

PLANT SCHEDULE

Project name	32 New Lane - Havant		
Design note title	Plant Schedule		
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1. INTRODUCTION

This is a short technical report to provide indicative information to the contractor on the ventilation and cooling (mechanical) plant to be installed as part of the Havant project.

1.1 Plant Dimensions

Dimensions provided are either indicative or as per supplier data sheets.

Reference	Plant/System	Length (m)	Width (m)	Height (m)	Weight (kg)	Comments
AHU 01	Warehouse AHU	8.5	3.9	2.5	4614	Provides ventilation to the warehouse (fresh air make up only)
AHU 02	Office AHU	5.4	2.4	2.8	1932	Provides ventilation to Locker/Toilet areas
AHU 03	Office AHU	4.0	2.2	1.9	1043	Provides ventilation to office accommodation
CU 01	VRV/VRF	0.92	0.74	1.86	229	PURY-P250YNWA
CU 02	VRV/VRF	2x1.75	0.74	1.86	674	PURYP1050YSNW

PLANT SCHEDULE

1.2 Acoustic Data

Acoustic data include within this report is based on initial plant selections and is subject to design development by the Mechanical Contractor. All final plant and sound attenuation selections shall meet the following requirements

1. Plant noise shall not exceed 5NR above the external ambient level at the Site Boundary.
2. The Mechanical Services Contractor shall ensure the Sound Pressure level of any external plant to be no greater than 60dBA at 10M.

1.2.1 Warehouse Ventilation - AHU 01

SOUND POWER LEVEL AT AHU								
Octave band (Hz)	63	125	250	500	1000	2000	4000	8000
Lw at fresh air inlet [dB]	79	85	80	81	75	70	62	58
Lw at supply air outlet [dB]	85	90	92	94	88	84	79	78
Lw to enviroment [dB]	76	78	80	81	74	68	50	44
								80

Sound pressure measured at 1 m distance in free field condition (Q=2) **63 dB(A)**

Tolerance on radiated sound power level Lw: +3 dB / Tolerance on level openings Lw: +5 dB @125 Hz, +3 dB @250 - 8000 Hz

As per the manufacturer's supplied data.

1.2.2 Locker/Toilets Ventilation - AHU 02

Octave band (Hz) - Octave band corrected Sound power level (dB)								
AHU sound levels	Tot.dB(A)	125	250	500	1000	2000	4000	8000
Sound power level inlet (supply side)	78	75	74	69	71	69	73	57
Sound power level discharge (supply side)	93	81	80	81	91	82	83	74
Sound power level inlet (return side)	81	77	76	71	74	75	76	66
Sound power level discharge (return side)	82	74	73	75	79	72	73	60
Calculated sound pressure level at 1 mt free field (61 dBA)								

As per the manufacturer's supplied data.

