

Cylent Assurance™ Clip

A Sound Isolating Clip for Any RC-1 Channel

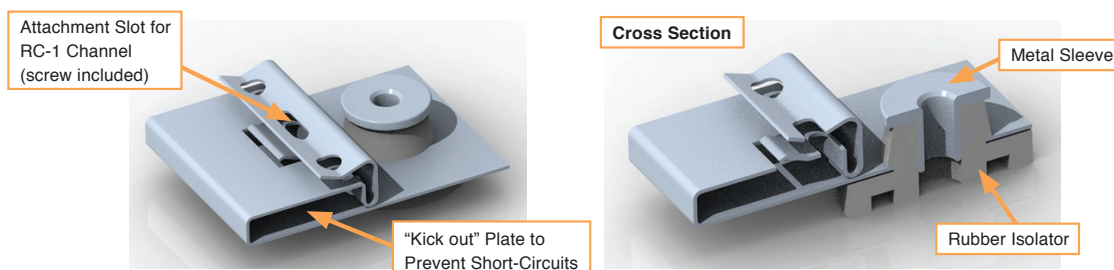
Description

Cylent Assurance™ Clip is a patented, resilient channel vibration isolation clip. It has been engineered to significantly reduce low frequency noise transfer in ceiling/wall assemblies used in modern multi-family construction. Cylent Assurance Clip was developed and being marketed exclusively by Keene Building Products.

Cylent Assurance Clip is specifically engineered to work with any type of resilient channel. All other vibration isolation clips available on the market today are limited in their application, since they typically only work with "Hat" type resilient channel. Only Keene's Cylent Assurance Clip vibration isolation clip can work with any type of standard resilient channel, including both Hat and RC-1 channel.

Cylent Assurance Clip works by limiting the direct connection of the resilient channel to the framing members, dampening the vibrations passing through wall/ceiling assemblies. Engineered to ensure there is no direct metal to metal contact, Cylent Assurance Clip additionally "assures" that there are no short circuits. Short-circuits can occur when drywall screws penetrate through the resilient channel and into the framing member, effectively connecting the resilient channel to the framing members. Short-circuits severely limit the vibration (noise) reduction provided by the resilient channel.

Combining Cylent Assurance Clip's ability to significantly reduce vibration transferred across wall/ceiling assemblies, with its unique design that prevents the most common installation error (short-circuits) make it the perfect choice for projects where noise is a concern. Allowing architects and builders to dramatically improve the performance of wall/ceiling assemblies STC and IIC ratings, improving piece of mind to both builders and architects that the completed project will perform as expected.



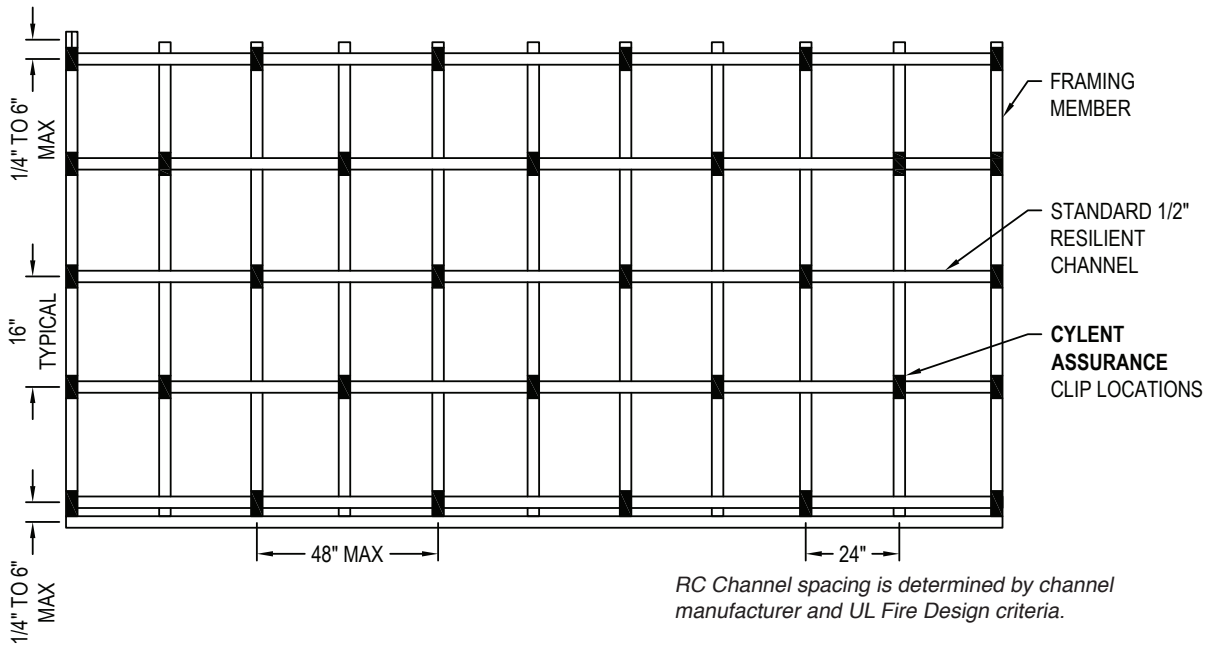
Cylent Assurance Clip Installation - Ceiling Application for 1 and 2 layers of Gypsum Board

