



8 First Street
Manchester
M15 4RP

THG

16-24 Kennedy Street



ORIGINATOR

WSP

DOCUMENT TITLE

Mechanical Equipment Schedules

	Name	Signature	Date
Engineer	WSP - JH	J.HYNES	24.05.21
Checked	WSP - CS	C.SMITH	25.05.21
Approved	WSP - BH	B.HARLOW	28.05.21

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FIRST ISSUE DATE	PROPOSED STATUS
28/05/21	S3 - FOR REVIEW

PROJECT	ISSUER	AREA	LEVEL	TYPE	TRADE	SEQUENCE	REV
THG	WSP	KS	ZZ	SC	M	500101	01

Mechanical Schedules

Schedule Title: M01 Fan coil - Internal Units Workstage: RIBA Stage 3 (Developed Design)

Schedule Reference: - Checked By: Brett Harlow

Project Title: 16-24 Kennedy Street Properties Issue Status: ISSUED for COMMENT

Project Number: 70075436

Specification Reference: -

Date: 21/05/2021

Prepared By: Joe Hynes

WSP Office: Manchester - 8 First Street

Revision: 01

Cooling Fluid	Refrigerant - R410a	Flow Temp	N/A	Return Temp	N/A
Heating Fluid	Refrigerant - R410a	Flow Temp	N/A	Return Temp	N/A

Unit reference		FCU 01	FCU 02	FCU 03	FCU 04	
Type		VRF	VRF	VRF	VRF	
Manufacturer		Mitsubishi (PACAIR)	Mitsubishi (PACAIR)	Mitsubishi (PACAIR)	Mitsubishi (PACAIR)	
Man. Ref.		PEFY-M40VMA	PEFY-M80VMA	PEFY-M125VMA	PKFY-P40VLM	
Type		Ceiling Void	Ceiling Void	Ceiling Void	Wall Mounted	
Quantity		24	3	1	1	
Location		See Layout	See Layout	See Layout	See Layout	
Cooling sensible	kW	3.3	5.9	9.9	3.1	
Cooling total	kW	3.5	7	12	3.5	
Heating	kW	3	5	11	3	
Refrigerant		R410a	R410a	R410a	R410a	
External summer temp	°C	25.5	25.5	25.5	25.5	
External winter temp	°C	-4.5	-4.5	-4.5	-4.5	
Indoor unit						
Type or reference		Ducted	Ducted	Ducted	Wall Mounted	
Location		See Layout	See Layout	See Layout	See Layout	
Air Flow	l/s	167-200-233	242-300-350	467-567-617	105-123-143-167	
Noise level	db A	35	35	35	35	
Condensate		Pumped	Pumped	Pumped	Pumped	
Width	mm	900	1100	1400	898	
Depth	mm	732	732	732	237	
Height	mm	250	250	250	299	
Supply	Voltage	volts	220-240	220-240	220-240	
	Phase	ph	1	1	1	
	Hz	Hz	50	50	50	

- This schedule shall be read in-conjunction with the specification and drawings
- Units to be complete with acoustically lined inlet plenum/ acoustically lined flexible ductwork to outlet
- Units shall be selected to achieve the duties at low to medium speed of operation
- The electrical components and installation of the units to comply with BS 7671
- High efficiency motors shall be supplied as stated elsewhere.
- Filters shall comprise one section and designed for side/underside withdrawal.
- Units to be complete with condensate tray fitted with 15mm plain tail copper connection.
- All coils to be factory tested to 15 bar and shall be suitable for an operating pressure up to 10 bar
- Each coil to be fitted with manual radiator key pattern air vent and key operated drain cock.
- Motors shall have power factors at full load running conditions that are equivalent or better than that

