KPC Install - Schedule of M&P equipment and imposed electrical loadings (SBEM compliant Revision): 27/11/2024

03/10/2024 C Barlow File Name: DML322-XX-GF-SH-M-5700 Rev: 2

HVAC EQUIPMENT SCHEDULE

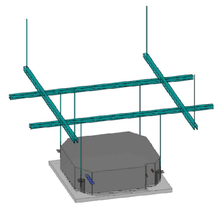
J1322

DX Systems

Reference	Description	Qty	Manufacturer	Type	Mounting height (to Bot') AFFL [mm]	Nominal Duty [kW]	Electrical Supply	Current load (A) - 1 Phase	Current load (A) - 3 Phase	Weight [kg]	Refrigerant	Outdoor/Indoor (companion) Unit	Dimensions WxLxH [mm]	Noise dB(A)	Comment
AC/1	VRF Outdoor unit	1	MHI	FDC450KXZHE2	~150	45(Cap)-45(Htg)	3Ph 400V 32A(max) 50A Fuse		23	372	R410A	-	1350x720x1052	62 / 61	Local 3Ph Isolator
AC/1A	Kitchen AC/Htg Void unit	1	MHI	FDU224KXZE1	2650	22(Cap)-25(Htg)	1Ph 220V 1A(max) 10A Fuse	3.9		89	R410A	FDC450KXZE2	1000x883x379	50 / 47 / 45	Local Fused Spur Req'd
AC/1B	Mgr' Off' AC/Cond' unit	1	MHI	FDK224KXZE1	2100	2.2(Cap)2.5(Htg)	1Ph 220V 1A(max) 5A Fuse	0.2		11	R410A	FDC450KXZE2	870x730x290	30 / 32 / 28	Local Fused Spur Req'd
AC/1C	3F Rm AC Comp' Cass'	1	MHI	FDTC224KXZE1	2400	2.2(Cap)2.5(Htg)	1Ph 220V 1A(max) 5A Fuse	0.3		13	R410A	FDC450KXZE2	570x570x248	32 / 29 / 25	Local Fused Spur Req'd
AC/1D/E	F.O.H. AC/Htg Cond' unit	2	MHI	FDT90KXZE1	@1g/M - TBC	9(Cg) 10(Htg)	1Ph 220V 1A(max) 5A Fuse	1.1		25	R410A	FDC450KXZE2	840x840x298	38 / 36 / 31	Local Fused Spur Req'd

