

## ClarkDietrich Sound Clip

### Sound isolation and dampening clip.

The ClarkDietrich Sound Clip is used in conjunction with 18mil (25ga) 7/8" deep drywall furring channel. It is used to fasten gypsum wallboard in various wall and floor-ceiling applications, while simultaneously providing acoustical separation. This significantly reduces the amount of airborne sound filtering from room to room. The ClarkDietrich Sound Clip adds notable STC points to most assemblies while reducing sound transfer.

- Ideal for use in multi-family dwelling, hotels, theaters and hospitals
- Used in conjunction with 7/8" 25 ga Furring Channel with a total standoff from stud of 1-5/8"
- UL fire rated for most common assemblies
- Complies to UL 263 test standards.
- Max. spacing 48" o.c. (laterally) x 24" o.c. (vertically)
- Maximum acoustical design load is 36 lbs.
- Sound testing for Type X & Type C Boards

### PRODUCT DIMENSIONS

3" x 1-1/4" (Clip only)

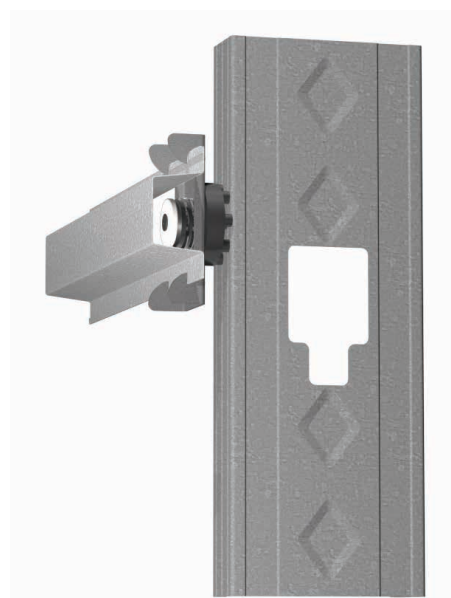
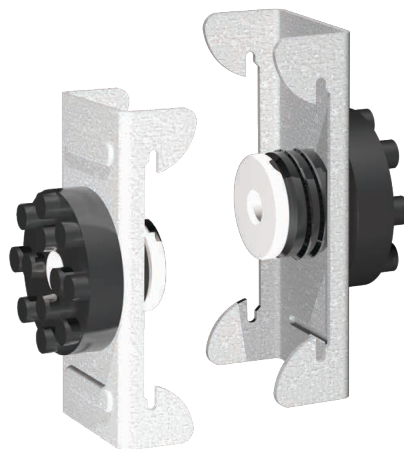
### MATERIAL SPECIFICATIONS

**Gauge:** 18 gauge (43mil)

**Design Thickness:** 0.0451 inches

**Yield Strength:** 33ksi

**Coating:** CP60



### ClarkDietrich Sound Clip (CDSC)

Product code	Mils (Gauge)	Size (in)	Pcs./Bucket
CDSC	43mil (18ga)	3 x 1-1/4	100

### SOUND AND UL DESIGN:

- Complies to UL 263 test standards. See full list of UL® design assemblies in UL R19331.
- Wall Sound Assemblies are certified by Western Electro-Acoustical Laboratories.
- Floor Sound Assemblies are certified by Intertek Building & Construction (B&C).
- NVLAP Accredited for ASTM E90 & E413, ISO Certified