NOTE: For best speed of installation, it is recommended to attach a Cylent Assurance Clip, to the framing, at each end of a typical 12 ft. piece of resilient channel. Install and secure the resilient channel at both ends. From there, go back to fill in the necessary clips and secure channel at the appropriate locations, typically every other framing member. Measure from the first channel run to the appropriate channel center spacing and repeat for the next row of resilient channel. Chalk lines or laser lines are not necessary.

Important Notice:

- This document is provided for guidance only, it is not intended to cover all code variations
 - Cylent Assurance Clips must be installed using industry accepted, best building practices that meet all local code requirements
 - Before beginning any installation, review all local building codes and thoroughly read all instructions provided by the manufactures of all products used during installation
 - Depending on your geography location and local code requirements, specific installation steps may vary
 - To determine the number of Cylent Assurance Clips needed before beginning installation, and for more detailed installation instructions please see keenebuilding.com
 - Installation of Cylent Assurance Clip should not exceed over 48" in distance from the closest clip
 - RC Channel Spacing is determined by channel manufacturer and UL Fire Design criteria
1. Attach the Cylent Assurance Clips to the RC-1 Channel by using the provided #10 1/2" self-tapping metal screw to attach the clip to the channel through the predrilled hole in the RC-1 Channel (when possible).
 2. If using Space Assurance™ (replacement for caulking) install Space Assurance around the perimeter of the room attaching the product to the top plate of the walls with a staple.
 3. Install channel with the attached Cylent Assurance Clip minimum 1/8" and maximum 6" from side of adjacent wall on either side as seen in example drawing. Ensure that the Cylent Assurance Clip and the RC channel do not connect with the top plate of the adjacent partition wall.
 4. Follow specified spacing of RC-1 Channel per architectural drawings (typically 16" O.C.). (Resilient channel spacing is determined by where the insulation, if any, is placed in the floor / ceiling cavity, as per UL Fire System Design).
 5. Install Cylent Assurance Clip in an alternating pattern, ensuring that there is no more than 48" between each Cylent Assurance Clip and that the ensuing channel connects to the joists bypassed by the prior.
 6. Use an appropriate screw for the type of substrate the Cylent Assurance Clip is being attached to. Typically, with wood-frame a 2-1/2" screw is suggested (to be supplied by installation contractor).
 7. Splice two RC-1 Channels by either lining up junction at joist and attach both with a Cylent Assurance Clip as previously described OR overlap adjoining pieces by 6" minimum and attach with two (2) self-tapping sheet metal screws.
 8. Attach gypsum board as outlined in the RC-1 guidelines. It is suggested to use a 1-1/4" or 1-1/2" gypsum board screws meant for metal studs.
 9. If Space Assurance (Step 2) was not installed, allow for 1/8" gap between the horizontal ceiling and the vertical wall, then caulk around the perimeter of the room to seal the gap. Tape and finish.
 10. If double layer drywall ceiling is to be installed using RC Channel spacing at 24" on center, it is recommended that a Cylent Assurance Clip be installed at each framing member. Type and length of screw for this application is as per UL code and the recommendation of the resilient channel manufacturer.
 11. When all Cylent Assurance Clips are installed and you are ready for drywall installation, please be sure to follow these steps:
 - Have two people to support the ceiling board while a third person starts securing the board the RC channel.
 - It is important to start by securing the board to the channels in the middle of the board and work your way out from the middle.
 - The use of drywall support braces (dead man) is also an option to help with support of the board.
 - Securing the board with one clip and allowing it to hang, without proper support will cause the clip to bend.

