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120a Series Audiology Booths

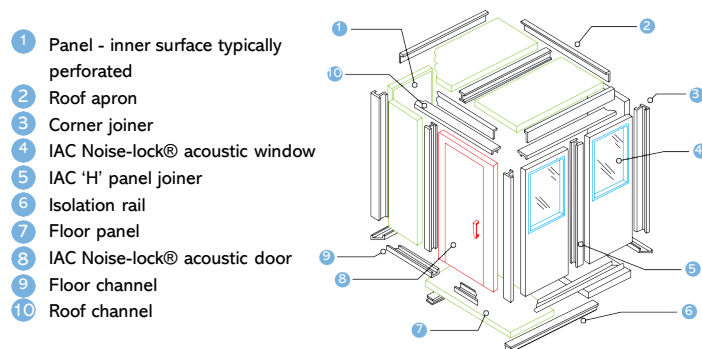
MAKING
THE
WORLD

A QUIETER
PLACE

Standard Audiology Booths

All IAC audiometric booths are constructed using Moduline™, an integrated system of laboratory and field tested components - including wall and roof panels, structurally isolated floors, doors, windows and silenced ventilation systems. The system offers many key advantages over traditional building materials:

- Guaranteed acoustic performance and compliance with all major technical standards, including HTM 2045 / ISO 8253
- Clean, rapid installation, keeps building time and mess / disruption to an absolute minimum
- Strong, lightweight structures are approximately 1/3 the weight of conventional structures of the same acoustic performance
- Rooms can be dismantled and moved to a different location at low cost and with no loss in acoustic performance



IAC modular audiology rooms are available in a wide range of sizes and can be finished to suit individual requirements. The range of rooms available are:

- **40a Range** - single skin construction complete with acoustic window
- **TETRA** - single skin construction for use in corners to save space
- **120a Range** - double skin construction for extraacoustic performance complete with quadruple glazed acoustic window
- **act Range** - a mixture of single / double skin construction rooms, each with adjoining control/observation room

IAC standard booths are constructed from 102mm thick IAC Noishield™ panels and offer a fitting environment for a whole range of audiological investigations and measurements, including bone conduction tests, speech therapy and psychological evaluations.



Engineered to perfection.

Over 50 years experience in manufacturing and installing audiology rooms has given IAC the ability to provide the best possible facilities in both aesthetics and performance.

120a Series Audiology Booths

Providing the optimal environment for hearing testing and medical and scientific research

Noise Reduction & Sound Absorption

Noise Reduction*: The minimum allowable noise reduction of completely assembled rooms, as tested in accordance with ASTM Standards in a recognised independent and approved laboratory, as shown in the table below.

Sound Absorption: The composite sheet metal and sound absorbing assembly shall have a sound absorption coefficient based on laboratory tests in accordance with ASTM C423-77 as shown in the table below.

	Octave Band Centre Frequency (Hz)						
	125	250	500	1000	2000	4000	8000
Noise Reduction (dB) for 120a Series Booths**	47	62	83	91	99	97	91
Sound Absorption Coefficient	0.49	0.37	0.83	0.96	0.99	1.00	-

Noise Reduction measurements shall be made in accordance with the following ASTM Designations: E596 and, where applicable, portions of E90 and E336.

* Defined as the measured difference between the sound pressure levels in a reverberant room, outside the booth and inside the booth.

* +/- 3dB for field instrument accuracy.

NIC – Noise Isolation Class, single number rating system for noise-reduction characteristics.

Specification for IAC 120a Series Audiometric Examination & Medical Research Booths

Roof & Wall Construction: Roofs and walls are constructed from standard IAC Noise-Lock® 2 acoustic panels, 102mm thick. Average weights are no less than 50kg/m².

Floor Construction: IAC Acousti-flote™ floors shall be 50mm high and structurally reinforced. All floors are carpeted. Average weights are no less than 90kg/m². Floors float on properly loaded vibration isolators rated for a natural frequency of 6.5Hz for maximum elimination of structural noise.

Acoustic Infill: Floor, wall, door and roof panels shall be sound retardant, absorbing, inert, mildew resistant and vermin proof. Heat transfer factor shall be no more than 0.397W/m²°C.

Door Construction: IAC Noise-lock®, flush fitting doors with twin magnetic seals, cam lift hinges and pull handles shall be provided with a clear opening of 838mm wide x 1857mm high.

Wall & Roof Panel 'H' Joiners: Wall and roof panels shall be acoustically and structurally joined together by IAC 'H' joiners, to maintain the acoustic integrity of the booth.

Window Construction: Windows shall be 750mm x 600mm (sizes may vary in some orientations), using sealed double glazed assemblies within profiled steel frames.

Jack Panel: Jack panel comprising of nine 6.4mm three-pole jack sockets and one Type A USB connector shall be provided below the window. The panel shall be designed and installed to preserve the acoustic integrity of the booth.

Electrical: All booths are provided with lighting operated from an adjacent switch. A separate switch will control the ventilation system. Power operation 240 volt, 50Hz. (All cable supplied by others).

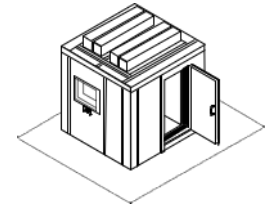
Ventilation: All models shall have the ventilation system roof or wall mounted and be operated in conjunction with special ventilation panels. A further 370mm should be added to the height, width or depth of the booth, depending on the location of the system.

Finish: All booths are supplied in a factory finish polyester powder coated condition. Colour: RAL 9002 (grey/white). All floors are covered in an anti-static carpet, colour: Light blue.

120a Series - Standard Sizes Available

The IAC 120a series is a range of double-walled booths for single or multiple occupancy.

- Door Opening: 838mm wide x 1857mm high
- Window Clear View: 750mm wide x 600mm high
- Ventilation: A further 370mm should be added to the width, depth or height of the booth, depending on the preferred location of the ventilation system



Model	Internal Dimensions (mm)			External Dimensions (mm)			Room Weight (kg)
	Width	Depth	Height	Width	Depth	Height	
120a-1	1322	1067	1995	1930	1675	2349	1894
120a-2	1881	1880	1995	2489	2488	2349	3006
120a-3	2135	2134	1995	2743	2742	2349	3463
120a-4	2592	2591	1995	3200	3199	2349	4349
120a-5	2846	2997	1995	3454	3605	2349	5039

Optional Extras (additional costs apply)

- Acoustic double glazed vision panel within door (150mm x 600mm high)
- Emergency light pack
- Internal power sockets
- RF and electrostatic shielding
- Fabric covering to internal walls
- Power filters
- Special jack panels, cut-outs and plugs
- Increased clear opening width doors (where possible)
- One-way viewing film fitted to window
- High frequency fluorescent lights
- Additional colour options are available for all panels and doors





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IAC has worldwide offices and manufacturing plants in the UK, Australia, Canada, China, Malaysia, Indonesia, Thailand, Philippines Denmark, France, Germany, Italy, Spain, UAE - Dubai, USA Houston, USA Lincoln, USA - New York.

