

# RSIC-1 THE REVOLUTION IN NOISE CONTROL

CHECK OUR [WEBSITE](http://www.pac-intl.com) FOR THE NEWEST INFORMATION AND ADDITIONS TO OUR PRODUCT LINE

[WWW.PAC-INTL.COM](http://www.pac-intl.com)

VER 0505



OVER 150 DESIGNS

*The sound of silence*



**WE DON'T BUILD BUILDINGS - WE MAKE THEM QUIET**

PAC International, Inc. Tel: (866) 774-2100 Fax: (866) 649-2710 Web Site: [www.pac-intl.com](http://www.pac-intl.com)

# THE LOWEST COST FLOOR CEILING SYSTEM

## Save \$1.71/ SQ FT

- Lowest possible cost, installed labor and material
- Exceeds fire and sound code
- Eliminate RC-1 and Acoustical Mat
- Over 150 UL Fire Resistive Design Assemblies
- Less LT WT Concrete = Lighter Weight Building
- Eliminate Installation Time of Acoustical Mat
- Acoustical Performance Upgrade
- 4 IIC point increase
- 3 STC point increase



The RSIC-1 is the first and only product classified by UL for both fire and sound.



Members of the International Code Council

### RSIC-1 Eliminates Acoustical Mat and Rc-1

#### Floor Ceiling Application

ITEMS TO REMOVE		ITEMS TO ADD	
REMOVE RC-1	\$.25/ SQ FT	RSIC-1 CLIPS	\$.86/ SQ FT
REMOVE ACOUSTICAL MAT	\$2.00 SQ FT	7/8" DFC	\$.21/ SQ FT
LESS LT WT CONCRTE	\$.50 SQ FT		
<b>TOTAL \$ REMOVED</b>	<b>\$2.75/ SQ FT</b>	<b>TOTAL \$ ADDED</b>	<b>\$1.04/ SQ FT</b>

**TOTAL SAVINGS WITH THE RSIC-1**

**\$1.71 SQ FT**

Actual cost may vary. The cost represented here in are not guaranteed cost, but rather cost of installation on an actual project.

# THE RSIC-1 SOUND ISOLATION CLIP

## RSIC-1 wall assemblies vs. Generic wall assemblies

The RSIC-1 wall systems give you a higher performing wall, while saving you money and reducing the wall thickness. The RSIC-1 wall systems are the highest performing, fire rated wall systems per dollar spent.

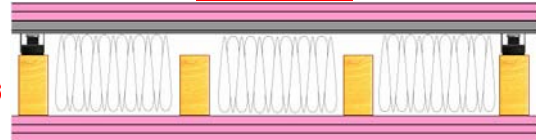
### RSIC-1 WOOD WALL ASSEMBLIES 1 & 2 HOUR

#### STC 63

2x4 stud wall, RSIC-1, drywall furring channel, R-19 insulation,  
2 layers RSIC-1 side, 3 layers 5/8" gypsum board other side  
UL U301, U305, U309, U311, U331, U334



**\$ 7.97/ sq ft** Est. assembly cost

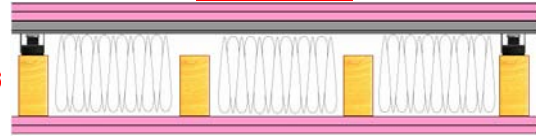


#### STC 62

2x4 stud wall, RSIC-1, drywall furring channel, R-19 insulation,  
2 layers 5/8" gypsum board each side  
UL U301, U305, U309, U311, U331, U334



**\$ 7.17/ sq ft** Est. assembly cost

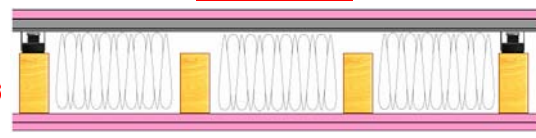


#### STC 60

2x4 stud wall, RSIC-1, drywall furring channel, R-19 insulation,  
1 layer RSIC-1 side, 2 layers 5/8" gypsum board other side  
UL U305 U309 U311 U331