Ventilation Systems

Reference	Description	Qty	Manufacturer	Type	Mounting height (to Bot') AFFL [mm]	Nominal Duty [kW]	Electrical Supply			Weight [kg]	SFP	Outdoor/Indoor (companion) Unit	Dimensions WxLxH [mm]	Noise dB(A)	Comment
SF/01	Kitchen supply Fan	1	Systemair	MUB062-560EC	3295	2.25 m³/s	3Ph 400V 50Hz ~1808W(~2.7A)		2.7	83	0.822	n/a	820 x 820 x 820	53	
KE/01	Kitchen Extract Fan	1	Systemair	MUB/T 062-630EC	1640	2.8 m³/s	3Ph 400V 50Hz ~2061W(~3.0A)		3	114.5	0.736	n/a	820 x 820 x 820	52	
KEOC/01	Kitchen Extract odour control	1	Purified Air	UVO1000	~2270	0.7	1ph 220V 50Hz 700W(3.0A)	3.0		50	n/a	n/a	363x1568x350	n/a	Chk Handing Flow L>R
KEOC/02	Kitchen Extract odour control	1	Purified Air	UVO500	~2700	0.04	1ph 220V 50Hz 140W(0.6A)	0.6		10.5	n/a	n/a	605x200x300	n/a	Chk Handing Flow L>R
ESP/01	Kitchen Extract odour control	2	Purified Air	ESP4500	~1640	0.05	1ph 220V 50Hz 50W(0.2A)	0.4		118	n/a	n/a	1350x640x630	n/a	Chk Handing Flow L>R
EF/01	WC Extract Fan	1	Vent Axia	ACM200	~2650	120 l/s @100 Pa	1Ph 220V 50Hz ~60W(~0.5A)	0.5		3	0.64	n/a	223x300x276	26	Slit to low
Fridge Systems															
FR/01	Veg Chiller	1	Danfoss	MSM/0144MPN/55G	1650	1.4	1ph 220V 50Hz ~1610W(7A max)	6.8		52	R449	Outdoor	910x364x530	34	
FR/01	Veg Chiller	1	Searle	TEC4-7	1900	1.25	1ph 220V 50Hz ~920W(~4A)	4		15	R449	Indoor	965x378x210	53	0.9kW Defrost unit
FR/02	Chicken Chiller	1	Danfoss	MSM/0144MPN/55G	950	1.4	1ph 220V 50Hz ~1610W(7A max)	6.8		52	R449	Outdoor	910x364x530	34	
FR/02	Chicken Chiller	1	Searle	TEC4-7	1900	1.25	1ph 220V 50Hz ~920W(~4A)	4		15	R449	Indoor	965x378x210	53	0.9kW Defrost unit
FZ/01	Freezer Room	1	Danfoss	LSQM048NTV6SE	150	1.4	3Ph 400V 50Hz ~3150W(~4.8A)		4.8	77	R452a	Outdoor	1087 x 464 x 695	62	
FZ/01	Freezer Room	1	Searle	TEC-6-S	1900	1.31	1ph 220V 50Hz ~1020W(~4.4A)	4.4		19	R452a	Indoor	1120 x 560 x 524	n/a	1.0kW Defrost unit
						Other mech systems with Electrical loads									
DHWCyl/01/02	Hot Water Cylinder	2	Megaflo	250DDDD	~	4x3kW Imm Htr (Ea)	1ph 220V 50Hz ~3kW(13A) x 8	104		283	n/a	n/a	⌀579 x 1738	n/a	
OH 1	Overdoor Heater (Front)	1	Dimplex	AC3OE	3300	3	1ph 220V 50Hz 3kW(13A)	13		8.7	n/a	n/a	639x282x224	n/a	Supplied and Fitted by Elec. Contractor
OH 2	Overdoor Heater (B.O.H)	2	Dimplex	AC3N	2400	3	1ph 220V 50Hz 3kW(13A)	26		5	n/a	n/a	730x170x230	n/a	Supplied and Fitted by Elec. Contractor
DHWRtn Pump	HW return pump	1	Grundfos	UPS15/50N	~	~	1ph 220V 50Hz ~50W(~0.21A)	0.21		2.4	n/a	n/a	130x130x126	n/a	
BU DHWPOU	Backup HWS/STEMS	1	ZIP	CDO-O	1800	6.6 - 8.8	1ph 220V 50Hz ~8.8kW(39A)	38		n/a	n/a	n/a	177x109x312	n/a	Only used when main DHWs off
HD/01	F.O.H. WC Hand Dryer	3	Xpargarillo	1118	1000	1.4	1ph 220V 50Hz ~1400W(~6A)	18		4.5	n/a	n/a	295x170x320	76	



TYPICAL CEILING CASSETTE INSTALLATION DETAIL

HD galv Unistrut H frame configuration with M10 rod, zebs and Sq washers supporting the lower frame to allow zeb fixtures to be loosened and AC unit to be moved as required.

To be employed on all ceiling cassette installations to allow a minimum of 350mm movement in any direction to index unit with lighting and ceiling systems.

