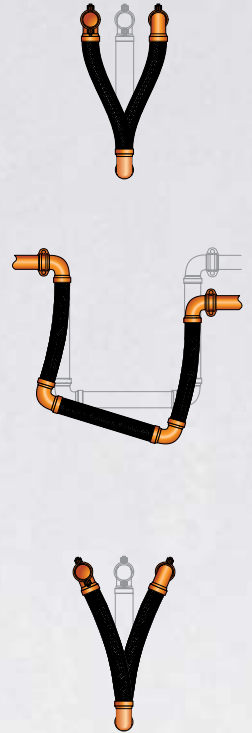


Tri-Flex Loop®



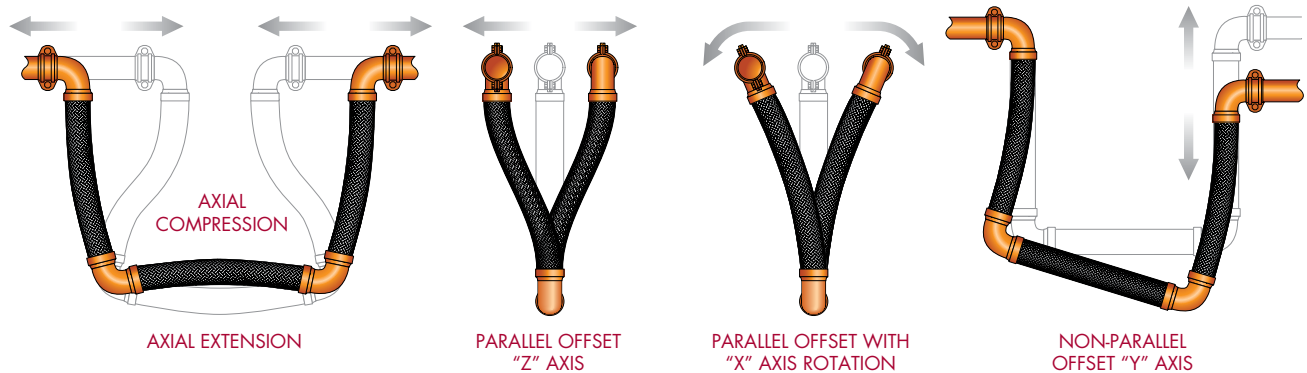
BUILDING CONNECTIONS THAT LAST

OTHER ANVIL BRANDS:



MOVEMENT CAPABILITIES

AnvilStar™ Tri-Flex Loop® is capable of handling the following movements simultaneously.



ABSORB & COMPENSATE

The patented AnvilStar Tri-Flex Loop is the only flexible pipe loop that absorbs and compensates for pipe movement in six degrees of freedom, including three coordinate axes, plus rotation about those axes simultaneously. AnvilStar's Tri-Flex Loop is the safest and most reliable means of absorbing movement resulting from thermal changes and random seismic shifts in a fire protection system.

Quality assurance and precision manufacturing are central to the AnvilStar Tri-Flex Loop. The AnvilStar product ensures safety and superior performance as it is specially designed to withstand large and irregular movements, such as those caused by seismic activities. The AnvilStar Tri-Flex Loop is tested and approved by Factory Mutual from 1"-12" sizes. In sizes 1"-3", this product is approved for up to 300 psi and service assemblies maintained pressure integrity to 1,200 psi, a 4:1 safety factor. In sizes 4"-12", the product is approved for up to 175 psi and service assemblies maintained pressure integrity to 700 psi, also a 4:1 safety factor.

AnvilStar Tri-Flex Loop is designed and manufactured using state-of-the-art welding technology. The product is 100% dye penetrant tested at the seal welds and pressure-tested prior to release for shipment. The AnvilStar Tri-Flex Loop has a three-year warranty. Please refer to warranty registration for details.