**\$ 6.41/ sq ft** Est. assembly cost

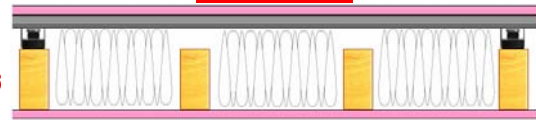


#### STC 56

2x4 stud wall, RSIC-1, drywall furring channel, R-19 insulation,  
1 layer 5/8" gypsum board each side  
UL U305 U309 U311 U331



**\$ 5.65/ sq ft** Est. assembly cost



### GENERIC WOOD WALL ASSEMBLIES

#### STC 56

2x4 double stud wall, 3.5" insulation,  
1 layer 5/8" gypsum board each side

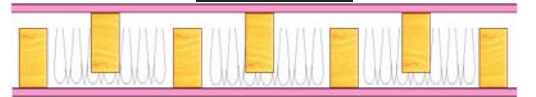
**\$ 6.88/ sq ft** Est. assembly cost



#### STC 47

2x4 stagger stud wall, 3.5" insulation,  
1 layer 5/8" gypsum board each side

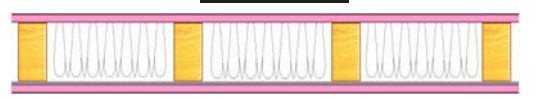
**\$ 6.10/ sq ft** Est. assembly cost



#### STC 46

2x4 stud wall, RC-1 channel, 3.5" insulation,  
1 layer 5/8" gypsum board each side

**\$ 4.57/ sq ft** Est. assembly cost



# THE RSIC-1 SOUND ISOLATION CLIP

## RSIC-1 STEEL WALL ASSEMBLIES 1 & 2 HOUR

### STC 66

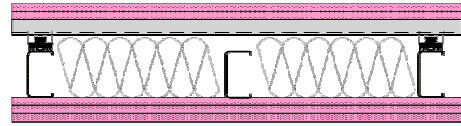
20 ga 3-5/8" steel stud wall, RSIC-1, 7/8" DFC, R-19 insulation, 2 layers RSIC-1 side, 3 layers 5/8" gypsum board other side

UL U419, U423



**\$ 8.13/sq ft**

Est. assembly cost



### STC 64

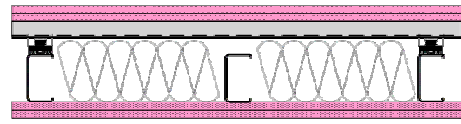
20 ga 3-5/8" steel stud wall, RSIC-1, 7/8" DFC, R-19 insulation, 2 layers 5/8" gypsum board each side

UL U419, U423



**\$ 7.33/ sq ft**

Est. assembly cost



### STC 61

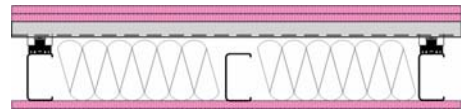
20 ga 3-5/8" steel stud wall, RSIC-1, 7/8" DFC, R-19 insulation, 1 layer RSIC-1 side, 2 layers 5/8" gypsum board other side

UL U419, U423



**\$ 6.53/ sq ft**

Est. assembly cost



### STC 58

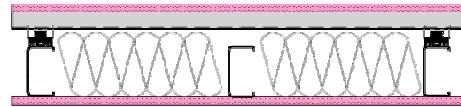
20 ga 3-5/8" steel stud wall, RSIC-1, 7/8" DFC, R-19 insulation, 1 layer 5/8" gypsum board each side

UL U419, U423



**\$ 5.73/ sq ft**

Est. assembly cost



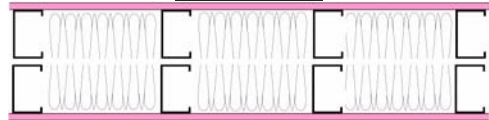
## GENERIC STEEL WALL ASSEMBLIES

### STC 56

25 ga 3-5/8" double steel stud wall, R-11 insulation, 1 layer 5/8" gypsum board each side

