



RSIC-SI-X



Patent Pending

The **RSIC SI-X** new low profile spring isolation system is designed for use with any wood framed, steel framed, or concrete ceiling system where vibration and noise control is needed. The RSIC-SI-X assembly decouples and isolates the gypsum board or plywood from the structure with a low profile spring increasing the acoustical performance of the system. With an Acoustical design load range from 7 lbs to 25 lbs per isolator, the RSIC-SI-X clip can support up to two layers of 5/8" gypsum board. The spacing at 16" x 48" oc is the same for 1 or 2 layers of gypsum board

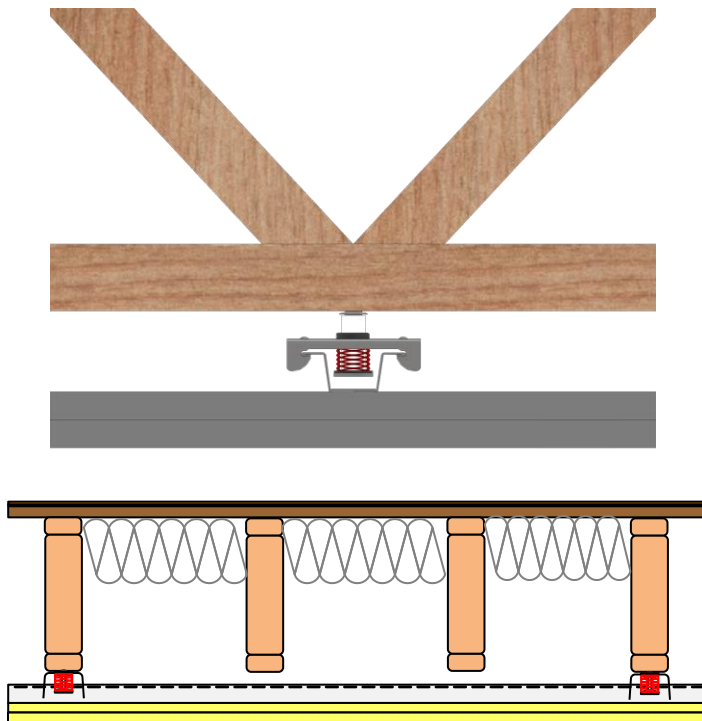
Wood
Steel
Metal Deck

Steel
Condo
Commercial

Apartment
Retail
Conference Rooms

Recording Studio
Home Theater
Commercial theater

RSIC-SI-X on Open Web Truss



STC 61

IIC 58

RSIC-SI-X Specifications:

Acoustical design load:	7 lb to 25 lb
Total deflection	0.5"
Double deflection	YES
Adjustable	NO
Cavity min	2" nom
Cavity Max	2" nom
Adjustment limit	0"
Use on Ceilings	YES
New Construction	YES
Retro Fit	YES
Spring Isolation	Yes
Rubber Isolation	Yes
Pre-Calibrated	Yes
Pre-Assembled	Yes

Made, Tested, Engineered, Designed, and Calibrated In USA



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GYPSUM BOARD ASSEMBLIES 2021

PAC INTERNATIONAL, LLC.

1. Product Name

- RSIC-SIX Resilient Sound Clip..
 - RSIC-SIX Resilient Sound Isolation Spring Clip

2. Manufacturer

PAC International, LLC
7260 W Azure Dr
Suite 140-213
Las Vegas, NV 89130
Phone: (866) 774-2100
Fax: (866) 649-2710
Email: info@pac-intl.com
Web: www.pac-intl.com

3. Product Description

RSIC-SIX

The RSIC-SIX is designed for use with ceiling system where noise control is needed. The RSIC-SIX assembly decouples and isolates the gypsum board or other sheet goods from the structure increasing the acoustical performance of the system.

The RSIC-SIX stops the noise and vibrations that typically would be allowed to transfer through the structure.

Materials and Composition

The RSIC-SIX Spring and rubber isolator are made of rubber and/or manufactured rubber compound, and steel parts.

Environmental Considerations

The RSIC-SIX may contribute to LEEDS points, by reducing materials needed to achieve high STC and IIC floor ceiling systems.

The rubber and Steel portions can be recycled.

Weight-bearing Information

With an acoustical design load rating of 26 pounds, 13 pounds, and 7 pounds per isolator, The RSIC-SIX clip can support up to two layers of 5/8 inch gypsum board when spaced at 16" x 48 " oc. For heavier systems increase the number of isolators and channel to support the additional weight of the system. The RSIC-SIX clip fastens directly to the underside of the structure.

