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HEAT EXCHANGER SCHEDULE										
General Note: All water heaters to have a minimum 93% efficiency										
Location	Ref.	Type	Duty	Primary			Secondary			To be supplied with
				Inlet Temp	Outlet Temp	Pressure	Inlet Temp	Outlet Temp	Pressure	
Plantroom	HE-01	Plate heat exchanger	55kW	80°C	70°C	0.5kPA	55°C	47°C	0.5kPA	Accessories included: isolation valves on all connections, Y-strainer on inlet, temperature gauges/transmitters and pressure gauges on inlet and outlet connections, differential pressure indicator across the heat exchanger, automatic air vent, drain valve, balancing valve, flexible connectors, thermowells for temperature sensors, and control valve where required. Complete with mounting supports and manufacturer-recommended maintenance accessories.

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HOT WATER GENERATOR SCHEDULE										
General Note: All water heaters to have a minimum 93% efficiency										
Location	Ref.	Primary				Secondary				Comments
		Inlet Temp	Outlet Temp	Pressure	Input	Inlet Temp	Outlet Temp	Pressure	Recovery	
Plantroom	HWC-01	55°C	47°C	0.5kPA	9.5kW	10°C	60°C	0.5kPA	160 lt/hour	Calorifier to have a volumetric capacity of 160 Litres and be supplied complete with 2 No of 3kW immersion group
Contact List										
Copper Industries (Ireland) Ltd		21 Hillhead Road Toomebridge, Co.Antrim BT41 3SF							Ph. 028 79659736	

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HEAT PUMP SCHEDULE								
General Note: All Air to Water Heat Pumps to have a minimum efficiency as set out in the schedule								
Location	Ref.	Type	Manufacturer	Model	Thermal Output (kWt)	Electrical Input (kWe)	Efficiency	To Be Supplied with
External	HP-0.01	Air to Water Heat Pump	RHOSS	THAITP 147 PI1	38	14	ηS – 176%	Master Controller, flexible water connections, Thermostatic pump and any other items deemed necessary to complete the installation.
Contact List								
Cool Air Ltd		9/10 Broomhill Road, Tallaght, Dublin 24, D24 PH21						Ph. 086 203 1163

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BUFFER VESSEL SCHEDULE							
Location	Ref.	Type	Manufacturer	Model	Capacity (L)	Dimension (mm)	To Be Supplied with
Plant Room	BV-0.01	Vertical			300	Refer to 51-00 drawing	Tank shall be provided with 100mm polyurethane insulation, drain valves and any other items deemed necessary to complete the installation

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PUMP SCHEDULE								
General Note: All Pumps to be in accordance with the EU ErP Directive, and must have an energy efficiency index (EEI) of no more than 0.27								
Location	Ref.	Function	Manufacturer	Type	Flow Rate (kg/s)	Pressure (Kpa)	Supply	Model Reference
Plant Room	P-0.01	GP Hall Circuit	WILO	Duty/Standby	1.00	120	230/1/50	Stratos MAXO D 40/0,5-16 PN 16
Plant Room	P-0.02	Classroom Circuit	WILO	Duty/Standby	1.50	120	230/1/50	Stratos MAXO D 65/0,5-16 PN 16
Plant Room	P-0.03	DHW Primary Cirucit	WILO	Duty/Standby	0.22	60	230/1/50	Stratos MAXO-Z 40/0,5-12 PN6/10
Plant Room	P-0.04	Primary Flow	WILO	Duty	1.52	60	230/1/50	Stratos MAXO 65/0,5-16 PN 16
Plant Room	P-0.05	Heat Pump Shunt	WILO	Duty	1.52	80	230/1/50	Stratos MAXO 65/0,5-16 PN 16
Plant Room	P-0.06	Heat Exchanger Primary Pump	WILO	Duty	1.25	120	230/1/50	Stratos MAXO 65/0,5-16 PN 16
Plant Room	P-0.07	Heat Exchanger Secondary Pump	WILO	Duty	1.25	120	230/1/50	Stratos MAXO 65/0,5-16 PN 16
Plant Room	P-0.08	Hot Water Retun Pump	WILO	Duty	0.15	80	230/1/50	Stratos MAXO-Z 40/0,5-12 PN6/10
Contact List								
Wilo Limited		Unit A14, Calmount Park, Calmount Avenue, Dublin 12, D12 E395.					Ph. 01 426 0000	

