

Compression Posts

USG DOWN® Brand Compression Post provides rigid support for a ceiling suspension system in seismic applications. Telescoping compression posts attach to the main tees at each splayed wire location, preventing upward movement of the system, often required by code. Because codes continue to evolve¹, check with a local official prior to designing and installing a ceiling system.

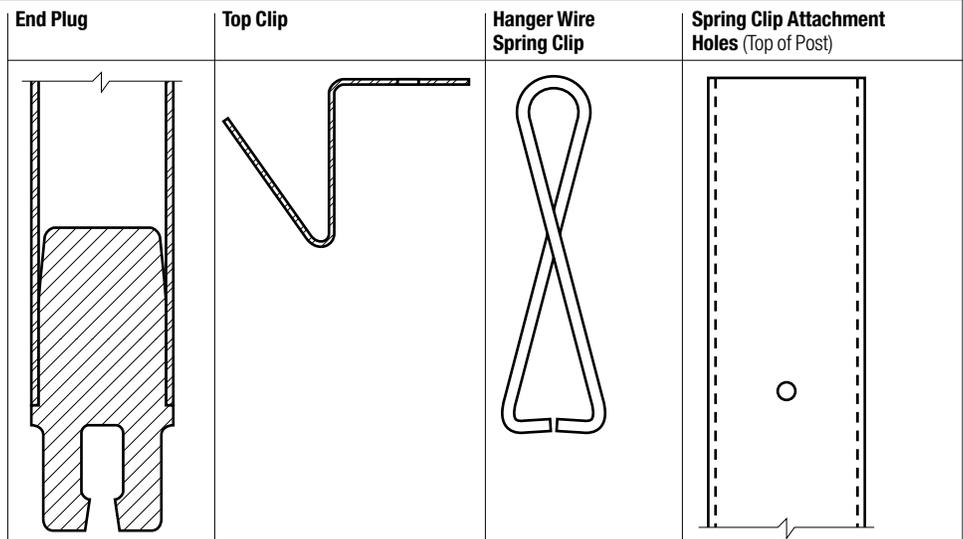
Features

- Factory-engineered solution provides system rigidity in seismic applications and offers quick installation thus reducing field labor time.
- Available in six different telescoping sizes that meet requirements and includes fast delivery.

Item No.	Size
VSA 18/30	18" to 30"
VSA 30/48	30" to 48"
VSA 48/84	48" to 84"
VSA 84/102	84" to 102"
VSA 102/120	102" to 120"
VSA 120/144	120" to 144"

- Injection-molded, high-impact clip snaps onto the bulb of the main tee for a secure, positive connection.
- Heavy-wall galvanized steel tubing, no-rust telescoping post locks into permanent support length.
- Injection-molded guide ring prevents rattling.
- Spring steel top clip for attachment to vertical hanger wire adjacent to post
- The adjustable self-locking connection has been tested and certified to a minimum compressive load of 900 lb.
- Meets UL797

