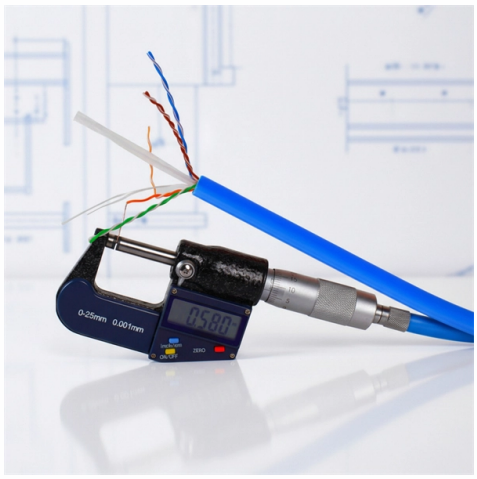
Applications of seismic bracing for cable trays in New Zealand



AI Overview

Seismic bracing for cable trays in New Zealand involves using compliant wire or rigid support systems to secure non-structural electrical services, ensuring stability during earthquakes in accordance with NZS 4219:2009.OverviewSeismic bracing is essential for protecting cable trays and other non-structural building services during seismic events. In New Zealand, all bracing systems must comply with NZS 4219:2009 – Seismic performance of engineering systems in buildings, which sets the standards for design, installation, and performance of seismic restraints . Proper bracing ensures that cable trays remain secure, preventing damage to electrical systems and reducing risk to personnel and infrastructure.Types of Seismic BracingWire or Cable BracingFlexible, lightweight, and cost-effective alternative to rigid supports .Easy to transport and install, reducing labor and installation time.Suitable for overhead cable trays, electrical services, and suspended systems.Can accommodate building movement and vibration without compromising system integrity.Rigid or Rigid-Locking BracesProvide a more traditional, solid support for cable trays.Often used in high-load or critical installations where maximum stability is required .Can be supplied in ready-to-use kits to minimize on-site cutting and installation time.Hybrid SystemsSome solutions combine wire suspension with rigid components to optimize both flexibility and load capacity .Products like Gripple Lockable Plus or V-Lock systems allow fast installation and adjustable configurations.Design and Installation ConsiderationsLoad Calculations: Accurate seismic load calculations are critical to ensure cable trays can withstand earthquake forces .Compliance: All systems must meet NZS 4219 requirements, including PS1 design certification and PS4 completion certification for project sign-off .Installation: Wire bracing systems are often preferr...

Article Content

The shake on seismic bracing

Seismic bracing against the wrath of earthquakes is an increasing concern for today''s data-communications and telecommunications cable installer, and efforts to minimize the damage they

Seismically Resilient Non-Structural Elements #3: Restraint systems

Electrical cables, conduit and cable trays that cross a structural separation or seismic gap should have sufficient flexibility to accomo-date the expected horizontal and vertical movements determined

SEISMIC CABLE BRACING

Cable or wire bracing and suspension ofers an alternative to solid bracing and supports - so you can select the solution that best meets the unique needs of your project. Cable systems can be very cost

Seismic Engineering | Mechanical Support Systems

Our experts design supports and restraints that meet NZS 4219 requirements, improving safety, reducing risk and ensuring systems remain secure during seismic events across New Zealand.

BR_Seismic-Design-Installation-Guide_EN_AU

Seismic Design coordination of mechanical services and other plenum located elements, including lights, air conditioning, cable trays, fire suppression systems etc, with the suspended ceiling is

Seismic Restraints (Full)

All linear runs must have minimum two transverse seismic restraints and one longitudinal seismic restraint. A run is defined as a 1.5m length for duct and 3m length for any other linear non-structural

Services Must be Seismically Restrained to Comply with Clause B1

Whilst the seismic restraining of building services is nothing new to the industry, the recent earthquakes in Canterbury have generated new emphasis on the design and installation of

Seismic analysis and design of electrical cable trays and support ...

The design aspects of electrical cable trays and support systems are discussed from the seismic and structural standpoint. The effects of the inherent flexibility of commonly used cable trays

Seismic Bracing Ensures Stability and Safety of Cable Trays

Seismic bracing can enhance the stability and safety of cable trays during earthquakes and other vibration events, ensuring your cable system is secure and stable.

Seismic Bracing | Piping Systems & Ductwork | FDG NZ

Understanding Seismic Bracing when it comes to your Designs FDG are more than just suppliers of HVAC, Plumbing and Electrical support systems and accessories, we know that a key

SEISMIC CABLE BRACING

Features and Benefit Alternative to solid bracing. Easy to transport and install. Complies with New Zealand Building Standard NZS 4219:2009 – Seismic performance of engineering systems in buildings.

Seismic Bracing | Vent Supply

Vent Supply is a reliable distributor of V.Lock Global''s seismic bracing and suspension systems. These cutting-edge wire bracing and support solutions provide a dependable option compared to

Understanding the Seismic Resistance of Cable Trays

This article discusses the importance of seismic resistance for cable trays, detailing when seismic braces are necessary, the factors that affect seismic resistance, and how to ensure your

Power Xpert UX | Medium-voltage primary switchgear | Overview | Eaton

Eaton''s Power Xpert UX IEC medium-voltage switchgear system can be used for a wide range of power distribution and motor control applications at rated voltages up to 24 kV. The system is available in

Seismic Bracing of Building Services in New Zealand

At FDG, we specialize in providing comprehensive seismic bracing solutions, offering both cable and rigid bracing systems designed to meet and even exceed government standards.

Vaico | Seismic and suspension

At Vaico, we design, produce and test seismic and suspension solutions for non-structural building services. Based in New Zealand, we supply to local and global distributors.

Seismic Engineering | Mechanical Support Systems

Seismic Engineering MSS provides specialist seismic engineering services for cable containment, HVAC, pipework and related building services. Our experts design supports and restraints that meet

Seismic & Structural Services

We design, supply, and install seismic bracing, isolation systems, and anchoring solutions for racks, containment, cable trays, and all critical infrastructure—minimising the risk of damage and downtime

Seismic restraint of non-structural elements in buildings

During the recent Kaikoura and Canterbury earthquakes in New Zealand, it was observed that non-structural elements performed poorly, particularly in multi-storey buildings. The safety of

Seismic bracing compliance made easy with BLITZCLIP

If you''re installing cable tray, basket, or pipework in a seismic zone, the pre-engineered BLITZCLIP Seismic Wire Restraint System makes compliance straightforward, while keeping installs

Installing Seismic Restraints for Electrical Equipment

INSTALLING SEISMIC RESTRAINTS FOR ELECTRICAL EQUIPMENT Notice: This guide was prepared by the Vibration Isolation and Seismic Control Manufacturers Association (VISCMA) under

Cable & Pipe Supports

In Australia, seismic compliance is mandated by Section 8 of AS1170.4 (2007). EzyStrut offers a range of seismic solutions that comply with AS1170, and our one-stop range of seismic bracing, cable tray

Seismic bracing | Level Electrical Gore

Our team designs, supplies, and installs compliant seismic bracing systems to help protect critical infrastructure during seismic events while ensuring compliance with NZ building standards and

How Cable Trays and Seismic Bracing Systems Mitigate Earthquake

In Antakya, a hospital using ISO-compliant cable trays retained functional emergency power and oxygen lines despite 0.8g ground acceleration, while nearby facilities without such

Gripple New Zealand

Gripple''s engineered seismic bracing systems are designed and tested in accordance with NZS4219 to brace and secure suspended non-structural equipment. Select an application for more information on

Contact Us

For more information, pricing, or custom solutions, please contact us:

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