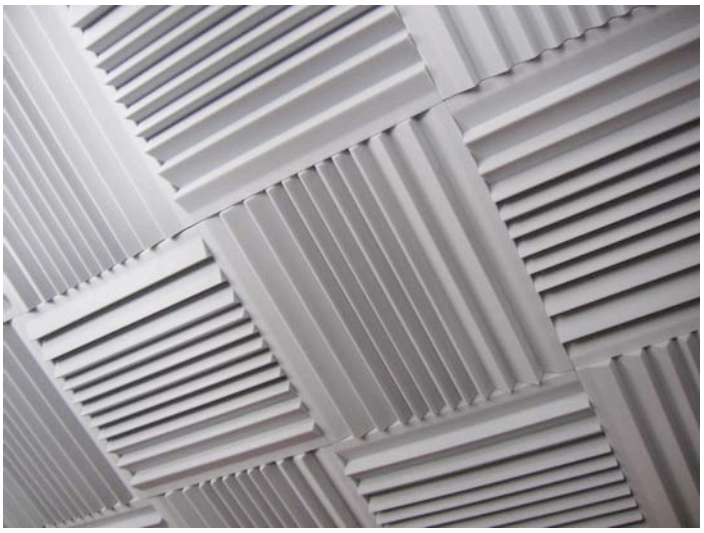
SoundAcoustics BA600/60 acoustic panel

Application: Class 1 fire rated high performance acoustic panel. Controls broad frequency reverb and reflection

Frequency Characteristics: 300Hz - 20Khz

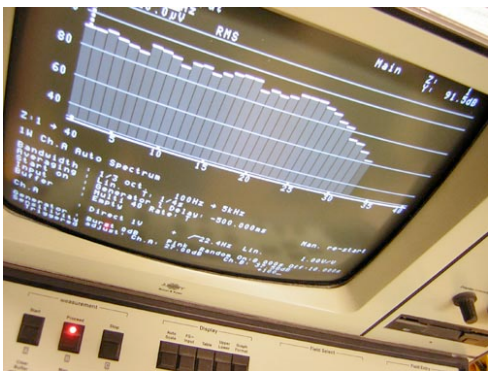
Installation: Water based adhesive

Dimensions: 600 x 600 x 60mm, border 40mm



The **SoundAcoustics BA600/60** acoustic panel is designed for effective control of excessive interior noise levels due to uncontrolled sound reverberation and reflection. Typically, interior spaces which contain hard reflective surfaces results in the propagation and accumulation of sound waves, with an associated increase in sound pressure levels. This effect can be also be exacerbated by the shape and dimensions of a room. **Designed and developed by SoundAcoustics**, the BA600/60's unique multi-angled profile combines form with function, presenting a striking contemporary aesthetic, as well as providing outstanding acoustic absorption characteristics across a broad frequency range. All SoundAcoustics products are manufactured in Australia, with product testing taking place at the RMIT acoustic laboratory in Melbourne.

The BA600/60 is manufactured from Class 1 fire rated Willtec, and meets stringent building codes in regards to flammability and toxicity. Applications include media rooms, call centres, restaurants, nightclubs, conference rooms, auditoriums and live music venues, classrooms, music rooms, even manufacturing plants. The BA600/60 acoustic panel is also suitable for high-end studio applications in the recording and broadcast industries.



The lightweight and flexible panels can be installed easily and simply with water based adhesive, without the need for reinforcement of walls or roof structures. Full ceiling coverage is not always required to achieve effective acoustic control. The panels can be applied in grids of four or six panels, which provides many installation options in regards to design considerations. Generally, ceiling coverage of at least 50% is recommended. The panels are manufactured as a nested pair, and are designed to be installed at 90 degrees to one another.

The standard colour is light silver grey. The panels can also be flock coated in a range of colors, at additional cost.

13/02/2008

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Statement Of Results For Sound Absorption Tests Performed By Acoustics Laboratory At RMIT University On The Behalf Of SoundAcoustics.