- The controls shall be compatible with the BMS system.
- The manufacturer shall check control valve size according to coil pressure drop and flow rate to achieve
- All control valves and controls shall be installed, pre-wired and tested at the factory.
- All insulation shall be Class O fire rating.
- Flexible ductwork form discharge spigots shall be acoustically lined with a minimum length of 1000 mm.
- All units shall not exceed a supply to room temperature differential of 10°C
- Water coils shall be copper tubes with aluminium fins
- All units shall comply with the requirements of the Building Regulations
- This Information has been supplied by PACAIR North west - Stuart Law, stuart@pacair.co.uk, 01942 252 888

Mechanical Schedules

Schedule Title: M02 Fan coil - External Units Workstage: RIBA Stage 3 (Developed Design)
 Schedule Reference: - Checked By: Brett Harlow
 Project Title: 16-24 Kennedy Street Properties Issue Status: ISSUED for COMMENT
 Project Number: 70075436
 Specification Reference: -

Date: 21/05/2021
 Prepared By: Joe Hynes
 WSP Office: Manchester - 8 First Street
 Revision: 01

Cooling Fluid	Refrigerant - R410a	Flow Temp	N/A	Return Temp	N/A
Heating Fluid	Refrigerant - R410a	Flow Temp	N/A	Return Temp	N/A

Unit reference		ODU 01 - Basement & Ground	ODU 02 - First & Second Floor	ODU 03 - Third & Fourth Floor
Model		PURY-EP350YNW	PURY-EP500YNW	PURY-EP500YNW
Manufacturer		Mitsubishi (PACAIR)	Mitsubishi (PACAIR)	Mitsubishi (PACAIR)
Location		Roof	Roof	Roof
Total Cooling (UK)	kW	35.8	50.1	50.1
Heating	kW	41	54.2	54.2
Supply	Voltage	volts	380-415	380-415
	Phase	ph	3	3
	Hz	Hz	50	50
Starting current	amps	8	8	8
Heating	amps	17.7	27.8	27.8
Cooling	amps	15.9	29	29
Fuse Rating	amps	1 x 25	1 x 50	1 x 50
Width	mm	1240	1750	1750
Depth	mm	740	740	740
Height	mm	1858	1858	1858
Weight	kg	275	346	346
Noise	dBA	83/81	84/82	84/82

- This schedule shall be read in-conjunction with the specification and drawings
- Units to be complete with acoustically lined inlet plenum/ acoustically lined flexible ductwork to
- Units shall be selected to achieve the duties at low to medium speed of operation
- The electrical components and installation of the units to comply with BS 7671
- High efficiency motors shall be supplied as stated elsewhere.
- Filters shall comprise one section and designed for side/underside withdrawal.
- Units to be complete with condensate tray fitted with 15mm plain tail copper connection.
- All coils to be factory tested to 15 bar and shall be suitable for an operating pressure up to 10 bar
- Each coil to be fitted with manual radiator key pattern air vent and key operated drain cock.
- Motors shall have power factors at full load running conditions that are equivalent or better than that
- The controls shall be compatible with the BMS system.
- The manufacturer shall check control valve size according to coil pressure drop and flow rate to
- All control valves and controls shall be installed, pre-wired and tested at the factory.
- All insulation shall be Class O fire rating.
- Flexible ductwork form discharge spigots shall be acoustically lined with a minimum length of 1000
- All units shall not exceed a supply to room temperature differential of 10°C

- Water coils shall be copper tubes with aluminium fins
- All units shall comply with the requirements of the Building Regulations
- This Information has been supplied by PACAIR North west - Stuart Law, stuart@pacair.co.uk, 01942 252 888

Mechanical Schedules



Schedule Title: M04 Fans

Schedule Reference: -

Project Title: 16-24 Kennedy Street Properties

Project Number: 70075436

Specification Reference: -

Workstage: RIBA Stage 3 (Developed Design)