## CDSC STC SOUND ASSEMBLIES ON METAL STUD FRAMING

Fire Rating	UL Assembly	Wall Framing	Stud Spacing	Wall Board (Side1/Side2)	Insulation	STC Rating	OITC Rating	Test Report
		3-5/8" ProSTUD 20 33mil	24" o.c.	(1) layer / (1) layer 5/8" Type C	R-19	60		TL18-291
		3-5/8" ProSTUD 20 33mil	24" o.c.	(1) layer / (2) layers 5/8" Type C	R-19	62		TL18-292
		3-5/8" ProSTUD 20 33mil	24" o.c.	(2) layers / (2) layers 5/8" Type C	R-19	63		TL18-293
		3-5/8" ProSTUD 25 15mil	16" o.c.	(1) layer / (1) layer 5/8" Type X	R-11	56		TL18-199
		3-5/8" ProSTUD 25 15mil	16" o.c.	(1) layer / (2) layers 5/8" Type X	R-11	60		TL18-197
		3-5/8" ProSTUD 25 15mil	16" o.c.	(2) layers / (2) layers 5/8" Type X	R-11	62		TL18-194
2 Hr	U411	2-1/2" ProSTUD 25 15mil	24" o.c.	(2) layers / (2) layers 5/8" Type X	R-13	62	48	L3173.08-113-11-R0
3/4 Hr	U423	3-1/2" Structural Stud 33mil	24" o.c.	(1) layer / (1) layer 1/2" Type C	R-19	53	37	L3173.10-113-11-R0
1 Hr	U423	3-1/2" Structural Stud 33mil	24" o.c.	(1) layer / (1) layer 1/2" Type X	R-19	55	38	L3173.12-113-11-R0
1-1/2 Hr	U423	3-1/2" Structural Stud 33mil	24" o.c.	(2) layers / (2) layers 1/2" Type C	R-19	62	48	L3173.11-113-11-R0
2 Hr	U423	3-1/2" Structural Stud 33mil	24" o.c.	(2) layers / (2) layers 5/8" Type X	R-19	63	50	L3173.13-113-11-R0
1 Hr	U465	3-5/8" ProSTUD 20 18mil	24" o.c.	(1) layer / (1) layer 5/8" Type X	None	45	29	L3173.03-113-11-R0
1 Hr	U465	3-5/8" ProSTUD 20 18mil	24" o.c.	(1) layer / (1) layer 5/8" Type X	Mineral Wool	53	36	L3173.04-113-11-R0
1 Hr	U465	3-5/8" ProSTUD 20 18mil	24" o.c.	(1) layer / (1) layer 5/8" Type X	R-13	53	37	L3173.05-113-11-R0
1 Hr	U493	(2) 2-1/2" ProSTUD 25 15 mil - ChaseWall	24" o.c.	(1) layer / (1) layer 5/8" Type X	R-13 Both Sides	60	44	L3173.06-113-11-R0
2 Hr	U493	(2) 2-1/2" ProSTUD 25 15 mil - ChaseWall	24" o.c.	(2) layers / (2) layers 5/8" Type X	R-13 Both Sides	67	53	L3173.07-113-11-R0
1 Hr	V438	2-1/2" ProSTUD 25 15 mil	24" o.c.	(1) layer / (1) layer 1/2" Type C	R-13	49	34	L3173.09-113-11-R0
2 Hr	V438	1-5/8" ProSTUD 25 15 mil	24" o.c.	(2) layers / (2) layers 1/2" Type C	2-3/4" Fiberglass	59	42	L3173.14-113-11-R0
3 Hr	V438	1-5/8" ProSTUD 25 15 mil	24" o.c.	(3) layers / (3) layers 1/2" Type C	2-3/4" Fiberglass	63	49	L3173.15-113-11-R0
4 Hr	V438	1-5/8" ProSTUD 25 15 mil	24" o.c.	(4) layers / (4) layers 1/2" Type C	2-3/4" Fiberglass	66	53	L3173.16-113-11-R0

**Wall Tests:** The test was performed in accordance with ASTM E 90-09 (2016), Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and ASTM E2235-04 (2012), Standard Test Method for Determination of Decay Rates for Use in Sound Insulation Test Methods.

