

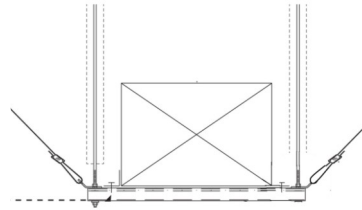
# BRACING FOR THE FUTURE

## SEISMIC RISK MANAGEMENT FOR NONSTRUCTURAL BUILDING COMPONENTS

Gripple provides Seismic Risk Management. We take the liability issues away from you by providing a complete seismic solution—the risk management you need—that encompasses beginning to end Engineering services, as well as a full line of seismic bracing and vibration isolation products.

### ENGINEERING SERVICES

The complex and technical nature of seismic bracing requirements, industry regulations, and life-safety issues necessitates a partner like Gripple who can offer you complete beginning-to-end engineering services, such as:



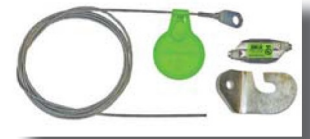
- **PE Stamped Drawings**
  - Engineered seismic bracing calculations and details based upon drawings provided.
  - PE stamped layout drawings for each service noting the proper location of Gripple Seismic Cable Bracing, per the scope of the project.
  - PE stamped layout drawings for each service noting the proper location of vibration isolation products (snubbers, isolators, hangers, and/or pads), per the scope of the project.
- **BIM Modeling and Clash Detection** - Provided as required by design scope. Includes 2D, 3D, AutoCad, and/or REVIT.
- **Coordination and Site Reviews** - with Structural Engineer and Gripple to ensure proper installation of products.
- **Budget Estimating** - Our project quote for engineering services and products is all-inclusive and will not increase after signed off on. In good faith, and to provide you with a solid number you can count on to work into your budget, we do not add additional charges or fees once the project quote has been agreed upon.
- **Products** - And finally, we'll provide you with the appropriate quantity of complete Gripple Seismic Cable Brace Assembly Kits and/or vibration isolation products per Engineer's calculations for the required services.



## VIBRATION ISOLATION PRODUCTS

A full selection of vibration and seismic isolation products are available in North America through your Gripple Inc. Territory Managers or representatives. Products include: Seismic Snubbers, Seismic Isolators, Vibration Isolators, Hangers, Pad Isolators, and Thrust Resistors.

### GRIPPLE® SEISMIC CABLE BRACING SYSTEMS



Gripple® Seismic Cable Bracing Solutions are pre-engineered systems that are up to 10 times faster to install, and can be used to brace new or retrofit nonstructural equipment or components. They require no tools to install, and no field swaging of cables. There are four cable bracing kit sizes, each with its own selection of cable lengths, end fittings, and brackets:

- GS10 Seismic Bracing Kit—Design Strength (LRFD\*): 350 lbs
- GS12 Seismic Bracing Kit—Design Strength (LRFD\*): 1,050 lbs
- GS19 Seismic Bracing Kit—Design Strength (LRFD\*): 2,100 lbs
- GS25 Seismic Bracing Kit—Design Strength (LRFD\*): 3,850 lbs

\* Load and Resistance Factor Design

### APPROVALS & CERTIFICATIONS

**OSHPD OPA Pre-Approval** Following extensive testing and qualifications, Gripple® Seismic Cable Bracing Systems GS10, GS12, and GS19 have been assigned OPA-2123-10 for Fixed Equipment Anchorage by the California Office of Statewide Health Planning & Development (OSHPD).

**SMACNA Verification** The Sheet Metal and Air Conditioning Contractors National Association (SMACNA) has deemed Gripple® Seismic an acceptable alternative for seismic hanger bracing in strict accordance with the ANSI / SMACNA Seismic Restraint Manual – Guidelines for Mechanical Systems.



**UL NEBS GR 63 Core Certification** UL has awarded Gripple® Seismic the UL NEBS GR 63 Core Certification based on surpassing extensive shaker table testing requirements. Gripple® Seismic is the only seismic bracing company to hold this certification.

**Additional Approvals** In addition, Gripple® Seismic has undergone all of the proper qualifications and extensive strength testing to meet any seismic design code requirements including: International Building Code, California State Building Code, National Fire Protection Association, and American Society of Civil Engineers.