



PROJECT	Nike Manchester
PROJECT NUMBER	70097489
ISSUE	Stage 4
CHECKED	RS
DATE	01/03/2023
REVISION	T02
SCHEDULE REFERENCE	NRM-WSP-XX-XX-SH-M-500101
	VRF SCHEDULE

Filename

CONTENTS OF SPREADSHEET

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Sheet 2 to 3	VRF COMFORT COOLING SCHEDULE

AUTHORISATION OF LATEST VERSION

Type and method of check		
Signatures & dates:	By	R.STEVENS
	Checked	D.BOTTRILL
	Signed	

REVISIONS					Current Revision	T02
Rev.	Date	By	Checked	Signed	Description	
T01	16/12/22	R.STEVENS	D.BOTTRILL		Stage 3	
T02	01/03/23	R.STEVENS	D.BOTTRILL		Stage 4	

Mechanical Schedules

Schedule title	VRF Comfort Cooling Schedule	Issue	Stage 4
Schedule ref	NRM-WSP-XX-XX-SH-M-500101	Revision	T02
Project title	Nike - Manchester	Date	01/03/2023
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Specification references		Checked	RS

Unit reference		FCU 00-01, 05, 06, 09	FCU 00-11	FCU 00-02, 03,04,07,08	FCU 00-10	FCU 00-12	FCU 01-01,03,04,07,08
Manufacture		Daikin	Daikin	Daikin	Daikin	Daikin	Daikin
Reference		FXSQ40A	FXFQ32B	FXSQ40A	FXSQ15A	FXFQ32B	FXSQ50A
Quantity		4	1	5	1	1	5
Cooling sensible	kW	2.9	2.6	2.9	1.1	2.6	3.6
Cooling total	kW	3.7	3	3.7	1.4	3	4.6
Heating	kW	4.8	3.9	4.8	1.8	3.9	6.1
External summer temp	°C	35	35	35	35	35	35
External winter temp	°C	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5

Indoor unit							
Location		Front of House - 00	Stock room - 00	Front of House - 00	Changing room - 00	Stock - 00	Front of House - 01
Type		Concealed ceiling unit with medium ESP	Round Flow Round flow cassette	Concealed ceiling unit with medium ESP	Concealed ceiling unit with medium ESP	Round Flow Round flow cassette	Concealed ceiling unit with medium ESP
Noise level		db. A	30-38	30-38	30-38	30-38	30-38
Filter			Yes	Yes	Yes	Yes	Yes
Condensate			Pumped	Pumped	Pumped	Pumped	Pumped
Width		mm	*	*	*	*	*
Depth		mm	*	*	*	*	*
Height		mm	*	*	*	*	*
Weight		kg	*	*	*	*	*
Colour			*	*	*	*	*
Supply	Voltage	volts	220	220	220	220	220
	Phase	ph.	1	1	1	1	1
	Hz	Hz	50	50	50	50	50
Starting current		amps	*	*	*	*	*
Minimum Circuit amps		amps	1.1	1.1	1.1	1.1	1.1

External unit							
Reference		VRF/01	VRF/01	VRF/02	VRF/02	VRF/02	VRF/03
Manufacture		Daikin		Daikin			Daikin
Reference		REYQ8U		REYQ10U			REYQ12U
Type		Air cooled heat recovery		Air cooled heat recovery			Air cooled heat recovery
Cooling capacity		kW	15.1	19			29.8
Heating capacity		kW	18.6	21			25.4
Refrigerant		R410A		R410A			R410A
Location		Roof plant deck		Roof plant deck			Roof plant deck
Noise level		db. A	*	*			*
Weight		kg	*	*			*
Width		mm	*	*			*
Depth		mm	*	*			*
Height		mm	*	*			*
Supply	Voltage	volts	400	400			400
	Phase	ph.	3	3			3
	Hz	Hz	50	50			50
Minimum Circuit amps		amps	*	*			*
Nominal Running amps		amps	*	*			*