**Floor/Ceiling Tests:** Available from ClarkDietrich Technical Services.

## ClarkDietrich Sound Clip

## CDSC STC SOUND ASSEMBLIES ON 2x4 WOOD STUDS

Fire Rating	UL Assembly	Wall Framing	Stud Spacing	Wall Board (Side1/Side2)	Insulation	STC Rating	OITC Rating	Test Report
		2x4 Wood Studs	16" o.c.	(1) layer / (1) layer 5/8" Type X	R-19	53		TL18-201
		2x4 Wood Studs	16" o.c.	(1) layer / (1) layer 5/8" Type C	R-19	60		TL18-288
		2x4 Wood Studs	16" o.c.	(1) layer / (2) layers 5/8" Type X	R-19	57		TL18-204
		2x4 Wood Studs	16" o.c.	(1) layer / (2) layers 5/8" Type C	R-19	61		TL18-289
		2x4 Wood Studs	16" o.c.	(2) layers / (2) layers 5/8" Type X	R-19	61		TL18-205
		2x4 Wood Studs	16" o.c.	(2) layers / (2) layers 5/8" Type C	R-19	62		TL18-290
2 Hr	U301	2x4 Wood Studs	16" o.c.	(2) layers / (2) layers 5/8" Type X	R-13	60	47	L3173.01-113-11-R0
1 Hr	U309	2x4 Wood Studs	24" o.c.	(1) layer / (1) layer 5/8" Type X	R-19	53	37	L3173.17-113-11-R0
1 Hr	U311	2x4 Wood Studs	24" o.c.	(1) layer / (1) layer 5/8" Type C	R-19	55	39	L3173.18-113-11-R0
1 Hr	U340	2x4 Wood Studs - Chase Wall	12" o.c. Staggered	(1) layer / (1) layer 5/8" Type X	R-19	57	43	L3173.21-113-11-R0
1 Hr	U341	2x4 Wood Studs - Chase Wall	24" o.c.	(1) layer / (1) layer 5/8" Type X	R-19	60	45	L3173.20-113-11-R0
1 Hr	U344	2x4 Wood Studs	24" o.c.	(1) layer 5/8" Type X / (1) layer 5/8" Plywood + 5/8" Type X	R-19	57	41	L3173.19-113-11-R0
1 Hr	U356	2x4 Wood Studs	16" o.c.	7/16" Plywood / (1) layer 5/8" Type X	R-13	51	34	L3173.02-113-11-R0

**Wall Tests:** The test was performed in accordance with ASTM E 90-09 (2016), Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and ASTM E2235-04 (2012), Standard Test Method for Determination of Decay Rates for Use in Sound Insulation Test Methods.

**Floor/Ceiling Tests:** Available from ClarkDietrich Technical Services.

**10" TradeReady® STEEL JOISTS W/LEVELROCK (UL DESIGN NO. G551)**

Material Description	STC	IIC	Test Report
Carpet w/ Pad	55	80	J4775.02
Ceramic w/ NobleSeal®	57	50	J4775.06
Shaw Engineered Wood	54	50	J4775.03
Shaw Como Vinyl 12mm	55	48	J4775.04
Shaw Expo Vinyl 6mm	54	47	J4775.05
Baseline System UL Design No. G551 Ceiling: (1) layer 5/8" Type C	54	43	J4775.01
+(1) Gypsum C-Core Layer with: Shaw Expo Vinyl 6mm on top of the floor UL Design No. G551	58	51	J4775.07

**16" WOOD OPEN WEB TRUSS (OWT) W/LEVELROCK (UL DESIGN NO. UL-L521)**

With (1) layer 5/8" Type C attached to hat channel.

Material Description	STC	IIC	Test Report
Carpet w/ Pad	59	79	J4777.02
Ceramic w/ NobleSeal®	59	53	J4777.06
Shaw Engineered Wood	58	53	J4777.03
Shaw Como Vinyl 12mm	58	51	J4777.04
Shaw Expo Vinyl 6mm	58	51	J4777.05
Baseline System (Nothing on top of LevelRock) UL Design No. UL-L521 Ceiling: (1) layer 5/8" Type C	58	50	J4777.01

**16" WOOD OPEN WEB TRUSS (OWT) W/LEVELROCK (UL DESIGN NO. UL-M510)**

With (1) layer 5/8" Type C on the bottom of the joist + (2) layers 5/8" Type C attached to hat channel.

