

## **Resilient Channel**

Resilient Channel is a cost-effective product used on steel and wood studs, and LSF and wood joists as an assembly for achieving specified STC (sound transmission classification) ratings.

The pre-punched slots or holes in the metal web provide resiliency to reduce sound transmission through the steel. Resilient Channel is also an economical framing member used for leveling the underside of wood joists in basements and used for drywall attachment.

#### STC Ratings

There are several STC ratings for non load-bearing steel studs, heavy gauge steel studs, and LSF joists that utilize resilient channel within the assemblies. For a suggested reference guide, please see the following documentation:

https://cssbi.ca/assets/resources/Design\_Manuals/CSSBI-57-02.pdf (Architectural Design Guide—Appendix A—STC and Fire Performance for Wall and Floor Assemblies)

http://www.steelframing.org/PDF/fire/SFAFire&AcousticGuideVersion11 (February2017).pdf



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Installation (as per ASTM C754-20):

Resilient furring channel shall be installed to wall framing members with the mounting flange of the resilient furring channel down, except at the floor where the attachment flange shall be permitted to be installed with the flange up to accommodate fastening to the framing members.

For wall framing members, the first (lowest) row of resilient furring channel shall be not more than 2 in. (50 mm) off of the floor (as measured from the floor to the center of the face of the resilient channel) and the highest row of resilient furring channel shall be not more than 6 in. (150 mm) from the ceiling (as measured from the ceiling to the center of the face of the resilient channel).



Manufactured in accordance with CAN/CSA S-136-16 (North American Specification for the design of cold-formed steel structural members), ASTM A653/A653M (Standard for steel sheet, zinc-coated (galvanized) or zinc-iron alloy-coated by the hot-dip process), ASTM C645 (Standard specification for non-structural steel framing members), and Standard CSSBI 61-18 (Manufacturer Certification Requirements for Cold-Formed Steel Framing Members - Certificate of Registration reference number Q107858).

Material: 1-1/4" width, 0.1642 lbs/ft, 0.0188" design thickness, 18 mils, 50 ksi yield strength, G40 zinc coating.

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# Ceilings

Resilient Channel is fastened to the underside of LSF joists, or commonly used for leveling the underside of wood joists in basements and used for drywall attachment.

For ceiling framing members the first row and the last row of resilient furring channel shall be located not more than 6 in. (150 mm) from the adjacent wall. The resilient channel shall be positioned with the slotted hole(s) directly over the framing member.

The resilient channel shall be attached to the framing member with Type  $-S \times 3/8$  in. (10 mm) pan head framing screws using the screw hole provided in the mounting flange. Gypsum panel products shall be attached to the resilient furring channel using screws and ensuring that the screw does not make contact with the framing member.

