OUR TOWN HALL PROJECT

Document Name: KSF-01 Schedule

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Status: S4 – Suitable for Construction

Document Type: Schedules

Revision History:

REV.	DATE	DESCRIPTION OF CHANGE
P01	23/08/2019	Issue For Comment
P02	30/08/2019	Issue For Tender
P03	21/02/2023	Issued For Construction

Not Confidential - Internal

KSF-01 Schedule

Project :	**Manchester Town Hall Catering Works**	Project No :	**50801**	Schedule Ref :	**OTH-HAK-TH-06-SCH-V-0002**
		Area Served :	**Catering Areas**	Purpose of Issue :	**Suitable for Construction**
		Issue Date :	**21 February 2023**	Revision :	**P03**

Supply Air Fan						
Total Air Volume	(m3/s)	**5.772**		Fan Speed *	(RPM)	936 @ 48 Hz
External Static Resistance	(Pa)	**250**		Motor Rating *	(kW)	15
Twin Motors	(Yes/No)	No		Motor Starting Method		via Inverter
Motors out of airstream	(Yes/No)	No		Full Load Current *	(Amps)	30.40
Inverter Driven	(Yes/No)	Yes		Starting Current *	(Amps)	-
Fan/Drive Type		Plenum/Direct		Electrical Supply		380V/3/50

Extract Fan Sound Power Levels		Total	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Fan Sound Power	(dBW)			90	90	91	90	84	77	74
Attenuator Noise Reduction				-18	-21	-36	-42	-36	-31	-22
Resultant Spectrum at Spigots	(dB)			72	69	55	48	48	46	52
Casework Attenuation				-10	-13	-17	-31	-32	-33	-36
External Sound Power	(dBW)			80	77	74	59	52	44	38
External Sound Power A-Weighted	(dBWA)	73		64	68	71	59	53	45	36
Reduction @ 3m Distance	(dB)			-14	-14	-14	-14	-14	-14	-14
Pressure Spectrum @ 3m	(dB)			66	63	60	45	38	30	24
Pressure Spectrum A-Weighted	(dBWA)	59		50	54	57	45	39	31	22

Frost Coil						
Air On Coil Temperature	(°C)	-5.0		Flow Water Temperature	(°C)	80.0
Air Off Coil Temperature	(°C)	5.0		Return Water Temperature	(°C)	60.0
Duty	(kW)	70.17		Water Flow Rate	(kg/s)	0.87

Supply Filtration						
Panel Filter	Grade	-		Bag Filter	Grade	F9

Cooling Coil						
Air On Coil Temperature (db/RH)	(°C)	28.0 / 70.1		Flow Water Temperature	(°C)	6.0
Air Off Coil Temperature (db/wb)	(°C)	18.0 / 17.8		Return Water Temperature	(°C)	12.0
Air Density	(kg/m3)	-		Water Flow Rate	(kg/s)	5.680
Duty	(kW)	142.82				

Reheat Coil						
Air On Coil Temperature	(°C)	5.0		Flow Water Temperature	(°C)	80.0
Air Off Coil Temperature	(°C)	21.0		Return Water Temperature	(°C)	60.0
Duty	(kW)	112.57		Water Flow Rate	(kg/s)	1.4

Notes
1. Supply Fan to be complete with Anti-Vibration mounts (Rubber)
2. Supply Fan Dimensions (LxWxH) 7485x1930x2050
3. Specific Fan Power of Supply Fan not to exceed 2.44 w/l/s
4. Minimum Components: Inlet Section, Panel Filter (G4), LTHW Frost Coil, Bag Filter (F9), CHW Cooling Coil, Plenum, Re-heat Coil, Built-in Attenuator (Pre-Fan), Plug Fan, Built-in Attenuator (Post Fan), Outlet Sect
5. Support Steels to be designed to distribute unit weight at a maximum of 7.5kN/m2. Anticipate unit weight 3088kg.
6. Unit to be built complete with drain pan for CHW cooling coil condensate. Copper pipework, complete with aluminium fins, to include moisture eliminators.
7. LTHW frost and re-heat coils to be copper pipework complete with aluminium fins.
8. Unit to comply with The European ErP Directive 2009/125/EG (Energy-related-products-directive)
9. Contractor to allow for inlet and outlet section dampers to be motorised.
10. Unit to be complete with access panels to allow maintenance in accordance with the manufacturers requirements.
11. Filter bulkheads to be manufactured, and associated filters to be installed, in accordance with EN 1886:2007
12. Unit to be manufactured by Halton, Model 08 AEU, or equal and approved.
1.3. Unit Construction: Panel Thickness (47mm), Panel Insulation (High Density Infill - 50mm), Aluminium Framework (50mm Aluminium Corner Tube - B Type), Panel External Sheet (Solent Blue Plastisol Steel 22g -
14. Unit Construction Cont'd: Panel Internal Sheet (Natural Galvanised Steel 20g - 0.9mm), Base Frame (100mm High Channel Base - 3mm Sheet Steel)
15. Unit to be suitable for external mounting complete with single pitched roof.
16. Unit handing to be confirmed on-site prior to procurement and installation by contractor to suit maintenance access requirements.
17. Case Leakage Classes: L3[R] at +400Pa, L3[R] at -700Pa

Revision	Revision Notes	Revision Date
P01	Tender - For Comment	23 August 2019
P02	Issue For Tender	30 August 2019
P03	Suitable for Construction	21 February 2023