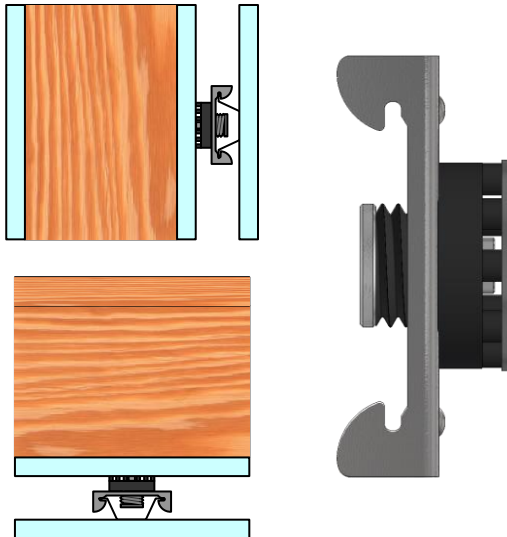




RSIC-1 Retro

The **RSIC-1 Retro** is designed for use with any wood, steel or concrete application where noise control is required. This includes, wood framed, steel framed, CMU, or concrete wall and or ceiling systems. The RSIC-1 Retro assembly decouples the gypsum board from the structure, giving the assembly enhanced acoustical performance. With an Acoustical design load rating of 36 lbs per isolator, the RSIC-1 Retro clip can support up to two layers of 5/8" gypsum board when spaced at 24" x 48" oc. The RSIC-1 Retro clip fastens directly to the framing or structure through the existing system. The RSIC-1 Retro decouples the gypsum board from the structure stopping STC and IIC vibrations from entering the space adjacent.



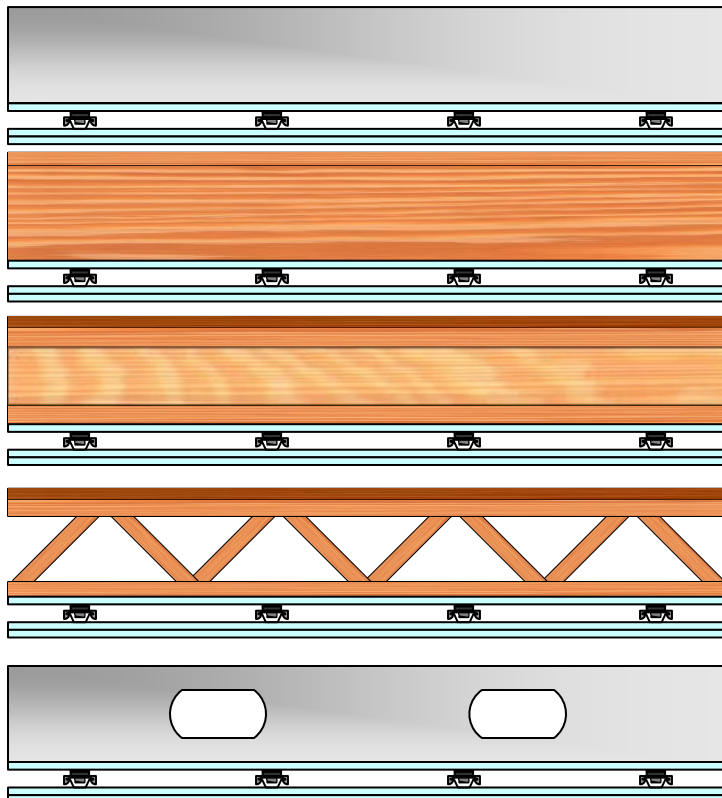
RSIC-1 Retro, the Low Cost, High Performance, Noise control Solution

Wood
Steel
Metal deck

Concrete
Condo
Commercial

Apartment
Retail
Conference Rooms

Recording Studio
Home Theater
Commercial theater



RSIC-1 Retro specifications:

Acoustical design load:	36 Lbs
Total deflection	3 mm
Double deflection	Yes (1.5 mm)
Low VOC	Yes
Adjustable	No
Cavity min	1-5/8"
Cavity Max	1-5/8"
Adjustment limit	N/A
Use on Ceilings	Yes
Use on walls	Yes
New Construction	Yes
Retro Fit	Yes
Assembled In USA	Yes



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GYPSUM BOARD ASSEMBLIES 07-26-21

PAC INTERNATIONAL, LLC.

