

Audiometric Room

The function of an Audiometric Rooms is to provide proper acoustical environment so that tests can be conducted without much interference from outside noise. Therefore, location of where the audiometric room to be placed is the single most important decision for one to make before constructing the Audiometric Rooms.

ISTIQ Audiometric Room offer the best solutions to overcome the problems in audiometric tests. The room is designed to have adequate ventilation and lighting so the patient and tester will be comfortable during hearing evaluation.



Applications

ISTIQ Audiometric Room are suitable for a wide spectrum of applications. It is specially designed to suit everyone's need where noise control is the main concern.

Typical applications are as follows:

- hospitals
- medical centres
- factories
- industrial testing stations
- administration areas

Selection Guidelines

ISTIQ Audiometric Room consider two important stages to achieve the required room specifications. Firstly, is to determine the background noise levels. Then, the type of room which is going to be implemented will be selected. The room chosen should provide ample noise reduction to bring the internal noise down to those prescribed by The Department of Occupational Safety and Health (DOSH).

Sound pressure level of the proposed location of an audiometric room must be measured. This includes each test tone of octave band centre frequencies. From the measurement, the type of audiometric room can be selected, whether a single or double wall panel.

The Department of Occupational Safety and Health (DOSH) has specified that the maximum allowable sound level inside the Audiometric room are as follows:

<i>Freq (Hz)</i>	<i>500</i>	<i>1k</i>	<i>2k</i>	<i>4k</i>	<i>8k</i>
dB	27	30	35	42	41

Construction

ISTIQ Audiometric Room are fabricated from a 4" (100mm) thick, steel panel which weighs approximately 10lbs. per sq.ft. This panel has a solid outer surface and a perforated inner surface and is filled with high density acoustical fill and damping material.

Inert, heat resistant, non-combustible type of different acoustical fill with different densities is particularly selected to give the optimum overall noise absorption. Floating floor normally will be incorporated at the bottom of the audiometric room to reduce the transmission loss of the noise.

Technical Specification

Acoustic Performance	
Frequency (Hz)	125 250 500 1k 2k 4k
Noise Reduction in dB	28 34 39 48 50 50
Standard Room Dimension	
External Dimension	1200 W x 950 L x 2100 mmH
Internal Dimension	1000 W x 750 L x 1800 mmH
Door Perimeter	710 W x 1780 mmH
Wall Panels	
Thickness	100 mm
External	2.3mm M.S painted with epoxy finishing
Acoustic Infill	60 - 80kg/m ³ density Rockwool
Internal	0.7mm M.S Cold Rold painted with epoxy
Floor Construction	
Thickness	100 mm
Upper Surface	3.0 mm M.S c/w structurally reinforced
Bottom Surface	Loaded with vibration isolator acting as Floating Floor
Door Construction	
	Flush Mounted c/w magnetic-seal
Jack Panel	
	3 ring tip with sleeve stereo plug completely wired
Standard Features	
	Double glazed observation window Carpeted floor Absorptive acoustic ceiling Lighting & Electrical Connection Ventilation Silencers for Inlet and Outlet Jacked panel
Non-Standard Rooms	
	Any special requirement other than standard size rooms can be supplied. This is to cater any needs for some situations where the standard size rooms are not suitable to use. ISTIQ engineers are always available to discuss your specific requirements.

