

MEDICAL AND SCIENCES AUDIOLOGICAL ROOMS AND SUITES BY **ECKEL**...

Your sound control specialists.

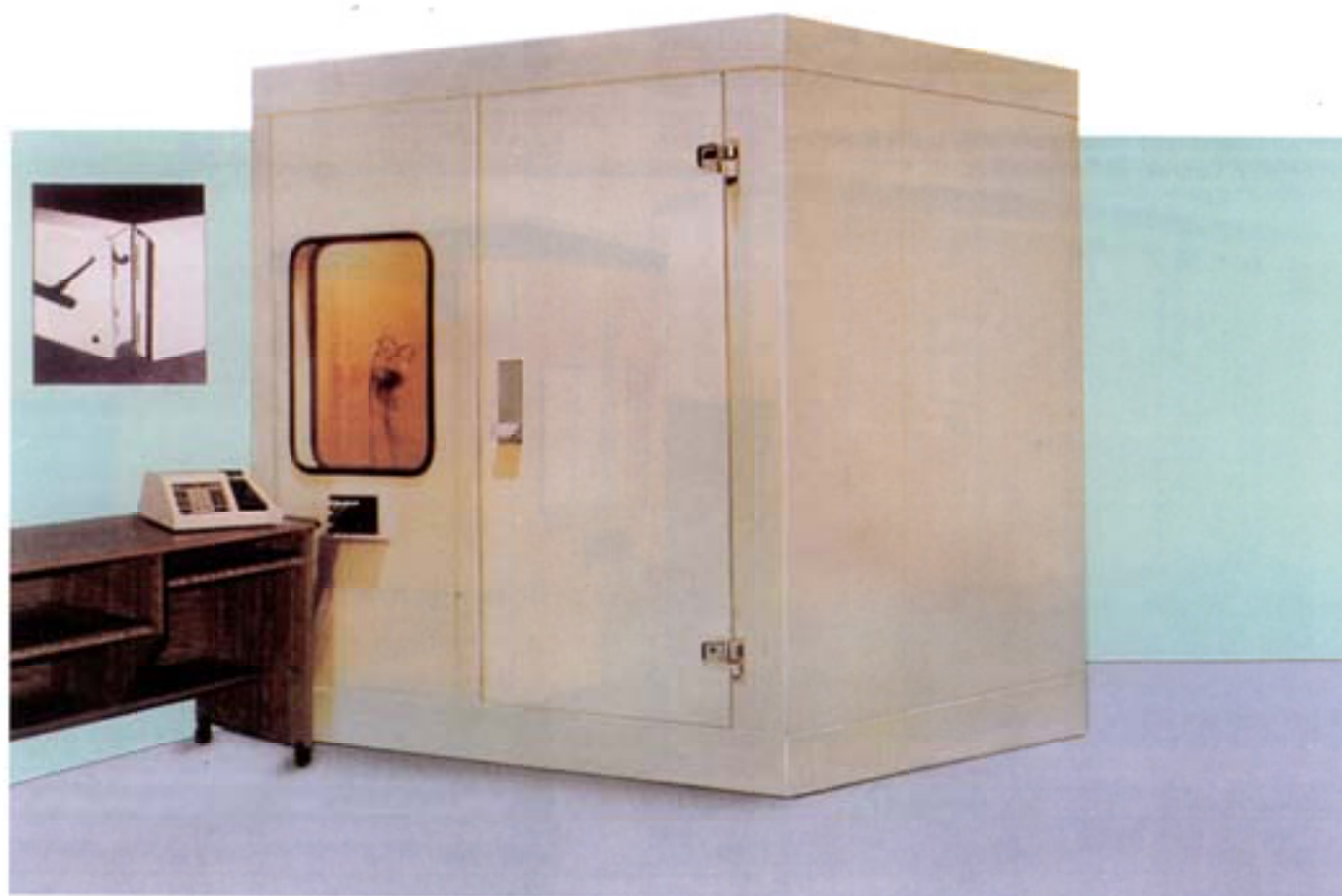
Eckel offers a wide range of standard rooms and custom-made suites to meet audiological clinical and research requirements. All combine high performance, versatile design and economy. Eckel acoustically engineered G-Panel construction affords excellent noise reduction. Choose from 19 demountable (G-Series panels) standard models and custom-made rooms for your specific needs. Rooms are easy to install, easy to take down and move.

