CASCADE AUDIO ENGINEERING
WWW.CASCADEAUDIO.COM

RSIC

Category: Acoustic Isolation

Technical Data Sheet

Resilient Sound Isolation Clips:

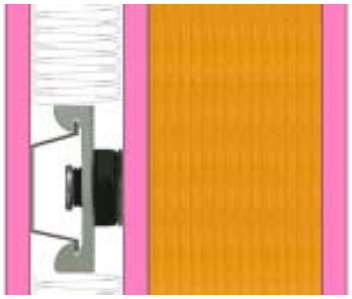
One of the most cost-effective acoustical products for improving the sound transmission loss of a wall or floor/ceiling system is the resilient channel. Resilient channels are commonly used in multi-family housing projects, especially projects with wood frame construction, but they can be used in any application where sound transmission is a concern.

Our resilient channels are ½" thick and have a cross-section shape similar to ½ of a hat channel, with only one leg attached to the supporting structure and the other edge floating freely. They are constructed from 25-gauge sheet steel, and they contain holes in the web of the channel to provide flexibility.

The fundamental purpose of the resilient channel is to provide a means for attaching gypsum board to the supporting structure without actually permitting the gypsum board to directly contact the supporting structure. It is the de-coupling of the gypsum board from the framing that provides the improved sound transmission loss.

Features:

- STC-56
- Best Performance to Dollar Ratio
- Not required to treat both sides of same wall
- Easy to Install
- Less expensive to ship than barrier materials