**\$ 6.73 sq ft**

Est. assembly cost

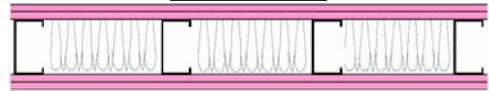


### STC 51

25 ga 3-5/8" steel stud wall, R-11 insulation, 2 layers 5/8" gypsum board each side

**\$ 5.73/ sq ft**

Est. assembly cost

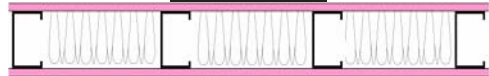


### STC 46

25 ga 3-5/8" steel stud wall, R-11 insulation, 1 layer 5/8" gypsum board each side

**\$ 4.13/ sq ft**

Est. assembly cost



# RSIC-1 Wall

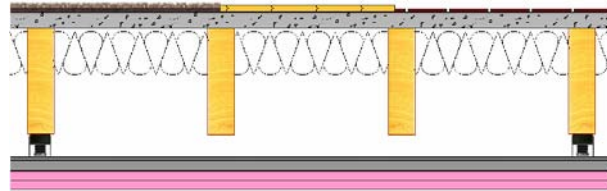


# THE RSIC-1 SOUND ISOLATION CLIP

## RSIC-1 WOOD/FLOOR CEILING ASSEMBLIES 1 & 2 HOUR

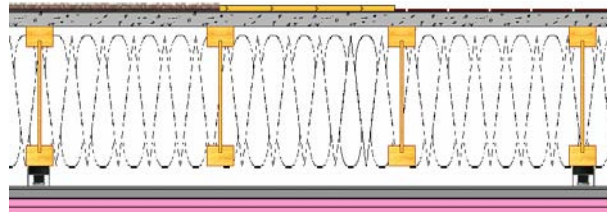
UL L528, L542, L532, L523,  
L562, L514, L513

Carpet	<b>STC 61</b>	<b>IIC 74</b>
Hard Wood	<b>STC 61</b>	<b>IIC 55</b>
Tile	<b>STC 61</b>	<b>IIC 53</b>



UL L547, L518, L570

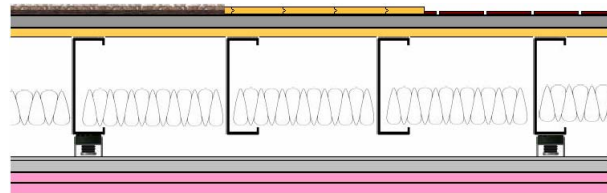
Carpet	<b>STC 61</b>	<b>IIC 74</b>
Hard Wood	<b>STC 61</b>	<b>FIIC 60</b>
Tile	<b>STC 61</b>	<b>FIIC 63</b>



## RSIC-1 STEEL CEILING ASSEMBLIES 1 & 2 HOUR

UL L573, G552, G534

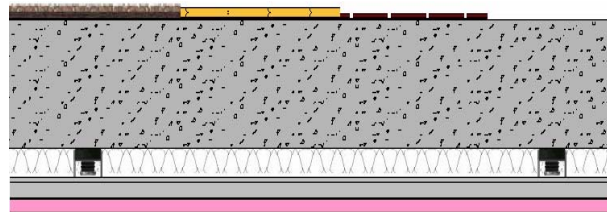
Carpet	<b>STC 60</b>	<b>IIC 70</b>
Hard Wood	<b>STC 60</b>	<b>IIC 60</b>
Tile	<b>STC 60</b>	<b>FIIC 59</b>



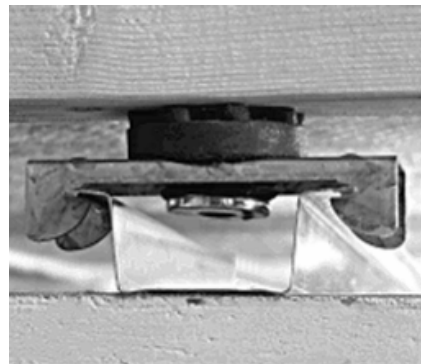
## RSIC-1 CONCRETE CEILING ASSEMBLIES 1 & 2 HOUR

UL D945

Carpet	<b>STC 60</b>	<b>FIIC 84</b>
Hard Wood	<b>STC 60</b>	<b>FIIC 74</b>
Tile	<b>STC 60</b>	<b>FIIC 70</b>
Bare	<b>STC 60</b>	<b>FIIC 51</b>