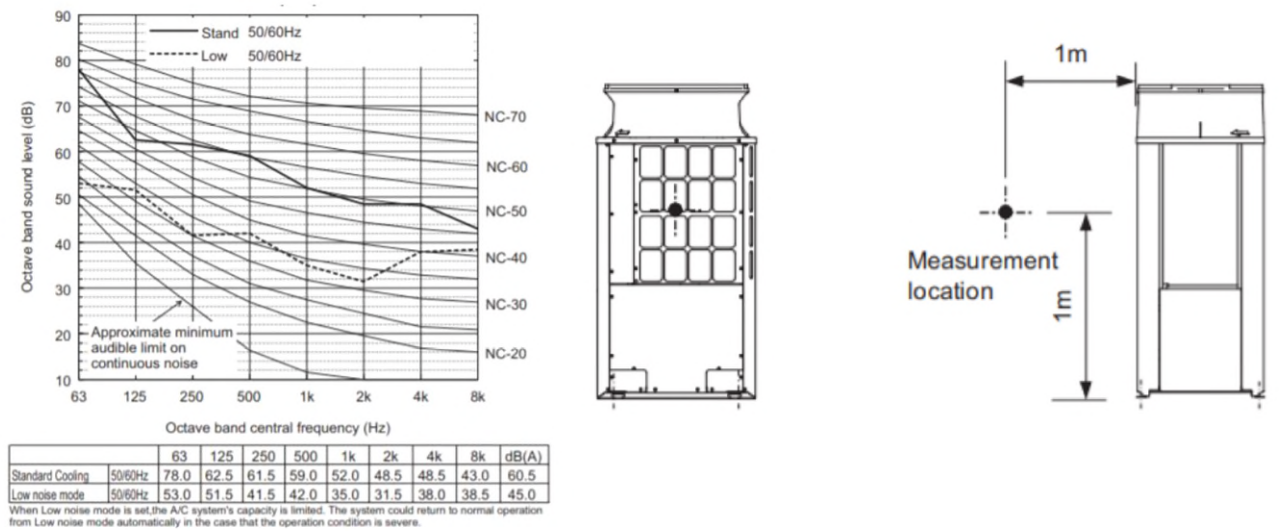
1.2.3 Office Ventilation - AHU 03

Octave band (Hz) - Octave band corrected Sound power level (dB)								
AHU sound levels	Tot.dB(A)	125	250	500	1000	2000	4000	8000
Sound power level inlet (supply side)	73	82	72	68	67	64	61	50
Sound power level discharge (supply side)	83	86	77	79	79	76	73	68
Sound power level inlet (return side)	81	72	78	75	73	74	74	67
Sound power level discharge (return side)	80	68	73	74	76	72	73	62
Calculated sound pressure level at 1 mt free field (59 dBA)								

As per the manufacturer's supplied data.

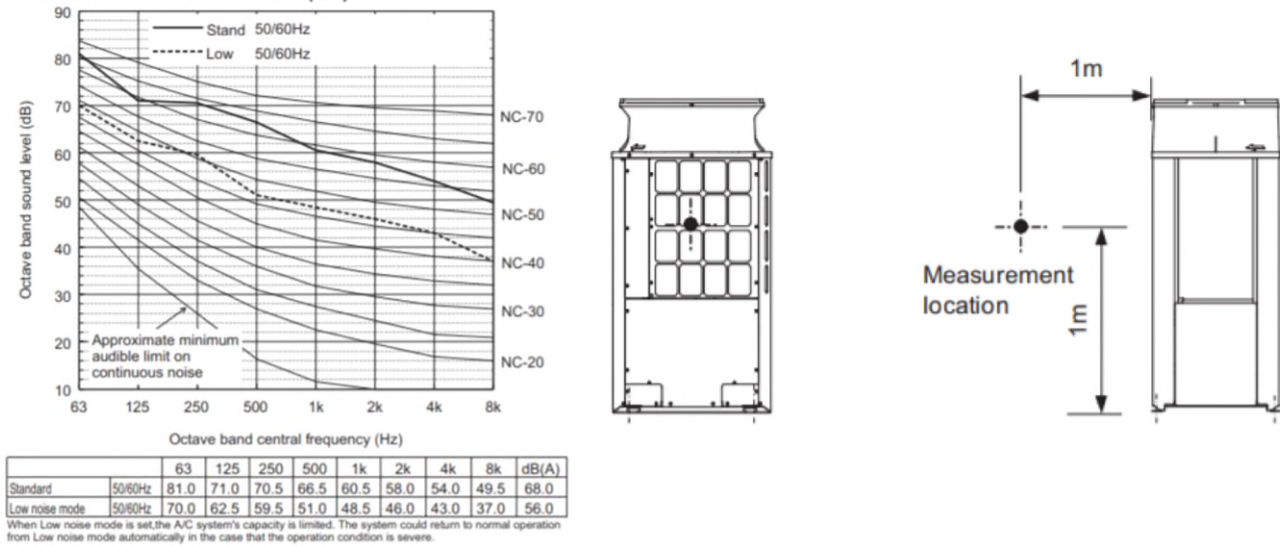
PLANT SCHEDULE

1.2.4 Variable Refrigerant Flow/Volume (VRF/VRV) - CU 01



As per the manufacturer's supplied data.

1.2.5 Variable Refrigerant Flow/Volume (VRF/VRV) - CU 02



As per the manufacturer's supplied data.