

## Fig. 825 - Bar Joist Sway Brace Attachment

**Size Range** — One size accommodates all TOLCO Fig. 900 Series sway brace attachments. Maximum Horizontal Design Load 2015 lbs.

**Material** — Carbon Steel

**Function** — To attach sway bracing and hanger assemblies to steel open web structural members.

**Features** — This product's design incorporates a concentric attachment point which is critical to the performance of structural seismic connections. NFPA 13 indicates the importance of **concentric** loading of connections and fasteners. Permits secure non-friction connection without drilling or welding. Unique design reinforces point of connection to joist. Break off head bolt design assures verification of proper installation torque (min. 31 ft.-lbs.).

**Approvals** — Underwriters Laboratories Listed in the USA (**UL**) and Canada (**cUL**). Approved by Factory Mutual Engineering (**FM**). Included in our Seismic Restraints Catalog approved by the State of California Office of Statewide Health Planning and Development (**OSHPD**). For additional load, spacing and placement information relating to OSHPD projects, please refer to the TOLCO Seismic Restraint Systems Guidelines.

**Installation Instructions** — The Fig. 825 is the structural attachment component of a longitudinal or lateral sway brace assembly. It is intended to be combined with a TOLCO transitional attachment, "bracing pipe" and a TOLCO "braced pipe" attachment, to form a complete bracing assembly. NFPA 13 and/or OSHPD guidelines should be followed.

**To Install** — Place the Fig. 825 on the steel beam, tighten the cone point set bolts until bolt heads break off. Attach other TOLCO transitional attachment fitting, Fig. 909, 910, 980 or 986. Transitional fitting attachment can pivot for adjustment to proper brace angle.

### Important Structural Note:

The TOLCO Fig. 825 has significant UL established design loads, however, structural issues related to the steel joist member require restricted location installation for all bracing. Steel Joist Manufacturers require that all earthquake bracing connections be within 6" of the cord panel point. Installation of the Fig. 825 must be limited to the outer third sections of the joist span. For installations within the center third section of the joist span, use **UL Listed TOLCO Fig. 825A**.

**Finish** — Plain, Electro-Galvanized and HDG

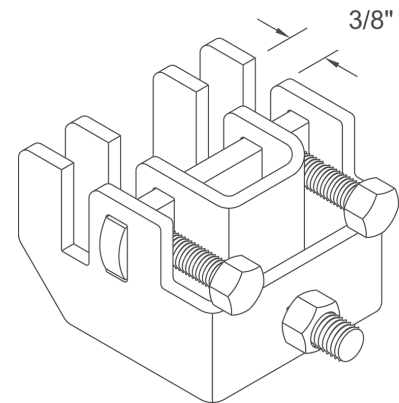
**Order By** — Figure number and finish

US Patent #6,098,942,

Canada Patent #2,286,659

\* The loads listed are axial loads on the brace. The horizontal load capacity, H, of the brace is:  $H = F \times \sin \theta$ , where  $\theta$  is the installation angle measured from the vertical.

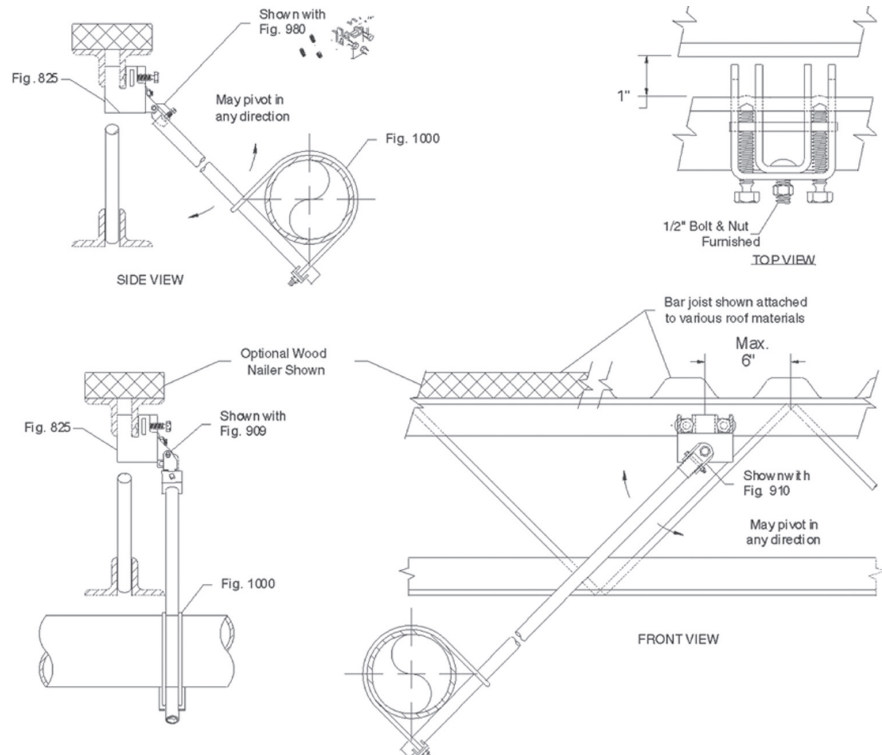
Component of State of California OSHPD Approved Seismic Restraints System



Maximum Design Load 2015 Lbs.  
Weight/100 237.5 Lbs.

UL Listed as Hanger Attachment  
6" Pipe Max.

FM Approved Design Loads\*  
2900 - Across Beam  
1350 - Along Beam



TOLCO® brand bracing components are designed to be compatible **ONLY** with other TOLCO® brand bracing components, resulting in a Listed seismic bracing assembly. **DISCLAIMER** — NIBCO does **NOT** warrant against the failure of TOLCO® brand bracing components, in the instance that such TOLCO® brand bracing components are used in combination with products, parts or systems which are not manufactured or sold under the TOLCO® brand. NIBCO shall **NOT** be liable under any circumstance for any direct or indirect, incidental or consequential damages of any kind, including but not limited to loss of business or profit, where non-TOLCO brand bracing components have been, or are used.