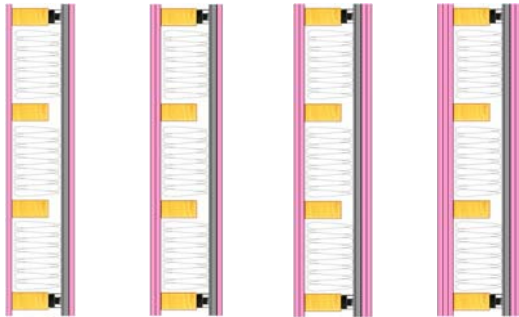
# RSIC-1 Ceiling



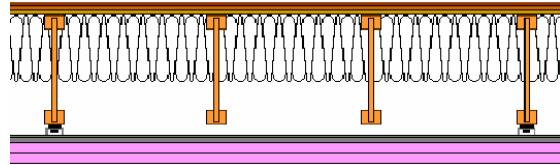
# THE RSIC-1 SOUND ISOLATION CLIP

## RSIC-1 WOOD AND STEEL WALL SYSTEMS

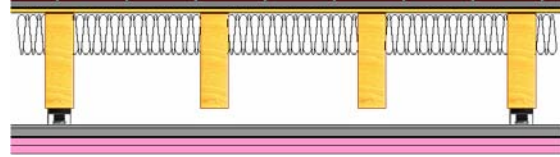
STC 56    STC 60    STC 62    STC 63



FSTC 57    FIIC 63

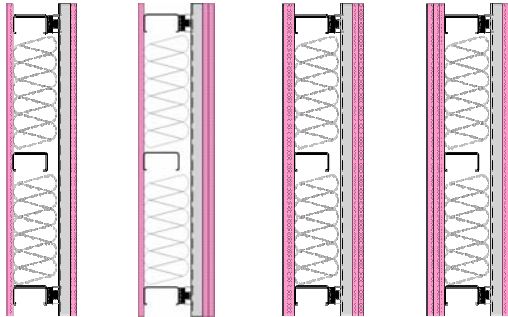


STC 61    IIC 53

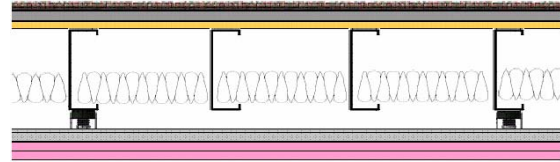


## RSIC-1 WOOD AND STEEL CEILING ASSEMBLIES

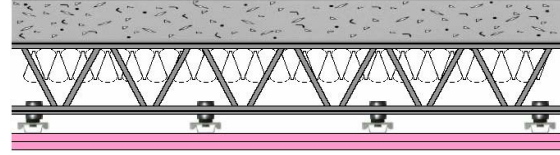
STC 58    STC 61    STC 64    STC 66



STC 60    IIC 70

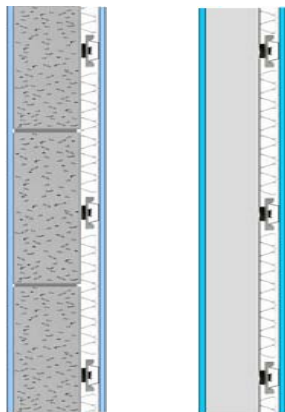


STC 60    IIC 50

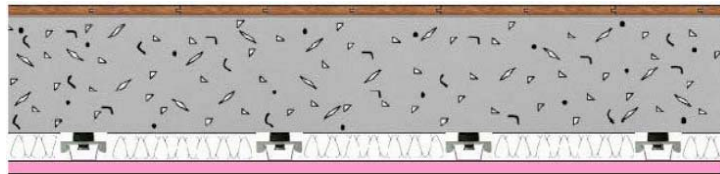


## RSIC-1 CONCRETE WALL AND CEILING ASSEMBLIES

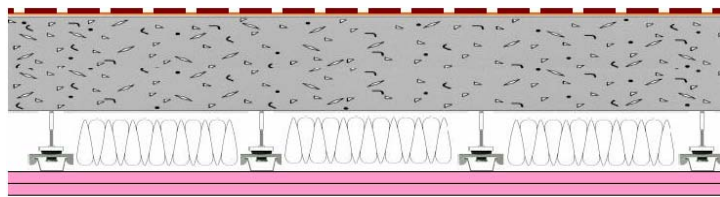
STC 64    STC 67



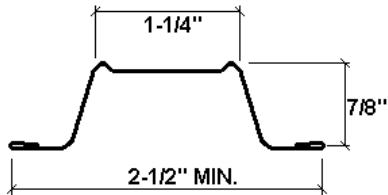
STC 60    FIIC 74



STC 60    IIC70



# RSIC-1 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.
- **Optional:** 22 gauge (no hemmed edge required with 22 gauge)
- **Depth:** 7/8 inch
- **Width Bottom:** 2-1/2 inch wide minimum.
- **Width Top:** 1-1/4 inch wide

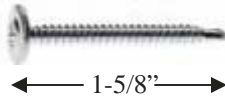
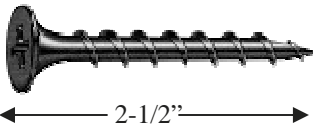
