

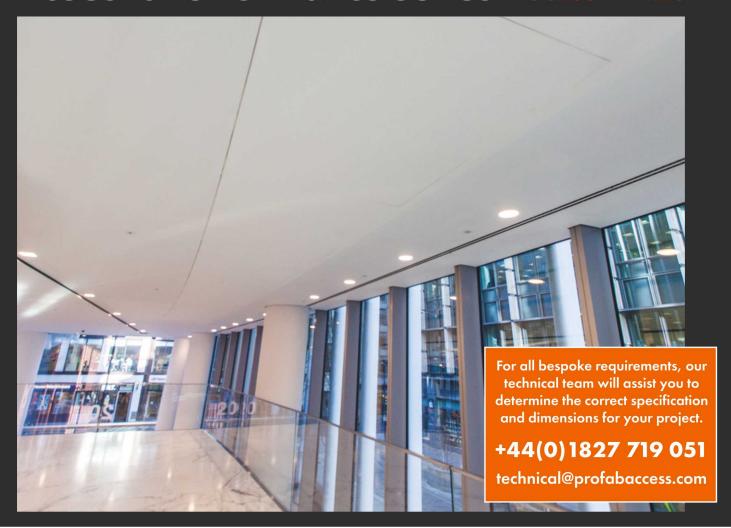
PERFORMANCE GUIDE







Acoustic Performance Series ACCESS PANELS



Non-fire and fire rated acoustic performance access panels for commercial and residential applications.

Acoustic performance access panels are available through many of Profab's access panel ranges with additional upgrades to acoustic shielding possible on selected series.

PRIMA 1000*
INTEGRA 4000*
ECHO 7000*
VISION 8000
PURA 9000*

>> BENEFITS

- Enhanced acoustic shielding
- 2 hour fire rated INTEGRA 4000 Series and VISION 8000 Series
- 1 hour fire rated PRIMA 1000 Series
- Clean aesthetic appearance with concealed frames and hinges
- Tested in accordance with stringent acoustic standards
 BS EN ISO 140 3 at a UKAS accredited facility
- Easy Installation access panels simply screw fix through pre-punched fixing holes into the structure.
 For example drywall screws can be fixed into metal stud partitions

BUILDING ACOUSTICS

Definition

Building acoustics is the art of controlling noise within a building. If 'sound' is the pleasurable experience to be gained from music and the spoken word, then 'noise' is the undesirable sound that can at best reduce a persons comfort, concentration and efficiency, and at worst cause stress and physical discomfort.

Sound Insulation

Is a method of controlling noise passing from one part of a structure to another. Airborne sound can pass directly through a dividing element, for example a partition, door or access panel, or indirectly around the surrounding structure, known as flanking sound transmission.

No specifc acoustic regulations exist to cover access panels. Therefore the table below taken from BB93 offers a guide to performance based on 'doorsets'.

Type of space	Wall (including glazing)	Doorset
All spaces except for music rooms	40dB	30dB
Music rooms	45dB	35dB

SOUND INSULATION RANGE

PRIMA AC1000 Series 30dB

Acoustic gasket upgrade and mineral wool door infill. A cost effective entry level acoustic solution for walls or ceilings.

PRIMA 1000 FR Series 32dB*

1 hour fire rated entry level wall panel with acoustic rating as standard.

INTEGRA 4000 FR Series 35dB*

2 hour fire rated wall panel with acoustic gasket as standard

INTEGRA AC4000 FR Series 42dB

2 hour fire rated wall panel with acoustic gasket and acoustic steel door upgrade.

INTEGRA AC4000 FR Series 44dB

2 hour fire rated wall panel with double level acoustic gasket, acoustic steel door upgrade with an additional door panel.

ECHO AC7000 Series 31 dB

Non-fire rated ceiling access panel with acoustic upgrade and mineral wool infill

ECHO AC7000 Series 34dB

Non-fire rated ceiling access panel with acoustic upgrade and double layer of mineral wool infill.

VISION 8000 Series 30dB*

To suit ceramic tiles with a concealed finish door and frame, as standard.

VISION 8000 FR Series 33dB*

To suit the application of tiles, stone or marble with acoustic gasket as standard, 1 or 2 hour fire rated.

PURA AC9000 Series 36dB

Non fire rated with acoustic gasket and laminated acoustic steel door construction for walls or ceilings.

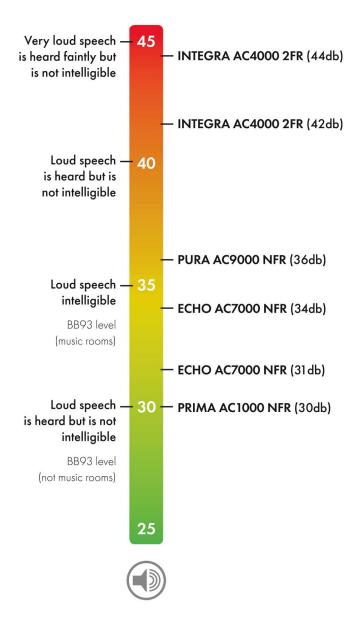


PROFAB ACCESS ACOUSTIC PANELS

AC sound insulation type

Most of Profab's standard range of access panels is available upgraded for enhanced acoustic performance. Upgraded panels are designated by AC followed by the series number.

The following table offers guidance on the performance of acoustic upgraded Profab access panels.



