Combined seismic support for pipe trays

Overview

Suspended systems such as piping, equipment and ductwork need seis-mic braces to keep them from swaying during an earthquake. Seismic braces can be flexible using aircraft quality cables, or rigid (solid) using steel sections such as pipe, angles, or strut channels. Braces are typi-cally installed. This review critically evaluates the seismic performance, design methodologies, and structural enhancement strategies for industrial pipe rack systems, with a particular focus on steel pipe racks subjected to dynamic loading. It synthesizes findings from analytical, experimental, and computational. Sikla seismic guidelines provide information needed by those carrying out the design work for seismic proof installations of the engineering service.

Article Content

Seismic MEP Solutions | Eaton

Seismic engineering services to help customers from pre-bid to inspection walk-through Full portfolio of seismic bracing solutions and support systems Cable tray Strut systems Pipe hangers Vibration

EARTHQUAKE PROTECTION

Suspended systems such as piping, equipment and ductwork need seis-mic braces to keep them from swaying during an earthquake. Seismic braces can be flexible using aircraft quality cables, or rigid

Seismic Risk Reduction in Industrial Pipe Rack Structures through ...

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

Pipe racks, sometimes called pipe bridges, are specialized frameworks—commonly made of steel, concrete, or a combination—that elevate and organize pipes, cable trays, and sometimes

Seismic Proof Systems

This document covers the rules of longitudinal, transversal and 4-dimensional bracing, seismic retrofitting and calculation methods using Sikla products, including newly developed seismic additions.

UNISTRUT Seismic Bracing Solutions

Layout for Piping, Conduit, Tube and Ductwork Placing Transverse Braces*: For each run, place transverse braces within 24” of an elbow or tee, and so that individual spans do not exceed the

International Journal of Innovative Research in Science

Pipe racks, sometimes called pipe bridges, are specialized frameworks—commonly made of steel, concrete, or a combination—that elevate and organize pipes, cable trays, and sometimes

Mechanical, Electrical and Plumbing Seismic Bracing Systems

“nVent''s seismic experts provide everything we need for a code compliant cable bracing system. Their patented, turn-key seismic solutions give us peace of mind that our building products are properly

E-Line Seismic

What is Seismic Support? Seismic support is designed to protect pipes, ducts, and other suspended systems from lateral movement during seismic events. Its main goal is to mitigate the horizontal

Seismic Bracing for Piping and Beyond | Engineered Solutions

Seismic bracing for piping, ducting, cable trays and HVAC equipment is crucial when designing seismic protection. These bracing systems absorb seismic forces and prevent structural damage.

241-252_EJ4Q_2010_2009_26

ABSTRACT Pipe racks are structures in petrochemical, chemical and power plants that are designed to support pipes, power cables and instrument cable trays. They may also be used to support

Seismic Bracing Installation Best Practices: Cable

In our three-part blog series, we''ll be exploring the different seismic bracing attachments, featuring both cable bracing and rigid bracing. Additionally,

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

Understanding Strut Channel Support Systems

Strut channel support systems offer a versatile and reliable solution for supporting pipes, cable trays, and equipment across a wide range of

Seismic Bracing Installation Best Practices: Strut Bracing for ...

In part two of nVent CADDY''s three part video series on different seismic bracing attachments, learn more about the best practices and benefits of using strut to brace both

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

Seismic Proof Systems

This typically includes: pipe and duct bracing, fan coil unit bracing, cable tray bracing, floor mounted components, light fitting details. This document covers the rules of longitudinal, transversal and 4

Mechanical, Electrical and Plumbing Seismic Bracing Systems

From design to construction to inspection, the nVent CADDY team makes seismic simple by walking you through the full process for applications including Mechanical, HVAC, Electrical, Plumbing and Fire

Cable Tray & Pipe Supports-The Forgotten Structural Elements

Cable trays are essential for safety and reliability in industrial projects. Learn how to avoid costly installation mistakes, like choosing the wrong cable tray type or overloading, and

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

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved

Contact Us

Continue your research online:

Website: https://alfa-pro.co.za
Technical inquiry: https://alfa-pro.co.za/contact.html

This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

© 2026 ALFA PRO COMMUNICATION SYSTEMS (Pty) Ltd - All rights reserved