

SCHEDULE NO. 07 – AIR HANDLING UNIT

Manufacturer:	Based on Barkell for outputs and co-ordination only
Reference:	AHU/RF/01
Quantity:	1
Description:	The Air Handling Unit shall be configured and arranged as detailed on the drawings and in accordance with the schedule of equipment. The units shall be manufactured from a highly rigid pentapost framework with 50mm double skinned infill panels. The panels shall contain inert high density infill. Panel materials are heavy gauge Aluzinc corrosion resistant steel. The units shall provide exceptional thermal and acoustic insertion. The general construction is to class A leakage.
Arrangement:	Refer to schematics 009433-IUL-01-ZZ-DR-M-560001-4 for details.
Maximum Dimensions:	
Location:	Roof Level
Supply Air volume:	2.54 m ³ /s
Extract Air volume:	2.03 m ³ /s
Supply External Resistance:	260Pa
Extract External Resistance:	150 Pa
Supply and Extract Fan:	Variable speed, direct drive, backward curved with inverter drive. Fan to be mounted on spring isolators to a minimum deflection of 25mm.
Supply Panel Filter:	G4 Grade to BSEN 779 F7 pleated panel with metal frame with front withdrawal panels and vertical manometer. ISO 16890 ePMcoarse Course 80
Extract Panel Filter:	G4 Grade to BSEN 779 F7 pleated panel with metal frame with front withdrawal panels and vertical manometer. ISO 16890 ePMcoarse Course 8
LTHW Frost Coil:	To raise air volume from -5°C to 5°C Face velocity 2m/s
LTHW Heating Coil:	To raise air volume from 5°C to 20°C Face velocity 2m/s
Thermal Heat Wheel:	Minimum 70% efficiency. Winter off coil condition 17.5°C DB based on inlet condition of 5°C

	DB/1.4 °C WB
Supply Bag Filter:	F7 Grade to BSEN 779 bag filter with metal frame with front withdrawal panels and vertical manometer. ISO 16890 ePM1 efficiency 60%
Shut Off Dampers:	At FAI and EA connections.
Access Sections:	Shall be provided upstream and downstream of each component requiring regular inspection and maintenance.
Electric Supply:	415 volts, 3 phase, 50 Hz.
Specific Fan Power:	The SPF shall not exceed 1.49 W/litre/sec. airflow
Colour:	Manufacturers standard colour acceptable.
Access Doors:	Hinged
Features:	Motorised shut off dampers on intake. Each fan motor to be fitted with pre-wired local isolator with auxiliary contacts. Protective packaging. Pre-wired bulkhead lights in access and fan sections. Drive guards fitted to fan assemblies. Viewing windows fitted to access and fan sections. Leakage testing. Pressure/temperature test points. Lockable access doors. Long term protective packaging. Lifting points.
Noise:	Fan speed not to exceed 1,450rpm. Fan discharge velocity not to exceed 8 m/s

Reference:	AHU/RF/02
Quantity:	1
Description:	The Air Handling Unit shall be configured and arranged as detailed on the drawings and in accordance with the schedule of equipment. The units shall be manufactured from a highly rigid pentapost framework with 50mm double skinned infill panels. The panels shall contain inert high density infill. Panel materials are heavy gauge Aluzinc corrosion resistant steel. The units shall provide exceptional thermal and acoustic insertion. The general construction is to class A leakage.
Arrangement:	Refer to schematics 009433-IUL-01-ZZ-DR-M-560001-4 for details.
Maximum Dimensions:	
Location:	Roof Level
Supply Air volume:	1.76 m ³ /s
Extract Air volume:	1.76 m ³ /s
Supply External Resistance:	280Pa
Extract External Resistance:	190 Pa
Supply and Extract Fan:	Variable speed, direct drive, backward curved with inverter drive. Fan to be mounted on spring isolators to a minimum deflection of 25mm.
Supply Panel Filter:	G4 Grade to BSEN 779 F7 pleated panel with metal frame with front withdrawal panels and vertical manometer. ISO 16890 ePMcoarse Course 80
Extract Panel Filter:	G4 Grade to BSEN 779 F7 pleated panel with metal frame with front withdrawal panels and vertical manometer. ISO 16890 ePMcoarse Course 8
LTHW Frost Coil:	To raise air volume from -5°C to 5°C Face velocity 2m/s
LTHW Heating Coil:	To raise air volume from 5°C to 20°C Face velocity 2m/s
Thermal Heat Wheel:	Minimum 70% efficiency. Winter off coil condition 17.5°C DB based on inlet condition of 5°C DB/1.4°C WB
Supply Bag Filter:	F7 Grade to BSEN 779 bag filter with metal frame with front withdrawal panels and vertical manometer. ISO 16890 ePM1 efficiency 60%

