# The Sound of Silence...

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**RSIC™** Clips Effectively **Reduces Noise Transfer** Through Walls, Ceilings and Floors in Multi-Unit Housing, Condominiums, **Hotels & Casinos** 

## rsic cli "The Revolution in Noise Control"

he RSIC<sup>™</sup> clips are designed and engineered to control noise, including low frequency noise. When the RSIC<sup>™</sup> clips are used, the assembly's acoustical performance is substantially boosted to exceptional levels usually only found in the most expensive noise control designs. The RSIC<sup>™</sup> family of products are the lowest cost, high performance noise control solution available.

- UL Classified in 100's of UL Fire Resistive Design Assemblies. See Website for Current Listings
- Low Cost Increase Rental Space
- High Performance Recyclable
- Sustainable Building Material
- Use Less Material to Improve STC & IIC (Potential Assistance in Green Qualification)
- New or Retrofit Construction
- Walls Ceilings Floors
- Wood Steel Concrete
- Save Time and Money

### **APPLICATIONS:**

- Condos Timeshares Assisted Living
- Apartments Single Family Luxury Homes
- Commercial Industrial Casinos
- Theaters Home Theaters Hotels/Motels
- Houses of Worship Schools

Resilient Sound Isolation Clips

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"We Don't Build Buildings, We Make Them Quiet"



AVAILABLE FROM

### Acoustical Surfaces, Inc. SOUNDPROOFING, ACOUSTICS, NOISE & VIBRATION CONTROL SPECIALISTS

123 Columbia Court North – Suite 201 – Chaska, MN 55318 952-448-5300 Fax: 952-448-2613 (888) 223-9695 sales@acousticalsurfaces.com www.acousticalsurfaces.com

### The RSIC Family Of Clips Improving STC & IIC, "One Clip At A Time"





RSIC-DC04<sup>™</sup> Clip

### **RSIC-1™ Clips:**

The RSIC<sup>™</sup> clip is the most commonly used and tested of all of the RSIC<sup>™</sup> family of clips. With over 150 UL Fire Resistive Designs available and 63 already published for use, The RSIC-1<sup>™</sup> clip has proven it is the easiest product to incorporate into almost any fire-resistive design assembly and exponentially enhance the noise reduction of the design.

### Walls: One and Two layers of 5/8" Gypsum Board

- Resilient Sound Isolation Clip (RSIC-1<sup>™</sup>) shall be 48 inches maximum on center (horizontal).
  - Fasten the Resilient Sound Isolation Clip (RSIC-1<sup>™</sup>) to the substrate with a fastener approved for a minimum pull-out and sheer of 120 lbs.
  - Ensure the internal metal ferrell is tight to the substrate. Locate the first row of RSIC-1<sup>™</sup> 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-1 clips (horizontal for walls).
  - 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 perimeter.
  - ONLY remove the shims after ALL the gypsum board is completely screwed to ALL the dry wall 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 (RSIC-1™) shall be 48 inches maximum on center.
- Fasten the Resilient Sound Isolation Clip (RSIC-1™) to the substrate with a fastener approved for a minimum pull-out and sheer of 120 lbs.
- Ensure the internal metal ferrell is tight to the substrate.
- Locate the first row of RSIC-1<sup>™</sup> clips within 8 inches of the wall at each end of a run.
- Snap in the drywall furring channel (hat track) into the RSIC-1<sup>™</sup> clips.
- Install the gypsum board leaving a 1/4" min. gap around the gypsum board.
- Caulk around the entire perimeter of the gypsum board. Use fire and smoke-rated acoustical sealant where required.

### **General Information:**

- Refer to www.UL.com for complete installation details on all fire-resistive assembly designs.
- Resilient Sound Isolation Clip (RSIC-1<sup>TM</sup>), furring channel (hat track) and gypsum board shall not carry heavy loads such as cabinets or bookshelves.
- Splice furring channel (hat track) with 6 inch overlap in mid span, secure with 18 ga. tie wire or with two traming 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-1™ clips to a steel stud the minimum allowable thickness is 20 ga. (0.030).

### **RSIC-V™** Clips:

The newest of the RSIC<sup>™</sup> family of products to achieve a UL Fire Resistive Design. With wood wall assemblies, steel wall assemblies, and engineered floor ceiling systems, the RSIC-V<sup>™</sup> clip is on its way to becoming the best "Value" line of noise control products. The RSIC-V<sup>™</sup> clip eliminates the possibility of a short circuit caused by installer error. The installation layout and spacing is exactly the same as the RSIC-1<sup>™</sup> clip.