RSIC-SIX



Product Limitations

For interior use only with operating temperatures of 40–100 degrees F (4.4–37.8 degrees C). Max load 26 Lbs, 13Lbs, 7 Lbs.

4. Technical Data

Applicable Standards

ASTM International (ASTM)

- **ASTM E90** Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements
- **ASTM E492** Standard Test Method for Laboratory Measurement of Impact Sound Transmission Loss of Building Partitions and Elements
- **ASTM E413** Classification for Rating Sound Insulation

Underwriters Laboratories (UL)

- **UL Fire Resistance Directory**; www.ul.com or visit [here](#).

5. Installation

General installation:

follow manufacturer's specific installation instructions. Install as required by UL fire resistive design.

- Install RSIC-SIX Resilient Sound Isolation Spring Clip following the manufacturer recommendations
- Fasten the RSIC SIX to the structure
 - For attaching to concrete use RSIC-SIX ADM Multi-Clip version with concrete pin. When fully loaded the air gap is between 3" and 6" adjusted by bolt length.
 - For Wood framed ceilings use a min #10 x 3-1/2" long coarse thread screw. When fully loaded the air gap is 2"
 - For Steel framed ceilings use a min length #10 x 2-1/2" long self-drilling fine thread screw. When fully loaded the air gap is 2"



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GYPSUM BOARD ASSEMBLIES 2021

PAC INTERNATIONAL, LLC.

- Install 7/8" 25 Ga drywall furring channel (Hat Channel) into RSIC-SIX at a maximum of 16 x 48 inches on center. 7/8" 25 GA drywall furring channel snaps into the RSIC SIX bottom part creating a 2" air gap from the under side of wood and steel framing.
- Max design load of each RSIC-SIX.
26 Lb, 13 Lb, and 7 Lb.
- Max spacing 16" x 48" oc.
- Splicing Drywall Furring Channels:
 - Splice drywall furring channels with minimum of six inch overlap.
 - Secure laps with two framing screws or 18 gauge tie wire double wrapped
 - Locate splices between resilient sound isolation clips
 - Do not locate splices on resilient sound isolation clips
- Flanking Noise:
 - Review installation details to prevent structure-borne flanking noise
 - Do not allow drywall furring channels or gypsum board to contact wall framing members
- Gypsum Board:
 - Install gypsum board in perpendicular to the Drywall Furring Channel. Leave a 1/4 inch (6 mm) gap around perimeter for acoustical sealant application
 - Install gypsum board in accordance with ASTM C840 as specified in Section 09250
- Acoustical Sealant:
 - Seal potential air leaks with acoustical sealant to achieve best Field Sound Transmission Class (FSTC)
 - Seal electrical outlets and penetrations with acoustical sealant
 - Apply fire-rated acoustical sealant at locations where fire- rated assembly is required
- Putty Pad Sealant: acoustically seal with putty pads, electrical boxes in walls and ceilings in which resilient sound isolation clips are used

6. Availability and Cost

Please contact PAC International, LLC. for availability and pricing information.

7. Warranty

RSIC-SIX clips are guaranteed free of manufacturer defects. Only remedy is the replacement of the defective component or components. Manufacturer is not liable for delays or extra costs.

8. Maintenance

No maintenance is necessary.

9. Technical Services

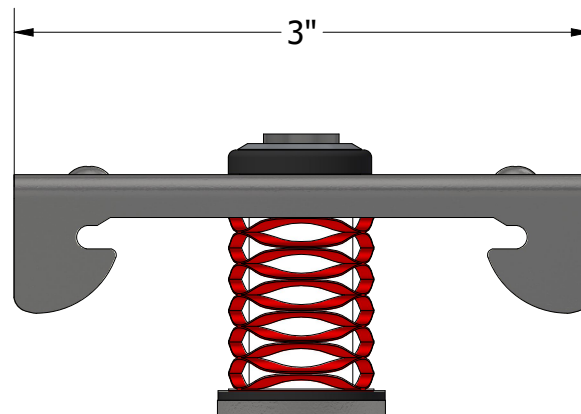
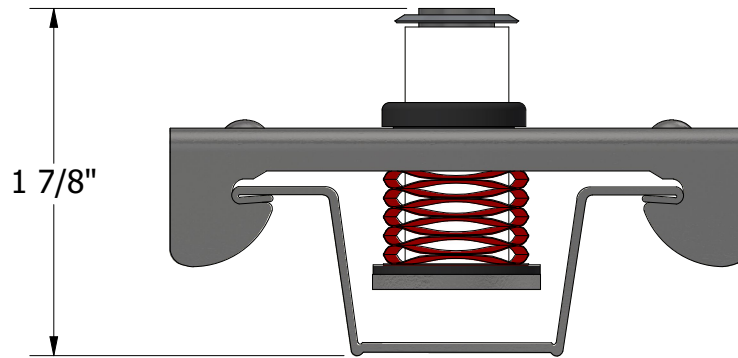
PAC International LLC. offers online product pages, installation guides, and specification sheets. Technical information can be found on the website, www.pac-intl.com or by calling 866-774-2100

