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## Operating manual IAC audiometry rooms 40a series



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### Room Details:

The IAC 40a-Series is a range of single-walled booths for individual or multiple occupancy.

### Dimensions and weight:

IAC Acoustics Standard cabins 40a-Series					
Model		Width (mm)	Length (mm)	Height (mm)	Weight approx. (kg)
40a-1	External	1,210	1,120	2,197	ca. 640
	Internal	1,016	916	1,995	
40a-2	External	1,424	1,220	2,197	ca. 760
	Internal	1,220	1,016	1,995	
40a-2se	External	1,424	1,220	2,197	ca. 760
	Internal	1,220	1,016	1,995	
40a-2XL	External	2,440	1,424	2,197	ca. 1,270
	Internal	2,236	1,220	1,995	
40a-3	External	2,135	2,030	2,223	ca. 1,550
	Internal	1,931	1,826	1,995	
40a-4	External	2,439	2,334	2,223	ca. 1,850
	Internal	2,235	2,130	1,995	
40a-5	External	2,944	2,744	2,223	ca. 2,350
	Internal	2,740	2,540	1,995	
40a-6	External	3,254	3,049	2,223	ca. 2,730
	Internal	3,050	2,845	1,995	
TETRA	External	2,134	2,134	2,197	ca. 2,250
	Internal	1,930	1,930	1,995	

### Noise Reduction & Sound Absorption

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

**Sound Absorption:** The composite sheet metal and sound absorbing assembly shall have a sound absorption coefficient based on laboratory tests.

Noise Reduction measurements shall be made in accordance with the following ASTM Designations: E 596 and, where applicable, portions of E 90 and E 336.

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

+/- 3 dB for field instrument accuracy.

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

## Specification for IAC 40a 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 50 kg/m<sup>2</sup>.

**Floor Construction:** IAC Acousti-flote™ floors shall be 50/80 mm high and structurally reinforced. All floors are carpeted. Average weights are no less than 90 kg/m<sup>2</sup>. Floors float on properly loaded vibration isolators rated for a natural frequency of 6,5–9 Hz for maximum elimination of structural noise. This enables a low-level entry, e.g using a wheelchair. Alternatively floor systems are available.

### 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 0.397 W/m<sup>2</sup> °C.

### Door Construction:

IAC Noise-Lock ®, flush fitting doors with twin magnetic seals, special hinges and pull handles shall be provided with a clear opening of 840 mm wide x 1860 mm high.

### Wall & Roof Panel 'H' Joiners:

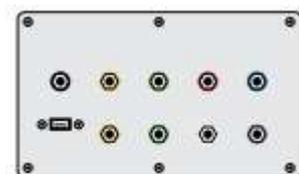
Wall and roof panels shall be acoustically and structurally joined together by IAC 'H' joiners, to maintain the acoustic integrity of the booth.

### Window Construction:

Windows shall be 750 x 600 mm (sizes may vary in some orientations), using sealed double glazed as-semblies within profiled steel frames.

### Jack Panel:

Jack panel comprising of nine 6.3 mm three-pole jack sockets and one Type A USB connector is provided below the window. The panel is designed and installed to preserve the acoustic integrity of the booth.



Jackpanel below window

### Electrical:

All booths are provided with lighting operated from an adjacent switch. A separate switch will control the ventilation system. Power operation 230 volts, 50 Hz. (All cable supplied by others).



Lighting module

**Ventilation:**

All models have the ventilation system (power of 120 m<sup>3</sup>/h) roof or wall mounted and be operated in conjunction with special ventilation panels. A further 380 mm should be added to the height, width or length of the booth, depending on the location of the system. All IAC booths equipped with a ventilation system should be installed in rooms with sufficient ventilation.

**Finish:**

All booths are supplied in a factory finish coated condition. Color: RAL 9010 (white). All floors are covered with an anti-static carpet, color: grey.

**Optional Extras (additional costs apply):**

- Acoustic double glazed vision panel within door (300 mm x 915 mm high)
- Emergency light pack
- Internal power sockets
- RF and electromagnetic shielding
- Fabric covering to internal walls
- Special connection panels, cut-out
- Increased clear opening width doors (where possible)
- Additional colour options are available for all panels and doors
- Power filters

**Cleaning the cabin:**

The cabin must be cleaned with household cleaning agents.  
Carpets are to be treated with foam cleaner for vacuuming and as required.  
No cleaning agents which attack the paintwork may be used.  
No scouring agents may be used.

**Service address:**

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