KEY FEATURES INCLUDE:

- Innovative, patented design
- Simultaneous movement in 3 coordinate axes
- Compensates random seismic shift
- Factory-provided seismic wire cable hanger kit
- Factory built and tested
- 3-year warranty
- Metal tagged with project location
- Ready to install

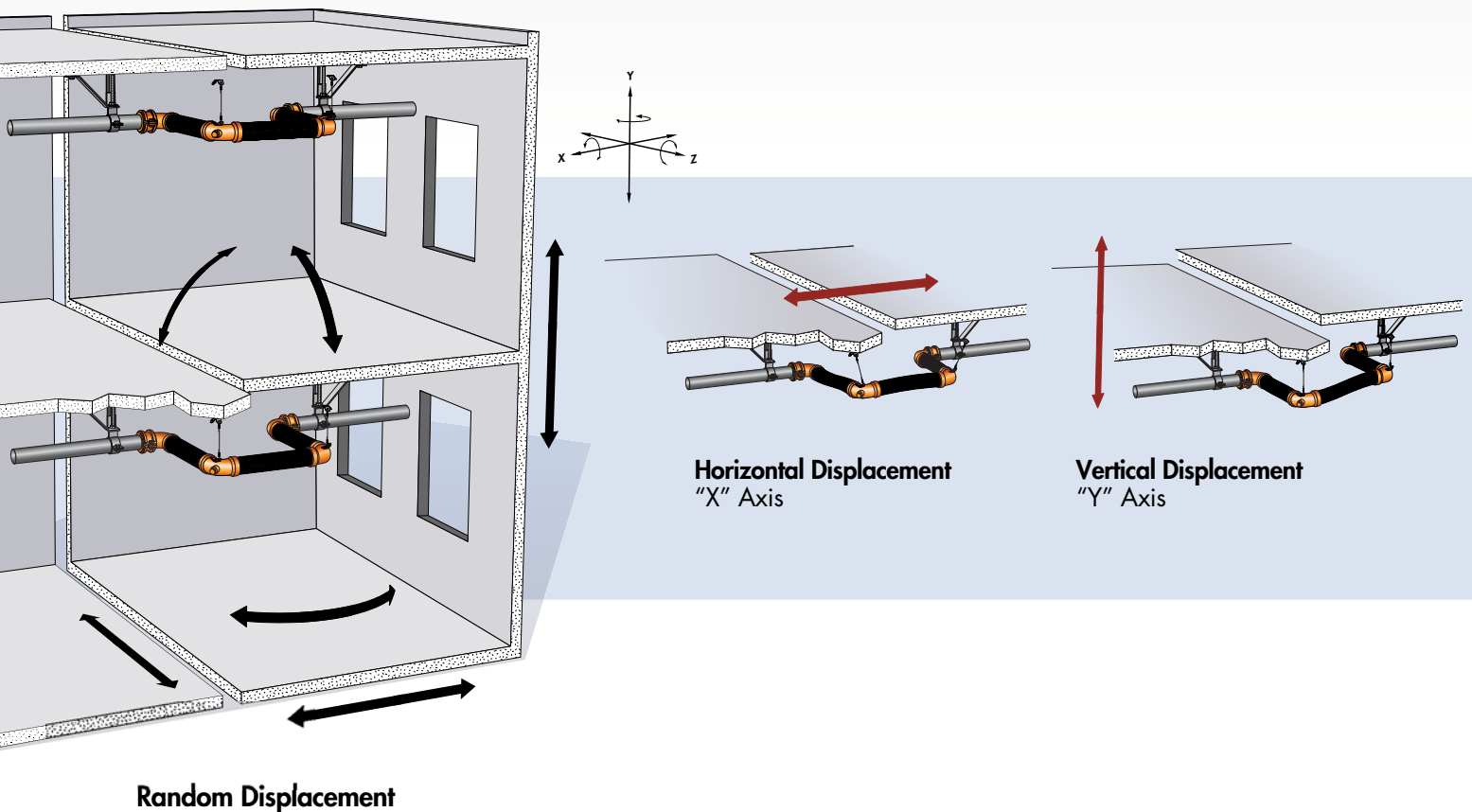


Seismic Displacement APPLICATIONS

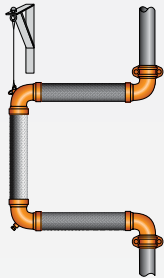
The product can accommodate seismic displacements for riser fire protection piping between floors of the building, where sprinkler pipes pass through or bridge building seismic joints. The AnvilStar Tri-Flex Loop is also used as horizontal fire protection for piping that crosses building seismic and building expansion joints to accommodate building drift of each building unit.