Fire ratings, sound test assemblies, CAD drawings, assembly drawings and clip specifications are also on the website.

10. Filing Systems

- Additional product information is available from the manufacturer upon request

RSIC-SI-X Loaded Height



Measurements +/- 1/16"

RSIC-SI-X

2/1/2023

SCALE
1 : 1

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RSIC-SI-X SOUND ISOLATION CLIP

RSIC-SI-X



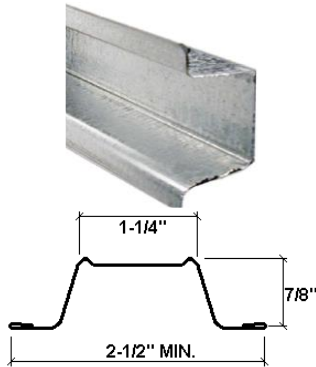
Patent Pending

**SHIPPED FULLY
ASSEMBLED
AND CALIBRATED**

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RSIC-SI-X SOUND ISOLATION CLIP



Drywall Furring Channel:

- **Minimum Requirements:** 25 gauge, hemmed edge detail required on all 25 gauge furring channel. Meets or exceeds SSMA requirements.
- **Depth:** 7/8 inch
- **Width Bottom:** 2-1/2 inch wide minimum.
- **Width Top:** 1-1/4 inch wide

Splice drywall furring channel (hat track) with 6 inch overlap in mid span (between two clips) secure with 18 ga tie wire, or two 7/16" framing screws.



Fasteners:

- **RSIC-SI-X Spring to Wood:** #8 2-3/4 inch min. coarse thread. (Recommended #12 or #10 x 2-3/4")
- **RSIC-SI-X Spring to Steel:** #8 2-1/4" inch min. fine thread. (Recommended #12 or #10 x 2-3/4")

26 Lb

13 Lb

7 Lb

Resilient Sound Isolation Clip (RSIC-SI-X Spring)

- **Maximum Spacing:** 48 inches on center
- **Design Load at 3/8" deflection from free height**
- Red = 26 Lbs
- Blue = 13 Lbs
- White = 7 Lbs

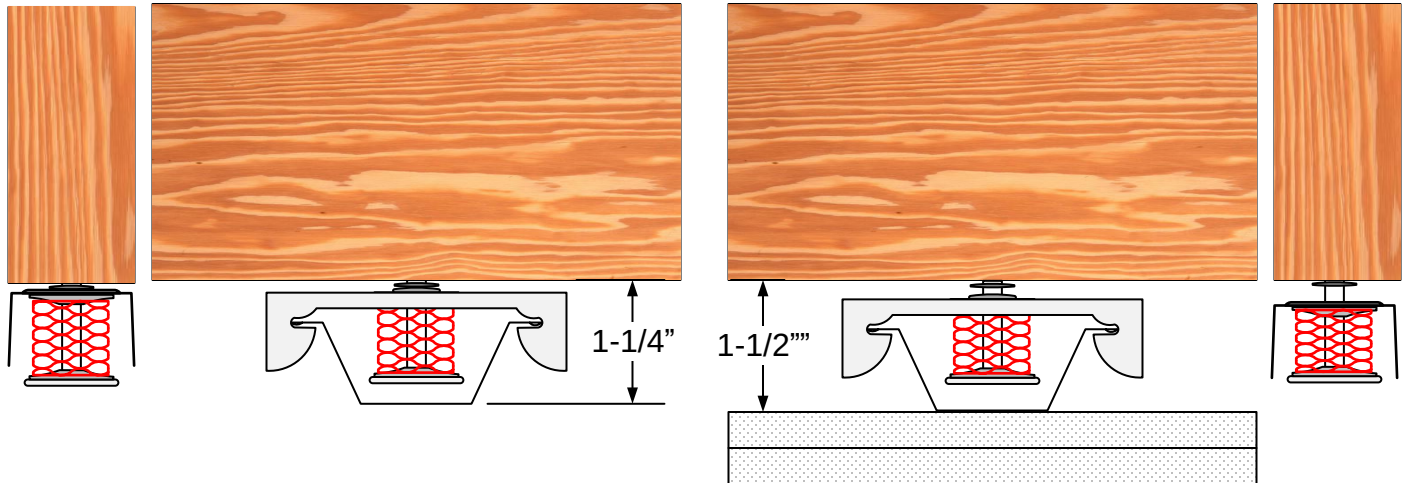
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RSIC-SI-X SOUND ISOLATION CLIP

