

Why choose Farrat for Acoustic Isolation of Secondary Steelwork?

Supporting steel structures and positioning acoustic isolators is more effective and more cost efficient when done in the form of point loads rather than line or area loads. This brings with it the challenge of varying load profiles at each support point as it is very rare to have a perfectly symmetrical structure and load distribution.

For both structural and architectural reasons, it is important for a secondary structure to deflect at a minimal, but more importantly, constant rate. This can be very difficult to achieve in structures mounted on low stiffness isolators with eccentric or variable load distribution.

Farrat's AISS system can overcome this problem and provides huge adaptability and flexibility for acoustically isolating auditorium raked seating structures, box-in-box frames, plant decks, bridges and staircases achieving controlled live load deflection yet low natural frequencies.

To find out more about the products used, please see the following Farrat Datasheets:

AVW - AWTH - 16a (AWTH Washer)

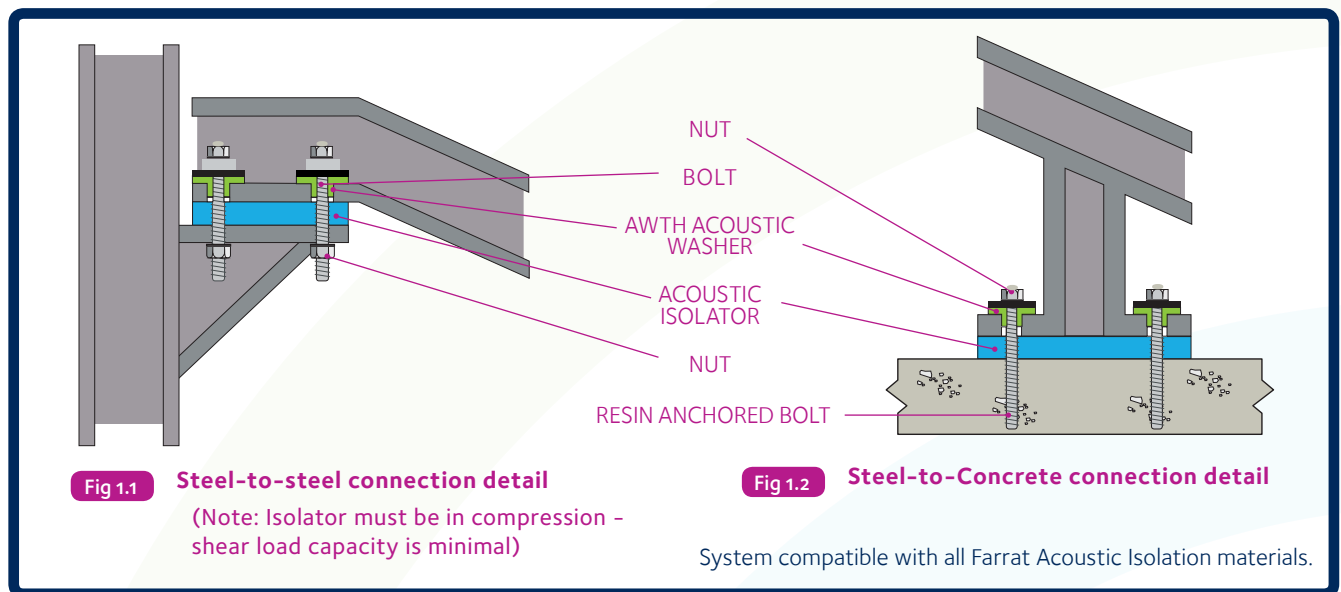
Loading $\leq 1\text{N/mm}^2$ (SLS): Isomat (NR) Range

Loading $\leq 4\text{N/mm}^2$ (SLS): (NR) Pad Range

Loading $> 4\text{N/mm}^2$ (SLS): Hybrid Bearing (NR) Range

Available to download at: www.farrat.com

SEE OVERLEAF FOR PRODUCT SPECIFICATION DETAILS



Features

- Acoustic isolators are sized to match baseplate profile to eliminate the risk of debris bridging the cavity.
- Consistent rate of deflection under load across the whole structure despite varying load profiles.
- Compatible with all steel frame and baseplate/bolt combinations (including steel-steel and steel-concrete connections) subject to isolator max load capacity.