Checked By: Brett Harlow

Issue Status: ISSUED for COMMENT

Date: 21/05/2021

Prepared By: Joe Hynes

WSP Office: Manchester - 8 First Street

Revision: 01

RIBA Stage 2/3					RIBA Stage 4										Sound Power Level									
Type	Reference	Airflow (m³/s)	External Pressure drop (Pa)	Fan size (W x D x H)	Motor Voltage (V/P/hz)	Motor Power (kW)	Start Current (A)	Run Current (A)	Drive Type	Fan Speed (RPM)	Fan weight (kg)	Specific Fan Power (W/l/s)	Comments	63	125	250	500	1k	2k	4k	8k			
Supply Fan	SF 01	0.6	300	642 x 705 x 635	400/3/50	0.36	2.5	2.5	V	1445	68	0.6	V=Variable	71	68	65	56	43	41	46	35			
Extract Fan	EF 01	0.6	250	642 x 705 x 635	400/3/50	0.36	2.5	2.5	V	1445	68	0.6	V=Variable	71	68	65	56	43	41	46	35			
Extract Fan	EF 02	1.1	300	712 x 775 x 702	400/3/50	1.76	4.5	4.5	V	1450	102	1.5	V=Variable	74	73	73	60	46	47	53	42			

- Notes
- 1 This schedule shall be read in-conjunction with the specification and drawings
 - 2 Where the final layout, based on the installation drawings, and equipment selections associated with
 - 3 The installer shall ensure the attenuator insertion losses are suitable for the final fan selection to
 - 4 All fans shall be tested to the relevant standards and test certificates provided
 - 5 Fan connections shall be isolated by flexible connections (line size) as indicated
 - 6 Suitable test points shall be provided for air flow measurement
 - 7 All fans shall be adequately supported independently of ductwork
 - 8 All fans rated above 1100 W shall be equipped with variable speed drives
 - 9 All fans and systems shall comply with the requirements of the Building Regulations

Mechanical Schedules

Schedule Title: M05 - Heat Recovery Units
Schedule Reference:
Project Title: 16-24 Kennedy Street Properties
Project Number: 70075436
Specification Reference:

Workstage: RIBA Stage 3 (Developed Design)
Checked By: Brett Harlow
Issue Status: ISSUED FOR COMMENT

Date: 21/05/2021
Prepared By: Joe Hynes
WSP Office: Manchester - 8 First Street
Revision: 01