Other							
Leak detection for refrigerant				Yes			

- 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.
 - Units to be complete with acoustically lined discharge plenum.
 - All insulation shall be Class O fire rating.
 - Units shall be selected to achieve the duties at 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. Condensate trays to be provided under control valve assembly. Condensate trays shall be designed to fully discharge all water and not allow stagnant water to remain in the tray. Drainage to be achieved by gravity
 - All coils to be factory tested to 15 bar and shall be suitable for an operating pressure up to 10 bar
 - Selections shall be based on Mitsubishi or equal and approved at medium speed or low
 - SFP to be 0.25 W/L/S or less
 - All units to be linked to a advance centralised controller capable of controlling all the units. The controller will be able to set independent heating and cooling setpoints for various occupied zones. The controller shall be Intelligent touch master ref,DCM601A51or similar.
 - Remote controllers shall be fitted to the One to one room, Office, Break and Comms rooms.
 - Comms room cooling shall operate as N+1. The Units shall be set up to automatically change over periodically, to evenly wear the units.
 - A branch selector unit shall be installed on each level, in line with manufactures literature.
 - A/C systems have been designed to give at least 2 independent systems for each sales floor and stockrooms with multiple units.
 - All items denoted "" to be confirmed by manufacturer.

Mechanical Schedules

Schedule title	VRF Comfort Cooling Schedule	Issue	Stage 4
Schedule ref	NRM-WSP-XX-XX-SH-M-500101	Revision	T02
Project title	Nike - Manchester	Date	01/03/2023
Project no	70097489	Sheet	2 of 3
Specification references		Checked	RS

Unit reference		FCU 01-10	FCU 01-12	FCU 01-15	FCU 01-02,05,06,09	FCU 01-11	FCU 01-13
Manufacture		Daikin	Daikin	Daikin	Daikin	Daikin	Daikin
Reference		FXSQ63A	FXZQ15A	FXFQ63B	FXSQ50A	FXZQ15A	FXZQ20A
Quantity		1	1	1	4	1	1
5.8	kW	4.5	1.3	4.5	4.6	1.3	1.5
Cooling total	kW	5.8	1.4	5.8	3.6	1.4	1.8
Heating	kW	7.7	1.8	7.7	6.1	1.8	2.4
External summer temp	°C	35	35	35	35	35	35
External winter temp	°C	-5.5	-5.5	-5.5	-5.5	-5.5	-5.5

Indoor unit							
Location		Changing - 01	One 2 One - 01	Stock room - 01	Frount of House - 01	Office - 01	Break - 01
Type		Concealed ceiling unit with medium ESP	Fully flat cassette	Concealed ceiling unit with medium ESP	Concealed ceiling unit with medium ESP	Fully flat cassette	Round Flow Round flow cassette
Noise level	db. A	30-38	30-38	30-38	30-38	30-38	30-39
Filter		Yes	Yes	Yes	Yes	Yes	Yes
Condensate		Pumped	Pumped	Pumped	Pumped	Pumped	Pumped
Width	mm	*	*	*	*	*	*
Depth	mm	*	*	*	*	*	*
Height	mm	*	*	*	*	*	*
Weight	kg	*	*	*	*	*	*
Colour		*	*	*	*	*	*
Supply	Voltage	volts	220	220	220	220	220
	Phase	ph.	1	1	1	1	1
	Hz	Hz	50	50	50	50	50
Starting current	amps	*	*	*	*	*	*
Minimum Circuit amps	amps	1.1	1.1	1.1	1.1	1.1	1.1

External unit							
Reference		VRF/03	VRF/03	VRF/03	VRF/04	VRF/04	VRF/04
Manufacture					Daikin		
Reference					REYQ10U		
Type					Air cooled heat recovery		
Cooling capacity	kW				22.9		
Heating capacity	kW				22.5		
Refrigerant					R410A		
Location					Roof plant deck		
Noise level	db. A				*		
Weight	kg				*		
Width	mm				*		
Depth	mm				*		
Height	mm				*		
Supply	Voltage	volts			400		
	Phase	ph.			3		
	Hz	Hz			50		
Minimum Circuit amps	amps				*		
Nominal Running amps	amps				*		