RSIC-SI-X Spring Dimensions:

- RSIC-SI-X Spring clip Free Height 1-1/4"
- RSIC-SI-X Spring clip Installed height 1-1/2"
- RSIC-SI-X Spring clip 1-1/4" Deep
- RSIC-SI-X Spring clip 3" Wide

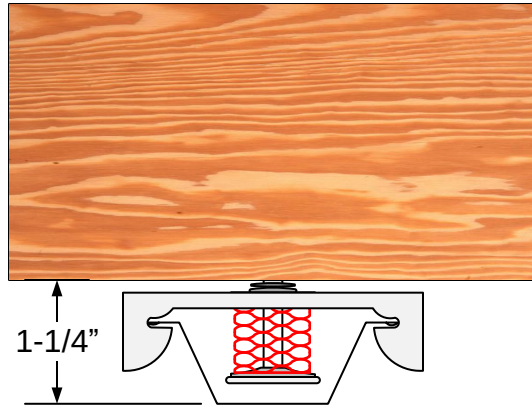


Ceilings:

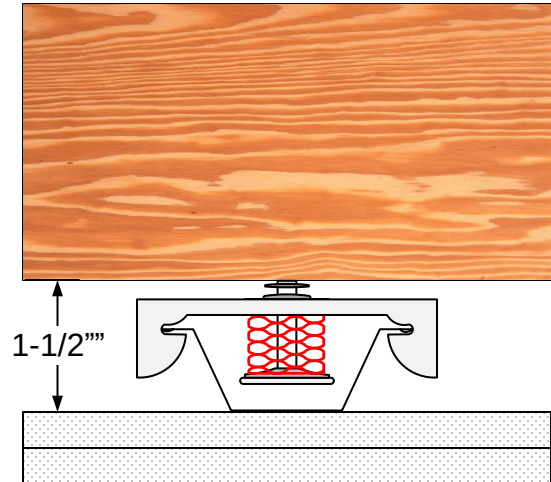
- Resilient Sound Isolation Clips (RSIC-SI-X Spring) maximum spacing 16" x 48" on center .
- Layout the RSIC-SI-X Spring clips according to general guidelines represented in this installation manual.
- Any additional or non standard room dimensions need to be addressed by a professional engineer.
- Verify the correct quantity of each RSIC-SI-X Spring isolator (weight / color) is included in the shipment.
- Layout the RSIC-SI-X Spring clips out on the floor (reflecting the ceiling above) Ensure there are no additional items required to complete the installation, IE: Additional blocking to support the RSIC-SI-X Spring clips, or additional clips to support the drywall furring channel.
- Red 26 Lb clips are for the field
- Blue 13 Lb clips are for the field, edge.
- White 7 Lb clips are for edge, corner, and or infill where additional support is needed
- Fasten the Resilient Sound Isolation Clip (RSIC-SI-X Spring) to the structure with fasteners approved for a minimum pull-out and shear of 100 lbs. Allowing for up to 1/2" deflection after the gypsum board has been installed.
- Using a laser level, or tape measure set the height for all of the RSIC-SI-X Spring brackets at the same height
- Ensure RSIC-SI-X Spring is securely fastened to the structure with a minimum #8 x 2-3/4" long screw for wood framed systems
- At the perimeter, the distance between the wall and first support for the drywall shall be less than 8".
- Variances in the field may require additional adjustment to ensure a consistent system. (see field calibration guide)
- When attaching plywood or other hard surface materials to light gauge drywall furring channel use RSIC-Super Coarse screw

RSIC-SI-X SOUND ISOLATION CLIP

Spring Height before gypsum board is installed.



