

BB/BBR

A technical line drawing of a BulletBrace system, showing a thick, braided cable running diagonally across the frame. The cable is connected to a cylindrical metal sleeve, which is further connected to a complex, curved metal bracket or anchor. The drawing is rendered in white lines on a solid red background.

BulletBrace™

VIBRO-ACOUSTICS[®]
by Swegon

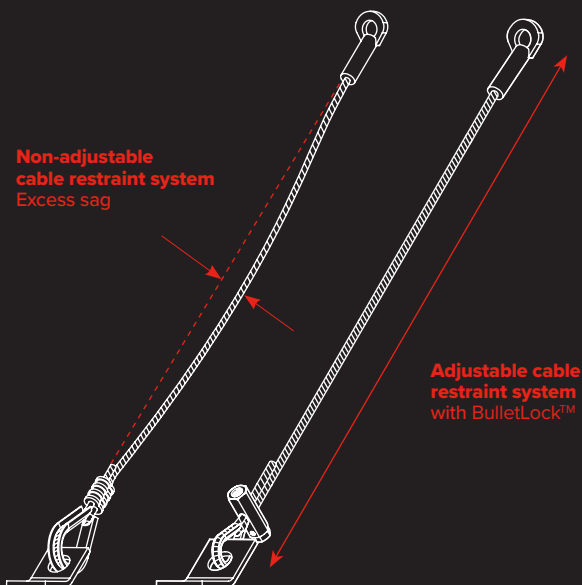
! The Challenge

IN SEISMIC APPLICATIONS, cable restraint systems provide the most common solution for restraining suspended components.

Cable restraints are either adjustable or non-adjustable. Adjustable cable restraints allow the installer to correct cable tension problems without having to replace or splice installed cable restraints. This saves installers from unnecessary rework time and cost.

Installing cable restraints can be a physically grueling exercise. They often need to be installed in hard-to-reach locations. The challenge is compounded when using non-adjustable restraint systems that use compression sleeves which require considerable effort and a large amount of space to operate the crimping tool.

Non-adjustable vs. adjustable cable restraint systems



! The Risk

ALTHOUGH there are other adjustable restraint systems available, many are large, complicated or come unassembled, requiring significant time and effort to install. Any bracing system that is difficult to install could jeopardize the project schedule with longer installation times and higher installation costs.

The Solution



The fastest adjustable cable restraint system

With BulletBrace™ and its patented BulletLock™ mechanism (US Patent #9,625,003), (Canadian Patent CA #2835531), Vibro-Acoustics offers contractors a cable restraint system that is fast and easy to use, minimizing installation time, effort and cost.

 **BULLETBRACE™**

LABOR SAVINGS

- > **Pre-Assembled:** BulletBrace™ kits are shipped pre-assembled, a unique feature in today’s market, making them the fastest restraints to install.
- > **Fewer restraints:** Combined with the V-Anchor engineering method, BulletBrace™ restraint kits allow for designs with fewer restraint points.
- > **Lower risk and higher accuracy on attachments to building structures:** Our engineered attachment details will show attachment alternatives to help contractors make substitution decisions on-site.
- > **Cost savings:** Our restraints are rated to allow for fewer, smaller restraint kits — reducing material costs. BulletBrace™ is one of the first seismic restraint kits rated for load capacities per ANSI/ASHRAE Standard 171-2017.

QUANTIFIED SAVINGS:

16 min per point

*Compared to standard products

INSTALLATION

INSTALLING AND ADJUSTING is as easy as 1, 2, 3. Vibro-Acoustics knows contractors care about labor savings. BulletBrace™ offers significant labor savings in installation and adjustment over other cable securing mechanisms, lowering the cost of installation.

SIGNIFICANT INSTALLATION TIME SAVINGS ON ANY PROJECT!



Installing similar products by others

Installing BulletBrace™



Up to **73%** time savings



Secure one end to structure. After attaching the bracket to the component, just **slide and secure** the cable.



Tighten the **secure screw** inside the BulletLock™ to the required torque.



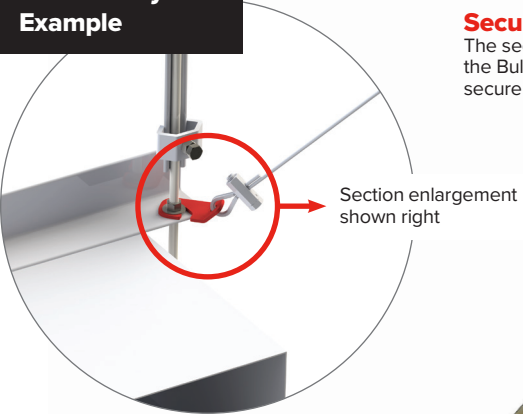
Insert the **lock screw** to complete the installation.

