

SCOUPS FOURTH FLOOR PROJECT
Mechanical Works

Item	Description	Qty.	Unit	Rate	Amount
				US \$	US \$
	<u>DRAINAGE SYSTEM</u>				
	<u>Supply and install the following drainage and vent pipes laid exposed, or under tiles and ground or suspended, including connection to existing pipes complete with all accessories and fittings wherever shown in Drawings and to the approval of the Engineer:</u>				
A	4" HDPE <u>Supply and install 4" HDPE floor or suspended drain outlets, including casting into concrete, excavating, bedding, surrounding and connections to drainage pipes, complete as specified and as shown on drawing.</u>	25	Mr.		
B	4" FT.	3	nr		
C	4" C.O	4	nr		
D	<u>Supply, install, test and commission white glazed fireclay, semi pedestal, wash basin of size (45x40cm), complete with mixer, UPVC waste fittings and siphon, angle valve, trap, plug and chain, all associated water supply pipes, waste to slab level and brackets screwed to concrete or block work, sealing joint to worktop or wall with mastic sealant, complete as specified and as shown on drawing and direction of the supervisor engineer.</u>	4	nr		
E	<u>Supply, install and commissioning fire glazed single bowl kitchen sink of size 60X50cm, complete with chrome plated kitchen mixer, chrome plated 13mm stop valve, supports, 2" waste outlet down to floor, P- trap, chrome plated 13mm hose and all required parts for water supply line, including connection to drain and water outlets, as per supervisor engineer.</u>	1	nr		
Total Carried To Next Page (US \$)					

Item	Description	Qty.	Unit	Rate	Amount
				US \$	US \$
A	<u>Supply and Install wall hung water closet suite , complete with recessed type flushing cistern , recessed in wall and heavy duty seat cover . The price includes supplying and installing ½” water supply “T” tap and plastic pipe from tap to cistern, flushing mechanism , ½” x 3/8” angle valve, type neil , ½” flush hose reel with water hand spray (Italian made) and 15X15cm toilet roll holder. The price shall also all HDPE drain and water pipes with fittings needed to complete the work and connection to existing pipes as per direction of the supervisor engineer.</u>	4	nr		
	<u>WATER SYSTEM</u>				
B	<u>Supply and install the following laid under flooring or ceiling, over false ceiling in walls polypropylene PPR pipes, type Aquatherm, Ceotherm or equal approved, complete, including all valves, fittings, accessories, hangers, supports, thermal insulation of hot water pipes, including connection to existing pipes, complete shown on Drawings and or specified and to the approval of the Engineer:</u> <u>Polypropylene PPR pipes .</u>				
C	32 mm diameter PPR pipe. <u>Supply and install copper collectors, for domestic cold and hot water system, with all necessary fittings, nipples, nuts, unions, quick shut off valves on main and on each eye of collector, brass fittings adapter, automatic vents, fasteners .etc. The price should also supplying and installing 16mm plastic pipes, with its 25mm plastic conduits with 5cm thick concrete layer to fixture units outlets, copper elbows in plastic boxes recessed in walls, complete as specified and as shown on drawing:</u>	10	m		
D	Water Collectors: size 1 1/4” with 13 Opening for cold water and size 3/4” with 5 Openings for hot water.	1	nr		
Total Carried To Next Page (US \$)					

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A	<u>Supply and install metallic steel cupboard with double doors of the following dimensions:</u>	1	nr		
B	60X60cm steel cupboard				
	<u>Supply and install hot water cylinder, of 60 liters capacity, of horizontal type. The price includes fixing the cylinder inside the plenum space above false ceiling with galvanized suitable hangers, including supply and install of pex pipes for feed and flow hot water from cylinder to hot water collector, with all related necessary fittings, i.e. air vent, valves, pressure relief valve, non return valve, .. All according to drawings and engineer's instructions.</u>	1	nr		
	HVAC SYSTEM				
C	<u>Install only indoor concealed ducted fan coil units. The price includes supplying and installing all accessories and fittings needed for installation and commissioning, i.e., 3-way valve, shut-off and butterfly valves, insulated pipes flexible connections, thermometers, connection of drain pipe, connections of chilled water pipes, acoustic insulation galvanized distribution plenum with circular necks, vibration isolators, duct flexible connection, hangers and supports, high performance washable filters, wall mounted thermostat (three fan speeds – summer/winter changeover – temperature setting module) with its control cable, drain pan, in addition to electrical connection, all according to drawings and engineer's instructions.</u>	37	nr		
D	<u>Supply & Install all needed connections with existing chiller including pipes connection, shutoff valve, balancing valve, flexibe joints, pressure & tempreture gauges, flow switch, air vent & strainer. Price should also includes electrical & control connection with chiller, & all needed works to complete the job as per engineer's instructions.</u>	1	L.M		
Total Carried To Next Page (US \$)					

