

PROPOSED PARTITIONING OF OFFICES AT ABSA TOWERS - 15TH FLOOR

ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)
<b>1.0</b>	<b>PRELIMINARIES</b>				
1	Discrepancies clause 1.02	1	Item		
2	Conditions of sub-contract Agreement clause 1.03	1	Item		
3	Payments clause 1.04	1	Item		
4	Site location clause 1.06	1	Item		
5	Scope of Contract Works clause 1.08	1	Item		
6	Extent of the Contractor's Duties clause 1.09	1	Item		
7	Firm price contract clause 1.12	1	Item		
8	Variation clause 1.13	1	Item		
9	Prime cost and provisional sum clause 1.14	1	Item		
10	Bond clause 1.15	1	Item		
11	Government Legislation and Regulations clause 1.16	1	Item		
12	Import Duty and Value Added Tax clause 1.17	1	Item		
13	Insurance company Fees clause 1.18	1	Item		
14	Provision of services by the Main contractor clause 1.19	1	Item		
15	Samples & Materials Generally clause 1.21	1	Item		
16	Supplies clause 1.20	1	Item		
17	Bills of Quantities clause 1.23	1	Item		
18	Contractor's Office in Kenya clause 1.24	1	Item		
19	Builder's Work clause 1.25	1	Item		
20	Setting to work and Regulating system clause 1.29	1	Item		
21	Identification of plant components clause 1.30	1	Item		
22	Working Drawings clause 1.32	1	Item		
23	Record Drawings (As Installed) and Instructions clause 1.33	1	Item		
24	Maintenance Manual clause 1.34	1	Item		
25	Hand over clause 1.35	1	Item		
26	Painting clause 1.36	1	Item		
27	Testing and Inspection – manufactured plant clause 1.38	1	Item		
28	Testing and Inspection – Installation clause 1.39	1	Item		
29	Storage of Materials clause 1.41	1	Item		
30	Initial Maintenance clause 1.42	1	Item		
31	Attendance Upon Tradesmen, etc. (Insert percentage only) clause 1.58				
32	Local and other Authorities notices and fees clause 1.60	1	Item		
33	Temporary Works clause 1.63	1	Item		
34	Patent Rights clause 1.64	1	Item		
35	Mobilization and Demobilization Clause 1.65	1	Item		
36	Extended Preliminaries Clause 1.66(see appendix on page C- 24)	1	Item		
37	Supervision by Engineer and Site Meetings Clause 1.67	1	Item		
	<b>Sub-Total for Preliminaries c/f to Next Page</b>				-

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ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)
<b>Sub-Total for Preliminaries b/f from Previous Page</b>					
38	Allow for profit and Attendance for the above		%		
39	Contractor Obligation and Employers		Item		
40	Obligation clause 1.69(see appendix page C- 24)		Item		
41	Any other preliminaries;				
	i) Continuous Professional Development Courses and registration fees for officers at the Institute of Engineers of Kenya(IEK) and Engineer's Board of Kenya (EBK)/ Kenya School of Government	1	Item		
	Allow for profit and Attendance for item (i) above		%		
	ii) Allow for airtime for the period of the project	1	Item		
	Allow for profit and Attendance for item (i) above		%		
<b>Total for Preliminaries Carried to Summary Page</b>					-

ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)
2.00	<b>BILL NO.2: WASHROOMS SANITARY FITTINGS</b>				
	<b>SANITARY FITTINGS</b>				
	Supply the following appliances including their support brackets, screws etc. and their connection to water supply, waste/soil drainage and electrical power supply:-				
	<b>NOTE: TRADE NAMES</b>				
	Supply, deliver, install and fix the following sanitary fittings including all materials and jointing to supply, waste/soil and overflow pipes. Twyford Ltd products are specified only as an indication of quality. Equal and approved appliances may be supplied. Where trade names are mentioned, the ref. no. is intended as a guide to the type and quality of fittings				
	<b>Water Closet (WC) Suite</b>				
<b>A</b>	Duravit D-Code close coupled washdown WC suite in white vitreous china with horizontal outlet, Premium round cistern, pan & fittings 4/6 litre BSIO push button complete with quick release family seat and cover, metal top fixed (chrome plated) hinges & self closing mechanism, P trap outlet connector, fixing screws and all other accessories necessary for correct use of the suite	2	No.		
	<b>Toilet roll holder</b>				
<b>B</b>	Toilet roll holder made of AISI 304 stainless steel in satin finish . To have a support of thickness 0.8 mm with trim and chromated plastic spindle. It shall have plate thickness of 1.6mm. Toilet roll holder to be as MEDICLINICS model 'AI0113CS' accessories Ref. No. VC 9808 WH.	2	No.		
	<b>Robe Hook</b>				
<b>C</b>	double robe hook in Satin AISI 304 stainless steel to be mounted by concealed screws to wall wedges & have support with trim.Cap thickness 3.6 mm,Support thickness 0.8mm & Plate thickness 1.6mm.To be as <b>MEDICLINICS model AI0036CS</b> or equal and approved.	2	No.		
	<b>Sub-Total c/f to Next Page</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)
<b>Sub-Total b/f from Previous Page</b>					
<b>Bidet Spray Kit (Arabic Shower)</b>					
<b>A</b>	Power spray bidet kit c/w 1/2" female inlet x 1 /2" Male Outlet. Spray Kit to be embed on wall mount water supply. Cradle to have positive shut off.The kit shall be complete with Bidet Handshower, Water supply elbow with shut off valve, Chrome plated hose, Dual check valve, backflow preventer and 49" hose. The hand held bide rose to be as "Docol Trio Line Shataffa #00502506" or an approved equivalent	2	No.		
<b>Mirrors</b>					
<b>B</b>	6mm thick polished plate glass silver backed mirror with bevelled edges, size 610 x 497mm, plugged and screwed to wall with 4No. chrome plated dome capped screws. The mirror shall rest against a layer of 5mm thick foam.	2	No.		
<b>Soap Dispenser</b>					
<b>C</b>	Soap Dispenser made of AISI 304 stainless steel of thickness 0.8mm & matte satin finish,vandal resistant casing,Stainless steel push-button,Corrosion-resistant anti-drip valve,Inner tank 2.5 mm thick made of translucent polypropylene,Hinged cover with Opening on top capacity 1.5 litres complete with rawl plugs, fixing screws, lock and key complete with initial fill of soap gel.It shall dispense 1.5 ml per pump & be suitable for Liquid soaps and hydroalcoholic gels The soap dispenser to be as MEDICLINICS model DJ0031CS, size 110 x 133 x 240mm (L*W*H) or approved equivalent.	2	No.		
<b>Paper towel dispenser</b>					
<b>D</b>	Wall mounted paper dispenser for dispensing interfolded paper tissue. The dispenser shall have a fully welded structure, Door fixed to the body with two rivets allowing it to be swung open for paper replacement, Front lock with a standard Mediclinics key provided, Content viewer on the front, Back-plate with multiple slots for easy installation. It shall have a capacity of 400-600 C/Z towels, dimensions 275*130*330mm (L*W*H),made of AISI 304 stainless steel with satin finish. It shall be as MEDICLINICS model DT2106CS include a casing having a narrow dispensing slot in the bottom surface. The dispenser should have a proper mechanism to prevent excessive quantities of tissue. It shall be as MEDICLINICS model DT2106CS or approved equivalent.	2	No.		
<b>Sub-Total c/f to Next Page</b>					

ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)
<b>Sub-Total b/f from Previous Page</b>					
<b>Hand Driers</b>					
A	Automatic hand drier in white steel, operating on an infra-red automatic sensing system with heating element safety cut-out complete with a 30 seconds safety timer, plastic rawl plugs and fixing screws. The hand drier to have a heating capacity of 2.1kw and performance flow rate of 135cfm (3.82m3/min) and to be of size 270x264x143mm deep It shall have a noise level below 72.5 dBA at 1.5m. It shall be as Medclinic or approved equivalent.	2	No		
<b>Toilet brush holder</b>					
B	Toilet brush holder made of AISI 304 stainless steel in satin finish, complete with Sisal fibre brush & assembling plate for mounting on the wall. Body thickness 0.4mm, Handle and lid thickness 0.4mm & Rod thickness 0.8mm. Toilet brush holder to be as Mediclinics 'ES0968CS' or equal and approved.	2	No.		
<b>Wash Hand Basin (Countersink)</b>					
C	Countersink wash hand basin size 575 x 500mm with one tap hole, 32mm diameter chrome plated waste and heavy duty plastic bottle trap (32mm 'P' trap) with 75mm seal. To be as Twyfords "Duravit D Code 26" or equal and approved.	2	No.		
<b>Mixer Faucets</b>					
D	Executive Lever Action Luxury Basin Mixer Faucet for Hot and Cold with Flow rate of 4.5L/min . Tap to to have Aerated spray and Cartridge to be made of Ceramic . Faucet to be as "Hansgrohe- Talis S SingleHole Faucet 80" or equivalent	2	No.		
<b>Towel Rail</b>					
E	Twyfords Bathrooms Ltd Ref. No. PB 0363 CP chrome plated screw to wall Towel Rail 650mm long complete with screws.	1	No.		
<b>Electric undersink water heater (CEO's) Washroom</b>					
F	6 Litres glass lined(enamelled) steel heater vessel complete with 2.2 kW element, external thermostat adjustable up to 65 <sup>o</sup> .Such as "Bosch" or approved equivalent	1	NO		
<b>Total for Washrooms Sanitary Fittings carried forward to Summary Page</b>					

ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)
3.00	<b>BILL NO.3: KITCHEN FITTINGS AND EQUIPMENT</b>				
	Supply the following appliances including their support brackets, screws etc. and their connection to water supply, waste/soil drainage and electrical power supply:- <b>NOTE: TRADE NAMES</b>				
	Supply, deliver, install and fix the following sanitary fittings including all materials and jointing to supply, waste/soil and overflow pipes. Twyfords Ltd products are specified only as an indication of quality. Equal and approved appliances may be supplied. Where trade names are mentioned, the ref. no. is intended as a guide to the type and quality of fittings				
	<b>Kitchen Sink</b>				
A	Stainless Steel Single bowl, Single drainer stainless steel kitchen sink of size 800 x 460mm. The bowl size to be 420 x 355 x 350mm deep complete with chrome plated 40mm waste fittings, plugs, chain stays, overflow, chrome plated bottle trap with 75mm deep seal and chain waste fitting, 1No. 15mm chrome plated deck mounted. To be as 'Franke Projectline' or approved equivalent	1	No		
	<b>Kitchen Mixer</b>				
B	Heavy duty chrome plated hot & cold kitchen sink mixer with swivel overarm outlet, single swing lever, aerator cartridge. To be as 'Tapis Yolanda #WDG56431C' or approved equivalent.	1	No.		
	<b>Towel Rail</b>				
C	Twyfords Bathrooms Ltd Ref. No. PB 0363 CP chrome plated screw to wall Towel Rail 650mm long complete with screws.	1	No.		
D	<b>Undersink water heater:</b> 10 Litres glass lined(enamelled) steel heater vessel complete with 2.2 kW element, external rhermostat adjustable up to 65 <sup>0</sup> .Such as "Bosch or approved equivalent	1	NO		
	<b>Total for Kitchen Fittings and Equipment carried forward to Summary Page</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)
<b>4.00</b>	<b>BILL NO.4:INTERNAL PLUMBING</b>				
	Supply, deliver and install chlorinated polyvinyl chloride (CPVC) pipes, tubing and fittings as described and shown on the drawings. The pipes and fittings shall be produced as per SDR 11 for sizes upto 2" and Schedule 40 for sizes above 2" upto 4". They shall meet or exceed the requirements of ASTM D 2846, current European standards for CPVC installations and to the Engineers approval. All joints shall be assembled employing solvent cements that meet or exceed the requirements of ASTM F493.				
	Rates must allow for all Metal/plastic threaded adaptors where required for the connection of sanitary fixtures as required in the running lengths of pipework and also where necessary, for pipe fixing clips, holder bats plugged and screwed, brackets and pipe sleeves through structural members for the proper and satisfactory functioning of the system. The pipes will be pressure tested before the plastering of wall commences and as per the manufacturers recommended testing pressures.				
<b>A</b>	<b>Cold water &amp; Hot Water CPVC Pipes</b>				
	i) 15 mm dia. CPVC SDR-11 Pipes. surface mounted.	10	LM		
	ii) 20 mm dia. CPVC SDR-11 Pipes. surface mounted.	10	LM		
	iii) 25 mm ditto	10	LM		
<b>B</b>	<b>Extra over CPVC tubing for the following:</b>				
	<b>1) Bends</b>				
	i) 15mm diameter CPVC 90° elbow	10	No.		
	ii) 20mm diameter CPVC 90° elbow	10	No.		
	iii) 25 mm ditto	15	No.		
	<b>2) Tees</b>				
	i) 25*20*25 mm reducing Tee	5	No.		
	ii) 20*15*20 mm reducing Tee	5	No.		
	<b>3) Reducers</b>				
	i) 25*20mm ditto	10	No.		
	ii) 25*15mm ditto	10	No.		
	iii) 20*15 mm ditto	10	No.		
	<b>Flexible Connections</b>				
<b>C</b>	15mm dia chrome plated flexible connection	4	No.		
	<b>Angle Valves</b>				
<b>D</b>	15mm dia Angle valve as Cobra or equal & approved	4	No.		
	<b>Sub-Total c/f to Next Page</b>				