PROJECT SIZE	Small	Medium	Mid-Large	Large
BUILDING TYPE EXAMPLE	School	Office or Medical Facility	Hospital	Industrial Complex
QUANTITY OF RESTRAINTS*	100 to 200	400 to 1000	1500 to 3000	3000 to 6000
TIME SAVED PER POINT	16 minutes			
TOTAL HOURS SAVED	Up to 53 hrs	Up to 267 hrs	Up to 800 hrs	Up to 1600 hrs

*Estimated average quantities

JUST SLIDE AND SECURE!

Restraint System Example



Lock Screw

The lock screw is used to lock the secure screw in place.

Secure Screw

The secure screw inside the BulletLock™ is used to secure the cable in place.

BULLETLOCK™

BulletLock™ (US Patent #9,625,003), (Canadian Patent CA #2835531) is the cable securing mechanism that allows for adjustability as well as quick and easy installation of the BulletBrace™ cable restraint system.

Attachment to component

Retrofit Bracket

Retrofit brackets allow installation freedom for the contractor. Installers can add restraints after the fact, saving significant labor. The Vibro-Acoustics retrofit bracket allows the restraint to be used with multiple hanger rod diameters.

VIBRO-ACOUSTICS'

BULLETBRACE™ cable restraint system is used to restrain non-structural components against seismic, wind, and blast forces.

Typical applications include suspended equipment, ductwork, piping, and conduit. Thanks to the uniquely designed BulletLock™ cable securing mechanism, our pre-assembled BulletBrace™ kits can be secured quickly and easily.

EASE OF ADJUSTMENT

BulletBrace™ is the most easily adjustable cable restraint system in the market. The cable length can be adjusted quickly after installation to remove excess sag in the cable. For the contractor, this adjustability eliminates the need for reinstalling the cable, saving time and reducing the installer's labor.

PRE-ASSEMBLED. JUST SLIDE AND SECURE!

BulletBrace™ comes pre-assembled. To adjust the cable, **just slide and secure!** This means no more fussing with thimbles, clips or brackets and no more fishing cables through holes. The result is significant labor savings.

Available in BB-13, BBR-13, BB-19 and BBR-19 versions, BulletBrace™ kits have pre-assembled ends, so they are ready for use straight out of the package.

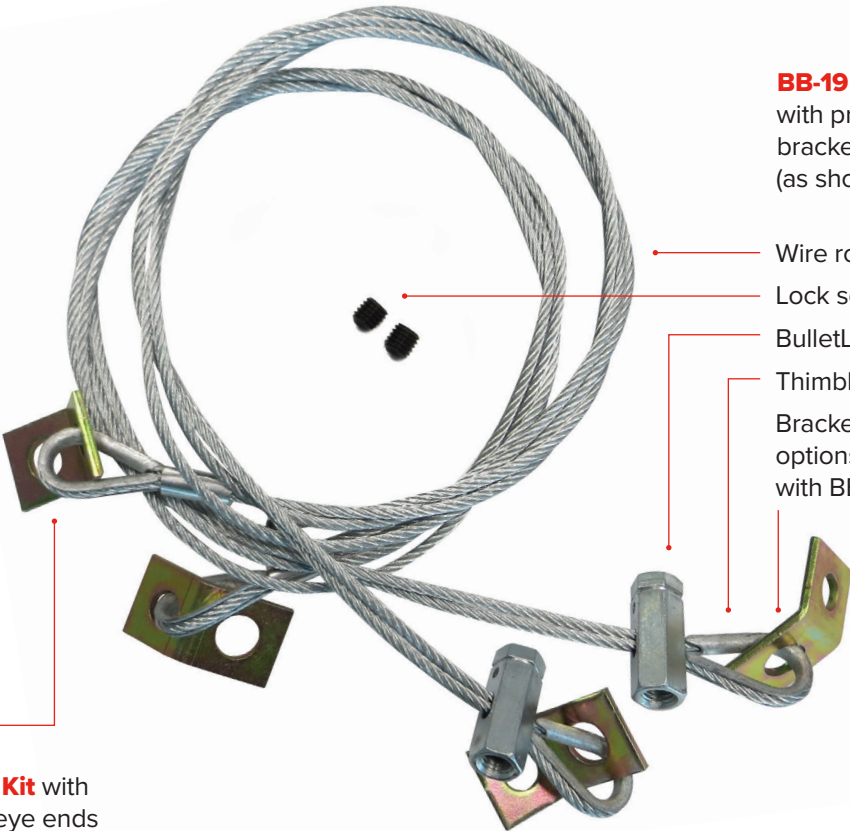


BULLETCLAMP™

BulletBrace™ is easy to attach to structural steel using BulletClamp™. Scan here for more information:



BB-13 Kit with stake-eye ends



BB-19 Kit

with pre-assembled bracket ends (as shown)