1. Product Name

- RSIC-1 Retro Resilient Sound Clip System

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-1 Retro

The RSIC-1 Retro is designed for use with any wood-framed, steel-framed, CMU, or concrete wall and ceiling system where noise control is needed. The RSIC-1 Retro assembly decouples and isolates the gypsum board or sheet goods from the structure increasing the acoustical performance of the system.

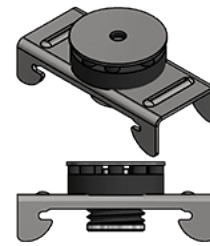
The RSIC-1 Retro stops the noise and vibrations that typically would be allowed to transfer through the structure. The RSIC-1 Retro systems have several UL fire resistive design assemblies ranging from one hour to four hours.

The UL assemblies can be viewed on the PAC International, LLC site (www.pac-intl.com) and on **UL.com**. (File #: R16638)

Materials and Composition

The 18 gauge RSIC-1 Retro clips are composed of galvanized or aluminum-zinc coated steel and is manufactured in Canby, OR.

The RSIC rubber isolators are made of a proprietary rubber and/or manufactured rubber compounds.



RSIC-1 Retro

Sizes and Weight-bearing Information:

The RSIC-1 Retro has an acoustical design load rating of 36 pounds per isolator. The RSIC-1 Retro clip can support up to two layers of 5/8 inch gypsum board when spaced at 24 × 48 inches on center. For heavier systems increase the number of isolators and channel to support the additional weight of the system. The RSIC-1 Retro clip fastens directly to the framing or structure creating a 1-5/8 inch cavity between the face of the framing and the back of the gypsum board.

Product Limitations:

For interior use only with operating temperatures of 40–100 degrees F (4.4–37.8 degrees C).

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 E413 Classification for Rating Sound Insulation

Underwriters Laboratories (UL)



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GYPSUM BOARD ASSEMBLIES 07-26-21

PAC INTERNATIONAL, LLC.

UL Fire Resistance Directory R16638

www.ul.com.

The RSIC-1 Retro may contribute to LEEDS points, see Leed information on pac-intl.com

5. Installation

General installation: follow manufacturer's specific installation instructions.

- Install resilient sound isolation clips and drywall furring channels in accordance with manufacturer's instructions
- Mechanically fasten resilient sound isolation clips to structure with screws, bolts or expansion anchors, dependent upon structure
- Fire-Resistive Design Assemblies: Install as specified in *UL Fire Resistance Directory*, where required
- Do not arbitrarily add resilient sound isolation clips to fire-rated assemblies
- Space resilient sound isolation clips at maximum of 24 × 48 inches (600 × 1200 mm) on center for walls and ceilings
- Do not exceed design load (pull and shear) of 36 pounds per isolation clip
- Stagger isolation clip installation, so dead load is supported by all support members
- Splicing Drywall Furring Channels: Splice drywall furring channels with minimum of six inch (150 mm) laps
- 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
- Install resilient sound isolation clips on one side of wall

assembly, unless otherwise indicated on the drawings

Flanking Noise:

- Review installation details to prevent structure-borne flanking noise
- Do not allow drywall furring channels or gypsum board to contact foreign materials, including floors, ceilings or wall framing members
- Ensure metal ferrule of resilient sound isolation clips is in firm contact with structural member
- Gypsum Board:
- Install gypsum board in vertical or horizontal position with 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-1 Retro clips have no warranty.

8. Maintenance

No maintenance is necessary.