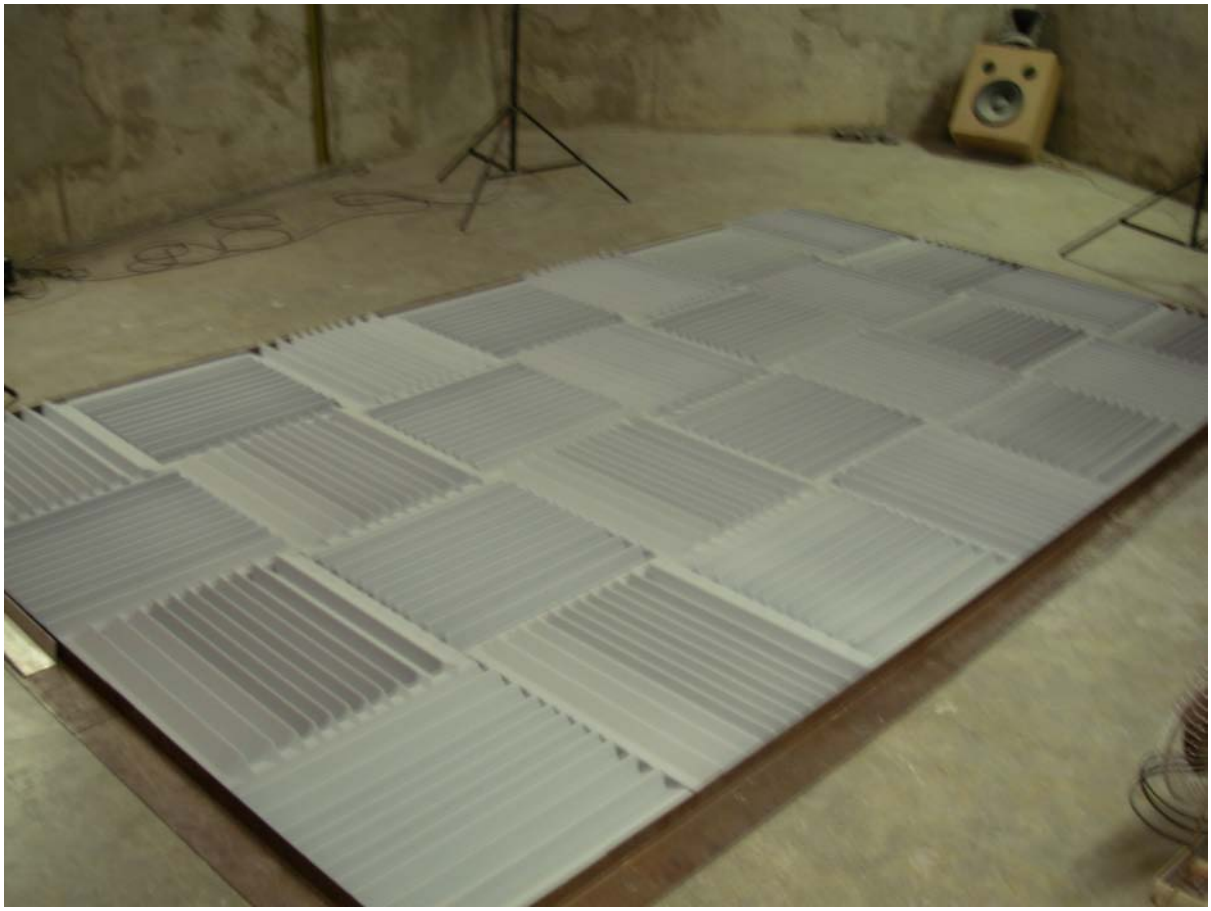
At the request of SoundAcoustics, sound absorption tests were performed on SoundAcoustics BA600-60 Foam Panel with non-symmetrical cut pattern. Willtec The sample was supplied by SoundAcoustics. The tests were performed at the School of Applied Sciences, Acoustics Laboratory at RMIT University on the 13th of February 2008. The procedure used to determine the sound absorption coefficient of the samples was based on:

AS/ISO 354:2006 - Acoustics: Measurements of Sound Absorption in a Room.

Sample Description (as supplied by the client): The foam from which the panels were cut was BA600-60 foam. The sample consisted of 28 discrete panels of dimension 600mm x 600mm with a nominal thickness of 60mm and arranged in a 7 x 4 pattern directly on the floor of the reverberation chamber as depicted below in Figure 2. Each individual panel had a non-symmetrical 'saw-tooth' pattern cut into the panel as depicted in Figure 1. Adjacent panels were rotated 90 degrees so that adjacent 'saw-tooth' patterns were also perpendicular as depicted in Figure 2. The sides of the sample were enclosed with 0.5mm steel runners in accordance with the recommendations in AS/ISO354. The total sample area was 10.08m^2.

Figure 1: SoundAcoustics BA600-60 Foam Panels: Detail of non-symmetric 'saw-tooth' pattern cut into panel.

Figure 2: SoundAcoustics BA600-60 Foam Panels: Test Set-up. Note 90 degree rotation between adjacent panels.