For more information on using acoustic isolators with secondary steelwork (including standard details), please see the following Farrat Technical Brochure:

Applications - Cinemas

Available to download at: www.farrat.com

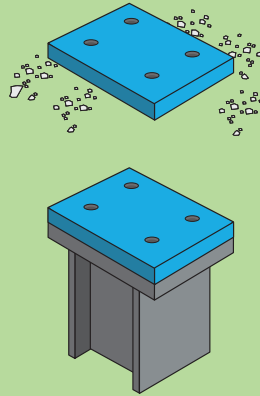
Secondary Steelwork Isolation- site applications:



Installation Instructions

1. Isolators must be placed on flat, level ground (typically, concrete with a pan-float finish, and large protrusions removed) or a steel section.

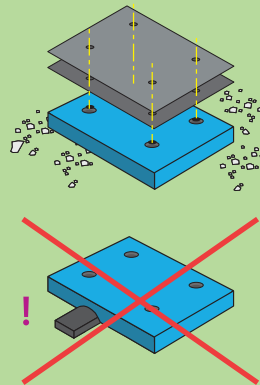
It must be uniformly supported across its whole area.



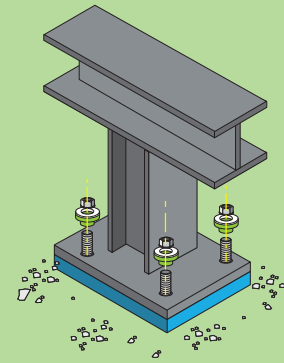
2. If height levelling is required, full area shim plates which match the profile of the baseplate must be used.

Rotational levelling is provided by the compressibility of the isolator.

Local packers are not acceptable.

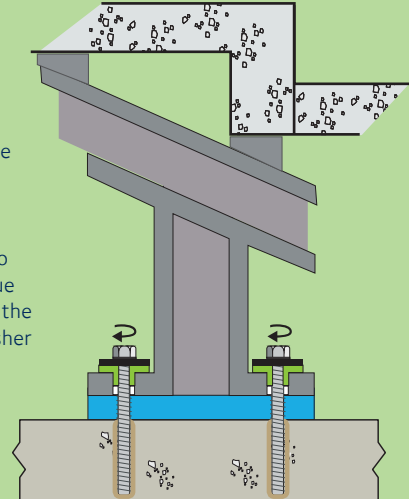


3. After the base plate has been seated, install the acoustic washers (with the bush facing into the baseplate hole) followed by the nut.



4. Once the structure has received its primary load (e.g. precast concrete) tighten the nuts to the required torque as detailed within the AWTH or STC washer datasheet.

DO NOT OVER TIGHTEN!



IMPORTANT NOTE: Due to constraints on rubber colour imposed by BS 6177, isolators of different rubber grades can look identical. It is essential to carefully review the location marking on the isolators prior to installation.

Ordering from Farrat

Acoustic performance of a rubber isolator is proportional to the load applied to it, therefore it is not possible to take the worst-case load as a basis as the design for all isolators within a project. To design a full-structure isolation system, we would require all of the information as shown in the table below:

PAD/PLATE DETAILS			BASEPLATE DIMENSIONS			UNFACTORED LOADS		
Location	Drawing Ref.	Qty	Length	Width	Bolt	Hole Size	DL	LL
			mm	mm		mm	kN	kN
Example Location 1	AP511 – B04	1	250	250	4	22	43.5	16.2

Typical Lead Times: 1 Week Design, 2 Weeks Fabrication

Please note that production cannot commence before we receive approved drawings, therefore lead time commences when both order and approved fabrication drawings are received.

AWTH Acoustic Washers

Acoustic washers are required wherever acoustic isolators are used. Our AWTH acoustic washers are available to match M6, M8, M10, M12, M16, M20 and M24 bolt sizes.

See the datasheet **AVW – AWTH – 16a** for further information including washer dimensions.

All information in this datasheet is for guidance only based on current knowledge and may be subject to change and correction.