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GYPSUM BOARD ASSEMBLIES 07-26-21

PAC INTERNATIONAL, LLC.

9. Technical Services

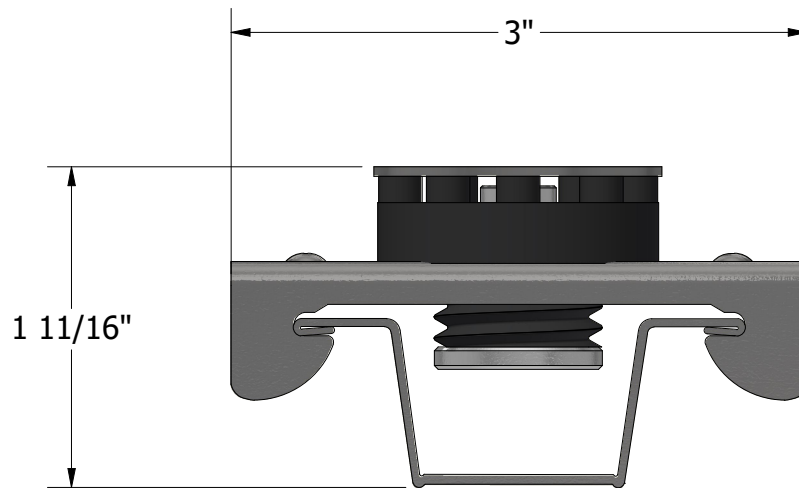
PAC International Inc. offers online product pages, installation guides, and specification sheets. Technical information can be found on the website, **www.pac-intl.com** or by calling 866-774-2100, ext. 101 or 801. Fire ratings, sound test assemblies, CAD drawings, assembly drawings and clip specifications are also on the website.

10. Filing Systems

Additional product information is available from the manufacturer upon request

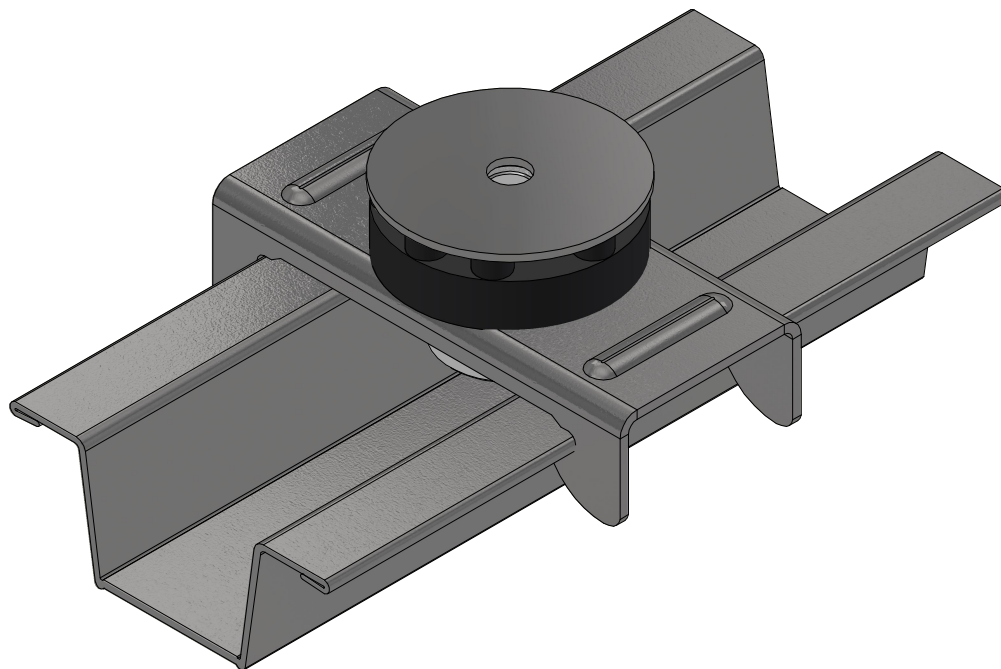
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RSIC-SI-CRC-EZ
Bracket