CASCADE AUDIO ENGINEERING
WWW.CASCADEAUDIO.COM

RSIC

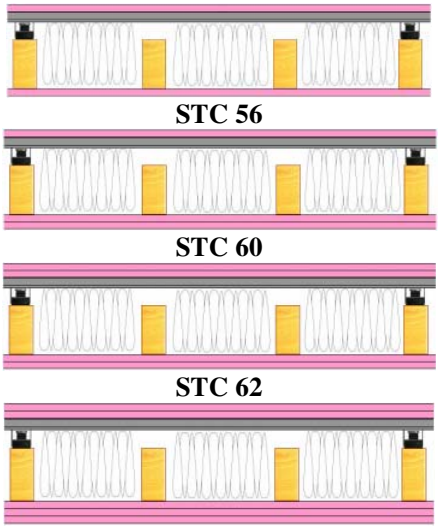
Category: Acoustic Isolation

Technical Data Sheet

THE RSIC-1 SOUND ISOLATION CLIP

RSIC-1 Wall Systems

WOOD



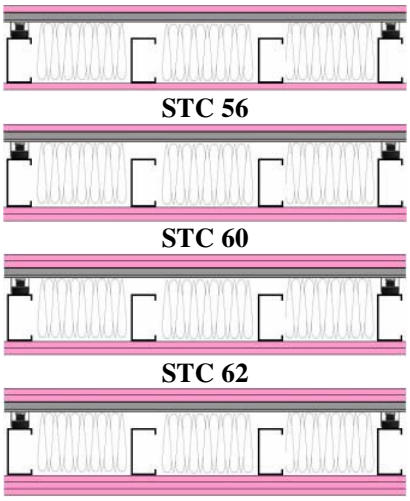
STC 56

STC 60

STC 62

STC 63

STEEL



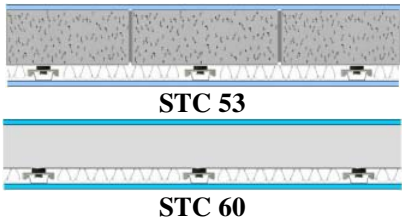
STC 56

STC 60

STC 62

STC 63

CONCRETE

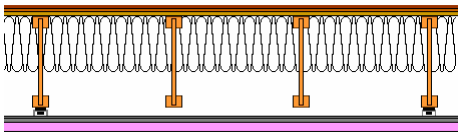


STC 53

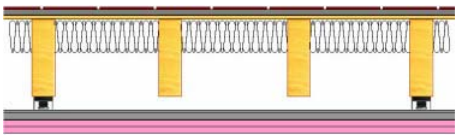
STC 60

RSIC-1 Floor/Ceiling Systems

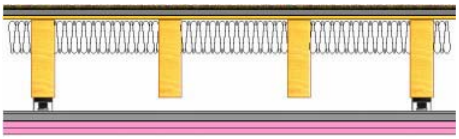
WOOD



STC 57 IIC 63

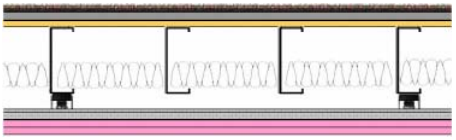


STC 61 IIC 53

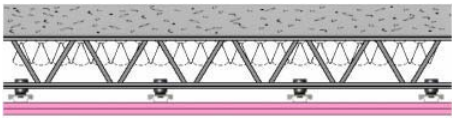


STC 60 IIC 74

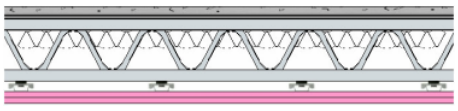
STEEL



STC 60 IIC 72

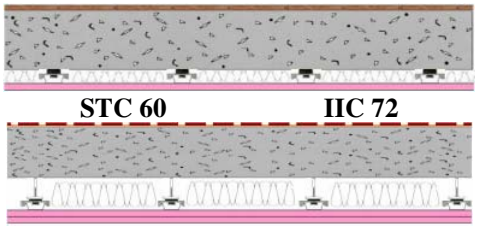


STC 60 IIC 50



STC 60 IIC 51

CONCRETE



STC 60 IIC 72

STC 60 IIC 62

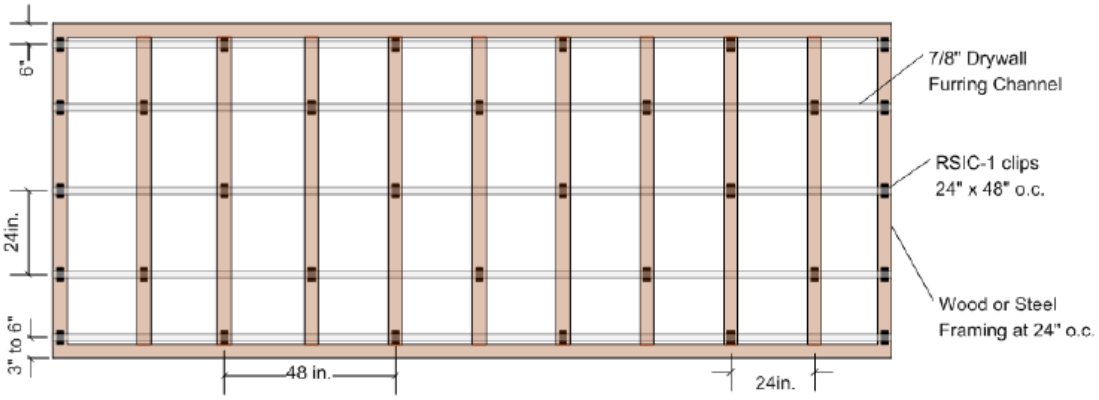
APPLICATION RECOMMENDATIONS FOR WALLS AND CEILINGS, WOOD OR STEEL FRAMING

INSTALLING RESILIENT SOUND ISOLATION CLIPS (RSIC-1)

RSIC CLIPS AT 24” OC.

