OUR TOWN HALL PROJECT

Document Name: MVHR-18 Schedule

Document Ref: OTH-HAK-TH-GF-SCH-V-0001

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

MVHR-18 Schedule

Project :	**Manchester Town Hall Catering Works**	Project No :	**50801**	Schedule Ref :	**OTH-HAK-TH-GF-SCH-V-0001**
		Area Served :	**Catering Areas**	Purpose of Issue :	**Suitable for Construction**
		Issue Date :	**21 February 2023**	Revision :	**P03**

Supply & Extract Air Fans						
Supply Air Volume flow rate	(m3/s)	0.715		Supply external static resistance	(Pa)	180
Extract Air Volume flow rate	(m3/s)	0.745		Extract external static resistance	(Pa)	180
Fan Speed *	(RPM)	2140		Motor Rating *	(kW)	2.1
				Full Load Current - Fan*	(Amps)	3.5
Twin Motors	(Yes/No)	No		Starting Current - Fan*	(Amps)	3.5
Motors out of airstream	(Yes/No)	No		Full Load Current - Fan and Heater*	(Amps)	20.5
Inverter Driven	(Yes/No)	Yes		Starting Current - Fan and Heater*	(Amps)	20.5
Fan Type		Centrifugal		Electrical Supply		400V/3ph/50Hz

Electric Heater Battery						
Air On Coil Temperature	(°C)	-		Heater Current	(Amps)	17.0
Air Off Coil Temperature	(°C)	-		Electrical Supply		400V/3ph/50Hz
Duty	(kW)	12.00				

Supply & Extract Fan Sound Power Levels			63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz
Case Breakout *	(dB(A))		69	61	58	56	47	39	40	32
Induct Intake *	(dB(A))		75	74	73	76	69	63	57	53
Induct Supply *	(dB(A))		76	72	66	73	70	60	44	44
Induct Discharge *	(dB(A))		79	78	73	81	80	72	65	61
Induct Extract *	(dB(A))		73	67	65	67	62	57	53	52

Supply Filtration						
Panel Filter	Grade	G4				

Notes
1. Unit to be as Nuaire Xboxer, model XBC75-H-EES, or equal and approved.
2. Supply & Extract Fans to be complete with Anti-Vibration mounts
3. Unit to be mounted Internally.
4. Specific Fan Power of AHU not to exceed 1.9 W/(l/s)
5. The supply and extract fans to incorporate IP54 EC motors.
6. The unit casing to be double skinned aluminium pentapost construction with integral acoustic mineral fibre providing low breakouut noise levels.
7. Acoustic spectrums provided above are at the controlled running speed to the required duty (77%), not full speed.
8. Leakage Class L2.
9.The unit shall incorporate a high efficiency couterflow plate heat exchanger matrix (up to 92% efficiency) with segmented 100% bypass facility including automatoc control and actuator.
10. A condensate pump (with alarm facility) and drip tray shall be fitted internally.
11. The unit shall be complete with 5 year warranty.
12. Unit handing to be confirmed by contractor on-site prior to procurement and installation.
13. The unit shall be fitted with an electric heater battery and burst fired temperature controller.
14. Maximum unit weight of 720kg allowed, unless otherwise agreed with structural engineer.

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