

Plant Noise Assessment

Block B3

Carried out for
BDW Trading Limited (Barratt West London)

Report 107362/3

Compiled by Rebecca Hogg

13 October 2025



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Plant Noise Assessment

Block B3

Carried out for: BDW Trading Limited (Barratt West London)
Hayes Village
Nestle Avenue
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Contract: Report 107362/3

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QUALITY ASSURANCE

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1 INTRODUCTION

Barratt West London (the client) commissioned BSRIA to carry out a plant noise assessment at Block B3 at Nestle Hayes Village. The purpose of the plant noise assessment was to demonstrate compliance, or otherwise, with Planning Condition 21, which was supplied by the client, and is given below.

Condition 21 – Post installation noise assessment

“The rating level of noise emitted from the plant and/or machinery hereby approved shall be at least 5 dB below the existing background noise level. The noise levels shall be determined at the nearest residential property. The measurements and assessment shall be made in accordance with British Standard 4142:2014. A post installation noise assessment shall be carried out where required to confirm compliance with the noise criteria and additional steps to mitigate noise shall be taken, as necessary. Approved details shall be implemented prior to occupation of the development and thereafter be permanently retained.”

The plant noise assessment was carried on 8th October 2025 on Block B3 at Nestle Hayes Village, Nestles Avenue, Hayes, UB3 4RF.

The weather during the monitoring period was dry with a temperature of 17°C and a slight breeze. Weather conditions were within the requirements of the standard.

This report details the acoustic methodology and measurement results.

2 METHODOLOGY

The objective of the plant noise assessment was to determine compliance, or otherwise, with Planning Condition 21. The client provided drawings of the plant locations which are given in Appendix A. Photographs are given in Appendix B.

The client provided a report with the required noise criteria entitled “Acoustic Assessment Report” dated 17th October 2019 Rev. no. 3, and the noise criteria is given in Table 1. The blocks are nearest to measurement position 4 and therefore the criteria of position 4 is used.

Table 1 Noise Criteria

Measurement Position	Daytime Plant Operation (07:00 – 23:00)	Night-time Plant Operation (23:00 – 07:00)
Position 1 – Nestles Avenue	50 dB	47 dB
Position 2 – Squirrels Trading Estate	51 dB	47 dB
Position 3 – Railway	49 dB	47 dB
Position 4 – Centre of Site	48 dB	43 dB

The calibration details of the instrumentation used during the acoustic testing are given in Table 2.

Table 2 Instrumentation Calibration Details

Instrument	Manufacturer	Range	Units	Serial Number	Calibration Due Date
Nor140 sound level meter	Norsonic	0 – 130	dB	1406512	24/09/2026
Nor1251 acoustic calibrator	Norsonic	114	dB	34632	18/09/2026

Noise measurements were carried out on the roof of Block B3 at an appropriate distance from the operational plant. A Nor140 sound level meter was installed at each monitoring location. The sound level meter was calibrated before and after the measurement period.

The client was responsible for operating the plant during the measurement period. The client stated all the plant was operating in Environmental Mode, which was the typical operation of the plant. The plant was operated for a short period to ensure stable operation and then a measurement was taken for 1 minute. For the BS 4142 assessment a worst-case scenario of the plant operating all day and night was used.

Due to the low noise levels of the plant noise on Block B3 compared to background noise levels it was not possible to measure at the closest receptor locations and therefore the alternative methodology in the standard of measuring close to the noise source (plant) and calculating the noise level at the nearest receptor. The nearest residential properties to the plant on the roof of Block B3 are on the balcony below or adjacent blocks with a minimum distance of at least 10m, which was used as a worst-case scenario for the noise assessment.

3 RESULTS

3.1 BLOCK B3

The results of the noise monitoring on Block B3 are given in Table 3. The fan was slightly audible at the measurement location during the measurement period.

Table 3 Block B3 Result of Noise Monitoring

Operating Conditions	Location	Noise Level
Ambient noise levels - no plant	Roof of Block B3	45.4
Plant operating	Roof of Block B3 – 1m from fan extract	52.1
Plant operating	Nearest residential property	32.1 (predicted)

3.2 COMPLIANCE ASSESSMENT

Table 4 outlines if each block complies with Planning Condition 21 for daytime and night-time noise levels.

Table 4 Compliance Assessment

Block/Location	Complies Daytime Criteria	Complies Night-time Criteria
B3	Yes	Yes

[illegible]

APPENDIX B: PHOTOGRAPHS

Figure 1 Plant on Roof of Block B3