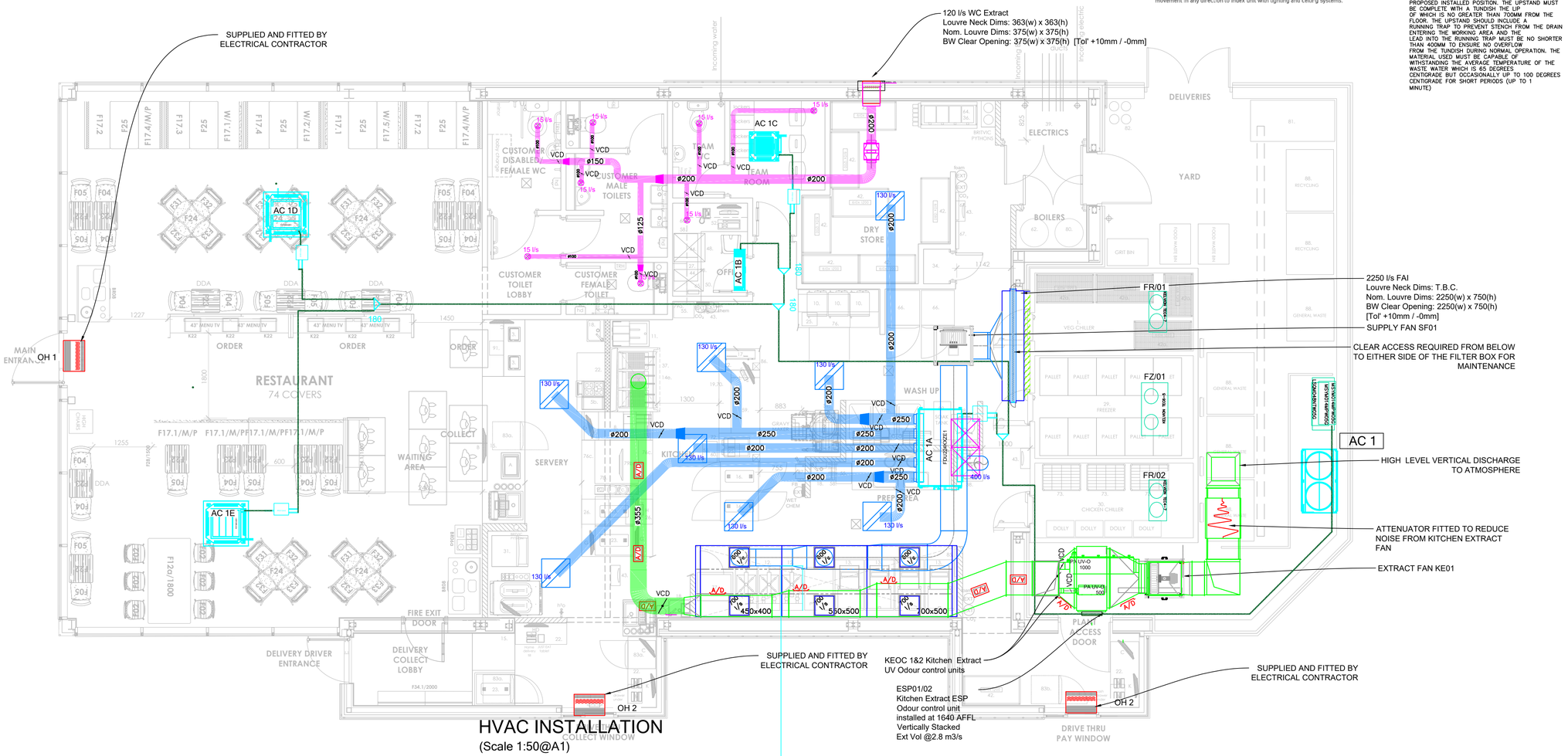
NOTES

1. ALL PENETRATIONS EXTERNAL TO CONCESSION BY MAIN CONTRACTOR COMPLETE WITH FIRESTOPPING.
2. TO BE READ IN CONJUNCTION WITH FRANKE AND FRANK BELSHAW CONSTRUCTION DRAWINGS.
3. CONTRACTOR TO INCLUDE FOR CO-ORDINATING HIS WORK WITH ALL OTHER TRADES.
4. ALL SERVICES TO BE CO-ORDINATED TO ENSURE SAFE AND EFFECTIVE ACCESS IS ACHIEVABLE TO ALL DUCT CLEANING ACCESS DOORS AND ALL OTHER MAINTAINABLE M&E SYSTEMS
5. LSVS TO ALL RETURN LEGS ON DHW TO FACILITATE FLOW BALANCE ON DHW-R
6. ALL PIPEWORK TO BE INSTALLED IN TABLE X COPPER.
7. CHROME PIPEWORK TO BE USED WHERE ON VIEW
8. ALL PIPEWORK TO BE INSULATED
9. WRAS COMPLIANT INSTALLATION
10.

