor the brace to a supporting structure;
- **Wire rope** – which transfers the load to the building structure;
- **Zip-Clip seismic locking device** – to attach the brace to the services;
- **Retro-fit bracket** – to anchor the wire rope to the primary supports;
- **PVC sleeve** – for ground identification and protection;
- **Seismic restraint washer** – to clamp the retro-fit bracket to the services.

## Testing and Conformity

Zip Clip Atlas seismic braces have been independently strength tested following ASCE 19 , ASTM A1023, ASTM A931 and NZS 4219 to determine Characteristic Break Strengths.

They have also been seismically tested using tri-axial shake table apparatus by Element Materials Technology at the Earthquake and Engineering Laboratory in Bristol University, UK, following ICC ES AC156 and IEE344 – seismic qualification for equipment in nuclear power stations.





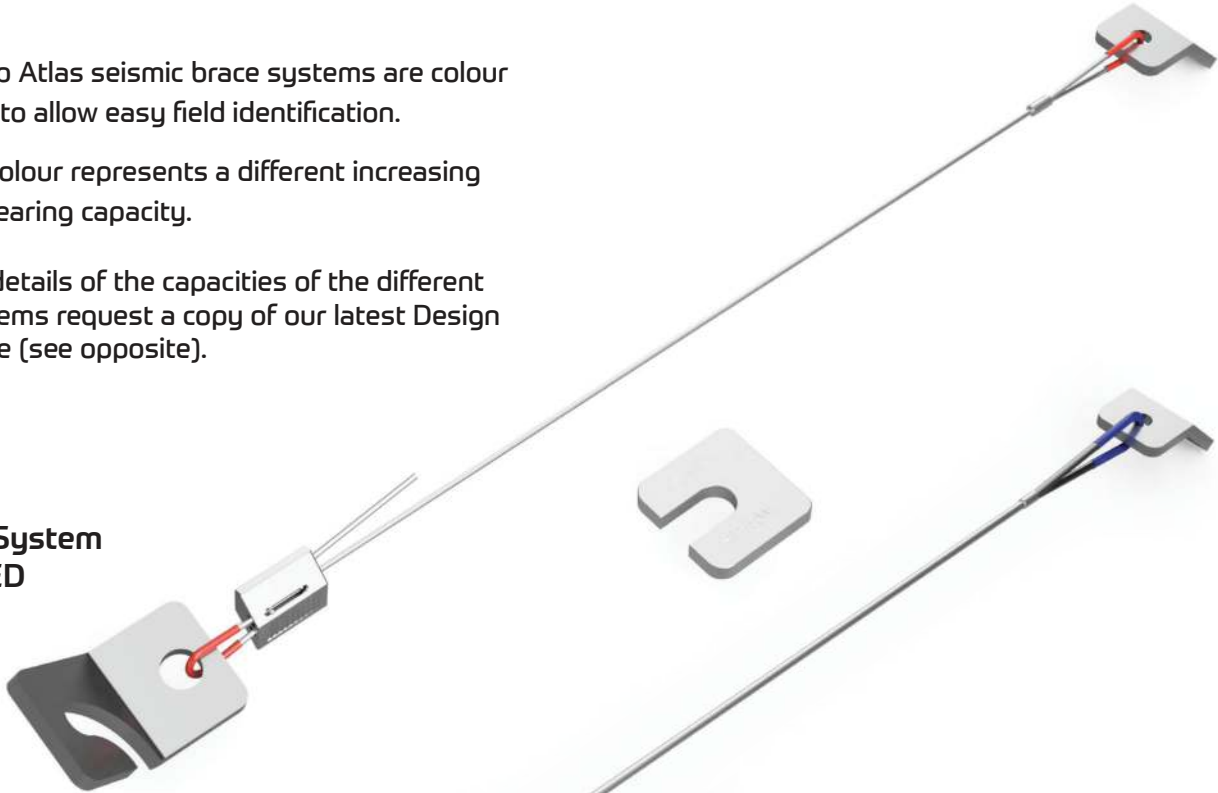
## SYSTEM DIFFERENTIATION

Zip-Clip Atlas seismic brace systems are colour coded to allow easy field identification.