11/18/2021

SCALE

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International

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Noise Control
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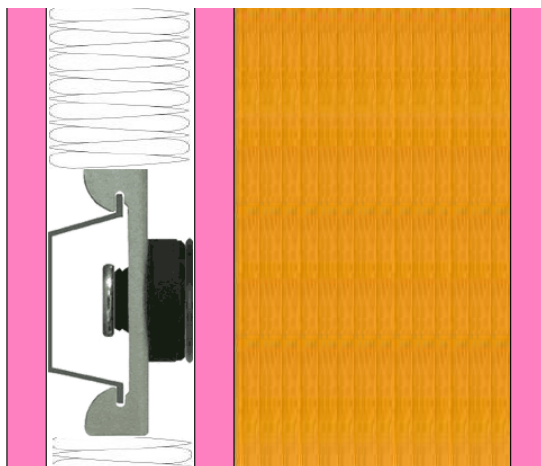
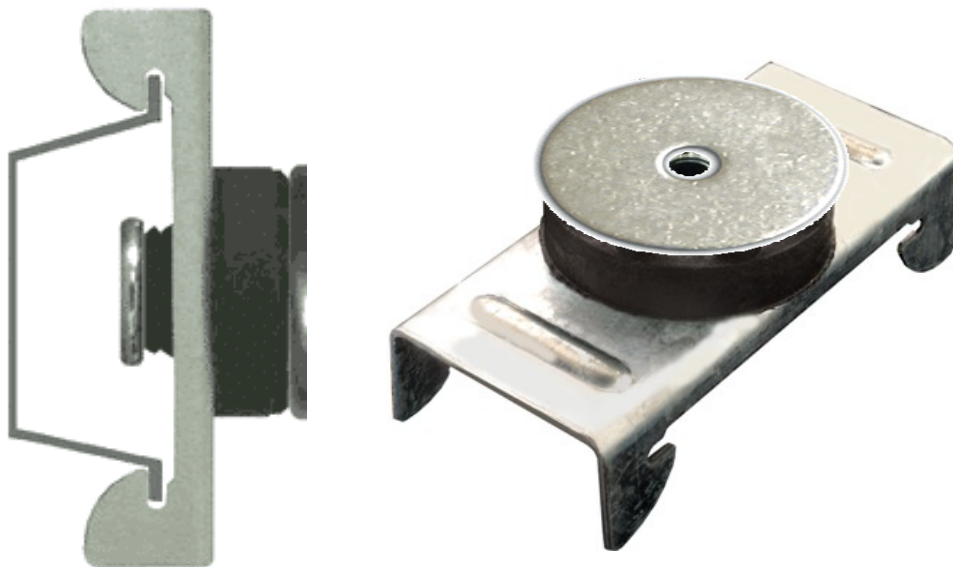
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RSIC RETRO SOUND ISOLATION SYSTEMS

RSIC-1 RETRO INSTALLATION GUIDE

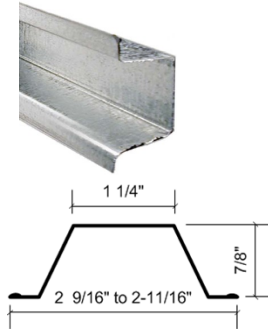
RSIC-1 RETRO CLIP WITH RSIC RETRO WASHER



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RSIC RETRO SOUND ISOLATION SYSTEMS



Drywall Furring Channel: (AKA “Hat Track”)

- **Requirements:** 25 gauge, hemmed edge detail required on all 25 gauge furring channel. Meets or exceeds SSMA requirements.
- **Depth:** 7/8 inch
- **Width Bottom:** 2-9/16 to 2-11/16 inch wide.
- **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.