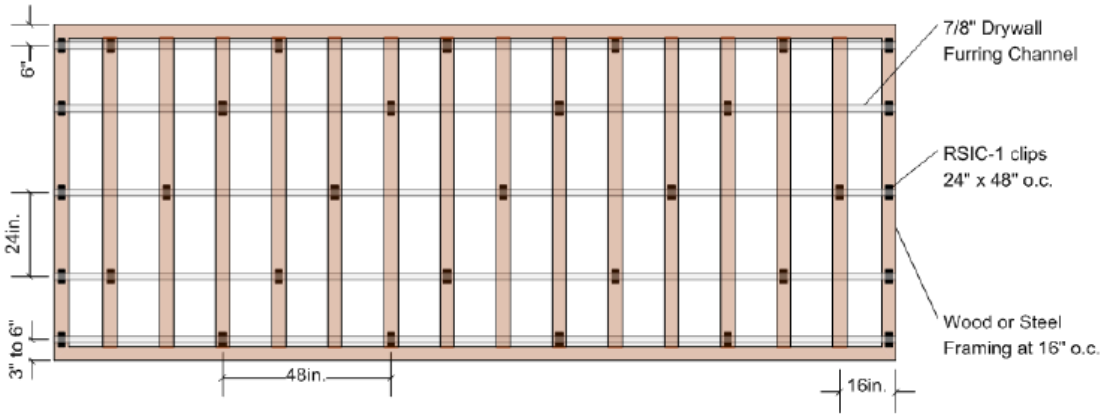
RSIC-1 Wall or Ceiling System Framing at 24" o.c.

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



RSIC-1 Usage Chart, DFC @ 24" on center with RSIC-1 @ 48" o.c.

Field conditions may effect quantity required

Width or Height	Length 1~4'	5~8	9~12	13~16	17~20	21~24	25~28	29~32	33~36	37~40	41~44	45~48	49~52	53~56	57~60	61~64
1~3'	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
3~5	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51
5~7	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68
7~9	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85
9~11	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
11~13	14	21	28	35	42	49	56	63	70	77	84	91	98	105	112	119
13~15	16	24	32	40	48	56	64	72	80	88	96	104	112	120	128	136
15~17	18	27	36	45	54	63	72	81	90	99	108	117	126	135	144	153
17~19	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170
19~21	22	33	44	55	66	77	88	99	110	121	132	143	154	165	176	187
21~23	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204
23~25	26	39	52	65	78	91	104	117	130	143	156	169	182	195	208	221
25~27	28	42	56	70	84	98	112	126	140	154	168	182	196	210	224	238
27~29	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255
29~31	32	48	64	80	96	112	128	144	160	176	192	208	224	240	256	272
31~33	34	51	68	85	102	119	136	153	170	187	204	221	238	255	272	289
33~35	36	54	72	90	108	126	144	162	180	198	216	234	252	270	288	306
35~37	38	57	76	95	114	133	152	171	190	209	228	247	266	285	304	323
37~39	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340
39~41	42	63	84	105	126	147	168	189	210	231	252	273	294	315	336	357
41~43	44	66	88	110	132	154	176	198	220	242	264	286	308	330	352	374
43~45	46	69	92	115	138	161	184	207	230	253	276	299	322	345	368	391
45~47	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384	408
47~49	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425
49~51	52	78	104	130	156	182	208	234	260	286	312	338	364	390	416	442
51~53	54	81	108	135	162	189	216	243	270	297	324	351	378	405	432	459
53~55	56	84	112	140	168	196	224	252	280	308	336	364	392	420	448	476
55~57	58	87	116	145	174	203	232	261	290	319	348	377	406	435	464	493
57~59	60	90	120	150	180	210	240	270	300	330	360	390	420	450	480	510
59~61	62	93	124	155	186	217	248	279	310	341	372	403	434	465	496	527
61~63	64	96	128	160	192	224	256	288	320	352	384	416	448	480	512	544
63~65	66	99	132	165	198	231	264	297	330	363	396	429	462	495	528	561
65~67	68	102	136	170	204	238	272	306	340	374	408	442	476	510	544	578
67~69	70	105	140	175	210	245	280	315	350	385	420	455	490	525	560	595
69~71	72	108	144	180	216	252	288	324	360	396	432	468	504	540	576	612
71~73	74	111	148	185	222	259	296	333	370	407	444	481	518	555	592	629
73~75	76	114	152	190	228	266	304	342	380	418	456	494	532	570	608	646
75~77	78	117	156	195	234	273	312	351	390	429	468	507	546	585	624	663
77~79	80	120	160	200	240	280	320	360	400	440	480	520	560	600	640	680
79~81	82	123	164	205	246	287	328	369	410	451	492	533	574	615	656	697

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.

