

## Seismic Support for Overhead Cable Trays in Pipe Galleries



### Overview

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 cable tray system can withstand earthquakes. Requests for copies of this report should be directed to the EPRI Distribution Center, 207 Coggins Drive, P. Box 23205, Pleasant Hill, CA 94523, (510) 934-4212. The following individuals provided valuable technical input to the report. The report includes exemptions that are stated as requirements. For over 60 years, the mechanical, electrical, and fire protection trades have relied on TOLCO seismic bracing solutions. Our one-stop solution for seismic bracing, cable tray, pipe hangers, strut systems and fasteners takes the guesswork out of your next project. While many occur in remote areas, it is known that failure of engineering services due to insufficient structural design in case of seismic activities has a significant effect on life safety and economic loss.



## Article Content

### SEISMIC BRACING OF A DISTRIBUTED CABLE TRAY SYSTEM

Above these cabinets, are cable trays that provide power and communications cabling to the cabinets. Since the facilities were located in a area of high seismicity, the cable tray system was required to be

Seismic Bracing Kit | Seismic Bracing | Wire and Cable Hangers | Wire ...

Kit contains items needed for seismic bracing long cable tray runs. Each kit contains: (4) 11" cables with mounting eyelets (2) Metal brackets for attachment to support members (4) Cable clamp collars (4)

Seismic fragility analysis of suspended cable trays in civil buildings ...

This study aims to understand the seismic fragility of typical suspended cable trays in civil buildings through full-scale shaking table tests and numerical simulation. Based on the shaking table

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

Most cable trays in nuclear power plants are classified as seismic category I components. Current safety requirements dictate that all such components be adequately designed in order to

### 6.4 Mechanical, Electrical, and Plumbing Components

Refer to FEMA 413 Installing Seismic Restraints for Electrical Equipment (2004) for general information on seismic anchorage of electrical equipment and to FEMA 414 Installing Seismic Restraints for Duct

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

### Appendix 3F Cable Trays and Cable Tray Supports

This appendix provides the design criteria for seismic Category I cable trays and their supports. Seismic Category II cable trays and their supports are also designed utilizing the design criteria of this appendix.

Seismic MEP Solutions | Eaton

Eaton's TOLCO seismic bracing solutions help protect people and non-structural components during an earthquake. For over 60 years, the mechanical, electrical, and fire protection trades have relied on

Multi-Directional Bracing For Electrical Conduit, Cable Tray And ...

Typical supports for piping, trays, and other equipment are designed for the gravity, or vertical, loads but do not take into account the horizontal loading caused by earthquakes. Seismic restraints (i.e.

Performance-based optimum seismic design of cable tray system

The seismic performance levels of cable tray systems are presented according to current seismic design codes. A performance-based optimum seismic design procedure for cable tray

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

Open type overhead power cable pipe gallery structure

The overhead pipe gallery structure can effectively solve the land use contradiction of the underground pipe gallery passing through the pipelines and the structure-intensive areas by raising the pipe

Performance-based optimum seismic design of cable tray system

The results show that the proposed performance index (drift ratio between adjacent supports) for cable tray systems is a reasonable criterion for performance-based seismic design and

Seismic Cable Restraint Kits

The Easy ex EFSCK Series Seismic Cable Restraint Kits are engineered to secure suspended non-structural components—such as ductwork, piping, conduit, cable trays, and HVAC

Rev 7 to Procedure SAG.CP3, "Seismic Design Criteria for Cable Tray ...

Determine the required seismic design "g" values-for the cable tray hanger by multiplying 1.25 to the above "g" value (obtained in Step iv) to account for multimode response except as noted in-

KINETICS™ Pipe & Duct Seismic Application Manu

Unless transverse (T) and longitudinal (L) load carrying capacities are provided by the manufacturer for cable trays and bus ducts locate the transverse (T) and longitudinal (L) seismic restraints at the cable

Multi-Directional Bracing ForElectrical Conduit, Cable Tray And ...

Multi-Directional Bracing ForElectrical Conduit, Cable Tray And Mechanical Piping Systems INTRODUCTION What is Seismic Bracing? Seismic forces are exerted on a building and its contents

## KINETICS™ Pipe & Duct Seismic Application Manu

Transverse seismic restraints (T): These act to prevent the pipe or duct from swinging side-to-side. They are normally placed perpendicular to the pipe or duct. The word lateral is often used for transverse

### Specification

General: The contractor shall provide pre-engineered seismic restraint systems to meet total design lateral force requirements for support and restraint of piping, conduit, cable trays and other similar

### Seismic Supports

Seismic Supports Cable trays are systems used for the safe transportation and protection of electrical cables, designed to fit the pathways within buildings and

### Cable Tray and Conduit System Seismic Evaluation Guidelines

Guidelines are presented here for conducting in-plant seismic ruggedness review of conduit, cable trays, and their support systems. The in-plant review has two purposes.

### E-Line Seismic

EAE Seismic Support Systems offer rigid solutions for installations that require earthquake protection. The seismic supports, which can be utilized in any type of

## Contact Us

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

Website: <https://www.activa.net.pl>

Email: [sales@activa.net.pl](mailto:sales@activa.net.pl)

Phone: +48 662 748 193

Address: ul. Cybernetyki 7B, 02-677 Warsaw, Poland

This document is for informational purposes only. Specifications subject to change without notice.