Resilient Sound Isolation Clip (RSIC-1Retro)

- **Maximum Spacing:** 48 inches on center
- **Maximum Acoustical Design Load:** 36 lbs



Coarse thread for wood



Fine thread self driller for steel

Fasteners: RSIC-1 RETRO / RETRO WASHER

- **RSIC-1 to Wood:** #8 min x 3-1/8” to 4” size coarse thread screw. (screw length determined by the thickness of the existing gyp board) Min. penetration into structure to be 1-1/2”. IE: a standard wall with one existing layer of gypsum board will require a 3-1/8” or longer screw.
- **RSIC-1 to Steel:** # 8 x 2-1/4” minimum size fine thread screw. (screw length determined by the thickness of the existing gyp board) Min. penetration into framing to be 5/8”. IE: a standard wall with one existing layer of gypsum board will require a 2-1/4” or longer screw.
- **DO NOT** fasten Resilient Sound Isolation Clips (RSIC-1) to framing members with nails. Use only approved screws.

General Information:

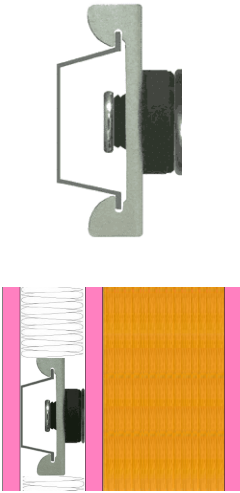
- Refer to www.UL.com, or www.pac-intl.com for complete installation details on all fire resistive assembly designs.
- Resilient Sound Isolation Clip, furring channel (hat track) and gypsum board shall not carry heavy loads such as cabinets or bookshelves.
- For focused loads, add RSIC-1 Backer Retro clip.
- 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 RSIC clips to Steel framing the minimum allowable gauge of the framing member is 20 ga when spacing is at 24” x 48”.
- When attaching to light gauge steel studs (25 ga or 25 ga equivalent) spacing of the RSIC clips is to be max 24” x 24” oc.

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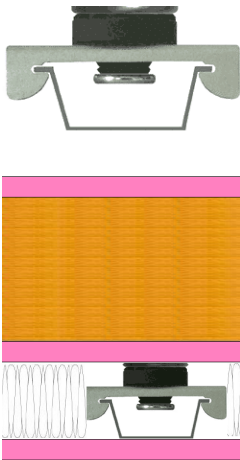
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RSIC RETRO SOUND ISOLATION SYSTEMS

WALLS: One and Two Layers of 5/8" Gypsum Board



- Resilient Sound Isolation Clips shall be 48 inches maximum on center (horizontal).
- Fasten the Resilient Sound Isolation Clip to the substrate with a fastener approved for a ultimate pullout and shear of 120 lbs, or allowable pullout and shear of 36 lbs (See page 2)
- The RSIC-1 RETRO clip requires a RSIC retro washer between the existing finish layer and the RSIC-1 clip. Ensure the RSIC clip is tight to the substrate.
- Locate the first row of RSIC clips within 3 inches from the floor and within 6 inches from the ceiling.
- Snap in the drywall furring channel (hat track) into the RSIC clips (horizontal for walls). (see page 2 for splice details)
- Insulate 1-5/8" cavity with glass fiber insulation
- Place 1/4" (minimum) shim on floor to fully support the gypsum board.
- Install the gypsum board from the bottom up leaving a 1/4" min. gap around the perimeter of the wall and ceiling.
- ONLY remove the shims after ALL the gypsum board is completely screwed to ALL the drywall furring channels. Make sure every screw (floor to ceiling and wall to wall) is installed as required by the assembly design, in every layer of gypsum board before removing the shims at the floor. The shims are critical to ensure best results.
- Caulk around the entire perimeter of the gypsum board. Use fire and smoke rated acoustical sealant where required.