Material Description	STC	IIC	Test Report
Carpet w/ Pad	58	75	J4778.02
Ceramic w/ NobleSeal®	57	51	J4778.06
Shaw Engineered Wood	58	50	J4778.03
Shaw Como Vinyl 12mm	58	49	J4778.04
Shaw Expo Vinyl 6mm	58	50	J4778.05
Baseline System (Nothing on top of LevelRock) UL Design No. UL-M510 Ceiling: (1) layer 5/8" Type C + (2) layers 5/8" Type C	58	50	J4778.01

**12" WOOD TRUSS JOINT (TJI) W/LEVELROCK (UL DESIGN NO. UL-L518)**

With (2) layers 1/2" Type C attached to hat channel.

Material Description	STC	IIC	Test Report
Carpet w/ Pad	62	84	J4776.03
Ceramic w/ NobleSeal®	63	56	J4776.07
Shaw Engineered Wood	62	56	J4776.04
Shaw Como Vinyl 12mm	62	54	J4776.05
Shaw Expo Vinyl 6mm	61	53	J4776.06
Baseline System (Nothing on top of LevelRock) UL Design No. UL-L518 Ceiling: (2) layers 1/2" Type C	62	50	J4776.02

**8" CONCRETE SLAB W/ (1) LAYER GYPSUM CEILING**

With (1) layer 5/8" Type X attached to hat channel.

Material Description	STC / Test Report	IIC / Test Report
Carpet Tiles	62 RAL-TL21-030	61 RAL-IN21-009
Vinyl Planks 7mm	63 RAL-TL21-031	61 RAL-IN21-010
Baseline System (Nothing on top of 8" Concrete)  Ceiling: R-6.7 unfaced fiberglass insulation + (1) layer 5/8" Type X	62 RAL-TL21-032	60 RAL-IN21-011

**8" CONCRETE SLAB W/ (1) LAYER GYPSUM CEILING**

With (2) layers 5/8" Type X attached to hat channel.

Material Description	STC / Test Report	IIC / Test Report
Carpet Tiles	63 RAL-TL21-029	61 RAL-IN21-008
Vinyl Planks 7mm	63 RAL-TL21-020	64 RAL-IN21-003
Baseline System (Nothing on top of 8" Concrete)  Ceiling: R-6.7 unfaced fiberglass insulation + (2) layers 5/8" Type X	63 RAL-TL21-027	64 RAL-IN21-006

**Wall Tests:** The test was performed in accordance with ASTM E 90-09 (2016), Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and ASTM E2235-04 (2012), Standard Test Method for Determination of Decay Rates for Use in Sound Insulation Test Methods.

**Floor/Ceiling Tests:** Available from ClarkDietrich Technical Services.

## ClarkDietrich Sound Clip Installation Guide

### FURRING CHANNEL:

7/8" 25-gauge hemmed furring channel (7/8" fur, 1-1/4" top & 2-23/32" bottom)

- When splicing, drywall furring channel should have 6 inch overlap in mid span (between two clips) secure with 18-gauge tie wire, or two 7/16" framing screws. If using in a fire rated/UL application; use only tie wire and no screws.

### CLARKDIETRICH SOUND CLIP:

3" x 1-1/4" (clip only) maximum spacing 48" o.c. and maximum design load is 36 lbs.

### FASTENERS:

- CDSC to Wood: 64mm (2-1/2") # 8 minimum size coarse thread screw. (Recommended #12 or #10 x 2-1/2" hex head)
- CDSC to Steel: 38 mm (1-1/2") # 8 minimum size fine thread screw. (Recommended #12 or #10 x 1-5/8" hex head)
- DO NOT attach CDSC to framing members with nails; use only approved screws.