Spring Height after gypsum board is installed.



Ceilings:

- Snap the drywall furring channel (hat track) into the RSIC-SI-X.
- Optional: Add strong back consisting of drywall furring channel perpendicular on the top of the standard drywall furring channel to assist in leveling the ceiling.
- Install the RSIC Perimeter Tape 3/8" below the drywall furring channel around the entire perimeter of the room.
- Install the gypsum board to the drywall furring channel snug to the RSIC Perimeter tape around the perimeter of the entire ceiling.
- Caulk around the entire perimeter of the ceiling wall intersection.
- Use fire and smoke rated acoustical sealant where required.

General Information:

- Resilient Sound Isolation Clip Spring Isolator (RSIC-SI-X Spring , furring channel (hat track) and gypsum board shall not carry heavy loads such as Projectors, HVAC Ducting, Curtains, etc.
- Splice furring channel (hat track) with 6 inch overlap in mid span, secure with 18 ga. tie wire or with two framing screws (7/16")
- Seal all potential air leaks with non-hardening acoustical caulking to achieve best noise control results. Use fire rated sealant where required.
- When attaching the RSIC-SI-X Spring clips to a steel Joist the minimum allowable thickness is 20 ga. (0.030).
- When attaching plywood or other hard surface materials to 25 Gauge drywall furring channel use RSIC-Super Coarse screw

Fire Test Information:

