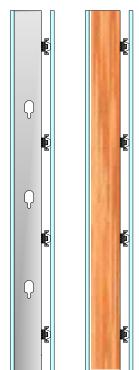


PAC INTERNATIONAL, INC.

RSIC-1 SOUND ISOLATION CLIP







RSIC-1

The **RSIC-1** 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 assembly decouples and isolates the gypsum board or plywood from the structure increasing the acoustical performance of the system. With an Acoustical design load rating of 36 lbs per isolator, the RSIC-1 clip can support up to two layers of 5/8" gypsum board when spaced at 24" x 48" oc. For heavier systems increase the number of isolators to support the additional weight of the system. The RSIC-1 clip fastens directly to the framing or structure creating a 1-5/8" cavity between the face of the framing and the back of the gypsum board. The RSIC-1 stops the noise and vibrations that typically would be allowed to transfer throught the structure. The RSIC-1 systems have several UL fire resistive design assemblies from ranging one hour to four hours. The UL assemblies can be viewed on our site at http://pac-intl.com/fire_ratings_list.html, and on UL.com

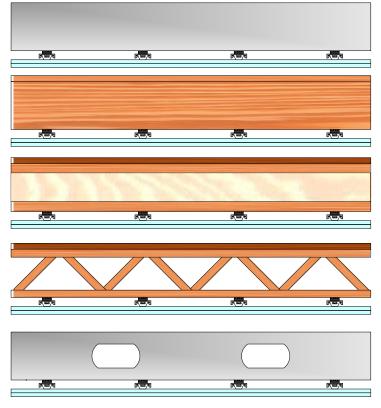
RSIC-1, the Low Cost, High Performance, Noise control Solution

Wood
Steel
Metal deck

Concrete	
Condo	
Commercial	

Apartment
Retail
Conference Rooms

Recording Studio
Home Theater
Commercial theater



RSIC-1 specifications:							
Acoustical design load:	36 Lbs						
Total deflection	3 mm						
Double deflection	Yes (1.5 mm)						
Made in the USA	Yes						
Made with Recycled content	Yes						
Low VOC treated	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						

RSIC-1 INSTALLATION GUIDE RSIC-1 SOUND ISOLATION CLIP

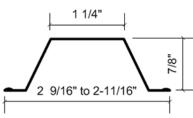




Drywall Furring Channel:

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



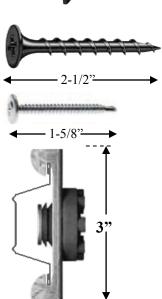
Resilient Sound Isolation Clip (RSIC-1)

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



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.



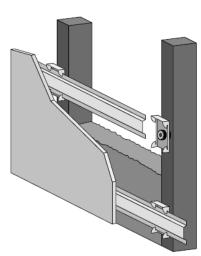
RSIC-1 Dimensions:

- 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:

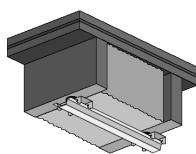
- **RSIC-1:** 72 clips per man hour
- Drywall Furring Channel: 550LF per man hour

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



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 sheer of 120 lbs.
- Ensure the internal metal ferrule 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 the perimeter of the wall.
- 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 sheer of 120 lbs.
- Ensure the internal metal ferrule 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 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.



General Information:

- Refer to <u>www.UL.com</u>, or <u>www.pac-intl.com</u> 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 UL Fire Resistance Directory File # R16638 for PAC International.

Contact us with any questions about Fire Testing or Installation.

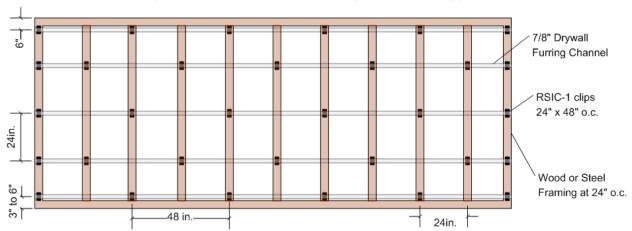
APPLICATION RECOMMENDATIONS FOR WALLS AND CEILINGS, WOOD OR STEEL FRAMING

INSTALLING RESILIENT SOUND ISOLATION CLIPS (RSIC-1)

RSIC CLIPS AT 24" OC.

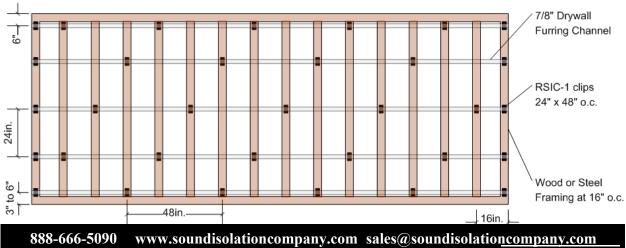
RSIC-1 Wall or Ceiling System Framing at 24" o.c.

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



RSIC-1 Wall or Ceiling System Framing at 16" o.c.

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



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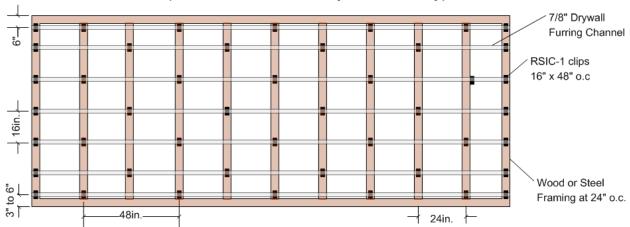
APPLICATION RECOMMENDATIONS FOR WALLS AND CEILINGS, WOOD OR STEEL FRAMING

INSTALLING RESILIENT SOUND ISOLATION CLIPS (RSIC-1)

RSIC CLIPS AT 16" OC.