Ceilings: One and Two Layers of 5/8" Gypsum Board

- Resilient Sound Isolation Clips shall be 48 inches maximum on center.
- Fasten the Resilient Sound Isolation Clip to the substrate with a fastener approved for a ultimate pullout and shear of 120 lbs, or allowable pullout and shear of 36 lbs (See page 2)
- The RSIC-1 RETRO clip requires a RSIC retro washer between the existing finish layer and the RSIC-1 clip. Ensure the RSIC clip is tight to the substrate.
- Locate the first row of RSIC clips within 8 inches of the wall at each end of a run.
- Snap in the drywall furring channel (hat track) into the RSIC clips.
- Install 1-5/8" glass fiber insulation in the cavity between the original gypsum board and the new gypsum board
- Install the gypsum board from leaving a 1/4" min. gap around the perimeter of the ceiling.
- Caulk around the entire perimeter of the gypsum board. Use fire and smoke rated

Residential non-fire rated ceiling systems:

Non fire rated ceiling systems usually found in single family residential homes can be altered to allow additional air flow through the cavity. 1" to 12" round, or square holes can be cut into the original gypsum board ceiling before the RSIC-1 Retro clips are installed to reduce the triple leaf effect on a ceiling system. Several small homes are better than fewer large holes allowing the trapped air to move more freely between the cavities. PAC International recommends a min of one hole per joist cavity, and a total min openings to equal to or greater than 10% of the total ceiling.

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RSIC RETRO SOUND ISOLATION SYSTEMS

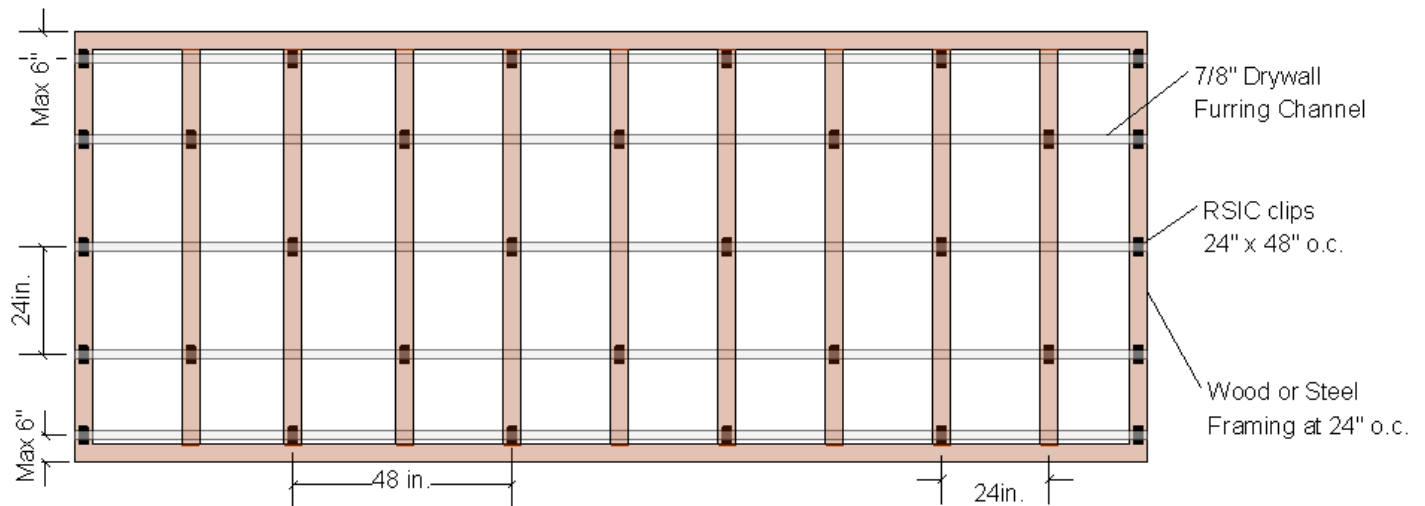
APPLICATION RECOMMENDATIONS FOR WALLS AND CEILINGS, WOOD OR STEEL FRAMING

INSTALLING RESILIENT SOUND ISOLATION CLIPS (RSIC-Retro clip)

