

# Donn® Suspension Systems

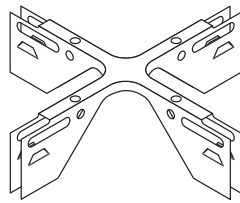


## 4-Way Seismic Separation Joint Clip

**Description**

The DONN® Brand DH4 seismic separation joint clip is designed to provide the most robust hold in the most stringent seismic design categories.

**4-Way Seismic Separation Joint Clip**



**Features & Benefits**



- Meets or exceed all national code requirements.
- Fulfills requirements for IBC Seismic Design Categories D, E, and F.
- Provides evidence of compliance (and greatly exceed) ICC Evaluation Service, Inc. (ICC-ES) AC156 and AC368 requirements.
- Clip placement is over the bulb of the tee and does not interfere with light fixtures.
- Fastener holes and expansion slots enable fail-safe installation.
- Non-directional and can be used on either main tees or cross tees.
- No extra hanger wires are required.
- No special fasteners are required.
- Maintains squareness and strength of suspension system.
- One-piece, solid construction.
- Laboratory-tested to greatly exceed all structural and seismic requirements including tension, compression and tee fallout.
- Offers an aesthetically attractive option to traditional control joints. Maintains clean uninterrupted look.
- Lifetime limited warranty.

**Applications**

- All interior general use areas
- With intermediate and heavy-duty Donn suspension systems, AX, DX®/DXL™, FINELINE® (DXF), FINELINE® 1/8 (DXFF), CENTRICITEE™ (DXT), CE (Controlled Environment), DXSS, DXW, DXLA™, and ZXLA™ (Environmental). Donn ACM7 seismic clip solutions include the code-compliant heavy-duty and intermediate duty main tee required for Seismic Design Categories A-F.

**Performance**

The DH4 seismic separation clip sustained tremendous forces in tension and compression testing, far greater than would be experienced in a seismic event.



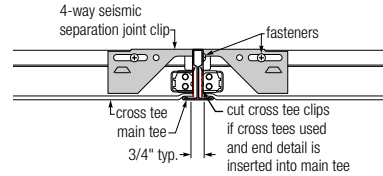
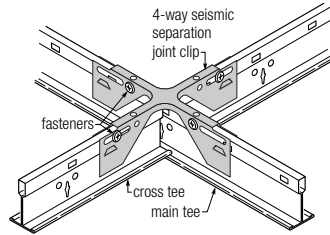
**ACM7 Seismic Clip Performance**

| Test             | Failure Criteria          | Result   |
|------------------|---------------------------|--|
| Tension Test     | Tee fallout/ displacement | > 300 load (lbs.).<br>Test stopped to protect equipment;<br>failure load will exceed this level. |
| Compression Test | Tee fallout/ displacement | > 400 load (lbs.).<br>Test stopped to protect equipment;<br>failure load will exceed this level. |

**Construction**

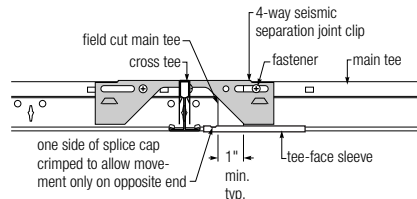
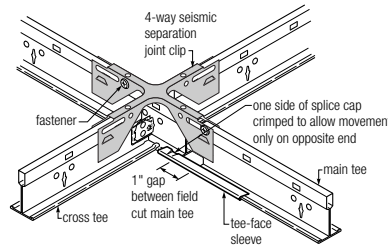
**4-Way Seismic Separation Joint Clip**

A one-piece, multi-directional fastener with a slot that secures the tee while allowing expansion-joint movement. This clip sits on top of bulb, avoiding interference with light fixtures and ceilings panels.