For Wood or Steel Framing Cylent Assurance Clip Spacing Example



Estimated Number of Cylent Assurance Clip by Wall/ Ceiling Dimension

Width of Wall or Ceiling (Direction the Channels Running) @ Joists 24" O.C.

	4	5	6	7	8	9	10	11	12
4	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0	18.0
5	11.9	13.1	14.3	15.4	16.6	17.8	19.0	20.2	21.4
6	13.8	15.1	16.5	17.9	19.3	20.6	22.0	23.4	24.8
7	15.6	17.2	18.8	20.3	21.9	23.4	25.0	26.6	28.1
8	17.5	19.3	21.0	22.8	24.5	26.3	28.0	29.8	31.5
9	19.4	21.3	23.3	25.2	27.1	29.1	31.0	32.9	34.9
10	21.3	23.4	25.5	27.6	29.8	31.9	34.0	36.1	38.3
11	23.1	25.4	27.8	30.1	32.4	34.7	37.0	39.3	41.6
12	25.0	27.5	30.0	32.5	35.0	37.5	40.0	42.5	45.0

Width of Wall or Ceiling (Direction the Channels Running) @ Joists 16" O.C.

	4	5	6	7	8	9	10	11	12
4	12.0	13.5	15.0	16.5	18.0	19.5	21.0	22.5	24.0
5	14.3	16.0	17.8	19.6	21.4	23.2	24.9	26.7	28.5
6	16.5	18.6	20.6	22.7	24.8	26.8	28.9	30.9	33.0
7	18.8	21.1	23.4	25.8	28.1	30.5	32.8	35.2	37.5
8	21.0	23.6	26.3	28.9	31.5	34.1	36.8	39.4	42.0
9	23.3	26.2	29.1	32.0	34.9	37.8	40.7	43.6	46.5
10	25.5	28.7	31.9	35.1	38.3	41.4	44.6	47.8	51.0
11	27.8	31.2	34.7	38.2	41.6	45.1	48.6	52.0	55.5
12	30.0	33.8	37.5	41.3	45.0	48.8	52.5	56.3	60.0

LIMITED WARRANTY: Keene Building Products, Inc. warrants to the initial purchaser only that the goods sold hereunder will be free from defects in material and workmanship and, except as otherwise set forth herein, will conform to the specifications provided. If any failure to meet this warranty appears within one year from the date of shipment of the goods, on the condition that Keene Building Products, Inc. will correct any such failure by either replacing or repairing any defective goods, at Keene Building Products, Inc.'s option.

The preceding paragraph sets forth the exclusive remedy for all claims based on failure of or defect in the goods sold hereunder, whether such failure or defect arises before or during the warranty period and whether a claim, however instituted, is based on contract, indemnity, warranty, tort (including negligence), strict liability or otherwise. The forgoing warranty is exclusive and is in lieu of all other warranties whether written, oral, implied or statutory.

Cylent Assurance Clip is a component in an overall floor/ceiling assembly. Its performance is affected by every other component and the likelihood of achieving code compliance is contingent upon many other trades including framers, plumbers, drywall contractors to name a few. Developers and general contractors are responsible for building properly and testing field performance as soon as possible in order to assure the reliability of the project.

WARNING: Laboratory tests are not a guarantee of field performance because of the issues noted above and many other design errors that may occur. Please consult a professional acoustical consultant to assure plans are proper and that the floor/ceiling assembly can perform to expectations.

