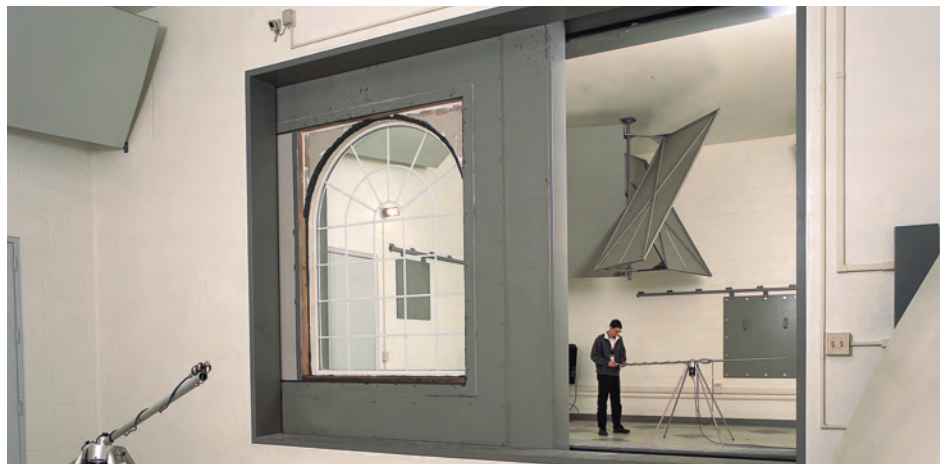


BUILDING & CONSTRUCTION

ACOUSTICAL TESTING

EVALUATING THE ACOUSTICAL PERFORMANCE OF BUILDING MATERIALS FOR CERTIFICATION AND PRODUCT DIFFERENTIATION

The demand for high performing and sound reducing building materials has continued to rise in recent years as growing concern about the effect of sound on human performance is leading to increased regulation.



With the most advanced acoustical test labs on the East and West Coast, Intertek has the acoustical expertise and capabilities to help you meet your acoustical needs and differentiate your product in the market.

Excessive noise in our schools, workplaces, homes, and factories, have been known to cause fatigue, increased stress levels, speech impairment, productivity issues, and even hearing loss. These effects have led to an increased regulation causing manufacturers to pay more attention to the acoustical properties of their products as accurate acoustical performance measurements are becoming critical for certification of building products, materials, and appliances.

With the ability to test for sound absorption, sound transmission loss, impact sound transmission, and sound power testing, Intertek's full suite of acoustical capabilities is what you need to validate, certify, and differentiate your products in the market. With one of the most trusted reputations in the industry, we can provide you the valid data for architects, facility owners, and consultants.

Capabilities

Intertek has the capabilities and expertise to guide you through any acoustical performance test. With some of the industry's most innovative and high-tech testing equipment, you can be assured your test results are accurate.

Sound Absorption Test

This measures a material's ability to absorb sound and reduce noise levels in a space. Utilizing the appropriate amount of sound absorption in a space will control reverberation, improve speech intelligibility and enhance the listening environment.

Sound Transmission Loss Test

This measures a product or system's ability to attenuate sound that passes through it. The higher the sound transmission loss, the better the product or system will isolate noise from one area to an adjacent area. This isolation could be required between adjacent spaces inside a building or it could be from required from the outside to the inside of the building.

Impact Sound Transmission

This is the measurement utilized to evaluate the impact isolation performance of floor/ceiling systems that are excited by a standardized tapping machine. Higher impact isolation ratings result in lower levels of noise that are transmitted from upper to lower spaces inside a building.

Sound Power

This is the measure of the total amount of sound that is generated by a machine, appliance, or other sound emitting devices.

