**Improved Performance**

A series of tests on resilient channels were performed at National Research Council Canada (NRCC) for Bailey Metal Products Limited. These results showed improved STC performance with the new Bailey design **RC PLUS**.

The tested assemblies were constructed to be the same as assembly W3B, which is listed in table A-9.10.3.1.A of the National Building Code of Canada (NBCC). That assembly delivers an STC of 48. The same assembly with the improved Bailey resilient channel **RC PLUS** product delivers an STC of 51. It is also evident that the Bailey **RC PLUS** product delivered an STC of 50+ with one less layer of gypsum board.

**Labour Savings**

The Bailey **RC PLUS** design incorporates unique features that allow faster installation and uncompromised performance. Other resilient channel designs are required to have a specific placement of the section that requires the large oval hole to align with the stud or joist member*. To achieve this, the first stud spacing is measured and the channel is trimmed accordingly. This is not required with the Bailey **RC PLUS** design.

T-joist spacing (19.2”) or multiple stud or joist members common for floor and wall construction don’t allow this specific channel placement. This is not required with the Bailey **RC PLUS**.

*ASTM C754-11 states:
“The resilient furring channel shall be positioned with the slotted hole(s) directly over the framing member...”

Incorrect positioning with other designs of resilient channel has resulted in a reduction in performance of 1-3 STC points. Common conditions where the required positioning is a problem with conventional designs, is not an issue with the Bailey **RC PLUS**.
RC PLUS RESILIENT CHANNEL

Installation Note

Many assemblies in table A-9.10.3.1B of the NBCC illustrate joist spacing of up to 600 mm and RC channels perpendicular to the framing at up to 600 mm and supporting two layers of 5/8” type x board with insulation. For these combinations of maximum loads and spacing, consult with the gypsum board and resilient channel manufacturer. It is recommended to have the joist or the channels at 400 mm spacing.

Avoid situations where the resilient channel is placed between two layers of gypsum board or other panel material. This arrangement reduces and may almost eliminate the benefit of the resilient channels. This is sometimes used to reduce the load on the resilient channel to one layer of gypsum for two layers board assemblies.

Product Description

- **Overall Dimension:** 2” high and 1/2” deep with a knurled 1-1/4” wide surface to receive gypsum board.
- **Mounting Flange:** 1/2” wide and separated from the drywall flange with continuous offset uninterrupted slats, which is unique to this design.
- **Holes:** The mounting flange has pre-punched 0.165” holes, spaced at 1” centres, that will accept a #6 to a #8 screw thread diameter.

Screws – Fasteners

<table>
<thead>
<tr>
<th>Resilient Channel to Wood Framing</th>
<th>Resilient Channel to Steel Framing</th>
<th>Gypsum Board to Resilient Channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type W or Type S x 1-1/4” screws</td>
<td>Type S x 3/8” pan head screws</td>
<td>Type S bugle head</td>
</tr>
</tbody>
</table>

Note: select screw length to ensure that the screw point does not make contact with the framing member.

Standards & Specifications

Materials and coatings are to the requirements of ASTM A653/ A653-11. G40 galvanized Installation is to the requirements of ASTM C754-11.