

Noise & Vibration Specification

32 Heathlee Road, London SE3 9HP

Date ▶ 06 May 2024

SCM40ZS-W

Mitsubishi

MULTI OUTDOOR UNIT RAC

Nominal cooling capacity of 4.0kW

Noise & Vibration Specification

32 Heathlee Road, London SE3 9HP

Introduction

Planning permission is sought from the London Borough of Lewisham.

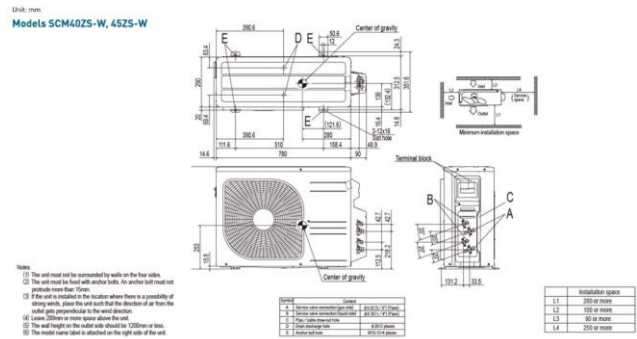
This report has been prepared to outline the noise and vibration impacts associated with the attachment of a single heating and cooling to the first floor side southern elevation of 32 Heathlee Road, London SE3 9HP.

The proposed unit is a Mitsubishi 'Multi Outdoor Unit RAC'.

Technical Specification Overview

The proposed unit is a Mitsubishi 'Multi Outdoor Unit RAC'. SCM40ZS-W

Power source			1Phase, 220 - 240V, 50Hz
Nominal cooling capacity (Min-Max)		kW	4.0(1.5-5.9)
Nominal heating capacity (Min-Max)		kW	4.5(1.3-6.3)
Power consumption	Cooling/Heating	kW	0.80(0.34-2.10) / 0.83(0.25-1.48)
EER/COP	Cooling/Heating		5.00 / 5.42
Max. running current		A	14
Sound power level	Cooling	dB(A)	62
	Heating		64
Sound pressure level	Cooling	dB(A)	49
	Heating		51
Air flow	Cooling	m ³ /min	32.5
	Heating		32.5
Exterior Dimensions	Height x Width x Depth	mm	595x780(+90) x290



More info online: <https://mhiae.com/units/scm40zs-w/>

Nearby Sensitive Noise Receptors

No. 30 Heathlee Road

This property is located 11.47 metres away from the proposed heating/ cooling unit.

There are no openings or windows that serve a habitable room which directly face the application property or the proposed unit. The unit would be located sufficiently away from any sensitive receptors.

The proposed unit would be located within the envelope of the existing building. Setback by over 2 metres from the side of the first floor carport roof. Together this would ensure that any limited noise generated from the unit does not harmfully impact upon the enjoyment of the adjacent garden.

As outlined in the technical specification the Db rating would not exceed 64 dBA with an ordinary quiet/ night mode significantly lower. Notwithstanding the lack of any openings this Db rating would be within a comfortable range that would not impact upon the living conditions or amenity of the occupants of No.30 Heathlee Road.

It is further noted that this is an inner London urban environment that has high levels of background noise associated with the nearby A20 and flight paths associated with London City Airport and London Heathrow Airport.

No.75 Heathlee Road and No.2 Lawnside

These properties are located to the west of the application site and the proposed heating and cooling unit.

To the nearest point these properties are located 25 metres away from the proposed heating/ cooling unit.

Each property has first floor and ground floor windows which serve habitable rooms.

It is considered that the distance between the proposed unit and the two nearest properties is sufficient to mitigate against any impact on the amenity of the occupiers. The unit would also present a side to these properties.

As outlined in the technical specification the dBA rating would be minimal. Given the inner London urban context any noise would be imperceptible to the occupiers of these two properties and inconsequential.

Noise generated from the nearby A20 and flight paths associated with London City Airport and London Heathrow would remain greater than that of the proposed unit at any given time.

34 Heathlee Road

No impact, given proposed location of heating and cooling unit.

Further Mitigation

The proposed unit would be enclosed in a visual louvred screen. This will reduce and perceived/ visual impact associated with its operation. This is in addition to the low Db rating specified within the technical specification and the site-specific Inner London noise conditions.

Conclusions

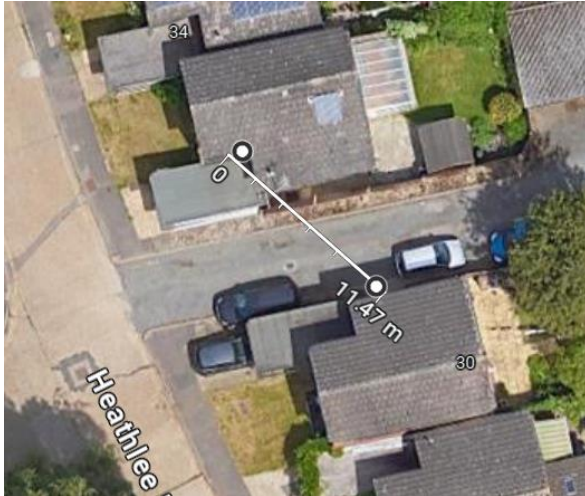
As demonstrated by this Noise and Vibration Statement any noise or vibration generated from the proposed heating and cooling unit would be unperceptible for any nearby habitable rooms or private garden areas.

The proposed heating and cooling would therefore have no harmful impacts on the occupants or users of any nearby properties.

Appendix One – Photographs/ measurements



Distance to side elevation 30 Heathlee Road



Distance to 75 Heathlee Road



Appendix Two – Technical Specification

<https://mhiae.com/units/scm40zs-w/>

Power source		1Phase, 220 - 240V, 50Hz
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Nominal heating capacity (Min-Max)	kW	4.5(1.3-6.3)
Power consumption	Cooling/Heating	kW 0.80(0.34-2.10) / 0.83(0.25-1.48)
EER/CDP	Cooling/Heating	5.00 / 5.42
Max. running current	A	14
Sound power level	Cooling	dB(A) 62
	Heating	64
Sound pressure level	Cooling	dB(A) 49
	Heating	51
Air flow	Cooling	m ³ /min 32.5
	Heating	32.5
Exterior Dimensions	Height x Width x Depth	mm 595x780(-90) x290

Net weight	kg	40.0
Refrigerant	Type/GWP	R32/675
	Charge	kg/TCO2Eq 1.4/0.945
Refrigerant piping size	Liquid/Gas	ø mm 6.35(1/4")x2 / 9.52(3/8")x2
Outdoor operating temperature range	Cooling	°C -15-46
	Heating	-15-24
Number of Connectable indoor units		2
Total indoor units capacity		6.0