MCS 020 - Planning Standards

Noise Assessment Calculations (Air Source Heat Pump)

Assessment Details

Pass

Site Reference: Whitemoss Road HT1 3B5P

PROJECT DATE
08/05/2026

ASSESSMENT TYPE
Single Heat Pump

MANUFACTURER
Daikin Europe N. V.

MODEL
EDLA04E2V3

Sound Level Assessment Data

POSITION	HP NAME	SOUND POWER (DB)	DIRECTIVITY (Q)	DISTANCE (M)	BARRIER (DB)	FINAL LEVEL
P1	HP1	44.0	4.0	1.0	-2.5	**36.53** PASS

Assessment Summary

Positions Assessed: 1
Positions Passed: 1
Compliance Rate: 100%

Pass
Overall Result

Position Images

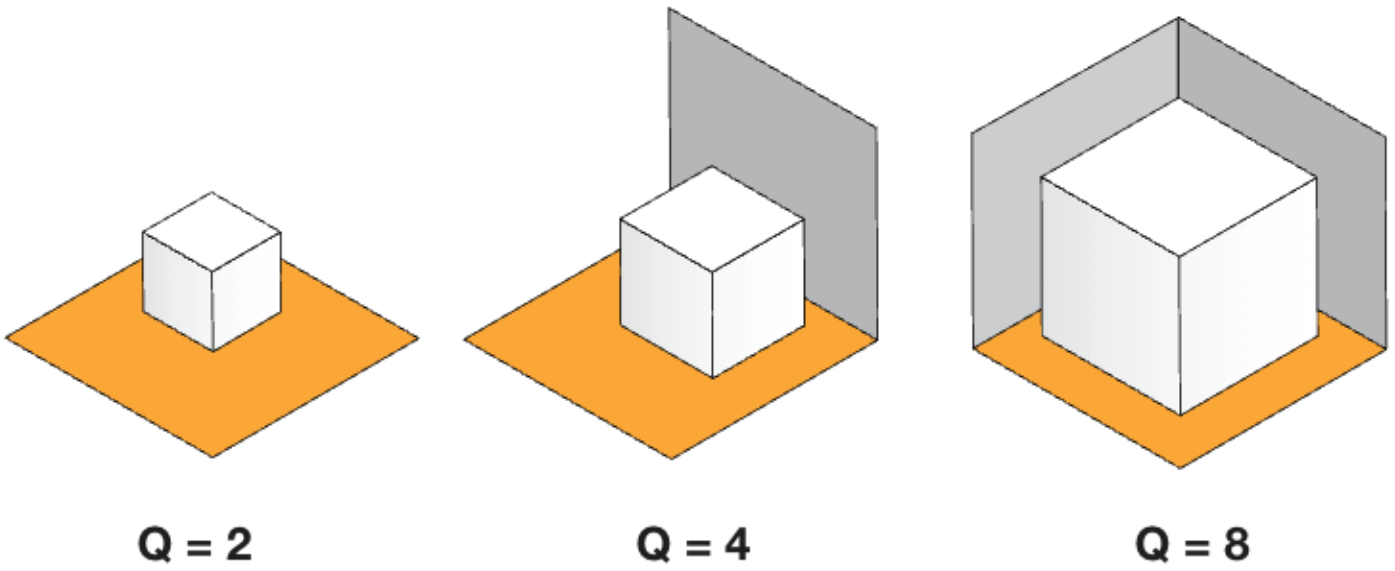
No position images available

Assessment Criteria

- Sound Power: Manufacturer specification (dB)
- Distance: Measurement distance (metres)
- Directivity: Reflected surface multiplier (Q)
- Barrier: Sound reduction from barriers (dB)

Final Level <= 37.1dB = PASS | Final Level > 37.1dB = FAIL

Barriers



The following definitions of a barrier shall be used for the purposes of this assessment.

- Barrier (Type 1) - a solid brick/masonry wall or a solid fence that is at least 18mm thick. There should be no cracks or gaps in the barrier. The barrier should extend horizontally by 1m or more from either edge of the heat pump.
- Barrier (Type 2) - a solid fence that is less than 18mm thick. There should be no cracks or gaps in the barrier. The barrier should extend horizontally by 1m or more from either edge of the heat pump.
- No barrier - open fences, fences with gaps and cracks, and vegetation do not count as a barrier. Walls or fences in a poor state of repair (e.g. gaps or pieces missing) do not count as a barrier.

The following definitions of line of sight shall be used for the purposes of this assessment.

- No view - If a barrier that completely obscures the vision of an assessment position from the top edge of the heat pump.
- Partial view - If by moving up to 0.25m in any direction from the top edge of the heat pump the assessment position is visible.
- Full view - If the assessment position is visible from the top edge of the heat pump.

The matrix table below shall be used in conjunction with the above definitions to determine the barrier attenuation.

		Line of Sight		
		No view	**Partial view**	**Full view**
Barrier Type	**Type 1**	-10 dB	-5 dB	0 dB
	Type 2	-5 dB	-2.5 dB	0 dB
	No barrier	0 dB	0 dB	0 dB