



# Acousstop Vibro Mount Ceiling Installation & Technical Guide

## 1. Product Snapshot



High-performance airborne and structure-borne vibration isolation mount for ceiling-suspended systems.



Controls airborne noise-induced vibration; prevents transmission into building structure through hangers and threaded rods.



Hybrid Isolation Core: Epoxy-coated steel helical spring + High-damping viscoelastic polymer.



Built-in DS Mechanical Safety Stop – activates at 19 mm deflection, preventing collapse under extreme overload.



Load Capacity (Dynamic): 10–80 kg (98 N–785 N). Maximum Tested Load: 281.45 kg (Lab Certified).



Natural Frequency Range: 3.6–9.2 Hz (load dependent). Corrosion-protected steel components.

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## 2. Description & Features



### Description

- Excellent low-frequency isolation
- Increased stiffness at higher loads for stability and safety
- Progressive stiffness for stability
- Built-in mechanical safety stop



### Features

- Designed to achieve ultra-low natural frequency for ceiling applications
- Isolation improves significantly when operating frequency  $\geq 4 \times$  natural frequency
- Suitable for dynamic and static loads

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## 3. Installation System

AVMC-40-DS ceiling mount shall be installed using threaded rods suspended from the RCC slab. Ensure the surface is clean, level, and structurally sound before mounting.



### Step 1 – Suspend Threaded Rods

1. Fix threaded rods to the RCC slab at designated points.
2. Attach AVMC-40-DS mounts to the threaded rods.
3. Ensure rods are plumb and secure.
4. Verify load distribution per mount.



### Step 2 – Install GI Stud Framework

1. Form GI Stud – 48 mm ceiling framework.
2. Space studs at 600 mm centre-to-centre.
3. Fix framework to the AVMC-40-DS mounts as per manufacturer's recommendation.
4. Ensure no rigid contact with the RCC slab.



### Step 3 – Fix Gypsum Boards

1. Screw-fix gypsum boards directly to the stud framework.
2. Ensure no rigid contact with the RCC slab.
3. Verify proper alignment throughout.
4. Confirm effective vibration isolation is achieved.

**Note:** Mounting methods depend on the product profile and project instructions. Follow site specifications for fixing hardware and spacing. DS Safety Stop activates at 19 mm deflection.

## 4. Isolation Performance

### Proven Isolation

-77% isolation at 9 Hz; -94% at 18 Hz; -99% at  $\geq 36$  Hz.  
Isolation improves significantly when operating frequency  $\geq 4 \times$  natural frequency.

### Load Performance

At loads  $\geq 50$  kg, vibration isolation exceeds 90%.  
Dynamic load capacity: 10–80 kg (98 N–785 N). Maximum tested load: 281.45 kg (Lab Certified).

### Natural Frequency

Range: 3.6–9.2 Hz (load dependent). At 10 kg: 9.23 Hz; at 30 kg: 5.04 Hz; at 50 kg: 4.21 Hz; at 60 kg: 3.99 Hz; at 70–80 kg: 3.62 Hz.

### Applications

Fitness Centre, Gym, Music Room, Home Theatre, School Class Rooms, Meeting Rooms, Studios, and similar spaces requiring vibration isolation.

## 5. Do's & Don'ts (Quick Reference)



### Do

- Install using threaded rods suspended from the RCC slab.
- Maintain 600 mm centre-to-centre spacing for GI Stud framework.
- Ensure no rigid contact between gypsum board and RCC slab.
- Follow manufacturer's recommendation for mount fixing.



### Don't

- Exceed dynamic load capacity of 80 kg per mount.
- Allow rigid contact between ceiling assembly and building structure.
- Ignore the DS Safety Stop deflection limit of 19 mm.
- Use in environments without corrosion-protected components.

## 6. Help & Support

### India

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