### RSIC-DC04™:

The RSIC-DC04<sup>TM</sup> clip is one of our most versatile noise control clips. The RSIC-DC04<sup>TM</sup> clip is designed to isolate walls, ceilings, soffits, speakers, garage door openers, plumbing, HVAC, and anything else that can be fastened to an L bracket. The RSIC-DC04<sup>TM</sup> uses the RSIC technology to control vibration and isolate noise. The performance of the RSIC-DC04<sup>TM</sup> is consistent with other RSIC<sup>TM</sup> clips. The RSIC-DC04<sup>TM</sup> isolator has an acoustical design load capacity of up to 36 lbs. per RSIC-DC04<sup>TM</sup>.

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RSIC-1™ Clips Used to Improve STC & IIC in Hotels & Condos.



### Save Time – Money – Recyclable – Durable – High Performance – Sustainable Building



### RSIC-1™ Sustainable Installation System: - Save Money and "Go GREEN"

The RSIC-1™ SUSTAINABLE INSTALLATION SYSTEM is the lowest cost alternative to poured in place materials. Decreasing the number of contractors, and the cost of wet material on the job site decreases es the cost and time required to complete your projects. The removal of the poured in place product also reduces the potential for mold in your building. This method also makes your building lighter, a significant benefit when designing the structure. It gives the architects and engineers more flexibility in the design, and requires less material to build the same building. It also reduces the cost of your finished building. The RSIC-1™ Sustainable installation system is a GREEN DESIGN, and with the RSIC-1™ recycled content, helps achieve LEEDS certification. The reduction of building materials, weight, mold, and recycled content are all contributors to LEEDS.

### RSIC-CWB™:

The RSIC-CWB<sup>™</sup> has been used for several different acoustic needs. The most common use for this clip is to decouple two framed walls from each other. Some of the other uses are separating brick or CMU walls from a framed wall to help ensure the two walls are isolated from each other. This is done by installing the RSIC-CWB<sup>™</sup> into the mortar joints while the brick or CMU wall is under construction.

### RSIC-EXT04<sup>™</sup>:

The RSIC-EXT04<sup>TM</sup> is designed for use where an additional drop for HVAC, plumbing or electrical chases are needed. This clip gives you the flexibility to drop a ceiling as much as 4" from the bottom of the joist. The RSIC-EXT04<sup>TM</sup> is also used to level out uneven floor joists. This clip is very popular with the home theater industry and historical buildings. The RSIC-EXT04<sup>TM</sup> creates a dropped ceiling, allowing an open chase for new electrical wires, plumbing or HVAC, while maintaining the superior acoustical performance of the RSIC<sup>TM</sup> clips.

### RSIC-1.5CRC™:

The RSIC-1.5CRC<sup>™</sup> is designed for use with any ceiling assembly, either joist or concrete application, where a dropped acoustically isolated drywall ceiling is required. This RSIC-1.5CRC<sup>™</sup> ceiling assembly separates and decouples the gypsum board from the floor structure above. The RSIC1.5CRC<sup>™</sup> gives the floor-ceiling assembly enhanced acoustical performance, while allowing for a concealed space to conceal electrical, mechanical and plumbing. The RSIC-1.5CRC<sup>™</sup> dip simply snaps on to 1-1/2" x 16 ga. cold rolled channel. The 1.5" Cold Rolled Channel is supported by hanger wires spaced at 48" x 48" OC. Should the ceiling installation require seismic (earthquake) bracing, all bracing can be installed without affecting the acoustical decoupling, including the vertical uplift strut. The RSIC-1.5CRC<sup>™</sup> decouples the gypsum board below the Cold Rolled Channel to ensure a complete decoupling of the gypsum board for optimum noise control. The RSIC-1.5CRC<sup>™</sup> system is the lowest cost complete system and assembly available.



iThe RSIC-U<sup>™</sup> is designed for use with various wall designs. The RSIC-U<sup>™</sup> decouples the wall framing from the floor and ceiling structure. The RSIC-U<sup>™</sup> system eliminates flanking paths normally caused by a wall directly connected the floor or ceiling. When combined with the RSIC-1<sup>™</sup> wall system the highest possible noise control can be achieved by preventing noise from passing through wall framing into the adjoining structure. The RSIC-U<sup>™</sup> works directly with the RSIC-1<sup>™</sup> to achieve total decouple walls from the structure.