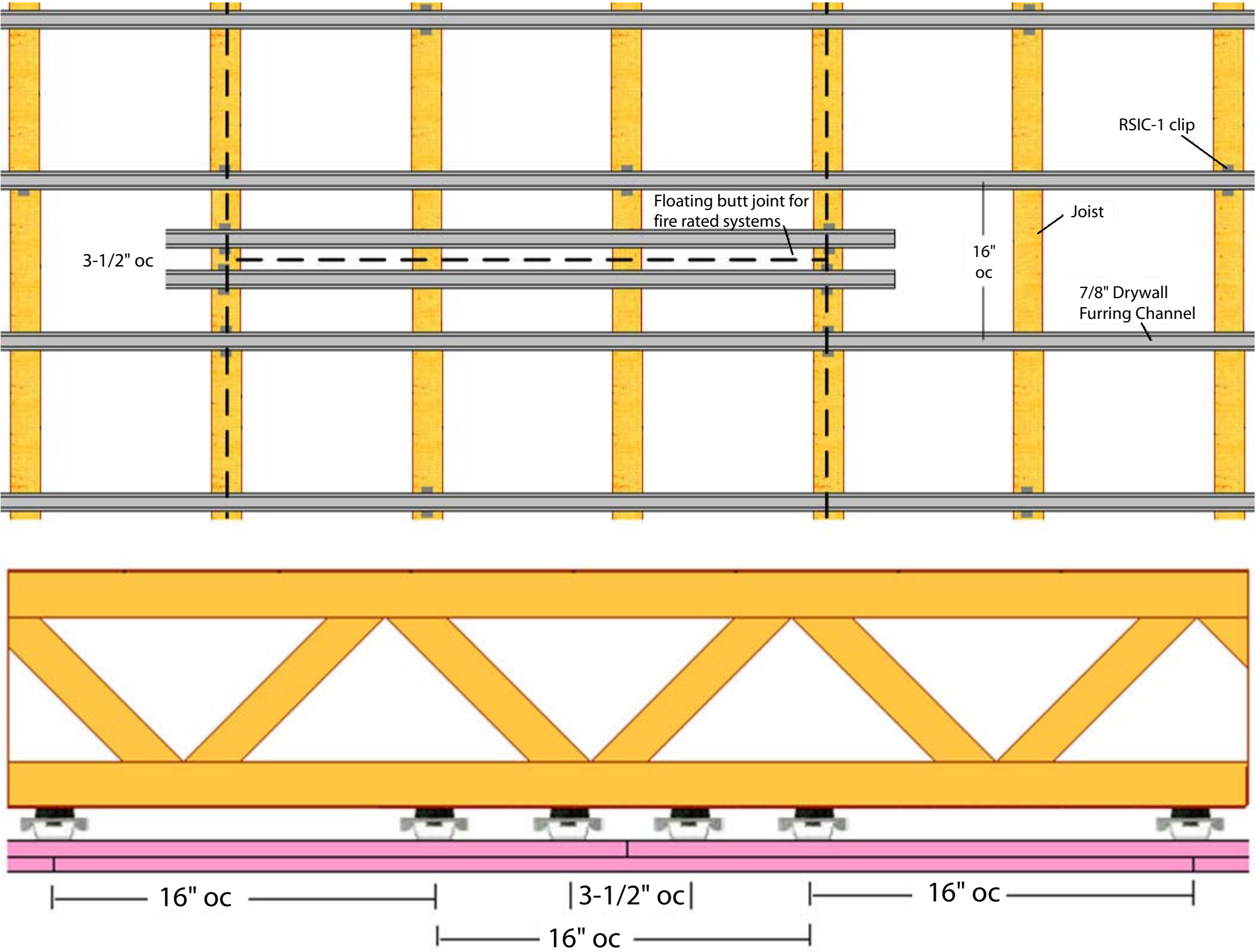
RSIC-1 Usage Chart, DFC @ 16" on center with RSIC-1 @ 48" o.c.