Please specify AC type if upgraded acoustic sound insulation is required

Our in-house manufacturing enables us to offer full flexibility in product design for projects that need to meet specific specification criteria



^{*}acoustic shielding in standard products

ACOUSTIC UPGRADE OPTIONS

Product Name	STANDARD Acoustic Shielding (dB)	UPGRADED Acoustic Shielding (dB)
PRIMA 1000 Series (NFR)	23	30
INTEGRA 4000 FR Series	35	42
INTEGRA 4000 FR Series	35	44
ECHO 7000 Series (NFR)	23	31
ECHO 7000 Series (NFR)	23	34
PURA 9000 Series (NFR)	30	36



Profab access panel undergoing acoustic testing

SOUND ABSORPTION

Sound absorption refers to the sound energy that can be absorbed by different materials within a space. Once a sound is produced the time taken for the 'echo' to disappear can be measured. This is known as reverberation time. Correct sound absorption levels are important for speech clarity, especially for pupils in an education environment.

Profab Access' Sound Absorbent Range

Profab manufacture a range of access panels to suit sound absorbent ceilings, such as Rigitone* or Gyptone* from British Gypsum.

Additionally we offer a bespoke design service for wall mounted sound absorbent panels. A vast number of bespoke design options are available regarding shape, size and perforation patterns.



Profab access panel into Rigitone ceiling at the Curve Performing Arts Centre Leicester

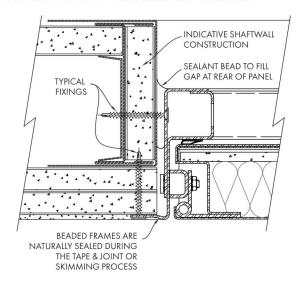


Example of design options using Profab wall mounted sound absorbent panels

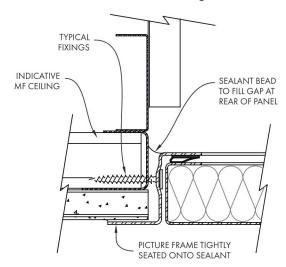
MINIMISING FLANKING SOUND

The figures quoted in this document are laboratory acoustic results solely for the access panels. To achieve the best possible performance on site any potential paths for flanking sound transmission should be prevented. When fitting access panels, this is relatively easy to achieve; see below for example details.

INTEGRA AC4000 2FR Series into Shaftwall



PRIMA AC1000 Series into MF Ceiling



REFERENCE DOCUMENTS USED

Several documents exist to give guidance on the acoustic design of buildings: -

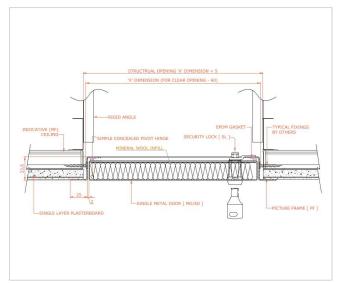
Building Regulations Approved Document E is

a substantial publication that covers many aspects of building acoustics, mainly in the residential sector, but is also relevant for many commercial sector applications, for example long term hospital patient accommodation.

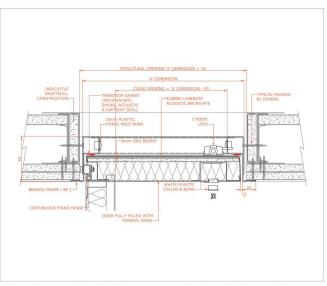
HTM08-01 (Health Technical Memorandum) covers acoustic design in healthcare buildings. (Supersedes both HTM 2045 and HTM 56).

Building Bulletin 93 (BB93) Department for Children, Schools and Families (DCSF) covering sound insulation, attenuation, reverberation and speech ineligibility in education environments.

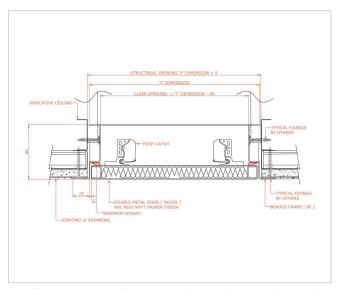
>> CAD DRAWINGS



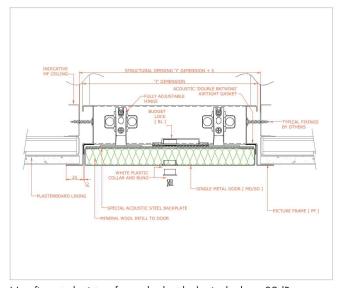
Non-fire rated, picture frame, security lock, single door, 30dB AC1000-NFR-PF-SL-SD-MAC30



2 hour fire rated, beaded frame, 3 point lock, single door, 42dB AC4000-2FR-BF-3PL-SD-MAC42



Non-fire rated, beaded frame, budget lock, double metal door, 31 dB AC7000-NFR-BF-BL-MD/DS-MAC31



Non-fire rated, picture frame, budget lock, single door, 39dB AC9000-NFR-PF-BL-SD-MAC39

CAD files for all product variants are available – please contact: technical@profabaccess.com

All of our digital resources can be downloaded from: www.profabaccess.com

Profab Access reserve the right to amend any of our published information and specifications deemed necessary as part of our continuous product development and improvement policy, without prior notice.



Sales Enquiries +44(0) 1827 718 222

sales@profabaccess.com

Technical Enquiries

+44(0) 1827 719 051 technical@profabaccess.com



www.profabaccess.com

Riversdale House Units C-D Riversdale Road Carlyon Road Industrial Estate Atherstone Warwickshire CV9 1FA United Kingdom





f: profabaccesspanels







EMS668264