RSIC CLIPS AT 24" OC. 1 or 2 Layers of Gyp Board

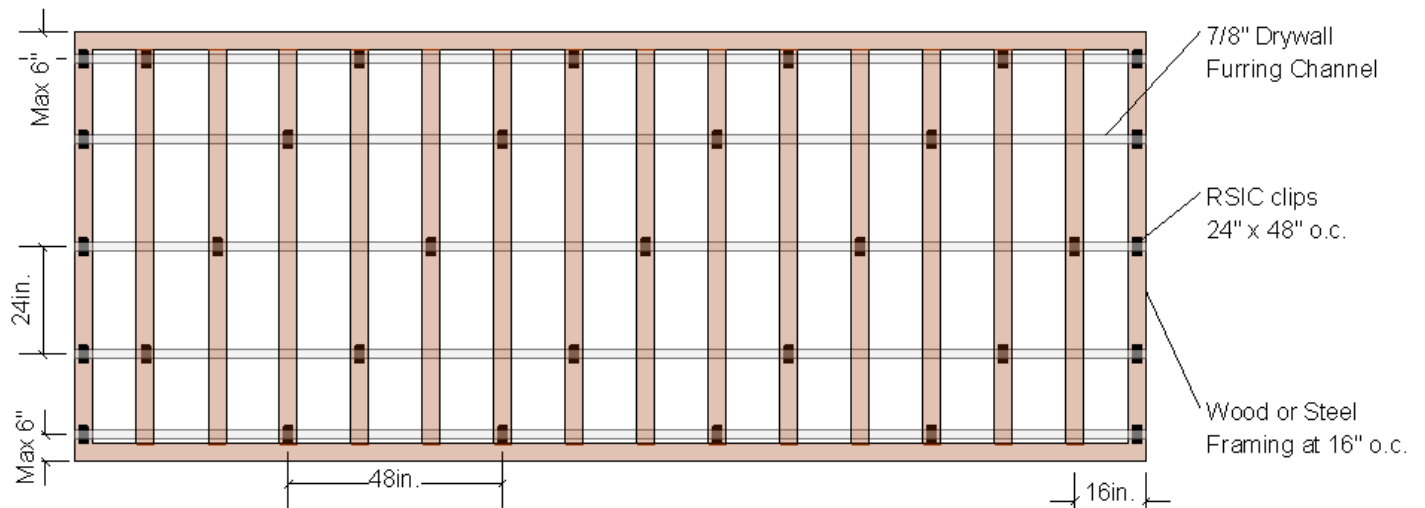
RSIC-RETRO Wall or Ceiling System Framing at 24" o.c.

RSIC clips at 24" x 48" o.c. 1 or 2 Layers of 5/8" Gypsum Board



RSIC-RETRO Wall or Ceiling System Framing at 16" o.c.

RSIC clips at 24" x 48" o.c. 1 or 2 Layers of 5/8" Gypsum Board



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**NOISE
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REAL SOLUTIONS IN CONSTRUCTION

LEED Analysis RSIC-1 Retro

Recycled Content

PAC International's RSIC-1 Retro does not contain significant recycled content.

Fabrication Location

The RSIC-1 Retro 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.



**World Leader in
Noise Control
Solutions**

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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THE MODEL OR SAMPLE SHOWN BY SELLER TO BUYER IS USED FOR DEMONSTRATION PURPOSES ONLY. THERE IS NO WARRANTY THAT THE GOODS AS DELIVERED SHALL CONFORM TO THE MODEL OR SAMPLE, AND CONFORMITY OF THE GOODS TO THE MODEL OR SAMPLE IS NOT PART OF THE BASIS OF THE BARGAIN BETWEEN SELLER AND BUYER.

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