Field conditions may effect quantity required

	Length															
	1~4	5~8	9~12	13~16	17~20	21~24	25~28	29~32	33~36	37~40	41~44	45~48	49~52	53~56	57~60	61~64
1~1.3'	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34
1.3~2.6'	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51
2.6~4'	8	12	16	20	24	28	32	36	40	44	48	52	56	60	64	68
4~5.3'	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85
5.3~6.6'	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
6.6~8'	14	21	28	35	42	49	56	63	70	77	84	91	98	105	112	119
8~9.3'	16	24	32	40	48	56	64	72	80	88	96	104	112	120	128	136
9.3~10.6'	18	27	36	45	54	63	72	81	90	99	108	117	126	135	144	153
10.6~12'	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170
12~13.3'	22	33	44	55	66	77	88	99	110	121	132	143	154	165	176	187
13.3~14.6'	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204
14.6~16'	26	39	52	65	78	91	104	117	130	143	156	169	182	195	208	221
16~17.3'	28	42	56	70	84	98	112	126	140	154	168	182	196	210	224	238
17.3~18.6'	30	45	60	75	90	105	120	135	150	165	180	195	210	225	240	255
18.6~20'	32	48	64	80	96	112	128	144	160	176	192	208	224	240	256	272
20~21.3'	34	51	68	85	102	119	136	153	170	187	204	221	238	255	272	289
21.3~22.6'	36	54	72	90	108	126	144	162	180	198	216	234	252	270	288	306
22.6~24'	38	57	76	95	114	133	152	171	190	209	228	247	266	285	304	323
24~25.3'	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340
25.3~26.6'	42	63	84	105	126	147	168	189	210	231	252	273	294	315	336	357
26.6~28'	44	66	88	110	132	154	176	198	220	242	264	286	308	330	352	374
28~29.3'	46	69	92	115	138	161	184	207	230	253	276	299	322	345	368	391
29.3~30.6'	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384	408
30.6~32'	50	75	100	125	150	175	200	225	250	275	300	325	350	375	400	425
32~33.3	52	78	104	130	156	182	208	234	260	286	312	338	364	390	416	442
33.3~34.6'	54	81	108	135	162	189	216	243	270	297	324	351	378	405	432	459
34.6~36'	56	84	112	140	168	196	224	252	280	308	336	364	392	420	448	476
36~37.3	58	87	116	145	174	203	232	261	290	319	348	377	406	435	464	493
38.6~40'	60	90	120	150	180	210	240	270	300	330	360	390	420	450	480	510
40~41.3'	62	93	124	155	186	217	248	279	310	341	372	403	434	465	496	527
41.3~42.6	64	96	128	160	192	224	256	288	320	352	384	416	448	480	512	544
42.6~44'	66	99	132	165	198	231	264	297	330	363	396	429	462	495	528	561
44~45.3'	68	102	136	170	204	238	272	306	340	374	408	442	476	510	544	578
45.3~46.6'	70	105	140	175	210	245	280	315	350	385	420	455	490	525	560	595
48~49.3'	72	108	144	180	216	252	288	324	360	396	432	468	504	540	576	612
49.3~50.6	74	111	148	185	222	259	296	333	370	407	444	481	518	555	592	629
50.6~52'	76	114	152	190	228	266	304	342	380	418	456	494	532	570	608	646
52~53.3'	78	117	156	195	234	273	312	351	390	429	468	507	546	585	624	663
53.3~54.6	80	120	160	200	240	280	320	360	400	440	480	520	560	600	640	680
54.6~56'	82	123	164	205	246	287	328	369	410	451	492	533	574	615	656	697

Width or Height

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.


RSIC-1 clip
Floating butt joint for fire rated systems
Joist
3-1/2" oc
16" oc
7/8" Drywall Furring Channel
16" oc
3-1/2" oc
16" oc
16" oc