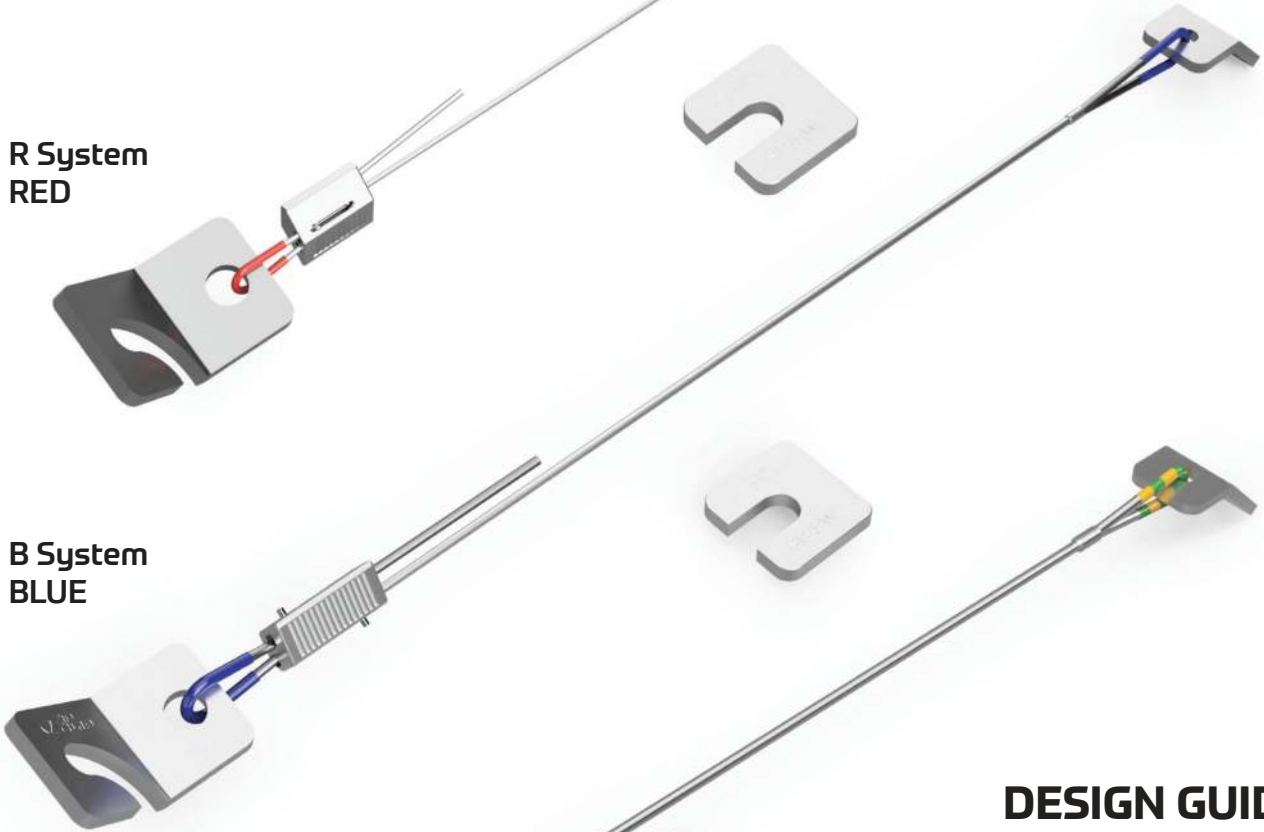
Each colour represents a different increasing load bearing capacity.

\* For details of the capacities of the different systems request a copy of our latest Design Guide (see opposite).