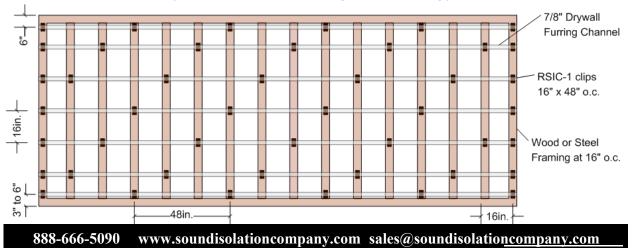
RSIC-1 Wall or Ceiling System Framing at 24" o.c.

RSIC-1 clips at 16" x 48" o.c. 3 Layers of 5/8" Gypsum Board



RSIC-1 Wall or Ceiling System Framing at 16" o.c.

RSIC-1 clips at 16" x 48" o.c. 3 Layers of 5/8" Gypsum Board



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ESTIMATED RSIC CLIP USAGE FOR WALLS AND CEILINGS, WOOD OR STEEL FRAMED. (SPACING AT 24" X 48" O.C.)

	1~4'	5~8	9~12	13~16	17~20	21~24	25~28	29~32	33~36	37~40
1~3'	4	6	8	10	12	14	16	18	20	22
3~5	6	9	12	15	18	21	24	27	30	33
5~7	8	12	16	20	24	28	32	36	40	44
7~9	10	15	20	25	30	35	40	45	50	55
9~11	12	18	24	30	36	42	48	54	60	66
11~13	14	21	28	35	42	49	56	63	70	77
13~15	16	24	32	40	48	56	64	72	80	88
15~17	18	27	36	45	54	63	72	81	90	99
17~19	20	30	40	50	60	70	80	90	100	110
19~21	22	33	44	55	66	77	88	99	110	121
21~23	24	36	48	60	72	84	96	108	120	132
23~25	26	39	52	65	78	91	104	117	130	143
25~27	28	42	56	70	84	98	112	126	140	154
27~29	30	45	60	75	90	105	120	135	150	165
29~31	32	48	64	80	96	112	128	144	160	176
31~33	34	51	68	85	102	119	136	153	170	187
33~35	36	54	72	90	108	126	144	162	180	198
35~37	38	57	76	95	114	133	152	171	190	209
37~39	40	60	80	100	120	140	160	180	200	220
39~41	42	63	84	105	126	147	168	189	210	231

Note: Add 4 RSIC-1 at each drywall butt joint condition for optimum acoustical and UL Fire Resistive assembly compliances. See UL Fire Resistive Design specifications.

ESTIMATED RSIC CLIP USAGE FOR WALLS AND CEILINGS, WOOD OR STEEL FRAMED. (SPACING AT 16" X 48" O.C.)

	1~4	5~8	9~12	13~16	17~20	21~24	25~28	29~32	33~36	37~40
1~1.3'	4	6	8	10	12	14	16	18	20	22
1.3~2.6'	6	9	12	15	18	21	24	27	30	33
2.6~4'	8	12	16	20	24	28	32	36	40	44
4~5.3'	10	15	20	25	30	35	40	45	50	55
5.3~6.6'	12	18	24	30	36	42	48	54	60	66
6.6~8'	14	21	28	35	42	49	56	63	70	77
8~9.3'	16	24	32	40	48	56	64	72	80	88
9.3~10.6'	18	27	36	45	54	63	72	81	90	99
10.6~12'	20	30	40	50	60	70	80	90	100	110
12~13.3'	22	33	44	55	66	77	88	99	110	121
13.3~14.6'	24	36	48	60	72	84	96	108	120	132
14.6~16'	26	39	52	65	78	91	104	117	130	143
16~17.3'	28	42	56	70	84	98	112	126	140	154
17.3~18.6'	30	45	60	75	90	105	120	135	150	165
18.6~20'	32	48	64	80	96	112	128	144	160	176
20~21.3'	34	51	68	85	102	119	136	153	170	187
21.3~22.6'	36	54	72	90	108	126	144	162	180	198
22.6~24'	38	57	76	95	114	133	152	171	190	209
24~25.3'	40	60	80	100	120	140	160	180	200	220
25.3~26.6'	42	63	84	105	126	147	168	189	210	231
26.6~28'	44	66	88	110	132	154	176	198	220	242
28~29.3'	46	69	92	115	138	161	184	207	230	253
29.3~30.6'	48	72	96	120	144	168	192	216	240	264
30.6~32'	50	75	100	125	150	175	200	225	250	275
32~33.3	52	78	104	130	156	182	208	234	260	286
33.3~34.6'	54	81	108	135	162	189	216	243	270	297
34.6~36'	56	84	112	140	168	196	224	252	280	308
36~37.3	58	87	116	145	174	203	232	261	290	319
38.6~40'	60	90	120	150	180	210	240	270	300	330
40~41.3'	62	93	124	155	186	217	248	279	310	341

Note: Add 4 RSIC-1 at each drywall butt joint condition for optimum acoustical and UL Fire Resistive assembly compliances. See UL Fire Resistive Design specifications.



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

Members of the International Code Council

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