Results:

RMIT Reference:	121I/08-009/JW
Panel Dimensions:	600mm x 600mm x nom. 60mm
No of Panels:	28
Total Sample Area:	10.08m^2
Date of Test:	13/02/2008

Test conditions were:

Empty Room:	Temperature	23.0°C.
	Relative Humidity	42%
	Barometric Pressure:	0.76435 mHg
Room with Sample:	Temperature	23.2°C.
	Relative Humidity	46%
	Barometric Pressure:	0.76450 mHg

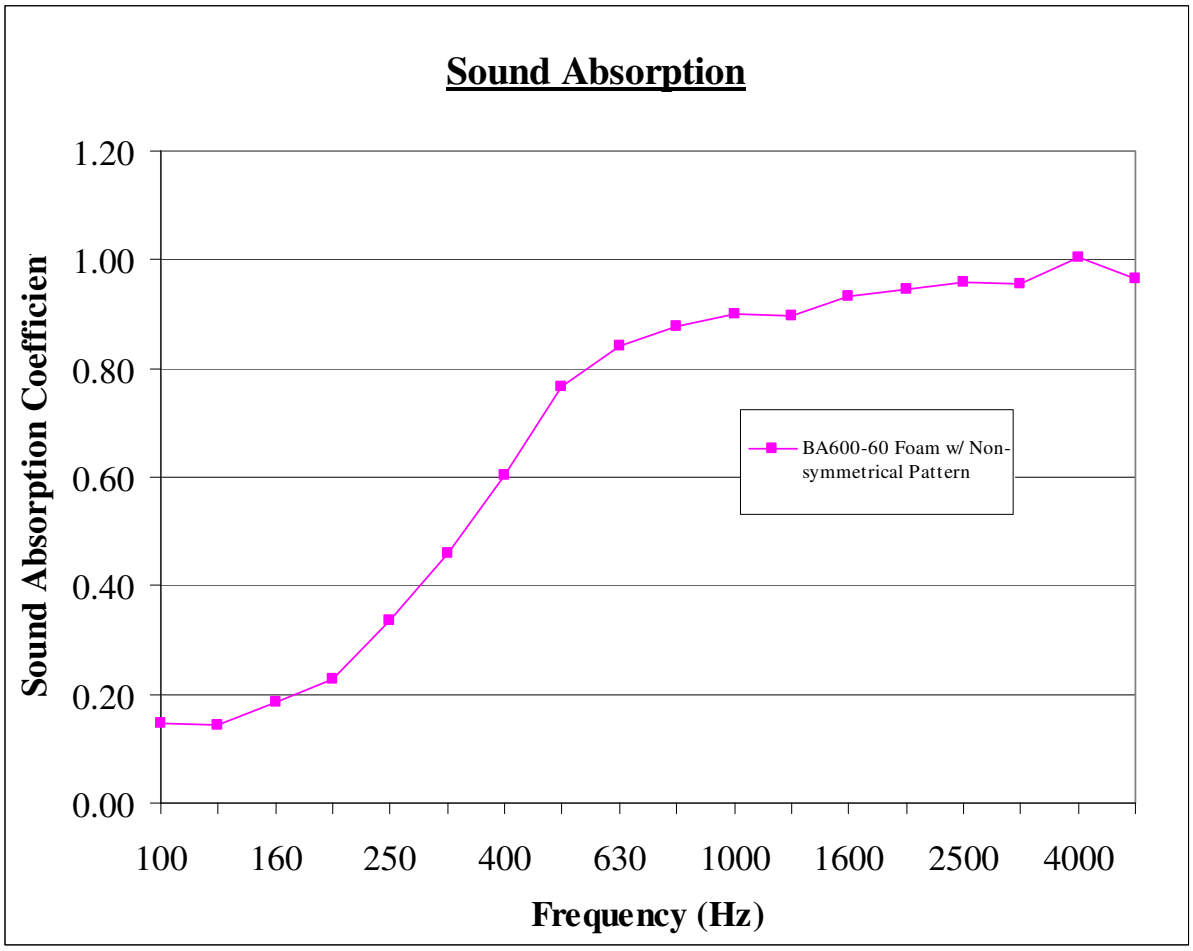
Results: Sound absorption coefficient (α) for SoundAcoustics BA600-60 Foam Panels.

Freq (Hz)	**α SoundAcoustics BA600-60 Foam Panel (unrounded)**	**α SoundAcoustics BA600-60 Foam Panel (rounded to 0.05)**
100	0.15	0.15
125	0.14	0.15
160	0.19	0.20
200	0.23	0.25
250	0.34	0.35
315	0.46	0.45
400	0.60	0.60
500	0.77	0.75
630	0.84	0.85
800	0.88	0.90
1000	0.90	0.90
1250	0.90	0.90
1600	0.93	0.95
2000	0.94	0.95
2500	0.96	0.95
3150	0.96	0.95
4000	1.00	1.00
5000	0.97	0.95

NRC of the sample calculated in accordance with ASTM C423-90A is:

NRC = 0.75

Results: Sound absorption coefficient (α) for SoundAcoustics BA600-60 Foam Panels in graph format.



Testing Officer:

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RMIT University
School of Applied Sciences.