Shut Off Dampers:	At FAI and EA connections.
Access Sections:	Shall be provided upstream and downstream of each component requiring regular inspection and maintenance.
Electric Supply:	415 volts, 3 phase, 50 Hz.
Specific Fan Power:	The SPF shall not exceed 1.49 W/litre/sec. airflow
Colour:	Manufacturers standard colour acceptable.
Access Doors:	Hinged
Features:	Motorised shut off dampers on intake. Each fan motor to be fitted with pre-wired local isolator with auxiliary contacts. Protective packaging. Pre-wired bulkhead lights in access and fan sections. Drive guards fitted to fan assemblies. Viewing windows fitted to access and fan sections. Leakage testing. Pressure/temperature test points. Lockable access doors. Long term protective packaging. Lifting points.
Noise:	Fan speed not to exceed 1,450rpm. Fan discharge velocity not to exceed 8 m/s

Reference:	KSF/RF/01
Quantity:	1
Description:	The Air Handling Unit shall be configured and arranged as detailed on the drawings and in accordance with the schedule of equipment. The units shall be manufactured from a highly rigid pentapost framework with 50mm double skinned infill panels. The panels shall contain inert high density infill. Panel materials are heavy gauge Aluzinc corrosion resistant steel. The units shall provide exceptional thermal and acoustic insertion. The general construction is to class A leakage.
Arrangement:	Refer to schematics 009433-IUL-01-ZZ-DR-M-560001-4 for details.
Maximum Dimensions:	
Location:	Roof Level
Supply Air volume:	3.7 m ³ /s (TBC dependent on Kitchen Suppliers Required Volume)
Supply External Resistance:	250Pa (TBC)
Supply Fan:	Variable speed, direct drive, backward curved with inverter drive. Fan to be mounted on spring isolators to a minimum deflection of 25mm.
Supply Panel Filter:	G4 Grade to BSEN 779 F7 pleated panel with metal frame with front withdrawal panels and vertical manometer. ISO 16890 ePMcoarse Course 80
LTHW Frost Coil:	To raise air volume from -5°C to 5°C Face velocity 2m/s
LTHW Heating Coil:	To raise air volume from 5°C to 20°C Face velocity 2m/s
Supply Bag Filter:	F7 Grade to BSEN 779 bag filter with metal frame with front withdrawal panels and vertical manometer. ISO 16890 ePM1 efficiency 60%
Shut Off Dampers:	At FAI connection.
Access Sections:	Shall be provided upstream and downstream of each component requiring regular inspection and maintenance.
Electric Supply:	415 volts, 3 phase, 50 Hz.
Specific Fan Power:	The SPF shall not exceed 1.49 W/litre/sec. airflow
Colour:	Manufacturers standard colour acceptable.

Access Doors: Hinged

Features:

Motorised shut off dampers on intake.

Each fan motor to be fitted with pre-wired local isolator with auxiliary contacts.

Protective packaging.

Pre-wired bulkhead lights in access and fan sections.

Drive guards fitted to fan assemblies.

Viewing windows fitted to access and fan sections.

Leakage testing.

Pressure/temperature test points.

Lockable access doors.

Long term protective packaging.

Lifting points.

Noise:

Fan speed not to exceed 1,450rpm.

Fan discharge velocity not to exceed 8 m/s

