

ACOUSTIC TECHNICAL NOTE



Reference:	11176.ATN01.COM.0
Revision:	0
To:	Legendre Construction
From:	Andrew Heath
Date:	26 January 2024
Project:	60-70 Shorts Gardens
Subject:	Internal Noise Commissioning

1.0 CRITERIA

Planning Condition 22 for the scheme outlines the following:

Prior to first occupation of the residential units:

- a) *Sound insulation measures outlined in the approved acoustic report (ref 7431/AAR, dated 11th April 2017) shall be implemented and thereafter be permanently retained.*
- b) *Post installation noise assessment shall be submitted to the Council for approval of internal noise and vibration levels to ensure internal room amenity noise standards remain in accordance with the criteria of BS82133:2014.*

Part a) of the above Condition has been fully implemented by the Contractor. RBA Acoustics have been involved with the scheme since inception and have carried out site inspection visits during construction to ensure the proposed full 'box-in box' noise and vibration control measures have been fully implemented as the design and construction progressed.

The project internal noise level criteria adopted (as reproduced from BS 8233:2014) are as follows;

Bedroom	Night-time (23:00-07:00)	30dB L _{Aeq}
Living Rooms	Daytime (07:00-23:00)	35dB L _{Aeq}

2.0 RESULTS

RBA Acoustics carried out internal noise commissioning on 23 January 2024 between 16:00 and 19:00 hours in order to demonstrate compliance with part b) of Planning Condition 22 for the scheme.

Noise measurements were conducted using a Class 1 sound level meter (calibration details attached). Noise levels were measured with the sound level meter fixed to a tripod at a height of 1.5m above floor level and at least 1m from any other reflective surface.

Measurements were carried out for a representative period within each room.

Rooms were complete with floor finishes installed but unfurnished.

2.1 Measured Internal Noise Levels

Full measurement results are summarised in Table 1.

Table 1 – Measurement results (Measured L_{Aeq} noise levels) compared with BS8233 Criteria

Room Reference	Target Noise Criteria (dBA)	Measured Noise Level, L_{eq} (dBA)	Compliant with BS8233 Criteria (Pass/Fail)
Bedroom 4A	30	20	Pass
Bedroom 4B	30	18	Pass
Bedroom 4C	30	22	Pass
Living Room 4D	35	19	Pass
Bedroom 3A	30	25	Pass
Bedroom 3B	30	24	Pass
Living Room 3C	35	20	Pass
Bedroom 2A	30	27	Pass
Bedroom 2B	30	17	Pass
Living Room 2C	35	19	Pass
Bedroom 1A	30	27	Pass
Bedroom 1B	30	20	Pass
Living Room 1C	35	19	Pass

All measured levels were below the BS8233 internal noise criteria and are therefore considered to be fully compliant with the requirements of Planning Condition 22, part b).

2.2 Instrumentation

The following equipment was used for the measurements.

Table 1 – Equipment Details

Manufacturer	Model Type	Serial No.	Calibration	
			Certificate No.	Expiry Date
Norsonic Type 1 Sound Level Meter	Nor140	1406255	U44039	18 April 2025
Norsonic Pre Amplifier	1209	2049		
Norsonic ½" Microphone	1225	225529	44038	18 April 2025
Norsonic Sound Calibrator	1251	34391	U440373	18 April 2025