**NOTE:** Splice drywall furring channel (hat track) with 6 inch overlap in mid span (between two clips) secure with 18 ga tie wire or two 7/16" framing screws.



## Resilient Sound Isolation Clip (RSIC-1)

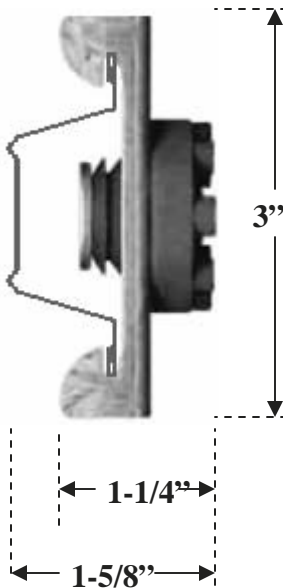
- **Maximum Spacing:** 48 inches on center
- **Maximum Acoustical Design Load:** 36 lbs

**NOTE:** Refer to [www.UL.com](http://www.UL.com) for complete installation details on all fire resistive assembly designs.



## Fasteners:

- **RSIC-1 to Wood:** #8 x 2-1/2 inch minimum size coarse thread screw. (Recommended #12 or #10 x 2-1/2 inch hex head)
- **RSIC-1 to Steel:** # 8 x 1-5/8 inch minimum size fine thread screw. (Recommended #12 or #10 x 1-5/8 inch hex head)
- DO NOT fasten Resilient Sound Isolation Clips (RSIC-1) to framing members with nails. Use only approved screws.



## RSIC-1 Dimensions:

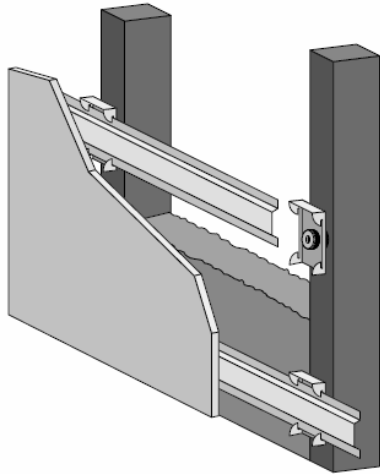
- RSIC-1 Clip 3" tall
- RSIC-1 Clip 1-1/4" deep
- RSIC-1 and Drywall Furring Channel 1-5/8" deep

## Average Labor Rates:

- **RSIC-1:** 72 clips per man hour
- **Drywall Furring Channel:** 550LF per man hour

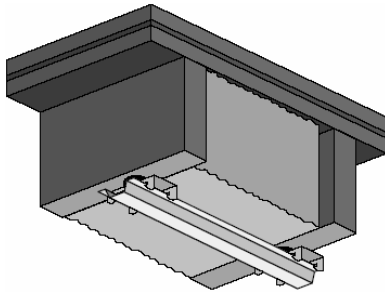
Labor rates provided to PAC International, Inc. by an independent contracting firm.