### RSIC-DC04X2™:

The RSIC-DC04X2<sup>TM</sup> clip is one of our most versatile noise control clips. The RSIC-DC04X2<sup>TM</sup> clip is designed to isolate walls, ceilings, soffits, speakers, garage door openers, plumbing, HVAC, and anything else that can be fastened to an L bracket. The RSIC-DC04X2<sup>TM</sup> uses the RSIC<sup>TM</sup> technology to control vibration and isolate noise. The performance of the RSIC-DC04X2<sup>TM</sup> is consistent with other RSIC<sup>TM</sup> clips. The RSIC-DC04X2<sup>TM</sup> isolator has an increased acoustical design load capacity up to 72 lbs. per RSIC-DC04X2<sup>TM</sup>.

For More Information, Installation Instruction and Specification Sheets Visit: http://www.acousticalsurfaces.com/rsic\_clips/risc\_clips.htm *or* www.rsic1clips.com

For All Other Acoustical, Soundproofing, Noise Control or Vibration Control Needs Visit: www.acousticalsurfaces.com

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RSIC-1™ Clips Used to Improve STC & IIC in Offices & Residential Applications.



### Don't Like The Itch Of Fiberglass? Use UltraTouch Acoustical Thermal "Green" Insulation In Your Next Building Project



LEED ELIGIBLE

**BUILDING A** 

"GREENER"

TOMORROW

### UltraTouch High Performance Acoustical Cotton Insulation, No Fiberglass, No itch or Skin Irritation & No Formaldehyde

**Material:** Recycled cotton. **Features:** No itch, no fiberglass. Environmentally friendly green product. ow frequency sound is the most difficult to control. UltraTouch is designed to perform in the most demanding situations like clubs, band rooms, studios, home AV rooms, theaters, manufacturing plants and enclosures. Install in ceiling, wall or floor cavities, or leave exposed to noise source for optimal noise control. When appearance is critical, use UltraTouch behind fabric panels, Wallmate® or Woodgrilles from Architectural Surfaces, Inc. UltraTouch also provides excellent thermal insulation. 3" = R-13, 5" = R-19. Available in Batts, Nominal 16.25" or 24.25" W x 94". NRC 1.37 @ 250Hz. Also available in R-21 & R-30.

UltraTouch Acoustical Insulation – Sound Absorption / Noise Reduction								
Product I	Nom. Size/Density	125Hz	250Hz	500Hz	1KHz	2KHz	4KHz	NRC
UltraTouch Insulation UltraTouch Insulation	n 3" 1.2 lb./cf n 5" 1.2 lb./cf	.95 .97	1.30 1.37	1.19 1.23	1.08 1.05	1.02 1.00	1.00 1.01	1.15 1.15

UltraTouch is manufactured in "oversized" widths and is installed with a friction fit to provide maximum fill capacity. This also reduces the chance for air convection and infiltration that can occur with smaller-sized insulation.

### UltraTouch + Sound Control

UltraTouch offers an exceptional NRC (Noise Reduction Coefficient) rating and can be used for ceilings, interior/exterior walls, and between floors where soundproofing is critical. UltraTouch's patented manufacturing process creates thousands of tiny air pockets throughout each batt of insulation providing superior sound absorption at multiple octave band frequencies. So whether you are trying to reduce noise in office spaces, between classrooms, or for home theaters, UltraTouch offers peace of mind knowing that what's in your walls is safe, effective, and healthy.

### UltraTouch + The Environment

The acoustical cotton used to make UltraTouch is diverted from potential landfill waste and used to create a Class-A fire-rated, fungi-resistant, superior performing insulation. Borates are used to treat the cotton and provide excellent resistance to fire, fungi, and pests. The borates used are safe and effective as well as an EPA registered fungal inhibitor. UltraTouch offers peace of mind in knowing that what's in your walls is safe, effective, and healthy.



One commonly overlooked aspect to an acoustical or soundproofing job is the door. Why is this so important? A one-percent air gap around a door can leak up to 30% of the sound from one side of the door to another. There are two options for acoustical doors. The first option is to buy an acoustical door which can be extremely expensive and often times out of a homeowner's budget. The second option is to purchase a standard, solid-core door and use one of our door perimeter seal kits. We offer two different kits – a standard kit and a heavy duty kit. The standard kit is approximately one-half inch thick whereas the heavy duty kit is almost one inch thick. The advantage of the heavy duty kit is that its seal has much more contact area, which makes a better seal. The parts that make up the standard kit are the 320-C automatic door bottom and the 33C adjustable jamb seal. The parts that make up the heavy duty kit are the 330-C door bottom and the 599C adjustable jamb seal.