G-SERIES Panel System

All Eckel models feature these advantages:

- 4" G-series Cam-Lok attenuating panels.
- Efficient and silent ventilation system.
- Double-glazed safety glass window.
- Flush sill door with magnetic gasket seal.
- Non-visible, internal electrical wiring.
- Incandescent light fixtures – Jack panels – Non-flammable carpet.
- "Air Cushion" vibration isolators.

Custom designs are available to utilize existing space.



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ECKEL
NOISE CONTROL TECHNOLOGIES

Audiometric Rooms



Single Wall

The C10 series are ideal for industry and private clinics.

The smaller models have the inlet silencer in the rear wall and the exhaust silencer integrated in the ceiling.

In the larger models, both silencers are in the ceiling panels. All models have a clinical Jack panel for greater versatility.

In both cases, the walls are mounted on the audiometric room floor which in turn rests on "air cushion" vibration isolator rails.

Ideal for sound field measurements, brain stem audiometry, hearing aid evaluation.
Includes integrated ceiling ventilation system.

DIMENSIONS

Model	Inside	Outside
C11	33" x 44" x 6'6" 838 x 1118 x 1981 mm	3'5" x 4'4" x 7'9" 1041 x 1321 x 2362 mm
C12	44" x 55" x 6'6" 1118 x 1397 x 1981 mm	4'4" x 5'3" x 7'9" 1321 x 1600 x 2362 mm
C13	4'8" x 5'6" x 6'6" 1422 x 1676 x 1981 mm	5'3" x 6'2" x 7'9" 1600 x 1800 x 2362 mm
C14	5'6" x 6'5" x 6'6" 1676 x 1956 x 1981 mm	6'2" x 7'1" x 7'9" 1800 x 2159 x 2362 mm
C15	6'5" x 7'4" x 6'6" 1956 x 2235 x 1981 mm	7'1" x 8'0" x 7'9" 2159 x 2438 x 2362 mm
C16	7'4" x 8'3" x 6'6" 2235 x 2515 x 1981 mm	8'0" x 8'11" x 7'9" 2438 x 2718 x 2362 mm
C17	8'3" x 9'2" x 6'6" 2515 x 2794 x 1981 mm	8'11" x 9'10" x 7'9" 2718 x 2997 x 2362 mm



Double Wall

The C20 series offers higher noise reduction characteristics which are a must in areas where the ambient noise levels are excessively high.

The interior walls are mounted on the audiometric room floor while the exterior walls are placed on the existing floor. Each double wall room is provided with a combination in-swing and out-swing, flush sill, magnetic seal doors.

When necessary, the audiometric rooms can be modified (dimensions, door, window placement, etc.) to your specific requirements.

Suitable for clinical and research applications.
Includes integrated ceiling ventilation system.

DIMENSIONS

Model	Inside	Outside
C24	5'6" x 6'5" x 6'6" 1676 x 1956 x 1981 mm	7'5" x 8'5" x 8'5" 2261 x 2565 x 2565 mm
C25	6'5" x 7'4" x 6'6" 1956 x 2235 x 1981 mm	8'5" x 9'4" x 8'5" 2565 x 2845 x 2565 mm
C26	7'4" x 8'3" x 6'6" 2235 x 2515 x 1981 mm	9'4" x 10'3" x 8'5" 2845 x 3124 x 2565 mm
C27	8'3" x 9'2" x 6'6" 2515 x 2794 x 1981 mm	10'3" x 11'2" x 8'5" 3124 x 3404 x 2565 mm