Components



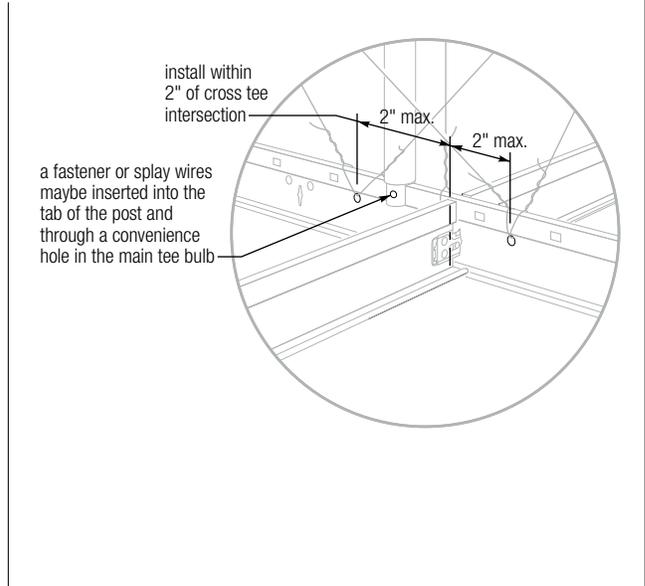
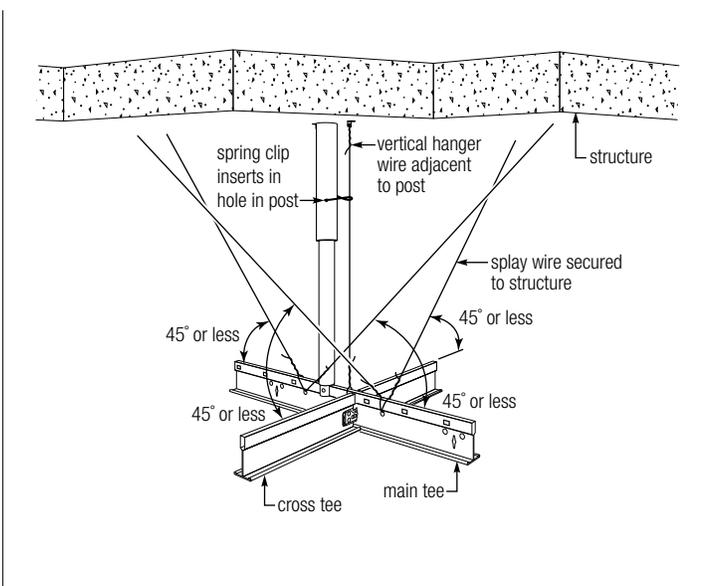
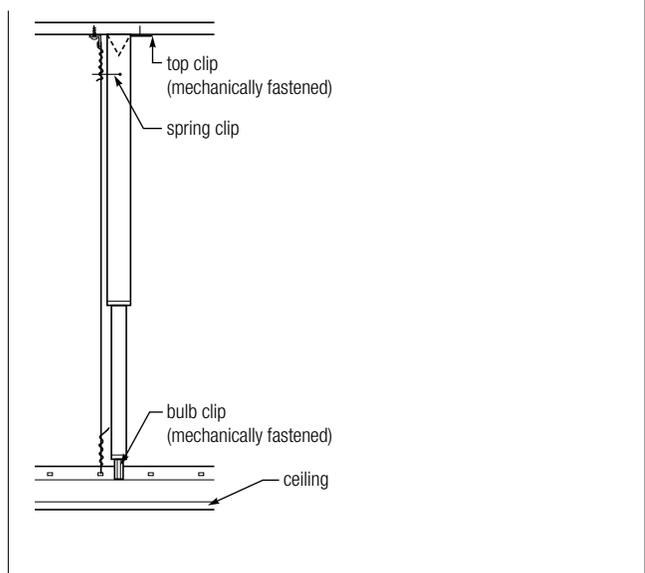
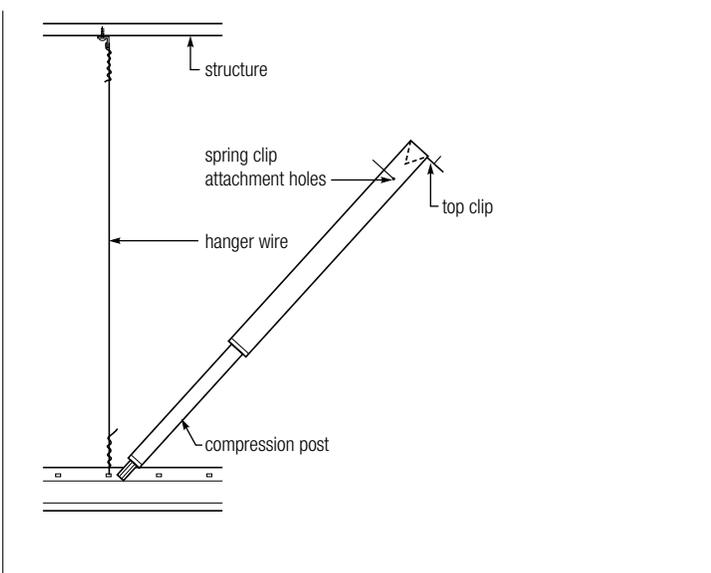
Note: All components are included with each post