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RADIATOR SCHEDULE								
<u>General Notes:</u> All radiators shall be complete with recessed air vents and concealed wall brackets. Radiators shall be mounted at a minimum of 150mm above floor level. Chrome plated clips shall be provided around pipes penetrating floors and walls.								
Location	Ref.	Type	Manufacturer	Radiator Height (mm)	Radiator Length (mm)	Output (ΔT 30) Watts	RAL Colours	Controls
Male Toilet	RAD-0.01	RRHLLH560	Versatile	571	400	266	TBC	TRV and LSV valves
Female toilet	RAD-0.02	RRHLLH560	Versatile	571	400	266	TBC	TRV and LSV valves
Acc Toilet	RAD-0.03	RRHLLH560	Versatile	571	400	134	TBC	TRV and LSV valves
Toilet Corridor	RAD-0.04	RRHLLH560	Versatile	571	400	118	TBC	TRV and LSV valves
Lobby GP	RAD-0.05	RRHLLH560	Versatile	571	500	397	TBC	TRV and LSV valves
Lobby Toilet	RAD-0.06	RRHLLH560	Versatile	571	700	610	TBC	TRV and LSV valves
Lobby Reception	RAD-0.07	RRHLLH560	Versatile	571	600	453	TBC	TRV and LSV valves
Lobby Waiting Area	RAD-0.08	RRHLLH560	Versatile	571	800	659	TBC	TRV and LSV valves
Meeting room	RAD-0.09	RRHLLH560	Versatile	571	400	286	TBC	TRV and LSV valves
WC	RAD-0.10	RRHLLH560	Versatile	571	400	93	TBC	TRV and LSV valves
Larder	RAD-0.11	RRHLLH560	Versatile	571	400	114	TBC	TRV and LSV valves
Claoks	RAD-0.12	RRHLLH560	Versatile	571	400	86	TBC	TRV and LSV valves
Utility	RAD-0.13	RRHLLH560	Versatile	571	400	250	TBC	TRV and LSV valves
First Floor								
FF- Quiet room	RAD-1.01	RRHLLH560	Versatile	571	400	287	TBC	TRV and LSV valves
FF Male toilet	RAD-1.02	RRHLLH560	Versatile	571	400	307	TBC	TRV and LSV valves
FF Female toilet	RAD-1.03	RRHLLH560	Versatile	571	400	307	TBC	TRV and LSV valves
FF Acc Toilet	RAD-1.04	RRHLLH560	Versatile	571	400	154	TBC	TRV and LSV valves
FF Toilet Corridor	RAD-1.05	RRHLLH560	Versatile	571	400	133	TBC	TRV and LSV valves
FF Lobby Toilet	RAD-1.06	RRHLLH560	Versatile	571	400	290	TBC	TRV and LSV valves

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Location	Ref.	Type	Manufacturer	Radiator Height (mm)	Radiator Length (mm)	Output (ΔT 30) Watts	RAL Colours	Controls
FF Stair lobby-1	RAD-1.07	RRHLLH560	Versatile	571	600	502	TBC	TRV and LSV valves
FF Class Lobby	RAD-1.08	RRHLLH560	Versatile	571	800	657	TBC	TRV and LSV valves
FF Stair Lobby-2	RAD-1.09	RRHLLH560	Versatile	571	1300	1084	TBC	TRV and LSV valves
Counselling Room 1	RAD-1.10	RRHLLH560	Versatile	571	800	683	TBC	TRV and LSV valves
Counselling Room 2	RAD-1.11	RRHLLH560	Versatile	571	1200	975	TBC	TRV and LSV valves
Library	RAD-1.12	RRHLLH560	Versatile	571	900	739	TBC	TRV and LSV valves
Contact List								
Versatile Group		Beechmount Home Park, Navan, Co. Meath, C15 WR60, Ireland					Ph. + 353 (0)46 902 9444	

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RADIANT PANEL SCHEDULE

General Notes: All radiators shall be complete with recessed air vents and concealed wall brackets. Radiators shall be mounted at a minimum of 150mm above floor level. Chrome plated clips shall be provided around pipes penetrating floors and walls.

Location	Ref.	Type	Manufacturer	Panel Width (mm)	Max Panel Length (mm)	Output (ΔT 33) Watts	RAL Colours	Controls & Accessories
GP/ Sports Hall	RP-0.01	ZFP	Versatile	1500	10000	4250	TBC	VSRK, LS Valves and Hanging Chains, Ball Guards, Perforation and acoustic insulation
GP/ Sports Hall	RP-0.02	ZFP	Versatile	1500	10000	4250	TBC	VSRK, LS Valves and Hanging Chains, Ball Guards, Perforation and acoustic insulation
GP/ Sports Hall	RP-0.03	ZFP	Versatile	1500	10000	4250	TBC	VSRK, LS Valves and Hanging Chains, Ball Guards, Perforation and acoustic insulation
GP/ Sports Hall	RP-0.04	ZFP	Versatile	1500	10000	4250	TBC	VSRK, LS Valves and Hanging Chains, Ball Guards, Perforation and acoustic insulation
GP/ Sports Hall	RP-0.05	ZFP	Versatile	1500	10000	4250	TBC	VSRK, LS Valves and Hanging Chains, Ball Guards, Perforation and acoustic insulation
Office 2	RP-0.06	Carboline Grid	Versatile	600	2400	332	TBC	VSRK, LS Valves and Hanging Chains
Office 2	RP-0.07	Carboline Grid	Versatile	600	2400	332	TBC	VSRK, LS Valves and Hanging Chains
Office 2	RP-0.08	Carboline Grid	Versatile	600	2400	332	TBC	VSRK, LS Valves and Hanging Chains
Office 1	RP-0.09	Carboline Grid	Versatile	600	2400	332	TBC	VSRK, LS Valves and Hanging Chains
Office 1	RP-0.10	Carboline Grid	Versatile	600	2400	332	TBC	VSRK, LS Valves and Hanging Chains
Kitchen & Dining Hall	RP-0.11	Carboline Grid	Versatile	600	7200	996	TBC	VSRK, LS Valves and Hanging Chains

