

MCS 020 - Planning Standards

Noise Assessment Calculations (Air Source Heat Pump)

Assessment Details

Failed

Site Reference: 50315110 - Paulo Vasques - NP19 8FP

PROJECT DATE
15/07/2025

MANUFACTURER
Daikin Europe N. V.

ASSESSMENT TYPE
Single Heat Pump

MODEL
EDLA09DA3V3

Assessment Position

Position Description
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Sound Level Assessment Data

POSITION	HP NAME	SOUND POWER (DB)	DIRECTIVITY (Q)	DISTANCE (M)	BARRIER (DB)	FINAL LEVEL
P1	HP1	62	8	2.3	-10	42.8 FAIL

Assessment Summary

Positions Assessed: 1
Positions Passed: 0
Compliance Rate: 0%

Failed
Overall Result

Position Images

Position 1



ASHP 1m away from boundary. 2.3m from nearest next door window

Position 2

N/A

Position 3

N/A

Position 4

N/A

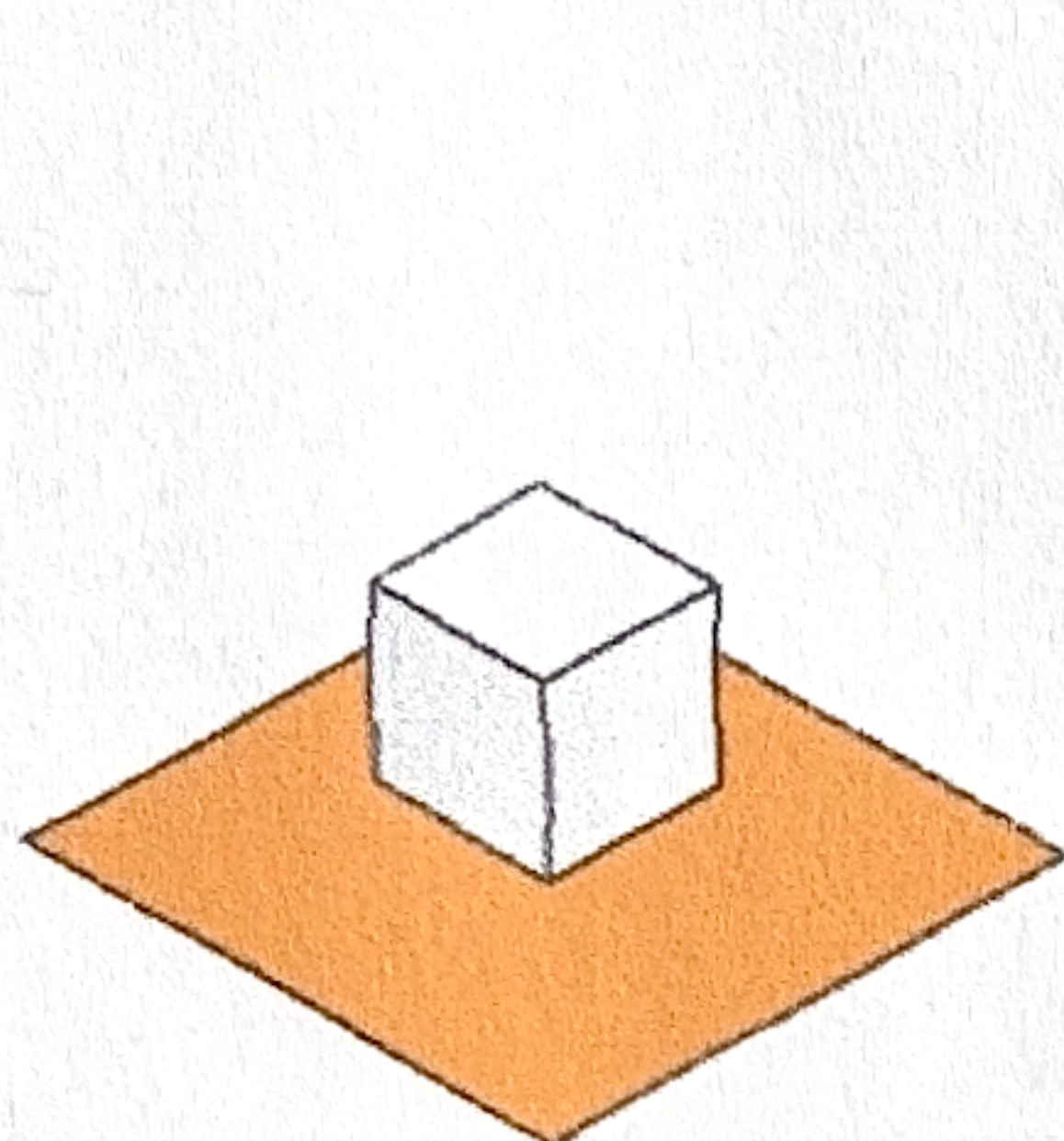
Assessment Criteria

- Sound Power: Manufacturer specification (dB)
- Distance: Measurement distance (metres)