### WALLS: ONE AND TWO LAYERS OF 5/8" GYPSUM BOARD

- ClarkDietrich Sound Clip (CDSC) shall be 48" maximum o.c. (horizontal).
- Fasten the CDSC to the substrate with a fastener approved for a minimum pull-out and shear of 120lbs.
- Locate the first row of CDSC within 3-6 inches from the floor and within 3-6 inches from the top track, making sure the clip is attached to the studs and not the track.
- Snap in the drywall furring channel into the CDSC 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" minimum 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

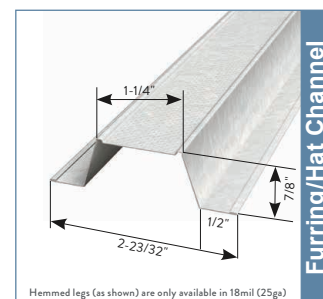
- CDSC shall be 48" maximum o.c.
- Fasten the CDSC to the substrate with a fastener approved for a minimum pull-out and shear of 120lbs.
- Locate the first row CDSC clips within 8" of the wall at each end of a run.
- Snap in the drywall furring channel into the CDSC clips. Channel max spacing at 24" o.c.
- 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 [www.UL.com](http://www.UL.com), or [www.clarkdietrich.com](http://www.clarkdietrich.com) for complete installation details on all fire resistive assembly designs.
- ClarkDietrich Sound Clips, furring channel and gypsum board shall not carry heavy loads such as cabinets or bookshelves.
- Seal all potential air leaks with non-hardening acoustical caulking to achieve best noise control results. Use fire rated sealant where required.

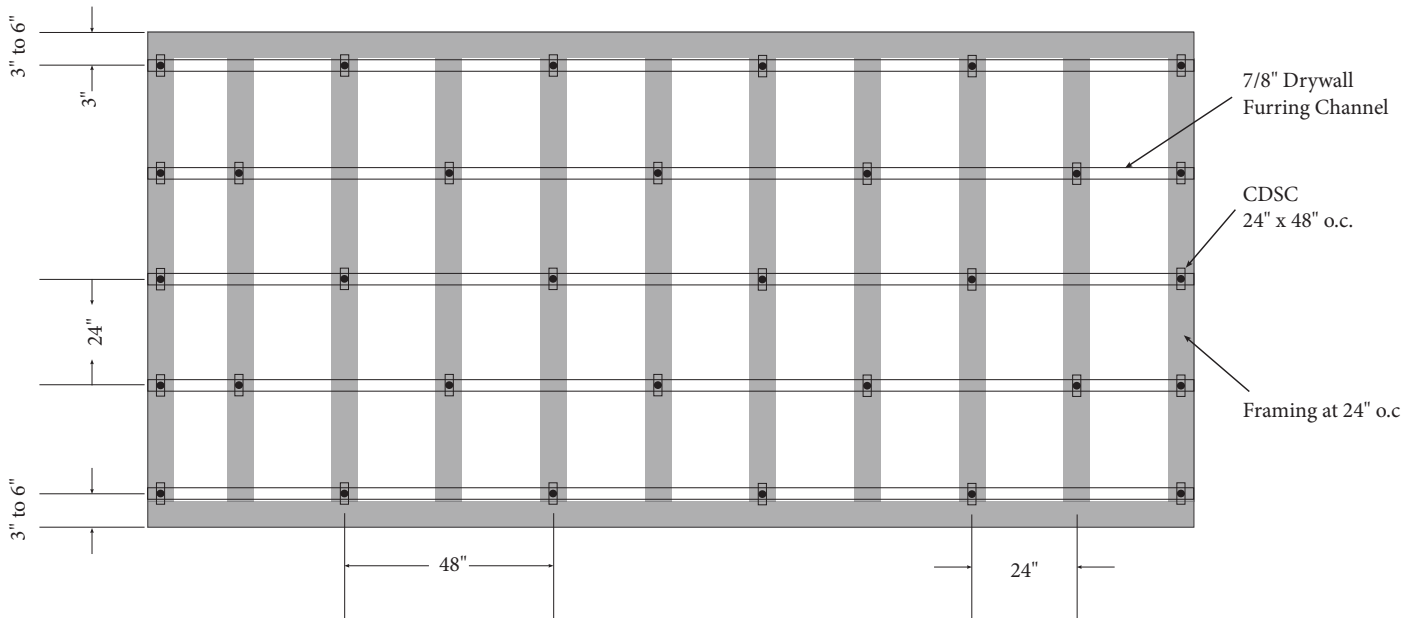
### FIRE TEST INFORMATION:

Visit [clarkdietrich.com](http://clarkdietrich.com) for the latest fire testing approvals and updates.