RATIONAL OVEN NOTES:

15mm COLD WATER SUPPLY IS REQUIRED COMPLETE WITH DOUBLE CHECK VALVE TO PREVENT BACK SIPHONING OF FOUL WATER INTO THE MAIN. THE SUPPLY SHOULD BE TERMINATED IN A ¾" BSP APPLIANCE FITTING (WASHING MACHINE TAP). THE DYNAMIC WATER PRESSURE SHOULD BE BETWEEN 1.5 AND 6 BAR (150 – 600 KILOPASCALS) RECOMMENDED 3 BAR (300 KILOPASCALS)

WASTE
WITHOUT PUMP SYSTEM
- THE APPLIANCE REQUIRES A 50MM WASTE UPSTAND TO BE INSTALLED WITHIN 1 METRE OF THE PROPOSED INSTALLED POSITION. THE UPSTAND MUST BE COMPLETE WITH A TUNDISH THE LIP OF WHICH IS NO GREATER THAN 700MM FROM THE FLOOR. THE UPSTAND SHOULD INCLUDE A RUNNING TRAP TO PREVENT STENCH FROM THE DRAIN ENTERING THE WORKING AREA AND THE LEAD INTO THE RUNNING TRAP MUST BE NO SHORTER THAN 400MM TO ENSURE NO OVERFLOW FROM THE TUNDISH DURING NORMAL OPERATION. THE MATERIAL USED MUST BE CAPABLE OF WITHSTANDING THE AVERAGE TEMPERATURE OF THE WASTE WATER WHICH IS 65 DEGREES CENTIGRADE BUT OCCASIONALLY UP TO 100 DEGREES CENTIGRADE FOR SHORT PERIODS (UP TO 1 MINUTE)



HVAC INSTALLATION

(Scale 1:50@A1)

ELECTRICAL AND MECHANICAL FITTINGS AND/OR APPLICANCES, CONDUITS, PIPES, DUCTS, CABLES, ETCARE INDICATED FOR TENDERING PURPOSES AND GUIDANCE DURING INSTALLATION. EXACT POSITIONS AND ROUTES SHALL BE SETTLED ON SITE IN RELATION TO OTHER SERVICES AND FIXTURES AND TO THE ARCHITECTS DETAILED ROOM LAYOUTS WHERE ISSUED OR APPROPRIATE, OR WHERE DIMENSIONS ARE GIVEN (ON THE DRAWING OR IN THE SPECIFICATION). FINAL POSITIONS OF LIGHTING POINTS, MECHANICAL AND ELECTRICAL FITTINGS, FIXTURES AND/OR APPLICANCES MUST BE CHECKED WITH THE CLIENT OR HIS REPRESENTATIVE BEFORE PROCEEDING.

This Drawing is copyright of DENMECH LTD and should not be reproduced without permission. All dimensions should be checked on site and any discrepancies notified prior to the commencement of work.

LEGEND

- CONDENSATE DRAINS
- Dx PIPE ROUTE
- SUPPLY DUCTING (DW 144 SPIRAL)
- KITCHEN EXTRACT DUCTING (DW 144 SPIRAL)
- W/C EXTRACT DUCTING (DW 144 SPIRAL)
- ACCESS HATCH IN DUCTING
- 4-WAY SUPPLY DIFFUSER
- A/C UNIT
- EGG CRATE GRILLE
- 100mm SEV GEV

REV.	DETAIL OF AMENDMENT	QA'D BY	DATE
P01	PRELIMINARY ISSUE	CB	19.11.24

GROSS INTERNAL AREAS (SQ.M) GIA BUILDING SITE AREA

BASIS OF DRAWING: PRELIMINARY

NOTES:

SITE ADDRESS
GILDERED ROAD, BIRSTALL, BATLEY
WF17 9TB

PROJECT
KFC BIRSTALL

DRAWING TITLE
PROPOSED HVAC EQUIPMENT LAYOUT

PROJECT NO.	DRWG NO.		DRAWN BY
J1322	DML-XX-GF-DR-M-5701		CB/LJ
SCALE	CHECK'D BY	DATE	REVISION
1:50 @ A1	CB	21.11.24	P01

denmech
Experts in air quality management and assessment