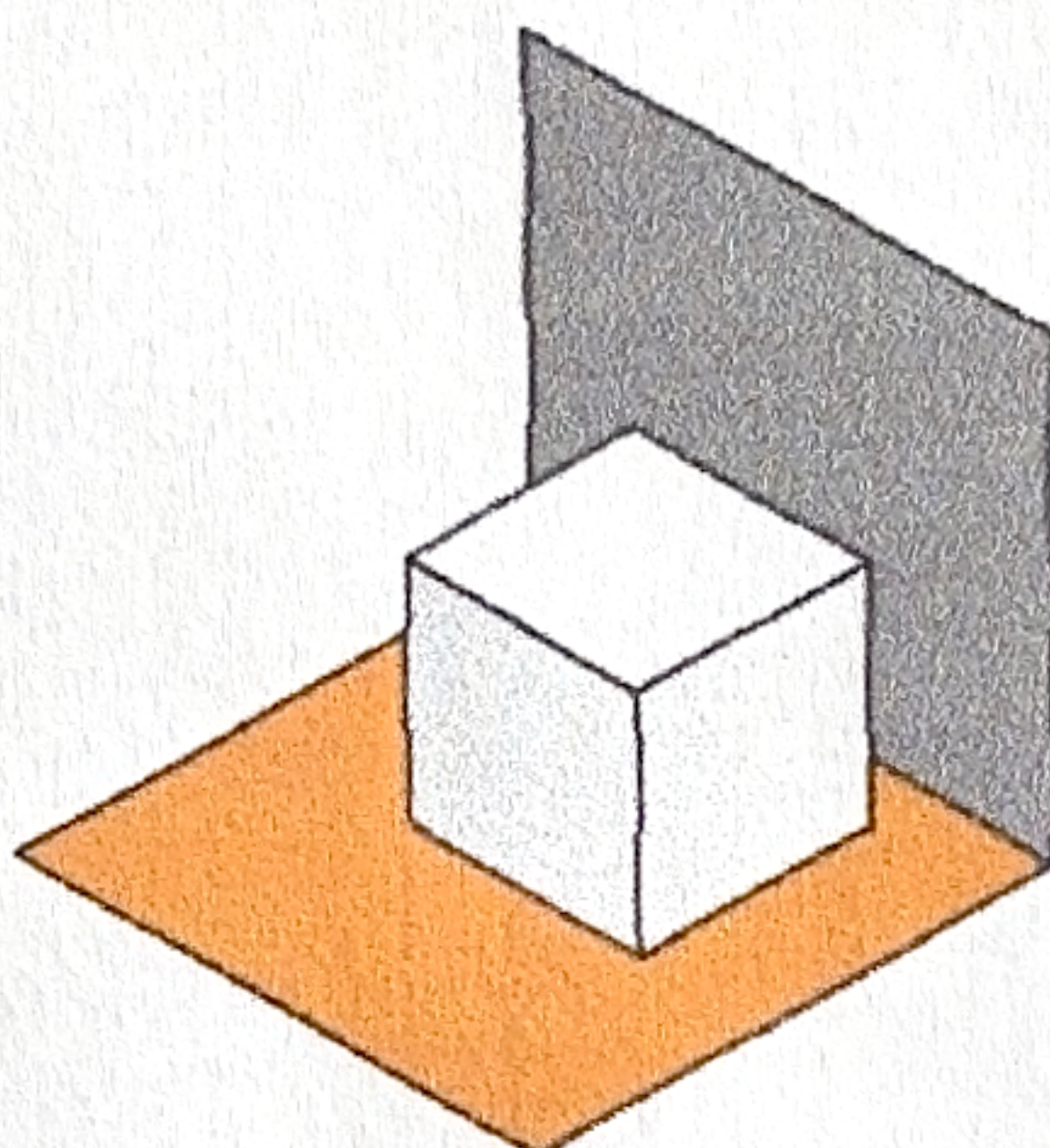
- Directivity: Reflected surface multiplier (Q)
- Barrier: Sound reduction from barriers (dB)