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Kitchen & Dining Hall	RP-0.12	Carboline Grid	Versatile	600	7200	996	TBC	VSRK, LS Valves and Hanging Chains
Kitchen & Dining Hall	RP-0.13	Carboline Grid	Versatile	600	7200	996	TBC	VSRK, LS Valves and Hanging Chains
Art Room	RP-0.14	Carboline Grid	Versatile	600	5400	747	TBC	VSRK, LS Valves and Hanging Chains
Art Room	RP-0.15	Carboline Grid	Versatile	600	5400	747	TBC	VSRK, LS Valves and Hanging Chains
Art Room	RP-0.16	Carboline Grid	Versatile	600	5400	747	TBC	VSRK, LS Valves and Hanging Chains
Art Room	RP-0.17	Carboline Grid	Versatile	600	5400	747	TBC	VSRK, LS Valves and Hanging Chains
Technology Room	RP-0.18	Carboline Grid	Versatile	600	3600	498	TBC	VSRK, LS Valves and Hanging Chains
Technology Room	RP-0.19	Carboline Grid	Versatile	600	3600	498	TBC	VSRK, LS Valves and Hanging Chains
Technology Room	RP-0.20	Carboline Grid	Versatile	600	3600	498	TBC	VSRK, LS Valves and Hanging Chains
Technology Room	RP-0.21	Carboline Grid	Versatile	600	3600	498	TBC	VSRK, LS Valves and Hanging Chains
Technology Room	RP-0.22	Carboline Grid	Versatile	600	3600	498	TBC	VSRK, LS Valves and Hanging Chains

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Location	Ref.	Type	Manufacturer	Panel Width (mm)	Max Panel Length (mm)	Output (ΔT 33) Watts	RAL Colours	Controls & Accessories
Classroom 1	RP-1.01	Carboline Grid	Versatile	600	4200	581	TBC	VSRK, LS Valves and Hanging Chains
Classroom 1	RP-1.02	Carboline Grid	Versatile	600	4200	581	TBC	VSRK, LS Valves and Hanging Chains
Classroom 1	RP-1.03	Carboline Grid	Versatile	600	4200	581	TBC	VSRK, LS Valves and Hanging Chains
Classroom 2	RP-1.04	Carboline Grid	Versatile	600	3600	498	TBC	VSRK, LS Valves and Hanging Chains
Classroom 2	RP-1.05	Carboline Grid	Versatile	600	3600	498	TBC	VSRK, LS Valves and Hanging Chains
Classroom 2	RP-1.06	Carboline Grid	Versatile	600	3600	498	TBC	VSRK, LS Valves and Hanging Chains
Classroom 3	RP-1.07	Carboline Grid	Versatile	600	5400	747	TBC	VSRK, LS Valves and Hanging Chains
Classroom 3	RP-1.08	Carboline Grid	Versatile	600	5400	747	TBC	VSRK, LS Valves and Hanging Chains
Classroom 3	RP-1.09	Carboline Grid	Versatile	600	5400	747	TBC	VSRK, LS Valves and Hanging Chains
Classroom 4	RP-1.10	Carboline Grid	Versatile	600	6600	913	TBC	VSRK, LS Valves and Hanging Chains
Classroom 4	RP-1.11	Carboline Grid	Versatile	600	6600	913	TBC	VSRK, LS Valves and Hanging Chains

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Location	Ref.	Type	Manufacturer	Panel Width (mm)	Max Panel Length (mm)	Output (ΔT 33) Watts	RAL Colours	Controls & Accessories
Classroom 4	RP-1.12	Carboline Grid	Versatile	600	6600	913	TBC	VSRK, LS Valves and Hanging Chains
ICT Room	RP-1.13	Carboline Grid	Versatile	600	4200	581	TBC	VSRK, LS Valves and Hanging Chains
ICT Room	RP-1.14	Carboline Grid	Versatile	600	4200	581	TBC	VSRK, LS Valves and Hanging Chains
ICT Room	RP-1.15	Carboline Grid	Versatile	600	4200	581	TBC	VSRK, LS Valves and Hanging Chains
Staff Room	RP-1.16	Carboline Grid	Versatile	600	4200	581	TBC	VSRK, LS Valves and Hanging Chains
Staff Room	RP-1.17	Carboline Grid	Versatile	600	4200	581	TBC	VSRK, LS Valves and Hanging Chains
Contact List								
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