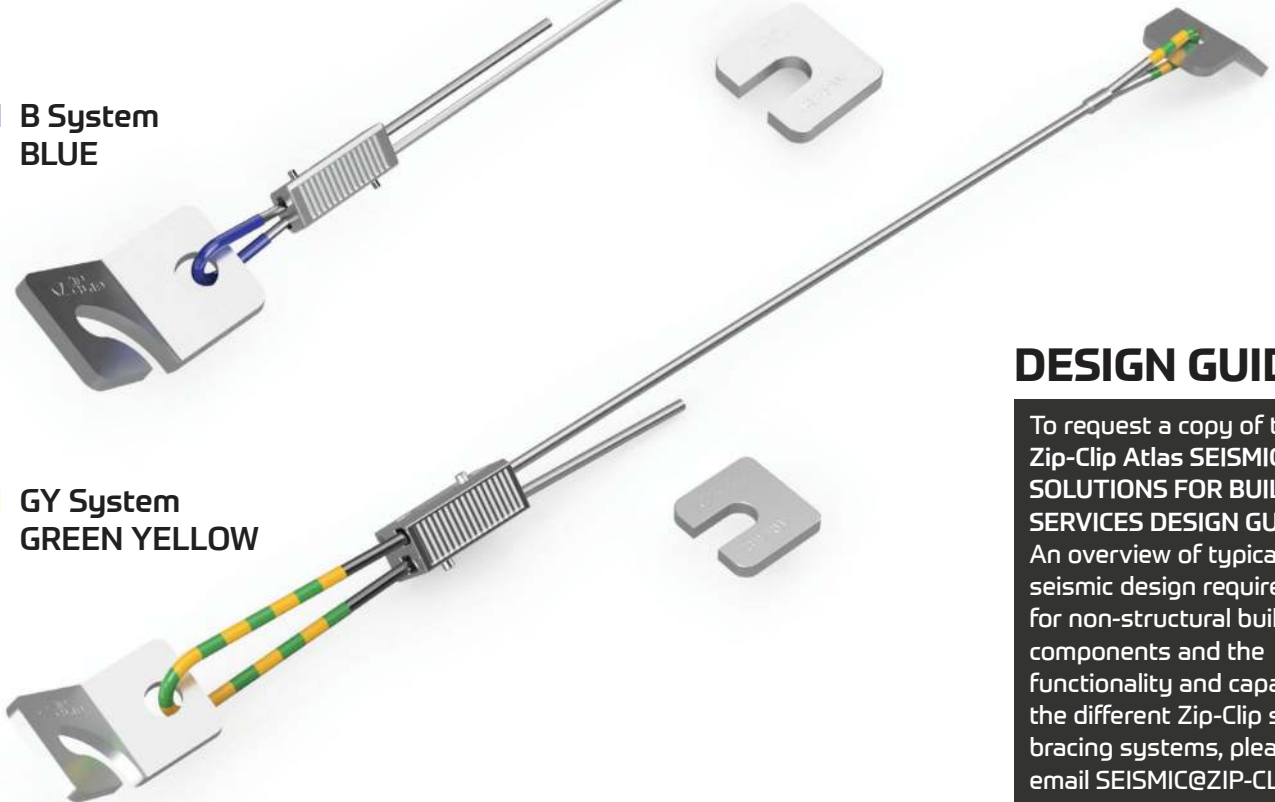
■ R System  
RED



■ B System  
BLUE



■ GY System  
GREEN YELLOW



### DESIGN GUIDE\*

To request a copy of the Zip-Clip Atlas SEISMIC SOLUTIONS FOR BUILDING SERVICES DESIGN GUIDE – An overview of typical seismic design requirements for non-structural building components and the functionality and capacity of the different Zip-Clip seismic bracing systems, please email [SEISMIC@ZIP-CLIP.COM](mailto:SEISMIC@ZIP-CLIP.COM)



For further information email [SEISMIC@ZIP-CLIP.COM](mailto:SEISMIC@ZIP-CLIP.COM)

## EXAMPLES OF TRANSVERSE BRACING

**PLEASE NOTE:**  
Rod stiffeners should be included where designed (Not shown in images).

Cables installed **perpendicular** (at 90°) to the run of services, or **in-line** with the bracket (at 180°).

▲ Plan view example of pipework on trapeze bracket



▲ Spiral ductwork



▲ Rectangular ductwork



▲ Pre-insulated ductwork (Spiralite)



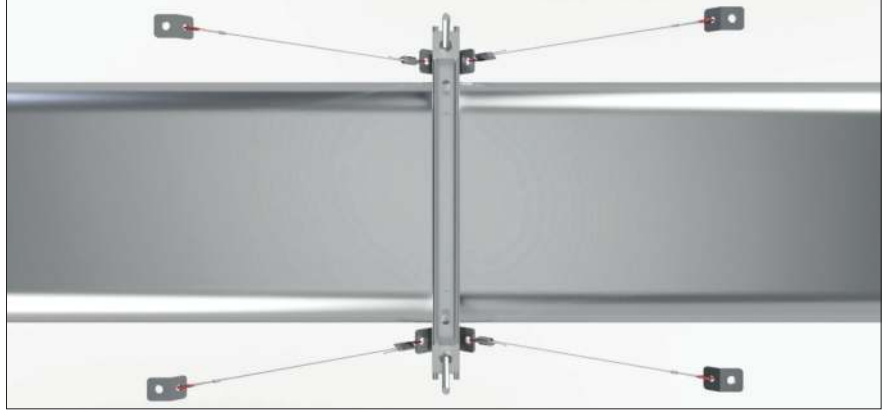
▲ Electrical containment

For further information email [SEISMIC@ZIP-CLIP.COM](mailto:SEISMIC@ZIP-CLIP.COM)