¹ See last page for Seismic Code Reference Standards

Installation

Application

- Step 1** Fit top clip into the opening of the post.
- Step 2** Snap compression post onto main tee bulb next to vertical hanger wire.
- Step 3** Bring compression post to vertical with hanger and extend post for snug fit against structure.
- Step 4** Loop spring clip around vertical hanger wire and connect to holes on top of post.
- Step 5** Mechanically fasten end plug of post to main tee bulb.
- Step 6** Fasten compression post to structure with the appropriate mechanical fastener.



Installation

Alternative Materials

The USG DOWN Brand compression post is an engineered solution designed to work with USG DOWN Brand Suspension Systems when required by code. The USG DOWN Brand compression post is an option for almost every project, however it is not necessary to use the USG DOWN Brand compression post when installing USG DOWN Brand Suspension Systems. Any steel member with sufficient strength is allowed by code and may be suitable for use as a compression post. Below are some common, light gauge steel members provided by others that are typically used as alternates for compression posts and their typical associated allowable lengths.

Alternative Material	Typical Allowable Length	Alternative Material	Typical Allowable Length
13/16" x 13/32" Strut 19 GA	24"	3-5/8" x 1-1/4" 18GA Stud (362S125-43)	84"
1-1/2" x 9/16" x 0.059" Channel	33"	1-1/4" x 1-1/4" Strut 14 GA	84"
(2) 3/4" x 1/2" x 0.059" Channel, Back to Back	39"	3-5/8" x 1-1/4" 20GA Stud (362S125-30)	85"
(2) 1-1/2" x 9/16" x 0.059" Channel, Back to Back	44"	2-1/2" x 1-1/4" 25GA Stud (250S125-18)	87"
1/2" Diameter EMT Conduit, 0.042" Wall Thickness	47"	158STS 1-5/8" x 1-1/4" x 0.0197" Channel	90"
3/4" x 1/2" x 0.059" Channel	47"	1-3/8" x 1-5/8" Strut 12 GA	96"
13/16" x 1-5/8" Strut 12 GA	48"	1-1/4" x 2-1/2" Strut 14 GA	96"
13/16" x 1-5/8" Strut 14 GA	48"	1-5/8" x 1-3/8" Strut 12 GA	96"
1-1/4" x 3/4" Strut 14 GA	48"	1-1/4" Diameter EMT Conduit, 0.065" Wall Thickness	102"
1-1/4" x 5/8" Strut 19 GA	48"	1-5/8" x 1-5/8" Strut 14 GA	108"
1-5/8" x 13/16" Strut 14 GA	48"	1-5/8" x 1-5/8" Strut 12 GA	108"
1-5/8" x 13/16" Strut 12 GA	48"	1-1/2" Diameter EMT Conduit, 0.065" Wall Thickness	118"
13/16" x 13/16" Strut 19 GA	54"	3-1/4" x 1-5/8" Strut 12 GA	120"
1" x 1-5/8" Strut 12 GA	60"	2-7/16" x 1-5/8" Strut 12 GA	120"
1-5/8" x 7/8" Strut 12 GA	60"	1-5/8" x 1-5/8" Strut 16 GA	120"
1-5/8" x 13/16" Strut 16 GA	60"	1-5/8" x 3-1/4" Strut 12 GA	120"
1-5/8" x 1" Strut 12 GA	60"	1-5/8" x 2-7/16" Strut 12 GA	120"
3/4" Diameter EMT Conduit, 0.049" Wall Thickness	61"	(2) 158STS 1-5/8" x 1-1/4" x 0.0197" Channel, Back to Back	130"
1" Diameter EMT Conduit, 0.057" Wall Thickness	78"	2" Diameter EMT Conduit, 0.065" Wall Thickness	150"
3-5/8" x 1-1/4" 16GA Stud (362S125-54)	82"		