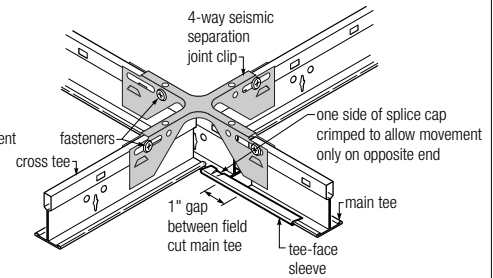
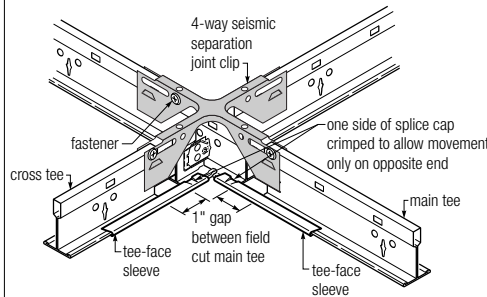


For additional clearance 1/2" DXW may be used.

**Alternative Application**



**Adjacent Expansion Joints**



**Submittal Approvals**

|                   |             |
|-------------------|-------------|
| <b>Job Name</b>   |             |
| <b>Contractor</b> | <b>Date</b> |

**Physical Data/ Footnotes**

|   |   |   |   |   |
|---|---|---|---|---|
| <p><b>Material</b><br/>Hot-dipped galvanized steel.</p> <p><b>Recycled content</b><br/>25%. For details, see the Sustainability selector.</p> <p><b>Installation</b><br/>Must be installed in compliance with ASTM C636, CISCA, and standard industry practices.</p> <p><b>Limitations</b><br/>The performance of Donn DH4 4-way seismic separation joint clip and systems is based on the specific combination of superior components, and design and installation methods shown. Components from other manufacturers were not evaluated, and their use or any mixed use is not recommended.</p> | <p><b>ICC Evaluation Service, Inc., Report Compliance</b><br/>Suspension systems manufactured by USG Interiors, Inc., have been reviewed and are approved by listing in ICC-ES Evaluation Report 1222. Evaluation Reports are subject to reexamination, revision and possible cancellation. Please refer to usgdesignstudio.com or 800 USG.4YOU for current reports.</p> <p><b>L.A. Research Report Compliance</b><br/>Donn 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.</p> | <p><b>AC156 Disclaimer</b><br/>The current ICC-ES acceptance criterion (AC) used for the testing and evaluation of seismic clips is AC156, Acceptance Criteria for Seismic Qualification by Shake-Table Testing of Nonstructural Components and Systems. AC156 was not specifically designed to provide testing guidelines or pass/fail criteria for acoustical suspension systems in a seismic event. However, in the absence of a specific AC for this purpose, ICC-ES allowed AC156 to act as the basis for all seismic testing and evaluation for the acoustical ceiling suspended ceilings industry.</p> <p><b>Code Compliance</b><br/>Testing and evaluation performed at the University at Buffalo (SUNY), the Department of Civil, Structural and Environmental Engineering –</p> | <p>Structural Engineering and Earthquake Simulation Laboratory (SEESL) and the Earthquake Engineering Research Center (EERC) University of California, Berkeley qualify the performance of these systems according to the AC156 – Seismic Qualification Specification, and AC368 – Acceptance Criteria for Suspended Ceiling Framing Systems. Several alternative materials, designs and methods of construction were evaluated and tested. Results of this investigation indicates that these tested alternative designs are at least the equivalent of that prescribed in the code for quality, strength, effectiveness, fire resistance, durability and safety. These alternative designs are at least equivalent to the criteria set forth in</p> | <p>AC156 and AC368, and otherwise demonstrate compliance with the performance features of the codes. The data and test results presented provide technical evidence on which a code official can base approval.</p> <p><b>Note</b><br/>The University of Buffalo and the University of California do not endorse specific products.</p> <p><b>Construction Details</b><br/>Please see SC2496 for construction details.</p> <p><b>Safety First!</b><br/>Follow good safety/industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read MSDS and literature before specification and installation.</p> |
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Manufactured by USG Interiors, Inc. 550 West Adams Street Chicago, IL 60661

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