PROPER ISOLATION OF SEISMIC JOINT

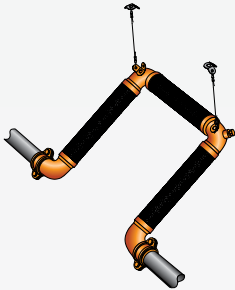
Seismic bracing should not pass through building seismic joints and/or expansion joints. Seismic bracing should not connect to or tie together different sides or parts of the building seismic joints.



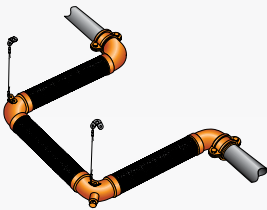
INSTALLATION OPTIONS



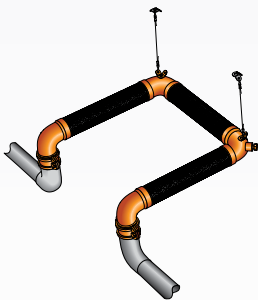
VERTICAL INSTALLATION



DIAGONAL INSTALLATION



HORIZONTAL INSTALLATION



OVER/UNDER PIPE INSTALLATION

INSTALLATION & MAINTENANCE TIPS

AnvilStar can help you achieve maximum protection for your piping system during seismic activity. We will work closely with you to make sure that our products are properly installed to meet the needs of your building.

Be sure that all pipelines are supported, so the AnvilStar Tri-Flex Loop does not carry the pipe load. Initial pipe misalignment should not exceed 1/8" in any direction as any misalignment, compression, or extension will reduce the maximum allowable movements of the product. However, in the event that the product must be installed with an initial misalignment, compression, or extension, then the maximum allowable movements will be reduced by the amount of the initial deflection.

Install the product with neutral face-to-face dimension as shown in submittal drawings. If seismic snubbers are designed into the piping system, they should be sized to accommodate the forces of the piping system, since the product will not impose additional thrust forces.

Verify that the movements of the system are within the design parameters of the product being installed. Be sure to check that system pressure and temperature do not exceed recommended performance limits as operation beyond design limits could result in premature failure.

Consider that the alloy of any product installed must be chemically compatible with the media of the existing piping system.

The AnvilStar Tri-Flex Loop flanges and the mating flanges on a flanged product should straddle the centerline to avoid torque.

When welding in the area of product, extreme care is necessary to ensure that no weld spatter comes in contact with the braided hose sections.

If you have any questions about installation options or how to best protect your piping systems, please contact your AnvilStar representative for guidance.

To install a thread end, the AnvilStar Tri-Flex Loop unions must be used cautiously. Do not place wrenches on the braided portion or the collar of the product. Use care not to torque the product while tightening the union.

Use care when handling the AnvilStar Tri-Flex Loop during transport, storage, and installation. The braided hose sections must not be allowed to bend, deflect, sag, or otherwise extend beyond their rated capabilities. The shipping bar is to keep the AnvilStar Tri-Flex Loop in its neutral end-to-end dimension during shipping and installation. After installation, the shipping bar must be removed.

Because the product is rated for motion on either side of its neutral face-to-face, the capability can be doubled by pre-compressing or pre-extending based on requirements. With the product's extreme flexibility, this can be easily done in the field.

When installing in any configuration other than with the product hanging down (vertical), the weight of the AnvilStar Tri-Flex Loop must be supported utilizing the support hanging lugs which are factory-welded at the two 90° elbows. The product's pre-stretched seismic wire/rope cable assembly must be used in accordance with the installation instructions included with the Cable Kit in order to ensure optimal performance of the product.

In the event of seismic activity or if excessive movement beyond design capability has occurred, the product should be inspected to ensure that it has not incurred damage. If there is any question as to whether or not excessive motion has occurred, the product should be replaced. The product should be also inspected during routine maintenance to ensure there are no signs of external damage.

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