Heat recovery units ref.	HRU 01	HRU 02	HRU 03	HRU 04	HRU 05	HRU 06				
Location	B1 - Corridor	01-Imm. Media	01-Theory Studio	02 - Train. Studio	GF - Kitchen	01 - WC's				
Manufacturer	Vent Axia	Vent Axia	Nuaire	Nuaire	Nuaire	Nuaire				
Model	Integra Plus EC	Integra Plus EC	XBOXER XBC15	XBOXER XBC25	XBOXER XBC65	XBOXER XBC15				
Area served	B1 - Studio	Immersive Media	Theory Studio	Training Studio	GF - Kitchen	01 - Kitchen				
Quantity	1	1	1	1	1	1				
Maximum dimensions and weight										
Length	mm	644	644	1600	1713	1600				
Width	mm	780	780	1000	1160	1000				
Height	mm	305	305	260	346	260				
Operating weight	kg	17	17	195	242	195				
Double stacked	No	No	No	No	No	No				
Duty										
Design air flow rate	m³/s	0.03	0.060	0.120	0.265	0.725				
Air leakage	%	5%	5%	5%	5%	5%				
Construction										
Frame	-	-	-	Aluminium	Aluminium	Aluminium				
Panel construction	-	-	-	Double Skin	Double Skin	Double Skin				
Casing finish	-	-	-	-	-	-				
Refer to drawings for configuration and direction of airflow										
Inlet damper										
Type		Motorised	Motorised	Motorised	Motorised	Motorised				
Main filter										
Filter type		-	-	Bag	Bag	Bag				
Filter grade		-	-	F7	F7	F7				
Max final flow resistance	Pa	-	-	18C	18C	18C				
Exhaust filter										
Filter type		-	-	Panel	Panel	Panel				
Filter grade		-	-	G4	G4	G4				
Max final flow resistance	Pa	-	-	18C	18C	18C				
Electric Heater										
Inlet										
Rating	kW	1	1	3	4.5	9				
Plate heat exchanger										
Extract air temp on	°C	16	16	16	16	16				
Exhaust air temp off	°C	18	18	18	18	18				
Fresh air temp on	°C	n/a	n/a	n/a	n/a	n/a				
Supply air temp off	°C	n/a	n/a	n/a	n/a	n/a				
Fresh air flow rate	m³/s	0.03	0.060	0.120	0.265	0.725				
Min. heat recovery	%	85	85	85	85	85				
Fan (supply & Extract)										
Air flow rate	m³/s	0.03	0.060	0.120	0.265	0.725				
External resistance	Pa	150	150	200	200	150				
Fan type										
Voltage	volts	230	230	230	230	230				
Phase	ph	1	1	1	1	1				
Fz	Hz	50	50	50	50	50				
Full load current	amps	-	-	16	19.4	47				
Starting current	amps	-	-	16	19.4	47				
Motor rating	kW	-	-	-	-	-				
Method of start	-	-	-	-	-	-				
Duty/standby motors	y/n	-	-	-	-	-				
Max motor speed	rpm	-	-	-	-	-				
Motor(s) in air stream	-	-	-	-	-	-				
Fan speed	rpm	-	-	4000	4000	4000				
Variable speed drive	Yes	Yes	Yes	Yes	Yes	Yes				
Specific fan power										
Specific fan power	W/(l/s)	1.3	1.3	2.1	2.1	2.1				
Acoustics										
Fan ref	HRU 01	Hz	63	125	250	500	1k	2k	4k	8k
Inlet attenuator insertion loss			47	42	38	40	35	28	27	32
Discharge attenuator insertion loss			39	43	44	47	42	36	29	30
Unit casing insertion loss			43	42	38	37	33	28	27	31
Fan ref	HRU 02	Hz	63	125	250	500	1k	2k	4k	8k
Inlet attenuator insertion loss			47	42	38	40	35	28	27	32
Discharge attenuator insertion loss			39	43	44	47	42	36	29	30
Unit casing insertion loss			43	42	38	37	33	28	27	31
Fan ref	HRU 03	Hz	63	125	250	500	1k	2k	4k	8k
Inlet attenuator insertion loss			70	60	55	56	62	55	47	43
Discharge attenuator insertion loss			75	73	65	67	68	65	60	58
Unit casing insertion loss			61	57	42	43	41	37	34	23
Fan ref	HRU 04	Hz	63	125	250	500	1k	2k	4k	8k
Inlet attenuator insertion loss			80	74	72	74	69	65	57	56
Discharge attenuator insertion loss			86	87	81	84	75	75	73	74
Unit casing insertion loss			72	71	58	61	48	47	47	39
Fan ref	HRU 05	Hz	63	125	250	500	1k	2k	4k	8k
Inlet attenuator insertion loss			79	79	72	66	64	59	48	34
Discharge attenuator insertion loss			85	85	79	75	72	69	61	55
Unit casing insertion loss			71	69	56	51	45	41	35	20
Fan ref	HRU 06	Hz	63	125	250	500	1k	2k	4k	8k
Inlet attenuator insertion loss			70	60	55	56	62	55	47	43
Discharge attenuator insertion loss			75	73	65	67	68	65	60	58
Unit casing insertion loss			61	57	42	43	41	37	34	23

- This schedule shall be read in-conjunction with the specification and drawings
- Where the final layout, based on the installation drawings, and equipment selections associated with the
- The installer shall ensure the attenuator insertion losses are suitable for the final fan selection to achieve the
- All fans shall be tested to the relevant standards and test certificates provided
- Fan connections shall be isolated by flexible connections (line size) as indicated
- Suitable test points shall be provided for air flow measurement
- All fans shall be adequately supported independently of ductwork
- All fans rated above 1100 W shall be equipped with variable speed drives
- All fans and systems shall comply with the requirements of the Building Regulations
- HRU 01 to have electric duct-mounted heater battery rather than in built coil, rating and load provided