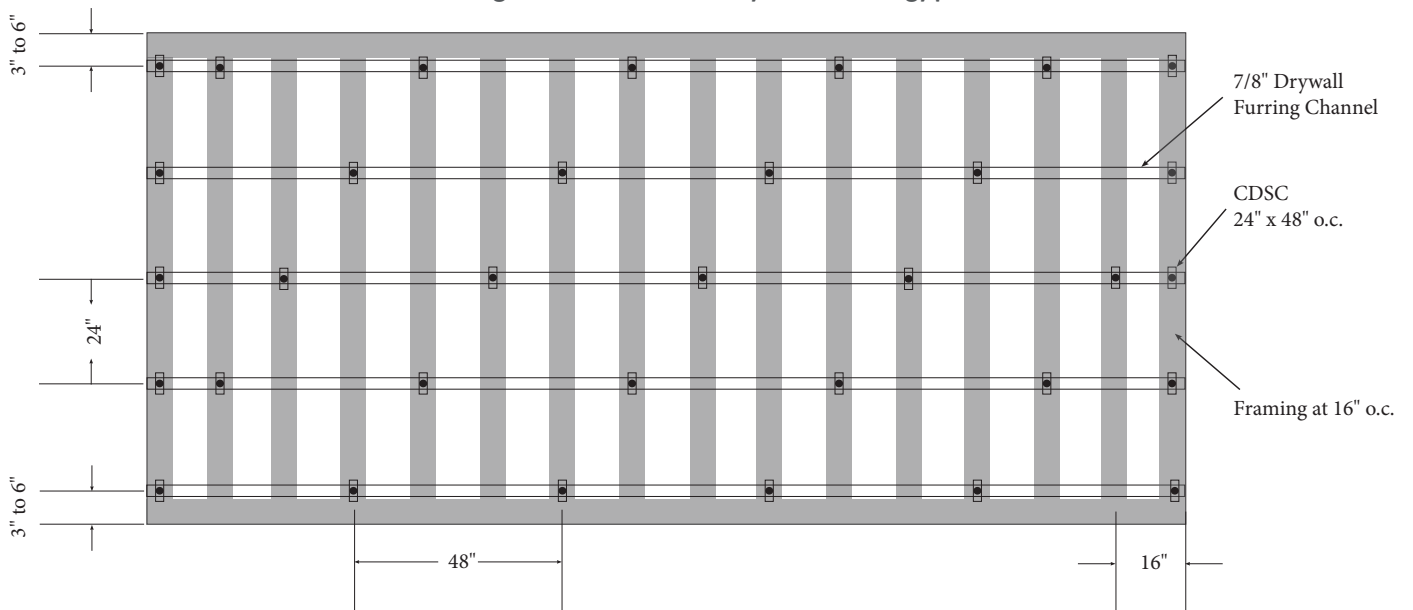
## WALL AND CEILING INSTALLATION GUIDE FOR WOOD OR STEEL FRAMING WITH FURRING ON 24" CENTERS

Wall or Ceiling framing at 24" o.c.,  
CDSC at 48" o.c., furring at 24" o.c., 1 or 2 layers of 5/8" gypsum board



NOTE: DRAWING NOT TO SCALE

Wall or Ceiling framing at 16" o.c.,  
CDSC at 48" o.c., furring at 24" o.c., 1 or 2 layers of 5/8" gypsum board



NOTE: DRAWING NOT TO SCALE