Wire rope cables

Lock screws

BulletLock™

Thimbles

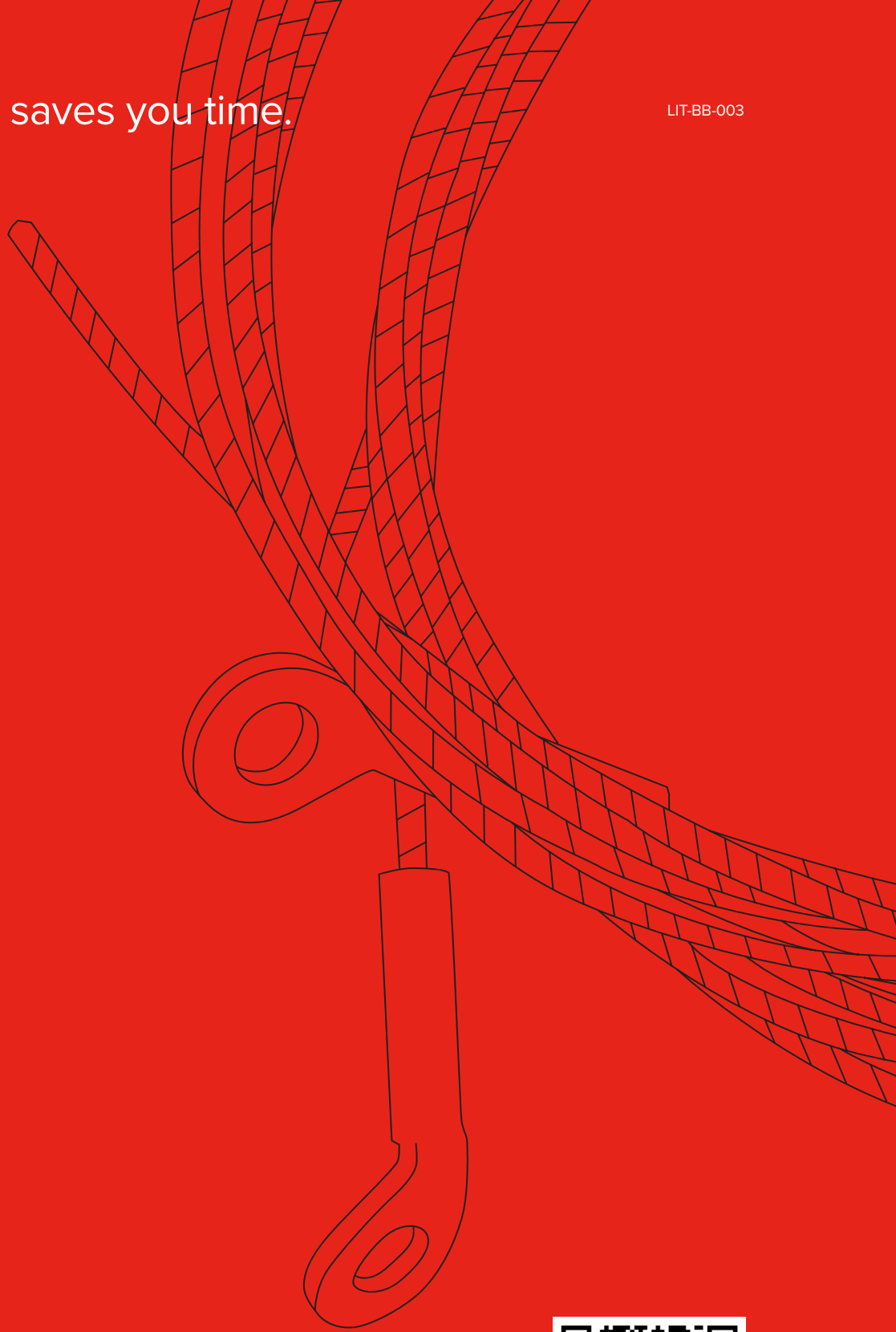
Brackets (retrofit bracket options available with BBR versions)

SPECIFICATIONS	BB-13/BBR-13	BB-19/BBR-19
Color-coded for size BB-13/BBR-13 and BB-19/BBR-19 can be identified by the label color of the BulletLock™		
Rated load*	1000 lb (4448 N)	2000 lb (8896 N)
Cable length	10 ft. (3 m)	10 ft. (3 m)
Cable material	Galvanized steel	Galvanized steel
Fixed end hole	1/2 in. (13 mm)	5/8 in. (16 mm)
Connections	Bracket connection on one end stake-eye on other end	Bracket connection on both ends
Secure screw installation torque	10 lbf-ft (13.6 N·m)	26 lbf-ft (35.3 N·m)

*Rated load based on third-party testing per ANSI/ASHRAE Standard 171-2017. Contact Vibro-Acoustics or see our website for additional information on structural attachment requirements.

The company that saves you time.

LIT-BB-003



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