

Fire Protection

These products are not FM Approved, except where separately listed for a specific end use application in the Approval Guide.

The products listed in this section have been evaluated according to recognized test standards. Products are also listed under a category entitled "Identified Components." These are not complete end-products, but are critical components of an FM Approved or specification-tested finished material or device.

All listed products have been subjected to examinations and follow-up inspections by FM Approvals. These products are not FM Approved, except where separately listed for a specific end use application in the Approval Guide. Periodic audit inspections of the manufacturing facilities and quality control procedures are performed on all listed products. In addition, the products may be re-examined to reconfirm the previous test results and to assess any changes in manufacturing procedures or composition of the product.

The manufacturer of the listed product or material is authorized to apply an identification marking to the product or container which includes the FM Approvals name and the FM Approvals test report identification.

FM Approvals does not imply or express any warranty of any kind with respect to the products, nor assume any responsibility for defects, failure in service or patent infringements.

FM Approvals makes no judgement of product suitability for its intended end use solely as a result of these tests.

Seismic Sway Brace Components

These products are not FM Approved, except where separately listed for a specific end use application in the Approval Guide.

Seismic Sway Braces are used to resist the differential movement between the sprinkler piping systems and the structure to which it is attached during an earthquake. The listings contained within this section are based on testing that was conducted on the building-attached and piping-attached components individually. While included in the certification testing, the component used between the building-attached component and the pipe-attached component was not within the scope of Approval.

Two or more listed components may be required to form a complete seismic sway brace. The specific components required depend upon the type of building construction and the pipe size.

Model CSBT – FM 1950

Testing was performed in accordance with the procedures discussed in FM Approvals Standard 1950, *Approval Standard for Seismic Sway Braces for Pipe, Tubing and Conduit*, paragraph 4.2.

Testing for the CSBT was performed with some differences than the procedure in paragraph 4.2. The CSBT was tested with the brace pipe, the building attached component and pipe attached component included in one test and was tested with the brace pipe at an angle. Calculations used to derive the ratings below accounted for these differences.

In all cases, the allowable capacities shown within this section have been determined by resolving the load rating (i.e. the load resulting in failure or exceedance of the deformation limits) to the horizontal direction and dividing by a safety factor of 1.5 to allow the values to be used directly for Allowable Stress Design (ASD). For Load Resistance Factor Design (LRFD) capacities, the values in the table shall be multiplied by 1.5.

Model	Part Description	Orientation	Run Pipe Nominal Size	Run Pipe Reference	Horizontal Capacity (F) per Installation Angle, lb (N)				Remarks
					30-44°	45-59°	60-74°	75-90°	
CSBT	Telescoping sway brace	Lateral	1 to 4 inch	LW, Sch 10, Sch 40	630 (2800)	1050 (4700)	1050 (4700)	1190 (5300)	a, b, c

N/A – Not Applicable

NR – Not Rated

Remarks:

a. Load rating for LW above refers to FM Approved Lightwall pipe, commonly referred to as Sch.7. These ratings may also be applied to EN 10220 and GB/T 8163 pipe

b. Load rating for Sch. 10 above may be applied to GB/T 3091, GB/T 3092, EN 10255M and H, JIS G3452, FM Approved Thinwall pipe and Sch. 40

c. Load rating for Sch. 40 may be applied to Sch. 80

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Company Website:	http://erico.com
New/Updated Product Listing:	No

Listing Country:	United States of America
Certification Type:	Specification Tested (Not FM Approved)