Other							
Leak detection for refrigerant				Yes			

- 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.
 - Units to be complete with acoustically lined discharge plenum.
 - All insulation shall be Class O fire rating.
 - Units shall be selected to achieve the duties at 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. Condensate trays to be provided under control valve assembly. Condensate trays shall be designed to fully discharge all water and not allow stagnant water to remain in the tray. Drainage to be achieved by gravity
 - All coils to be factory tested to 15 bar and shall be suitable for an operating pressure up to 10 bar
 - Selections shall be based on Mitsubishi or equal and approved at medium speed or low
 - SFP to be 0.25 W/L/S or less
 - All units to be linked to a advance centralised controller capable of controlling all the units. The controller will be able to set independent heating and cooling setpoints for various occupied zones. The controller shall be Intelligent touch master ref,DCM601A51or similar.
 - Remote controllers shall be fitted to the One to one room, Office, Break and Comms rooms.
 - Comms room cooling shall operate as N+1. The Units shall be set up to automatically change over periodically, to evenly wear the units.
 - A branch selector unit shall be installed on each level, in line with manufactures literature.
 - A/C systems have been designed to give at least 2 independent systems for each sales floor and stockrooms with multiple units.
 - All items denoted "" to be confirmed by manufacturer.

Mechanical Schedules

Schedule title	VRF Comfort Cooling Schedule	Issue	Stage 4
Schedule ref	NRM-WSP-XX-XX-SH-M-500101	Revision	T02
Project title	Nike - Manchester	Date	01/03/2023
Project no	70097489	Sheet	3 of 3
Specification references		Checked	RS

		FCU 01-14	IDU 01	IDU 01			
Unit reference							
Manufacture		Daikin	Daikin	Daikin			
Reference		FXFQ63B	FAA71B	FAA71B			
Quantity		1	1	1			
Cooling sensible	kW	5.8	7.0	7.0			
Cooling total	kW	4.5					
Heating	kW	7.7	-	-			
External summer temp	°C	35	35	35			
External winter temp	°C	-5.5	-5.5	-5.5			

Indoor unit							
Location		Stock room - 01	Comms - 00	Comms - 00			
		Round Flow Round flow					
Type		cassette	Wall mounted Split	Wall mounted Split			
Noise level	db. A	30-38	30-38	30-38			
Filter		Yes	Yes	Yes			
Condensate		Pumped	Pumped	Pumped			
Width	mm	*	*	*			
Depth	mm	*	*	*			
Height	mm	*	*	*			
Weight	kg	*	*	*			
Colour		*	*	*			
Supply	Voltage	volts	220	220			
	Phase	ph.	1	1			
	Hz	Hz	50	50			
Starting current	amps	*	*	*			
Minimum Circuit amps	amps	1.1	1.1	1.1			

External unit							
Reference		VRF/04	ODU/ 01	ODU/ 02			
Manufacture			Daikin	Daikin			
Reference			RZAG71NV1	RZAG71NV1			
Type			Air cooled heat recovery	Air cooled heat recovery			
Cooling capacity	kW		7	7			
Heating capacity	kW		-	-			
Refrigerant			R410A	R410A			
Location			Roof plant deck	Roof plant deck			
Noise level	db. A		*	*			
Weight	kg		*	*			
Width	mm		*	*			
Depth	mm		*	*			
Height	mm		*	*			
Supply	Voltage	volts	400	400			
	Phase	ph.	3	3			
	Hz	Hz	50	50			
Minimum Circuit amps	amps		*	*			
Nominal Running amps	amps		*	*			

Other							
Leak detection for refrigerant				Yes			

- 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.
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