Final Level $\leq 37.1\text{dB}$ = PASS | Final Level $> 37.1\text{dB}$ = FAIL

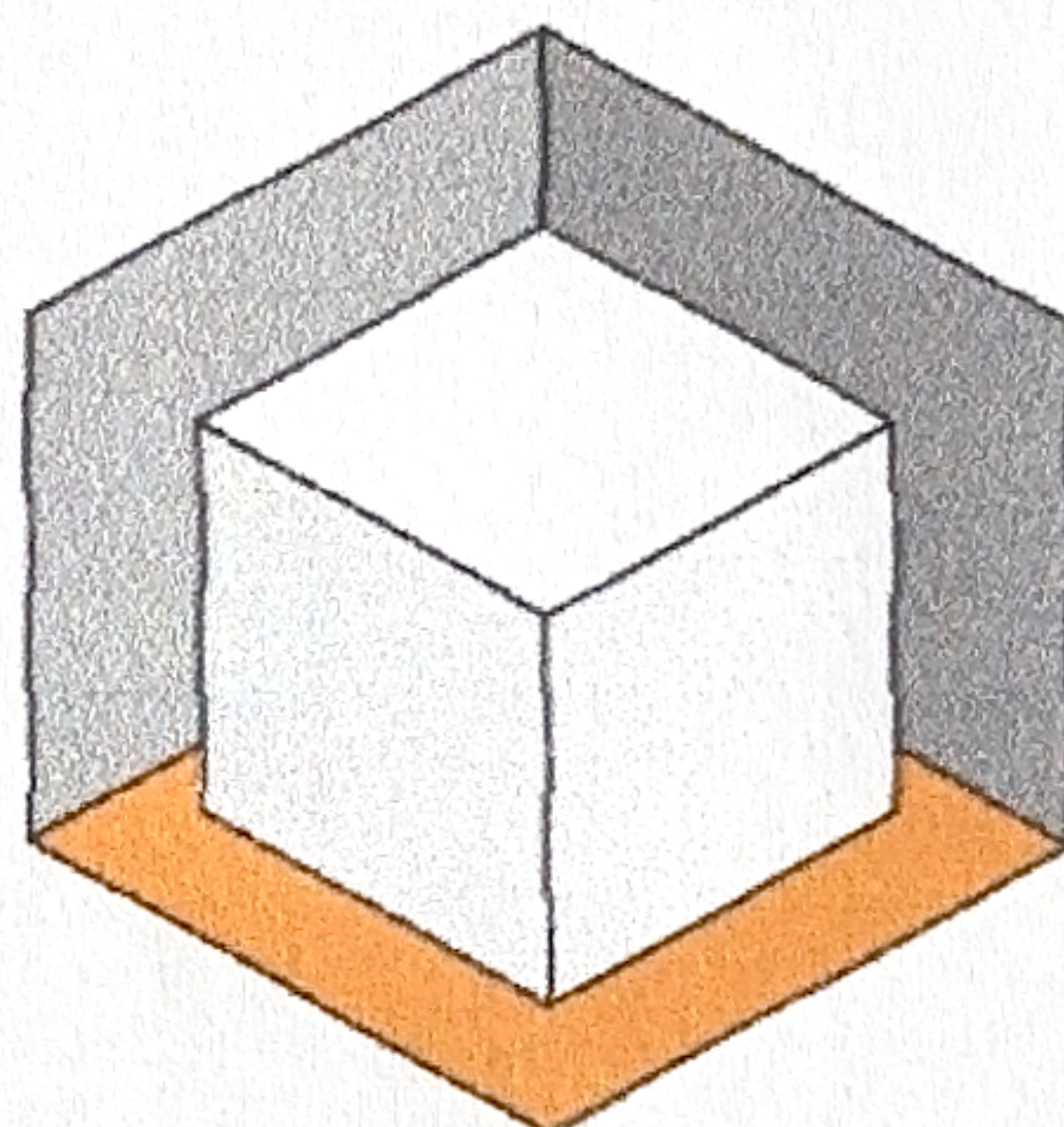
Barriers



Q = 2



Q = 4



Q = 8

Barriers

Is there a barrier between the heat pump and the assessment point?

A solid barrier (e.g. brick wall or fence) completely obscures the installers vision of the assessment position from the top edge of the ASHP

-10
dB

A solid barrier completely obscures the installers vision of the assessment position from the top or side edges of the ASHP, but moving a maximum distance of 25cm in any direction of the ASHP allows an assessment position to be seen

-5
dB

It is possible for the installer to see any part of an assessment position from the top or side of the ASHP

0
dB