Laboratory acoustical testing is applicable for the following products:

- Windows
- Curtain Walls
- Window Walls
- Fibrous Insulation
- Wall Panels
- Suspended Ceilings
- Floor Coverings
- Roof Assemblies
- Furniture
- Hanging Baffles
- Hoodliners
- Noise Enclosures
- Power Tools
- Doors
- Storefronts
- Interior/Exterior Walls
- Foam Insulation
- Carpeting
- Office Screens
- Floor Underlayments
- Skylights
- Theater Chairs
- Highway Barriers
- Headliners
- Appliances
- Vacuum Cleaners

Acoustical field testing

With field deployment capabilities throughout North America, Intertek has the testing vans to perform acoustical field measurements. Field sound transmission loss tests can be performed on:

- Interior wall partitions
- Floor/ceiling systems
- Building facades
- Windows / Doors
- Curtain walls

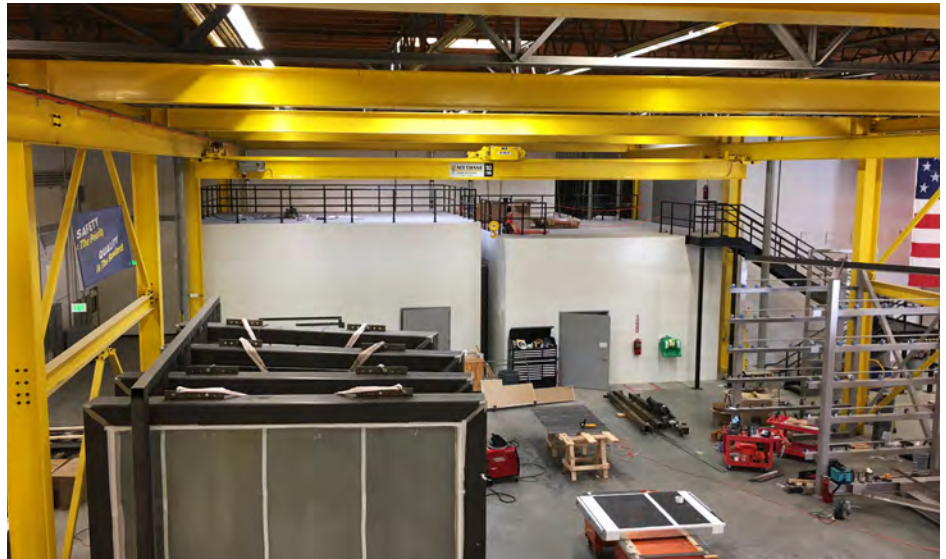
Site noise assessments can also be conducted to determine if existing noise levels exceed local, state, or federal noise limitations.

Benefit to our clients

- Unique test chamber design allows rapid testing of several specimens a day.
- Field acoustic teams can be deployed from four laboratory locations nationwide.
- Features large reverberation chambers sitting on fiberglass isolation pads to decouple the chambers from each other and the rest of the building for optimum performance.
- Major acoustical testing centers on East and West Coast.

Our laboratory test methods include:

ANSI S12.51 / ISO 3741
ASTM C423 / ISO 354
ASTM C522
ASTM E90 / ISO 10140-2
ASTM E492 / ISO 10140-3
ASTM E596



ASTM E1050
ASTM E1222 / ISO 15665
ASTM E1414
ASTM E1425 / AAMA 1801
ASTM E2179 / ISO 10140-1 Annex H
ISO 10140-1 Annex K

Our field test methods include:

ASTM E336
ASTM E966
ASTM E1007
Additionally, we regularly work with manufacturers and associations to develop custom testing programs.

Certification

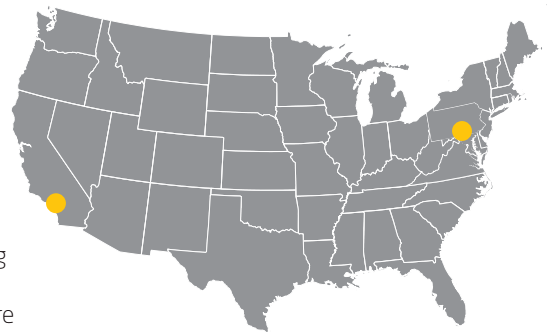
We offer acoustical ETL certification comprising listings that will reference the acoustical performance of your certified product or entire assembly. Utilizing our certification mark will reflect a commitment to product performance and helps you stand out from the competition by having your acoustical rating certified by the most reputed building product certified body. It will allow you to demonstrate the acoustical performance of your product in the marketplace.



Acoustic Testing Locations

Strategically placed acoustic testing locations on the East and West Coast, as well as China.

York, Pennsylvania
Lake Forest, California
Shanghai, China



FOR MORE INFORMATION

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 intertek.com/building/acoustical