WWW.PAC-INTL.COM

Check UL Fire Resistance Directory File # R16638

Check UL's web pages. www.ul.com/database

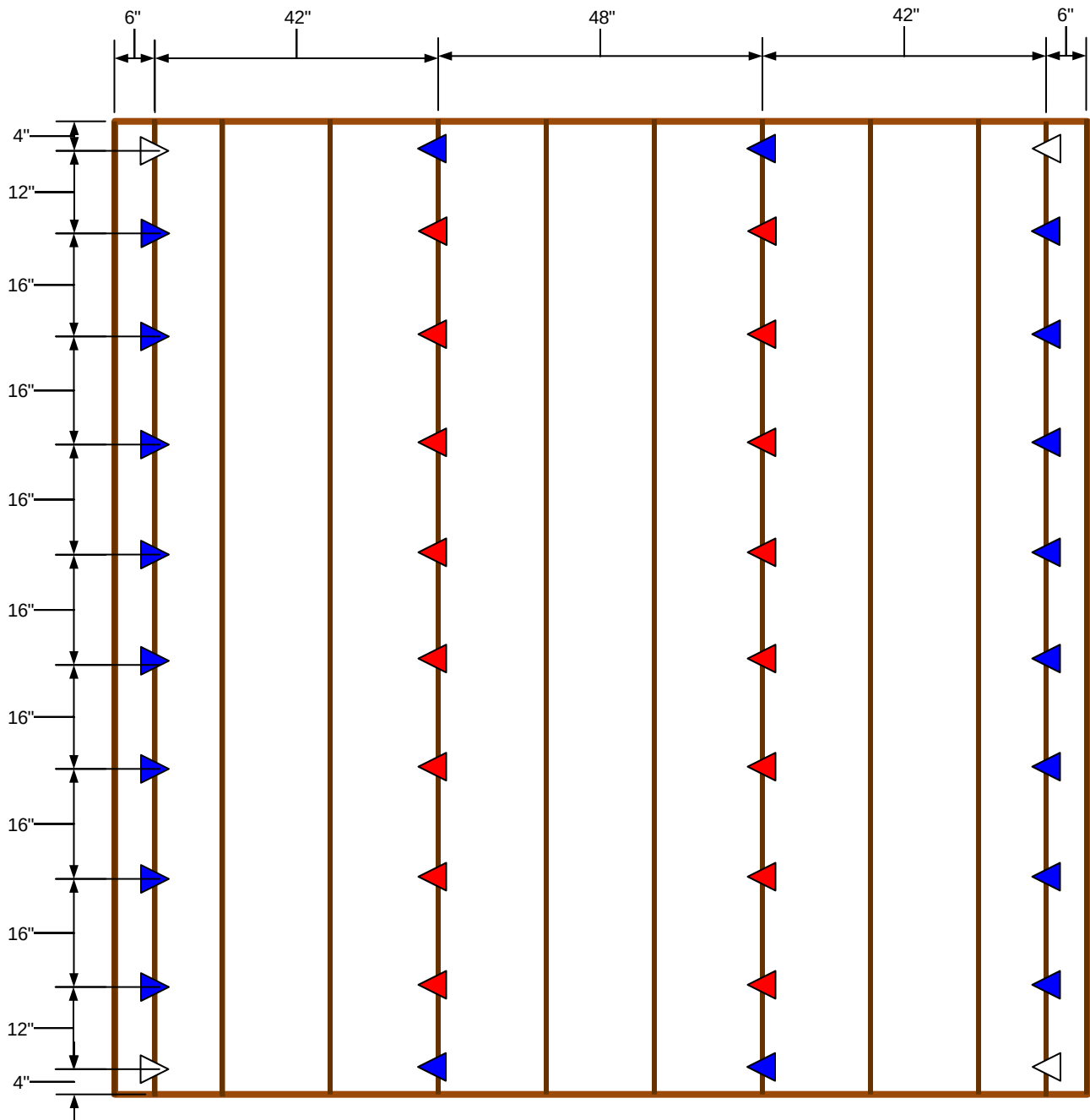
Contact UL (877) UL- HELPS

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RSIC-SI-X SOUND ISOLATION CLIP

RSIC-SI-X SPRING INSTALLATION WITH FRAMING SPACED @ 16" OC. RSIC-SI-X @ 16" OC.