# RSIC-1 SOUND ISOLATION CLIP



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

- Resilient Sound Isolation Clips (RSIC-1) shall be 48 inches maximum on center . (horizontal)
- Fasten the Resilient Sound Isolation Clip (RSIC-1) to the substrate with a fastener approved for a minimum pull-out and shear of 120 lbs.
- Ensure the internal metal ferrell is tight to the substrate. • Locate the first row of RSIC-1 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). (see page 2 for splice details)
- 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 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 (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 shear of 120 lbs.
- Ensure the internal metal ferrell is tight to the substrate.
- Locate the first row of RSIC-1 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 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](http://www.UL.com) for complete installation details on all fire resistive assembly designs.
- Resilient Sound Isolation Clip (RSIC-1), 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 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-1 clips to a steel stud the minimum allowable thickness is 20 Ga. (0.030).

## Fire Test Information:

Approved for use in over 150 different UL fire resistive design assemblies. Check our website for the latest updates of the fire testing approvals

[WWW.PAC-INTL.COM](http://WWW.PAC-INTL.COM)

Check UL Fire Resistance Directory File # R16638

Check UL's web pages. [www.ul.com/database](http://www.ul.com/database)

Contact UL (877) UL- HELPS



# THE RSIC-1 SOUND ISOLATION CLIP



*“Field Impact Isolation (Insulation) Class”*

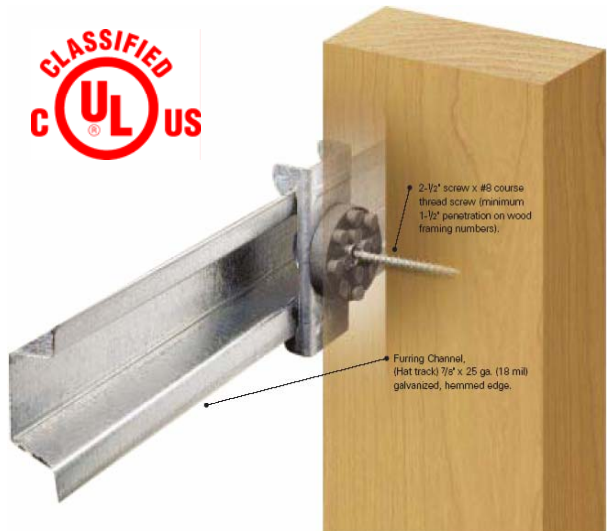
**Construction:**

- Ceramic tile
- 1-1/4” lt. wt. gypsum concrete
- 1/4” acoustical mat
- 1-1/8” T & G plywood deck
- 22” deep “I” beam
- Cellulose insulation
- RSIC-1 @ 48” o.c.
- Drywall furring channel @ 24”
- 2 layers 5/8” gypsum board

FIIC	FSTC
Impact Isolation Class	Sound Transmission Class
<b>FIIC 63</b>	<b>FSTC 57</b>

## *The Sound of Silence*

- Sound Transmission Class (STC) rating of 56, a full 19 STC pts greater than similar wall assemblies without RSIC-1. (RAL Report 209)
- Experience with the RSIC-1 has recorded remarkable improvements of up to an additional 20 STC pts on walls.
- Not only is the RSIC-1 silencing the competition with noise elimination, the RSIC-1 is classified by UL.
- UL Classified in over 150 Fire Resistive Design Assemblies. Up to 4 (four) hour Rated Systems.
- **Quiet and safe what a nice combination**



FIIC 63	STC
Report Number TL 01-209	56
Report Number TL 01-210	60
Report Number TL 01-211	62
Report Number TL 01-212	63