Mechanical Schedules



Schedule Title: M06 - Attenuators
Schedule Reference:
Project Title: 16-24 Kennedy Street Properties
Project Number: 70075436
Specification Reference:

Workstage: RIBA Stage 3 (Developed Design)
Checked By: Brett Harlow
Issue Status: ISSUED for COMMENT

Date: 21/05/2021
Prepared By: Joe Hynes
WSP Office: Manchester - 8 First Street
Revision: 01

Ref	System	Model/Type	Air flow m³/s	Press drop Pa	Nominal dimensions				Static insertion loss (Hz)								Requirements
					length mm	width mm	height mm	dia mm	63	125	250	500	1k	2k	4k	8k	
ATT-01	Supply Fan 01	Intake	0.66	48	1200	450	425	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-02	Supply Fan 01	Supply	0.66	48	1800	400	400	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-03	HRU - GF Kitch.	Intake	0.8	49	1500	500	475	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-04	HRU - GF Kitch.	Exhaust	0.8	49	1500	450	450	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-05	HRU - GF Kitch.	Supply	0.8	46	1800	450	450	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-06	HRU - GF Kitch.	Extract	0.8	46	1800	450	450	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-05	HRU - 01 Kitch.	Intake	0.3	0	915	-	-	315	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-06	HRU - 01 Kitch.	Exhaust	0.3	0	915	-	-	315	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-07	HRU - 01 Kitch.	Supply	0.3	30	1800	400	375	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-08	HRU - 01 Kitch.	Extract	0.3	30	1800	400	375	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-07	Extract Fan 01	Exhaust	0.56	0	1215	-	-	450	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-08	Extract Fan 01	Extract	0.56	49	1800	425	400	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-09	Extract Fan 02	Exhaust	1.10	46	1500	800	475	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-10	Extract Fan 02	Extract	1.10	37	1800	800	400	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-11	HRU - L1 Studio	Intake	0.20	25	1070	400	300	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-12	HRU - L1 Studio	Exhaust	0.20	25	1070	400	300	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-13	HRU - L1 Studio	Supply	0.20	27	1800	350	350	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-14	HRU - L1 Studio	Extract	0.20	27	1800	350	350	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-15	HRU - Imm. Media	Intake	0.06	5	600	220	90	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-16	HRU - Imm. Media	Exhaust	0.06	5	600	220	90	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-17	HRU - Imm. Media	Supply	0.06	5	600	220	90	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-18	HRU - Imm. Media	Extract	0.06	5	600	220	90	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-19	HRU - L2 Studio	Intake	0.30	0	915	-	-	300	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-20	HRU - L2 Studio	Exhaust	0.30	0	915	-	-	300	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-21	HRU - L2 Studio	Supply	0.30	23	1800	-	-	300	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-22	HRU - L2 Studio	Extract	0.30	23	1800	-	-	300	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-23	HRU - B1 Studio	Intake	0.03	5	600	220	90	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-24	HRU - B1 Studio	Exhaust	0.03	5	600	220	90	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-25	HRU - B1 Studio	Supply	0.03	5	600	220	90	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	
ATT-26	HRU - B1 Studio	Extract	0.03	5	600	220	90	-	TBA	TBA	TBA	TBA	TBA	TBA	TBA	TBA	

Notes
1 This schedule shall be read in-conjunction with the specification and drawings

Mechanical Schedules



Schedule Title:

M09 - Electric Panel Heaters

Workstage:

RIBA Stage 3 (Developed Design)

Date:

21/05/2021

Schedule Reference:

Checked By:

Brett Harlow

Prepared By:

Joe Hynes

Project Title:

16-24 Kennedy Street Properties

Issue Status:

ISSUED for COMMENT

WSP Office:

Manchester - 8 First Street

Project Number:

70075436

Revision:

01

Specification Reference:

Ref	Location/space reference	Type/Model	Output Watts	Length mm	Height mm	Depth mm	Pipe Connection	Sections N°	Finish/Colour	Comments/ Accessories
EPH-16KS-B-001	16KS-B1-Stairs	TAD-057-129/CF	2000	1309	575	150	N/A	15	TBC	
EPH-16KS-B-002	16KS-B1-WC	QSE-120-055/GF	500	550	1281	100	N/A	4	TBC	
EPH-16KS-B-003	16KS-B1-Staff Lockers	QSE-120-055/GF	500	550	1281	100	N/A	4	TBC	
EPH-16KS-B-004	16KS-B1-Staff Lockers	TAD-057-081/CF	1250	829	575	150	N/A	9	TBC	
EPH-20KS-B-001	20KS-B1-Corridor	TAD-057-081/CF	1250	829	575	150	N/A	9	TBC	
EPH-20KS-B-002	20KS-B1-Stair	TAD-057-081/CF	1250	829	575	150	N/A	9	TBC	
EPH-20KS-B-003	20KS-B1-Corridor	TAD-057-129/CF	2000	1309	575	150	N/A	15	TBC	
EPH-20KS-B-004	20KS-B1-Corridor	TAD-057-081/CF	1250	829	575	150	N/A	9	TBC	
EPH-20KS-B-005	20KS-B1-Staff WC	QSE-120-055/GF	500	550	1281	100	N/A	4	TBC	
EPH-24KS-B-001	16KS-B1-Studio	QSE-120-055/GF	500	550	1281	100	N/A	4	TBC	
EPH-16KS-GR-001	16KS-GR-Acc. WC	QSE-120-055/GF	500	550	1281	100	N/A	4	TBC	
EPH-16KS-GR-002	16KS-00-Stairs	TAD-057-129/CF	2000	1309	575	150	N/A	15	TBC	
EPH-20KS-GR-001	16KS-00-Stairs	TAD-057-129/CF	2000	1309	575	150	N/A	15	TBC	
EPH-16KS-01-001	16KS-01-Stairs	TAD-057-081/CF	1250	829	575	150	N/A	9	TBC	
EPH-16KS-01-002	16KS-01-Showers	TAD-057-129/CF	2000	1309	575	150	N/A	15	TBC	
EPH-16KS-01-003	16KS-01-WC's	QSE-120-055/GF	500	550	1281	100	N/A	4	TBC	
EPH-16KS-01-004	16KS-01-WC's	QSE-120-055/GF	500	550	1281	100	N/A	4	TBC	
EPH-20KS-01-001	20KS-01-WC's	TAD-057-129/CF	2000	1309	575	150	N/A	15	TBC	
EPH-20KS-01-002	20KS-01-Corridor	TAD-057-129/CF	2000	1309	575	150	N/A	15	TBC	
EPH-20KS-01-003	20KS-01-Corridor	QSE-120-055/GF	500	550	1281	100	N/A	4	TBC	
EPH-20KS-01-004	20KS-01-Corridor	TAD-057-081/CF	1250	829	575	150	N/A	9	TBC	
EPH-20KS-01-005	20KS-01-24 Guest WC	QSE-120-055/GF	500	550	1281	100	N/A	4	TBC	
EPH-16KS-02-001	16KS-02-Corridor	TAD-057-081/CF	1250	829	575	150	N/A	9	TBC	