Audiometric Suites

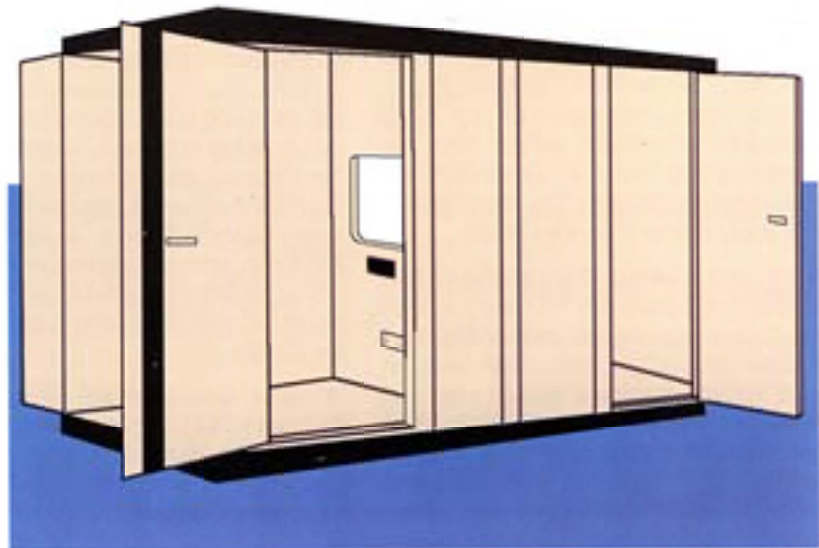
Single Wall

Two single wall examination rooms can be united to form an audiometric suite. The noise reduction characteristics therefore correspond to the attenuation of a single wall room.

However the attenuation of one room with regards to the other resembles the attenuation characteristics of a double wall room.

The audiometric suites are equipped with a wide 30 window as are the majority of our rooms. This offers a particular advantage when testing young children.

For applications requiring strict acoustic control in both test and control environments.
Includes integrated ceiling ventilation system.



DIMENSIONS

Model	Control Room	Exam Room	Outside Dimension
S34	5'6" x 4'8" x 6'6" 1676 x 1422 x 1981 mm	5'6" x 6'5" x 6'6" 1676 x 1956 x 1981 mm	6'2" x 12'9" x 7'9" 1880 x 3886 x 2362 mm
S45	6'5" x 5'6" x 6'6" 1956 x 1676 x 1981 mm	6'5" x 7'4" x 6'6" 1956 x 2235 x 1981 mm	7'1" x 14'6" x 7'9" 2159 x 4420 x 2362 mm
S56	7'4" x 6'5" x 6'6" 2235 x 1956 x 1981 mm	7'4" x 8'3" x 6'6" 2235 x 2515 x 1981 mm	8'0" x 16'4" x 7'9" 2438 x 4978 x 2362 mm
S57	8'3" x 7'4" x 6'6" 2515 x 2235 x 1981 mm	8'3" x 9'2" x 6'6" 2215 x 2797 x 1981 mm	8'11" x 18'2" x 7'9" 2718 x 5537 x 2362 mm

Single Wall Control / Double Wall Examination-Rooms

This is the suite that so many hospitals insist on having.

The double wall examination room assures maximum patient cooperation while the single wall control room permits live voice speech testing without any interference from outside noise. The control room has a single door and examination room has a double door system.

These audiometric suites are available with or without a floor in the control room.
Designed for trouble-free testing.
Includes integrated ceiling ventilation system.



DIMENSIONS

Model	Control Room	Exam Room	Outside Dimension
S121	7'4" x 5'6" x 7'9" 2235 x 1676 x 2362 mm	6'0" x 6'8" x 6'6" 1829 x 2032 x 1981 mm	8'0" x 14'6" x 8'5" 2438 x 4420 x 2565 mm
S122	8'3" x 6'5" x 7'9" 2515 x 1956 x 2362 mm	6'11" x 7'7" x 6'6" 2108 x 2311 x 1981 mm	8'11" x 16'4" x 8'5" 2718 x 4978 x 2565 mm
S123	9'2" x 7'4" x 7'9" 2794 x 2235 x 2362 mm	7'10" x 8'6" x 6'6" 2388 x 2591 x 1981 mm	9'10" x 18'2" x 8'5" 2997 x 5537 x 2565 mm
S124	10'1" x 8'3" x 7'9" 3073 x 2515 x 2362 mm	8'9" x 9'5" x 6'6" 2667 x 2870 x 1981 mm	10'9" x 20'0" x 8'5" 3277 x 6096 x 2565 mm

Optional floor in control room available, consult factory

G-SERIES Audiometric Examination Rooms

Technical Specifications

Diagnostic examination room will be Eckoustic® G-Series, Audiometric Examination room manufactured by Eckel Industries. The room utilizes high performance 100 mm / 4" G-Series, Cam-Lok panel construction. Standard features will apply unless otherwise noted.