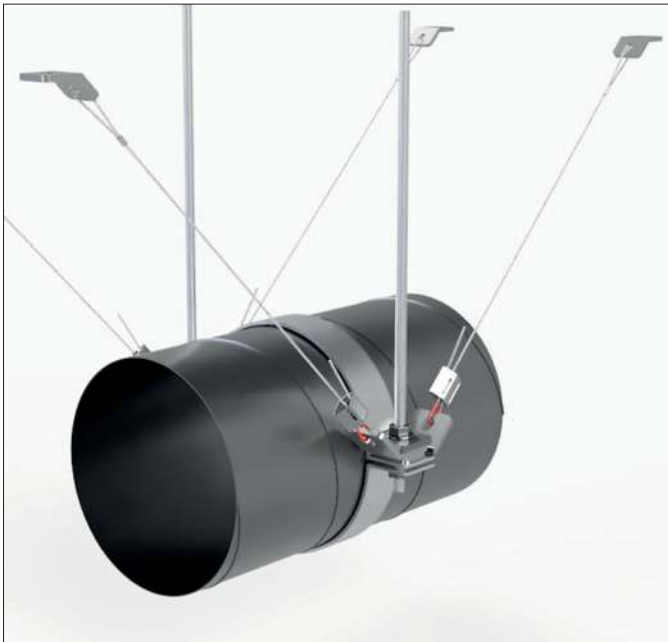
## EXAMPLES OF LONGITUDINAL BRACING

Cables installed **parallel** (in-line) with the run of the services, or 90° from the bracket.

**PLEASE NOTE:**  
Rod stiffeners should be included where designed (Not shown in images).



▲ Plan view example of flat-oval ductwork



▲ Spiral ductwork



▲ Rectangular ductwork



▲ Pre-insulated ductwork (Spiralite)



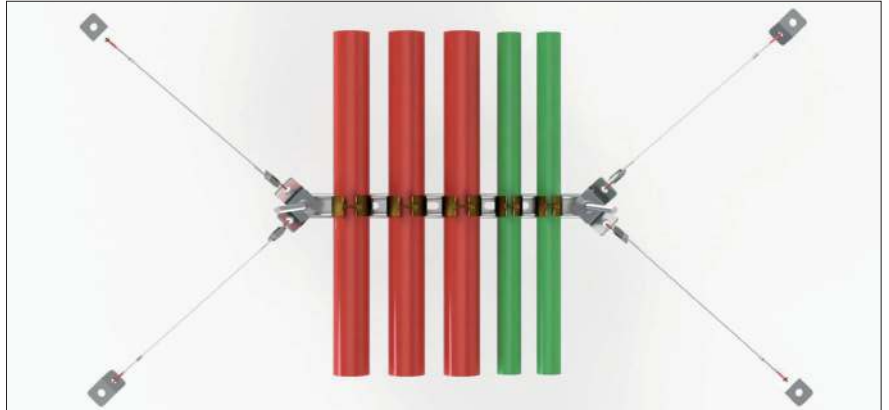
▲ Electrical containment

For further information email [SEISMIC@ZIP-CLIP.COM](mailto:SEISMIC@ZIP-CLIP.COM)

## EXAMPLES OF 4-WAY BRACING

Provides both lateral and longitudinal restraint to building services. Cables installed at **oblique** angles (45°) to the run of services.

**PLEASE NOTE:**  
Rod stiffeners should be included where designed (Not shown in images).



▲ Plan view example of pipework on trapeze bracket



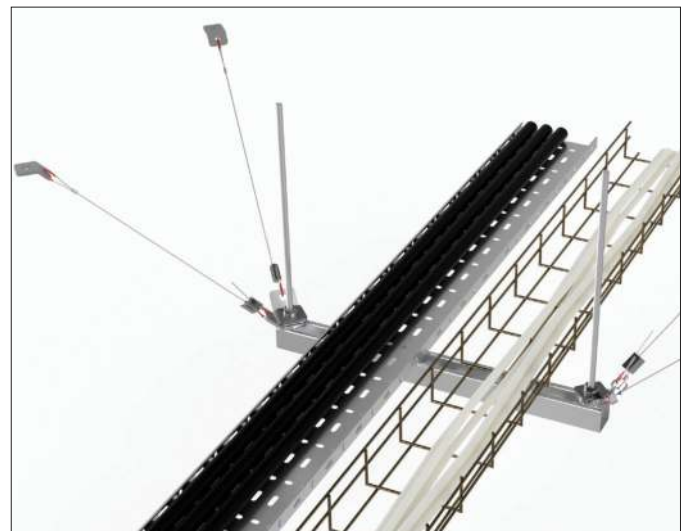
▲ Spiral ductwork



▲ Rectangular ductwork



▲ Flat-oval ductwork



▲ Electrical containment

**SEISMIC**  
SOLUTIONS  
FOR **BUILDING**  
SERVICES



A Division of the Zip-Clip Group

*Specialist systems for seismic bracing and vibration isolation*



To request a copy of Zip-Clip Atlas **SEISMIC SOLUTIONS FOR BUILDING SERVICES DESIGN GUIDE** – An overview of typical seismic design requirements for non-structural building components and the functionality and capacity of Zip-Clip seismic bracing systems, please email [SEISMIC@ZIP-CLIP.COM](mailto:SEISMIC@ZIP-CLIP.COM)

**ZIP-CLIP GROUP**

Distributed by



**0800 478 335 [steelandtube.co.nz](http://steelandtube.co.nz)**