Notes

1. The information provided is for quick reference only. Other restrictions and exemptions may apply.
2. All struts and allowable lengths should be verified by a design professional before use.
3. Wind loads may exceed seismic loads. The distances above may not be suitable for exterior use.
4. Wall molding should not be used as struts.
5. A structural engineer should be consulted for lengths greater than 14ft.

Compliance

Code Compliance

- ICC-ESR-1222
- City of Los Angeles Research Report: RR25764
- CA Division of the State Architect (DSA) IR-A5 Interpretation of Regulations Manual through reference to ICC-ESR-1222 or CA Division of the State Architect (DSA) IR-A6 Change Order and Field Change Approval Processes.
- CA Office of Statewide Health Planning and Development (OSHPD) please refer to Code Application Notice 2-1708A.5, pre-approval through ICC-ESR-1222 is recommended.

Seismic Code Reference Standards

Installation Guidelines for Suspended Ceilings				
International Building Code (IBC)	2003 IBC ↓	2006 IBC ↓	2009 IBC ↓	2012 IBC ↓
American Society of Civil Engineers (ASCE)	ASCE7-02 ↓	ASCE7-05 ↓	ASCE7-05 ↓	ASCE7-10 ↓
Ceilings Interior Systems Construction Association (CISCA) or ASTM International (ASTM)	CISCA Zones 0-2 CISCA Zones 3-4	CISCA Zones 0-2 CISCA Zones 3-4	CISCA Zones 0-2 CISCA Zones 3-4	ASTM E580

International Building Code (IBC) defines Seismic Design Categories A, B, C, D, E, and F.
www.iccsafe.org

ASCE/SEI 7 Minimum Design Loads for Buildings and Other Structures

American Society of Civil Engineers/Structural Engineer Institute (ASCE/SEI)
www.asce.org

Guidelines for Seismic Restraint for Direct-hung Suspended Ceiling Assemblies (Zones 3-4) Recommendations for Direct-hung Acoustical Tile and Lay-in Panel Ceilings (Zones 0-2)

CISCA Ceilings & Interior Systems Construction Association (CISCA)
www.cisca.org

ASTM International E580/E580M Standard Practice for Installation of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Subject to Earthquake Ground Motions.

ASTM International (formerly American Society for Testing and Materials)
www.astm.org

Further References

USG Seismic Ceiling Resource Center

Seismic Technical Guides
seismicceilings.com

Product Information

See usg.com for the most up-to-date product information.

Installation

Must be installed in compliance with ASTM C636, ASTM E580, CISCA, and standard industry practices.

Code Compliance

The information presented is correct to the best of our knowledge at the date of issuance. Because codes continue to evolve, check with a local official prior to designing and installing a ceiling system. Other restrictions and exemptions may apply. This is only intended as a quick reference.

Purpose

This seismic technical guide (STG) is intended as a resource for design professionals, to promote more uniform criteria for plan review and jobsite inspection of projects. This STG indicates an acceptable method for achieving compliance with applicable codes and regulations, although other methods proposed by design professionals may be considered and adopted.

ICC Evaluation Service, Inc., Report Compliance

Suspension systems manufactured by USG Interiors, Inc., have been reviewed and are approved by listing in ICC-ES Evaluation Report ESR-1222. Evaluation Reports are subject to reexamination, revision and possible cancellation. Please refer to usgdesignstudio.com or usg.com for current reports.

L.A. Research Report Compliance

Down brand suspension systems manufactured by USG Interiors, Inc., have been reviewed and are approved by listing in the following L.A. Research Report number: 25764.

Notice

We shall not be liable for incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered.

Safety First!

Follow good safety/industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read MSDS and literature before specification and installation.