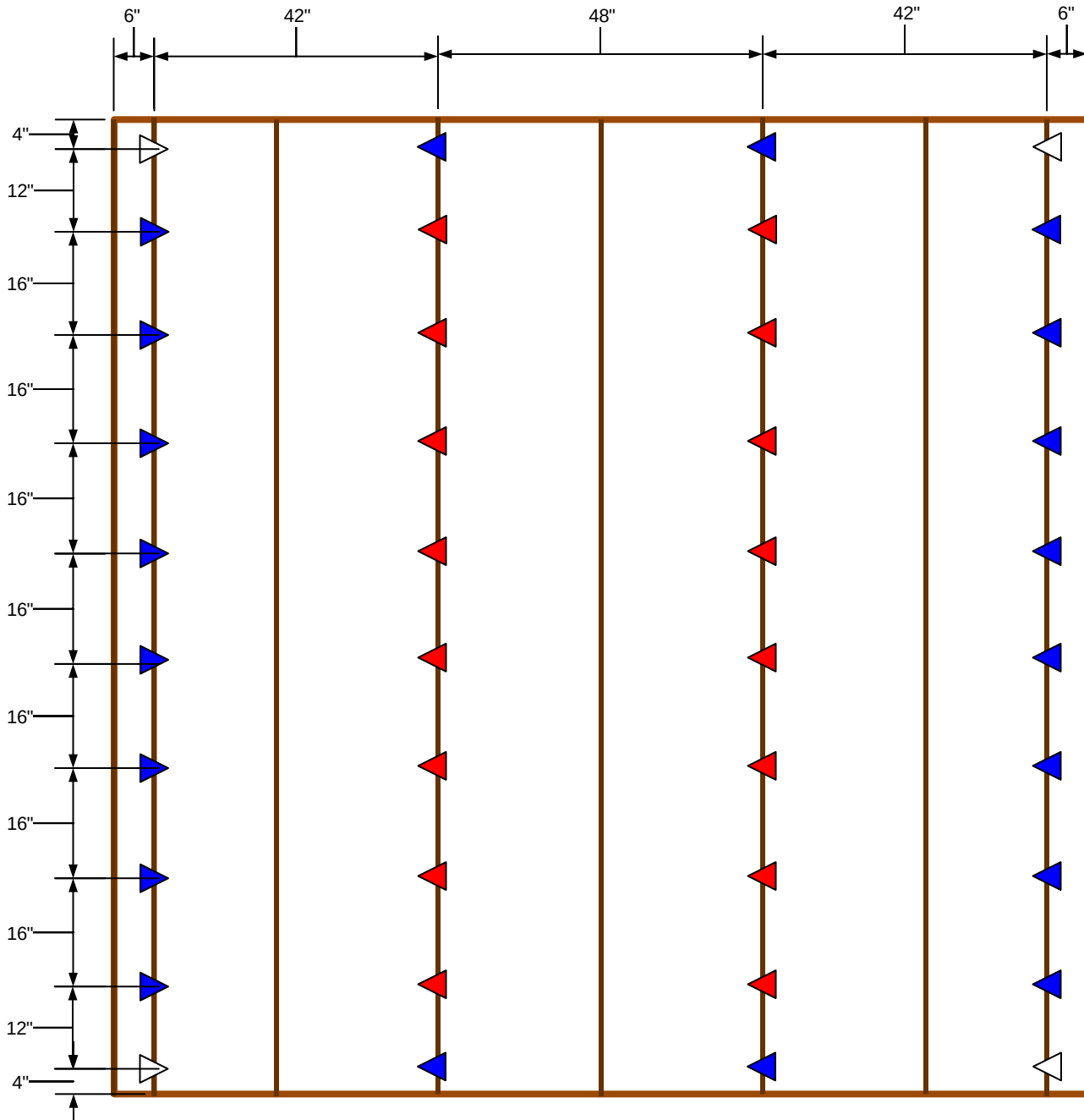


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RSIC-SI-X SOUND ISOLATION CLIP

RSIC-SI-X SPRING INSTALLATION WITH FRAMING SPACED @ 24" OC. RSIC-SI-X @ 16" OC.



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REAL SOLUTIONS IN CONSTRUCTION

LEED Analysis RSIC-SI-X

Recycled Content

PAC International's RSIC-SI-X does not contain significant recycled content.

Fabrication Location

The RSIC-SI-X is manufactured in Canby, OR 97013

Material Source

The extraction points for the materials in these products cannot be verified. Assume they are outside the 500 mile radius.



RSIC ® Safety Data Sheet

Article Statement

(PAC International, LLC Wall and Ceiling Isolation Products)

This document is provided for clarification of the Safety Data Sheets that you have requested for our product(s). OSHA Hazard Communication Standard requires a SDS for hazardous chemicals; however, the standard exempts all articles from the requirement. The explanation of an article is described per OSHA definition below.

Pursuant to 29 CFR 1910.1200 (b) (6) (v) and (c), the product described herein is an “article” or is otherwise excluded from OSHA regulations requiring that a Material Safety Data Sheet be prepared for it.

An article defined: manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacturing; (ii) which has an end use function (s) dependent in whole or in part upon its shape or design during end use; and (iii) which does not release, or otherwise result in exposure to, a hazardous chemical under normal conditions of use.

For technical information and additional resources covering these products please refer to PAC International published literature, e.g., data sheets, product drawings, and installation guidelines at www.PacInternationalLLC.com

As of the date of this document, the foregoing information is believed to be accurate and is provided in good faith to comply with applicable federal and state laws. However, no warranty or representation of law or fact, with respect to such information, is intended or given.



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RSIC Product Warranty Disclaimer

WARRANTY DISCLAIMER AND LIABILITY LIMITATION LANGUAGE

WARRANTY AND DISCLAIMER AND LIABILITY LIMITATION LANGUAGE ONE YEAR WARRANTY Seller warrants to the original purchaser that its products are free from defects in material or workmanship for one year from the date of purchase from seller. Any allegedly defective product that is portable must be returned to seller prepaid. If upon examination it appears to seller's satisfaction that the product is defective, seller shall repair, replace, or return the purchase price of the product at seller's option. EXCEPT FOR THE FOREGOING, THERE IS NO OTHER WARRANTY, REPRESENTATION OR CONDITION OF ANY KIND; AND ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS EXCLUDED AND DISCLAIMED. Some states do not allow limitations on implied warranties, so the above limitation may not apply to you.

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NO WARRANTY OR COMPLIANCE WITH SAFETY CODE OR REGULATION

SELLER DOES NOT WARRANT THAT ANY OF THE GOODS SOLD WILL MEET OR COMPLY WITH THE REQUIREMENTS OF ANY SAFETY CODE, BUILDING OR DWELLING CODE, OR REGULATION OF ANY STATE, MUNICIPALITY OR OTHER JURISDICTION.

NEVADA LAW APPLIES

SELLER AND BUYER AGREE THAT ALL ASPECTS OF THIS TRANSACTION INCLUDING THE APPLICABLE STATUTE OF LIMITATIONS SHALL BE GOVERNED BY THE INTERNAL LAW OF THE STATE OF NEVADA, AND NOT THE LAWS OF CONFLICTS.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state