

When Do You Need Testing?

Identifying the critical moments for acoustic assessment before material selection.

Customer resource • factual guide • Vancouver / BC commercial project context

Key takeaway: Testing is most useful when the cause of a complaint is uncertain, the project has a measurable requirement, or the cost of guessing is higher than the cost of assessment.

Test before selecting materials when

The complaint is unclear	People may describe echo, noise, privacy, vibration, HVAC rumble, or neighbour transfer using the same word: “soundproofing.” Testing helps separate the causes.
The space has hard finishes	Restaurants, lobbies, gyms, classrooms, studios, and open offices with exposed structure often need measured or calculated reverberation before treatment quantities are finalized.
Privacy is a requirement	Medical, legal, HR, finance, counselling, education, and executive spaces often need more than a visual treatment plan.
Tenant or landlord criteria apply	Lease, base-building, or owner standards can require a specific metric, test method, or acceptance record.

Useful test types

RT60 / reverberation	Measures how long sound lingers in a room after the source stops. Useful before acoustic panel, baffle, cloud, or ceiling recommendations.
Background noise	Measures HVAC, exterior, equipment, or operational noise. Useful when speech clarity or comfort is affected.
Airborne isolation	Measures sound transfer between rooms, through façades, or across demising assemblies.
Impact isolation	Measures structure-borne transfer through floor/ceiling assemblies, often from footsteps or rolling impacts.
Sound masking commissioning	Measures spectrum, level, uniformity, and zone performance after installation.

When not to over-test

Small low-risk rooms	A simple meeting room with obvious echo and no performance requirement may only need a practical absorption calculation and visual review.
Known standard assemblies	If an assembly is already designed, detailed, and accepted by the design team, testing may be reserved for closeout or dispute resolution.
Operational issues	Acoustic testing may not solve problems caused primarily by seating policy, loud equipment placement, open doors, or user behaviour.

Decision sequence

1	Define the decision the test must support.
2	Select the metric and method that match the concern.
3	Record field conditions during testing.
4	Use the findings to size treatment, revise assemblies, or confirm commissioning.
5	Retest only when changes need acceptance documentation.

Use note: This guide is intended for customer education and early coordination. It is not a code ruling, engineered specification, or substitute for field measurements where a numeric performance target is required.