EPH-16KS-02-002	16KS-02-Stairs	TAD-057-081/CF	1250	829	575	150	N/A	9	TBC	
EPH-16KS-02-003	16KS-02-WC/Shower	QSE-120-055/GF	500	550	1281	100	N/A	4	TBC	
EPH-16KS-02-004	16KS-02-WC/Shower	QSE-120-055/GF	500	550	1281	100	N/A	4	TBC	
EPH-20KS-02-001	20KS-02-Guestroom 3	QSE-120-055/GF	500	550	1281	100	N/A	4	TBC	
EPH-20KS-02-002	20KS-02-Corridor	TAD-057-081/CF	1250	829	575	150	N/A	9	TBC	
EPH-20KS-02-003	20KS-02-Corridor	TAD-057-081/CF	1250	829	575	150	N/A	9	TBC	
EPH-20KS-02-004	20KS-02-Guestroom 2	QSE-120-055/GF	500	550	1281	100	N/A	4	TBC	
EPH-20KS-02-005	20KS-02-Guestroom 1	QSE-120-055/GF	500	550	1281	100	N/A	4	TBC	
EPH-24KS-02-001	24KS-02-Bathroom	QSE-120-055/GF	500	550	1281	100	N/A	4	TBC	
EPH-16KS-03-001	16KS-03-Stairs	TAD-057-081/CF	1250	829	575	150	N/A	9	TBC	
EPH-16KS-03-002	16KS-03-Corridor	TAD-057-081/CF	1250	829	575	150	N/A	9	TBC	
EPH-20KS-03-001	20KS-03-Guestroom 6	QSE-120-055/GF	500	550	1281	100	N/A	4	TBC	
EPH-20KS-03-002	20KS-03-Corridor	TAD-057-081/CF	1250	829	575	150	N/A	9	TBC	
EPH-20KS-03-003	20KS-03-BOH	TAD-057-049/CF	750	509	575	150	N/A	5	TBC	
EPH-20KS-03-004	20KS-03-Corridor	TAD-057-081/CF	1250	829	575	150	N/A	9	TBC	
EPH-20KS-03-005	20KS-03-Guestroom 5	QSE-120-055/GF	500	550	1281	100	N/A	4	TBC	
EPH-20KS-03-006	20KS-03-Guestroom 4	QSE-120-055/GF	500	550	1281	100	N/A	4	TBC	
EPH-24KS-03-001	24KS-03-En-suite	QSE-120-055/GF	500	550	1281	100	N/A	4	TBC	
EPH-20KS-04-001	20KS-04-Corridor	TAD-057-081/CF	1250	829	575	150	N/A	9	TBC	
EPH-20KS-04-002	20KS-04-BOH	TAD-057-081/CF	1250	829	575	150	N/A	9	TBC	
EPH-20KS-04-003	20KS-04-Stair	TAD-057-081/CF	1250	829	575	150	N/A	9	TBC	
EPH-20KS-04-004	20KS-04-Corridor	TAD-057-081/CF	1250	829	575	150	N/A	9	TBC	
EPH-20KS-04-005	20KS-04-24K WC	QSE-120-055/GF	500	550	1281	100	N/A	4	TBC	
EPH-20KS-04-006	20KS-04-Corridor	TAD-057-081/CF	1250	829	575	150	N/A	9	TBC	

