



Mechanical Equipment Schedules

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Fans

Notes:

1. EF/01, EF/02 and EF/04 to be wall mounted thru-wall and to operate via PIR complete with run on timer.
2. EF/03 to be ceiling mounted thru roof discharge and operate via light switch complete with run on timer.
3. External Grilles to be complete with gravity backdraught flaps.

Reference	Location	System	Flow Rate (l/s)	External Static Pressure (Pa)	Maximum SFP (W/l/s)	Overall Dimensions (WxDxHmm)	Type	Manufacturer	Model	Spigot Size (mm)	Sound Pressure Level (dB(A))	Electrical Supply	Controls	Maintenance Access
EF/01	Female WC	N/A	18	20	0.35	307x154x225	Single Fan	Nuaire	Opus 40S-ESP	100	36	230V 1PH	Integral EcoSmart	Front Access
EF/02	Male WC	N/A	24	20	0.35	307x154x225	Single Fan	Nuaire	Opus 40S-ESP	100	36	230V 1PH	Integral EcoSmart	Front Access
EF/03	Disabled WC	N/A	6	30	0.35	307x154x225	Single Fan	Nuaire	Opus 40S-ESR	100	36	230V 1PH	Integral EcoSmart	Front Access
EF/04	Children's WC	N/A	12	20	0.35	307x154x225	Single Fan	Nuaire	Opus 40S-ESP	100	36	230V 1PH	Integral EcoSmart	Front Access
EF/05	Kitchen	N/A	60	20	0.35	391x388xXX	Single Fan	Vent Axia	Lo Carbon TX9WL Wired	NA	39 Med Speed	230V 1PH	On/Off/Speed control	Front Access

Electric Panel Heaters and Blow Heaters

Notes:

1. Heater selections based on Dimplex.

Room Name	Heat Loss (W)	Radiator Type	Reference	Height (m)	Length (m)	Output (W)	Wight (kg)
Children's WC	433	PLXE	R/01	430	430	500	4.6
Reading Room	1732	PLXE	R/02	430	620	1000	5.9
		PLXE	R/03	430	620	1000	5.9
Store	356	PLXE	R/04	430	430	500	4.6
Female WC	614	PLXE	R/05	430	620	750	5.9
Disabled WC	247	LST050	R/06	430	688	500	7.1
Male WC	644	PLXE	R/07	430	620	750	5.9
Entrance Lobby	2664	PLXE	R/08	430	620	1000	5.9
		PLXE	R/09	430	620	1000	5.9
		PLXE	R/10	430	620	1000	5.9
		PLXE	R/11	430	620	1000	5.9
Store off Hall	356	PLXE	R/12	430	430	500	4.6
Kitchen		FX20VE	BH1	242	229	1000/ 2000	1.1
		FX20VE	BH2	242	229	1000/ 2000	1.1
		FX20VE	BH3	242	229	1000/ 2000	1.1

Pumps

Notes:



1. *Pump operates continuously when HWS is engaged.*
2. *Provide antivibration mounts and flexible connections.*
3. *Provide new IVs on suction and discharge.*

Reference	Location	System	Type	Flow Rate (l/s)	Head (kPa)	Manufacturer	Model	Connection Diameter (mm)	Pressure Rating (bar)	Impeller Material	Electrical Supply	Controls
PMP/01	Plant Room	Hot Water Secondary	Single Pump	0.15	25	Grundfos	UPS 15-50 N 130	15	50	PES/PP	230V-1ph-50Hz	Variable Speed

Pipework

Service	Type	Notes
Hot and Cold Water	Copper tube to BS EN 1057 R250, capillary fittings to BS EN 1254-1	Include chromium plated, ¼ turn lever ball valves to all final connections.
Soil and Waste	Small dia branch PVC - C with solvent welded fittings Large dia branch PVC -U with solvnet welded fittings Stacks PVC - U with solvent welded fittings.	Include mineral wool pipe insulation to stacks and SVP offsets.

Valves

Service	Function	Size	Type / Requirement
Heating	Isolation	Up to 50mm	Lever operated ball valve
Heating	Regulation	Up to 50mm	Double regulating
Heating	Commissioning Set	All sizes	Close coupled double regulating valve and orifice plate
Hot and Cold Water	Isolation	Up to 50mm	Lever operated ball valve
Hot and Cold Water	Draw off / Isolation	Up to 32mm	Stop Cocks
Hot and Cold Water	Regulation (HWS returns)	Up to 28mm	Self Acting temperature regulating
	Sanitary Appliance Isolation	15mm / 22mm	Provide chrome plated ball valve, with screw driver operated to each draw off
	Flow Regulators	15mm	Chromium plated, cartridge type flow regulators with ¼ ball valve isolation.

Thermal Insulation

Service	Thermal Insulation Type	Finish	Location
Heating	Preformed Mineral Wool	Foil with service ID	All service voids, ducts and high level distribution
Hot Water Service	Preformed Mineral Wool	Foil with service ID	All service voids, ducts and high level distribution. All circulating HWS distribution.
Cold Water Service	Preformed Mineral Wool	Foil with service ID	All service voids, ducts and high level distribution
Valves Generally	Insulated removable jacket	Fabric / Nylon	All service voids, ducts and high level distribution
Waste and Soil Pipes.	Preformed Mineral Wool	Foil with service ID	All vertical stacks and SVP offsets