Item	Description	Qty.	Unit	Rate	Amount
				US \$	US \$
	<p><u>Supply, install and commission outdoor ducted centrifugal exhaust air fan. The price includes concrete or steel base, vibration isolators, and all accessories needed for installation (i.e. flexible ducts, hooks and adapters) according to drawings and engineer's instructions. The price shall also include electrical cables and connections to main distribution board. The fans capacities are as follows:</u></p>				
A	Centrifugal exhaust fan of 210 L/s flow @ 0.30" wg St. Pressure	1	nr		
	<p><u>As Above item, but Ceiling Mounted exhaust fan, including openings in walls including outdoor gravity grille with shutter:</u></p>				
B	Ceiling Mounted Type: 50 l/s Flow	1	nr		
	<p><u>Supply and install ducted out door centrifugal fresh air fan. The price includes vibration isolators, flexible connections between the fan and duct. The price also include galvanized steel base, elbow with mesh at fan discharge. The price shall also include control and electrical connections, complete as specified and as shown on drawing:</u></p>				
C	Centrifugal fresh air fan of 980 L/s flow @ 0.50" wg St. Pressure	1	nr		
D	<p><u>Supply and install galvanized metal sheet duct for ventilation system of thickness as per ASHRAE Standards. The price includes all joints, sealant compound of fire retardant type, and all necessary accessories, galvanized hangers, volume dampers, hooks, complete as specified and as shown on drawing.</u></p>	130	m2		
Total Carried To Next Page (US \$)					

Item	Description	Qty.	Unit	Rate	Amount
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	<u>Supply and install white anodized Aluminum, supply Linear slot diffusers with registers. The price includes insulated plenum box, connection to fan coil unit plenum distribution using insulated flexible duct connection, opening in false ceiling or gybson boards, complete as per engineer's approval:</u>				
A	2SLSD 2400 mm x 100 mm (Linear Diffuser)	6	nr		
B	2SLSD1200 mm x 100 mm (Linear Diffuser)	20	nr		
C	3SLSD 1800 mm x 100 mm (Linear Diffuser)	1	nr		
D	3SLSD 800 mm x 100 mm (Linear Diffuser)	3	nr		
	<u>Supply and install white anodized Aluminum, return Linear slot diffusers, including openings in gypsum boards or false ceiling, complete as per specifications:</u>				
E	2SLSD 2400 mm x 100 mm (Linear Diffuser)	6	nr		
F	2SLSD1200 mm x 100 mm (Linear Diffuser)	20	nr		
G	3SLSD 1800 mm x 100 mm (Linear Diffuser)	1	nr		
H	3SLSD 800 mm x 100 mm (Linear Diffuser)	3	nr		
I	2SLSD 1200 mm x 100 mm (Dummy Linear Diffuser)	2	nr		
J	2SLSD 600 mm x 100 mm (Dummy Linear Diffuser)	36	nr		
K	2SLSD 300 mm x 100 mm (Dummy Linear Diffuser)	12	nr		
	<u>Supply and install white anodized Aluminum, circular air diffusers with registers, including openings in gypsum boards or false ceiling. The price includes galvanized box, and connections to grilles through flexible duct connection, complete as per specifications:</u>				
L	EAG 150mm Dia.	7	nr		
Total Carried To Next Page (US \$)					

Item	Description	Qty.	Unit	Rate	Amount
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	<p><u>Supply, install, test and commission polypropylene pipe (PPR) special led for chilled/heated water system, covered with 13 mm thick thermal insulation. The rate shall include wrapping with 10 cm wide nylon wrapping and all type of fittings such as elbows 45deg, or 90 deg , reducers , plugs, tees , joint adaptors, air vents, valves ,hangers and supports -Hilti type. Also the rate include any required concrete coring by Hilti machine and using sleeves around the pipes with all accessories needed to complete the work as per dwgs, and direction of supervisor engineer, and as per the following internal diameters:</u></p>				
A	20mm (ID)	180	m		
B	25mm (ID)	45	m		
C	32mm (ID)	20	m		
D	40mm (ID)	50	m		
E	50mm (ID)	25	m		
F	65mm (ID)	15	m		
G	80mm (ID)	50	m		
	<p><u>Supply, install, and commission wall mounted inverter split unit, using R410 Refrigerant, with auto restart kit. The price includes all accessories and fittings needed for installation and commissioning, i.e insulated copper pipes, connection of drain pipe, hangers and supports, high performance washable filter, remote control, galvanized steel base for outdoor unit and all electrical wiring and control cable, in addition to connection to MDB. Rate shall also include openings in walls through sleeves:</u></p>				
H	3.5 kW Cooling Capacity &175 L/s Air Flow	1	No		
	<p><u>Supply, install, and commission HDPE condensate drain pipes, type Huliott, Wavin or equal approved, including 15 mm insulation as per drawings and engineer's instructions:</u></p>				
I	50 mm diameter insulated HDPE condensate drain pipe.	170	m		
Grand Total Price (US \$)					