- Notes
- 1

This schedule shall be read in-conjunction with the specification and drawings
- 2

Radiators shall be manufactured and tested in accordance with BS EN 422
- 3

Fixings for radiator brackets shall be suitable for the application and loads. Supports for radiators fixed to lightweight structures shall be approved before inst
- 4

Selection based on Zehnder Products .

Mechanical Schedules

Schedule Title: M10 - DX Split AC units
 Schedule Reference:
 Project Title: 16-24 Kennedy Street Properties
 Project Number: 70075436
 Specification Reference:

Workstage: RIBA Stage 3 (Developed Design)
 Checked By: Brett Harlow
 Issue Status: ISSUED for COMMENT

Date: 21/05/2021
 Prepared By: Joe Hynes
 WSP Office: Manchester - 8 First Street
 Revision: 01



External Design Conditions		Summer:	25.5	Deg C db	18.7	Deg C wb	50	%RH	Winter:	-4.5	Deg C db	-4.8	Deg C wb	50	%RH
Manufacturer		Selections below are based on the following manufacturer: Mitsubishi													
Unit reference		1	2	3	4	5	6	7	8						
Cooling sensible	kW	10	10	10	10	10	10	10	10						
Cooling total	kW	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2						
Heating	kW	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5						
Indoor unit															
Location		B1-Server Rm	B1-Server Rm	B1-Server Rm	B1-Server Rm	B1-Server Rm	B1-Server Rm	B1-Server Rm	B1-Server Rm						
Mounting		Under Ceiling	Under Ceiling	Under Ceiling	Under Ceiling	Under Ceiling	Under Ceiling	Under Ceiling	Under Ceiling						
Model		PCFY-P100VKM-ER1	PCFY-P100VKM-ER1	PCFY-P100VKM-ER1	PCFY-P100VKM-ER1	PCFY-P100VKM-ER1	PCFY-P100VKM-ER1	PCFY-P100VKM-ER1	PCFY-P100VKM-ER1						
Fan speed		Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium						
Noise level	db A	38-41	38-41	38-41	38-41	38-41	38-41	38-41	38-41						
Filter		-	-	-	-	-	-	-	-						
Condensate		Pumped	Pumped	Pumped	Pumped	Pumped	Pumped	Pumped	Pumped						
Width	mm	1600	1600	1600	1600	1600	1600	1600	1600						
Depth	mm	680	680	680	680	680	680	680	680						
Height	mm	230	230	230	230	230	230	230	230						
Colour		TBC	TBC	TBC	TBC	TBC	TBC	TBC	TBC						
Supply	Voltage	volts	230	230	230	230	230	230	230						
	Phase	ph	1	1	1	1	1	1	1						
	Hz	Hz	50	50	50	50	50	50	50						
Starting current	amps	-	-	-	-	-	-	-	-						
Running current	amps	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65						
External unit															
Location		Roof					Roof								
Model		PUHY-P400YNW-A1					PUHY-P400YNW-A1								
Noise level	db A	67/86					67/86								
Width	mm	1240					1240								
Depth	mm	740					740								
Height	mm	1858					1858								
Supply	Voltage	volts	400					400							
	Phase	ph	3					3							
	Hz	Hz	50					50							
Starting current	amps	8					8								
Running current	amps	19.8/22.7					19.8/22.7								
Other															
Leak detection		y	y	y	y	y	y	y	y						

Notes

- This schedule shall be read in-conjunction with the specification and drawings
- The installer shall include for electrical isolation, control and power cables for both indoor and outdoor units
- This Information has been supplied by PACAIR North west - Stuart Law, stuart@pacair.co.uk, 01942 252 888

Mechanical Schedules

Schedule Title: M11 - Re-Circ. Units
 Schedule Reference:
 Project Title: 16-24 Kennedy Street Properties
 Project Number: 70075436
 Specification Reference:

Workstage: RIBA Stage 3 (Developed Design)
 Checked By: Brett Harlow
 Issue Status: ISSUED for COMMENT

Date: 21/05/2021
 Prepared By: Joe Hynes
 WSP Office: Manchester - 8 First Street
 Revision: 01



Re-circulation		RCU 01					
Location		B1 - Plantroom					
Manufacturer		Halton					
Model		RecoAir 2.0					
Area served		GF - Kitchen					
Quantity		1					
Maximum dimensions and weight							
Depth	mm	1430					
Width	mm	1540					
Height	mm	2005					
Operating weight	kg	914					
Double stacked		No					
Duty							
Design air flow rate	m³/s	1.8					
External pressure	Pa	250					
Fan Size	ømm	450					
Power	V/ph/A	400/50/8					
Specific Fan Power (SFP)	kW/m³/s	1.27					
Acoustics							
Casing Breakout (filters clean)	dBA	53					
Casing Breakout (filters dirty)	dBA	60					

- 1 This schedule shall be read in-conjunction with the specification and drawings
- 2 Where the final layout, based on the installation drawings, and equipment selections associated with the system
- 3 The installer shall ensure the attenuator insertion losses are suitable for the final fan selection to achieve the required noise levels
- 4 All fans shall be tested to the relevant standards and test certificates provided
- 5 Fan connections shall be isolated by flexible connections (line size) as indicated
- 6 Suitable test points shall be provided for air flow measurement
- 7 All fans shall be adequately supported independently of ductwork
- 8 All fans rated above 1100 W shall be equipped with variable speed drives
- 9 All fans and systems shall comply with the requirements of the Building Regulations