Wall and Ceiling Construction: Wall and ceiling panels are 100 mm / 4" thick fabricated with 14 ga cold rolled steel frames and 16 ga steel outer surfaces, and framing members spaced not more than 610 mm / 24" centers. The inner faces are 22 ga cold rolled steel perforated with 3/32" holes on 5/32" staggered centers. Inside of the outer face panels will be damped with mineral material. Panels will be filled with incombustible and inert acoustical filler having a density of not less than 1.4 kg / 3 lb per cubic foot. Panels interlock and provide an acoustical seal using a minimum of two Cam-Lok interlocking panel connectors and a minimum of two sets of closed cell acoustic rubber seals.

Floor Construction: Floors are 100 mm / 4" thick with 11 ga cold rolled steel walking surfaces, 14 ga cold rolled steel framing members and 16 ga bottom face sheets. Acoustical filler is high density, incombustible mineral wool fill with a minimum density of 1.4 kg / 3 lb per cubic foot. The entire floor floats on vibration isolators and rails. Isolators are rated with a natural frequency of 6.5 Hz.

Door Construction: Doors are 100 mm / 4" thick, of similar construction to that of the walls and ceiling. Door is flush mounted on heavy duty cam lift hinges. A double magnetic gasket sealing system and flush sill seal design assures the acoustic seal. Standard door is 927 mm x 1918 mm with an opening of 813 mm x 1873 mm (36-1/2" x 75-1/2" with an opening of 32" x 73-3/4"), and is of out-swinging design.

Window Construction: Double-glazed 610 mm x 762 mm (24" x 30"). Window is constructed using 6 mm (1/4") safety glass and is set in the panel using a visco-elastic gasket.

Ventilation: Ventilation silencers are wall or ceiling mounted. A total of two silencers, an intake and exhaust, are provided for each room. Silencers are designed to provide up to 250 cfm each with an entrance velocity of less than 300 cfm. The system will not generate noise levels in excess of those specified by ANSI S-1 1991 standards.

Electricity and Lighting: Rooms are equipped with at least one double head incandescent light and one duplex receptacle. Optional additional lighting and electrical outlets are available. Electrical service runs inside the acoustic wall system whenever possible, and is connected to the outside by way of a surface exterior mounted electrical box.

Clinical Jack Panel: A pre-wired jack panel is provided with nine (3-wire) phone jacks, one Cinch Jones 303 and one 304 connector, and a 1" (25 mm) capped pass-through connection. The panel face is removable and will not detract from the room's acoustical performance.

Finish: The interior and exterior surfaces are finished with a durable commercial enamel. The standard colour is beige, however, custom colours are available.

Noise Reduction: The audiometric room tested in room configuration by an independent laboratory shall exhibit the following minimum characteristics when tested per ASTM E596-77.

- (i) data subject to change without notice
- (ii) Attenuation may vary slightly depending on the acoustical environment.

Optional Features:

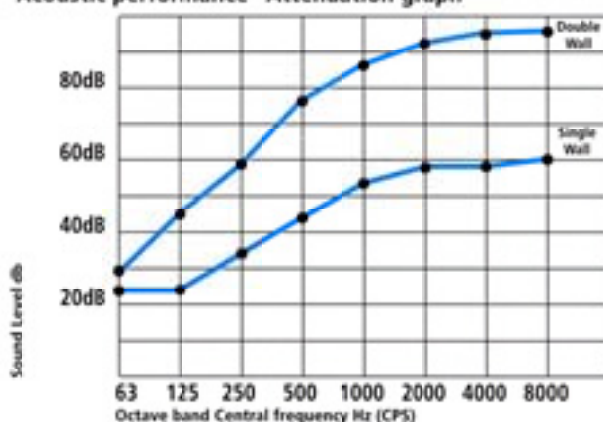
- One Way Glass
- Special Paint Colours
- Special Oversize Windows
- Non-Standard Jack Panel
- Extra or Special Lighting
- RF Shielding Package

All components shall be UL approved and Hospital Grade. All wiring shall be in accordance with the N.E.C.

ACOUSTIC PERFORMANCE ATTENUATION

HERTZ	Single Wall	Double Wall
63	24	29
125	24	44
250	32	59
500	44	75
1K	53	86
2K	58	91
4K	59	>95
8K	59	>95

Acoustic performance Attenuation graph



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