RSIC RETRO SOUND ISOLATION SYSTEMS RSIC-1 RETRO INSTALLATION GUIDE





Second Skin Audio Tel: (800) 679-8511 Website: www.secondskinaudio.com

RSIC RETRO SOUND ISOLATION SYSTEMS







Coarse thread for wood



Fine thread self driller for steel

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-1 Retro)

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

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 min 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 <u>www.UL.com</u>, or <u>www.secondskinaudio.com</u> 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.

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 sheer of 120 lbs, or allowable pullout and sheer 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 sheer of 120 lbs, or allowable pullout and sheer 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 acoustical sealant where required.

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.

RSIC RETRO SOUND ISOLATION SYSTEMS

APPLICATION RECOMMENDATION FOR WALLS AND CEILINGS, WOOD OR STEEL FRAMING

INSTALLING RESILIENT SOUND ISOLATION CLIPS (RSIC-1 RETRO CLIP)

RSIC CLIPS AT 24" OC. <u>1 or 2 Layers</u> of Gyp Board