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ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)
	<b>Sub-Total b/f from Previous Page</b>				
<b>A</b>	<b>Brass FPT 90° Bends/Elbows</b>				
	i) 15mm diameter CPVC 90° brass FPT elbow	5	No.		
	ii) 20*15mm diameter CPVC 90° brass FPT elbow	5	No.		
<b>B</b>	<b>Brass FPT 90° Tee</b>				
	i) 15*15*15mm diameter CPVC brass FPT Tee	10	No.		
	ii) 20*15*20 mm diameter CPVC 90° brass FPT elbow	10	No.		
	iii) 25*15*25mm diameter CPVC brass FPT Tee	10	No.		
<b>C</b>	<b>Gate Valves</b>				
	i) 25mm diameter approved medium pressure screw down full way non- rising stem wedge gate valve to BS 1952, with wheel and head joints to tubing. The gate valve to be as "Pegler" or approved equivalent.	1	No.		
	iii) 20mm ditto	2	No.		
<b>D</b>	<b>Allow for connection of the plumbing pipework to the existing water supply pipes as instructed by the Engineer.</b>	1	Item		
<b>E</b>	<b>Allow for testing and commissioning of the plumbing installations as per Engineer's instruction.</b>	1	Item		
	<b>Total for Internal Plumbing Carried Forward to Summary Page</b>				



ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)
<b>5.00</b>	<b>BILL NO.5:INTERNAL FOUL WATER DRAINAGE</b>				
	Supply, deliver and install the following UPVC, MUPVC, soil and waste systems respectively to B.S 5255 with fittings fixed to Manufacturer's Printed instructions and manufactured by reputable manufacturers. Tenderers must allow in their pipework prices for all the couplings, clippings, connectors, joints etc. as required in the running lengths of pipework and also where necessary, for pipe fixing clips, holder bats plugged and screwed for the proper and satisfactory functioning of the system				
<b>A</b>	<b>MuPVC and uPVC Waste and Soil pipework</b>				
	i) 100mm diameter heavy gauge grey MuPVC pipe	10	Lm		
	iii) 50mm diameter waste pipe	10	Lm		
	iv) 40mm diameter waste pipe	10	Lm		
	v) 32mm diameter waste pipe	10	Lm		
	<b>Extra over tubing for the following:</b>				
<b>B</b>	<b>Bends</b>				
	i) 100mm diameter bend	10	No.		
	ii) 100mm diameter bend with access	5	No.		
	iv) 50mm diameter bend	10	No.		
	v) 40mm diameter bend with access	5	No.		
	vi) 32mm diameter bend	10	No.		
<b>C</b>	<b>Tee</b>				
	i) 100mm diameter sweep tee	5	No.		
	ii) 50mm ditto	5	No.		
	iii) 40mm ditto	3	No.		
	iv) 32mm ditto	5	No.		
<b>D</b>	<b>Reducers</b>				
	ii) 50x40mm Ditto.	5	No.		
	ii) 50x32mm Ditto.	5	No.		
<b>E</b>	<b>Boss Connector</b>				
	i) 32x50mm Boss connector	5	No.		
	ii) 40x50mm Boss connector	5	No.		
	i) 100x50mm Boss connector	5	No.		
	ii) 100mm diameter W.C. connector bend	2	No.		
	<b>Sub-Total c/f to Next Page</b>				

PROPOSED PARTITIONING OF OFFICES AT ABSA TOWERS - 15TH FLOOR

ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)
	<b>Sub-Total b/f from Previous Page</b>				
<b>A</b>	<b>Access Caps</b>				
	i) 100mm diameter access cap	5	No.		
	iii) 40mm ditto	5	No.		
<b>B</b>	<b>Floor Traps</b>				
	i) 100x50mm dia. <b>stainless steel</b> floor trap with cover and grating	5	No.		
<b>C</b>	<b>Allow for connection of the drainage installations to the existing drain pipes as instructed by the Engineer.</b>	1	Item		
<b>D</b>	<b>Allow for testing and commissioning of the drainage installations as per Engineer's instruction.</b>	1	Item		
	<b>Total for Internal Foul Water Drainage Carried Forward to Summary Page</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)
<b>6.00</b>	<b>BILL NO.6: MECHANICAL VENTILATION</b>				
	<b>Mechanical Ventilation</b>				
<b>6.1</b>	<b>Shower/ Toilet Extract Fans</b>				
<b>A</b>	Wall mounted extract fan with two speed extract capable of 53/74 m <sup>3</sup> /hr. The fan shall have a maximum sound pressure of 34dB(A) at 3m. The fan features a Round Grille fascia and a 4"/100mm spigot, with integral PIR proximity sensor to activate the fan when movement is detected in the room. Featuring Ghost Air Movement technology for Quiet running. Supplied complete with a wall fixing kit comprising of outer grille, telescopic wall tube, gasket and foam strips. It shall be XpelAir model 'Simply Silent DX100PIRR' or approved equivalent	2	No		
<b>6.2</b>	<b>KITCHEN MECHANICAL VENTILATION SYSTEM</b>				
	Supply, delliver, install and fix the following equipment/items as described.				
<b>B</b>	<b>Kitchen Extract Hood</b> 800 x 600 x 500 mm (H*W*D) wall mounted kitchen extract hood complete with the following features/accessories: Suitable for ducted or recirculating operation Twin channel high-performance fan motor Switch control for extractor speeds and light 3-speed operation Maximum extraction of 450 m <sup>3</sup> /h 2 x high volt halogen light E14 30W Removable metal grease filters, dishwasher safe. Light Intensity: 270 lux Noise max. Normal Level: 69 dB				
	Hood to be as "Bosch DWP64CC50Z Chimney Wall Mounted Built in Hood, 60cm" or an equal & approved equivalent	1	No		
<b>C</b>	Electrical works including but not limited to wiring and conduits to fans and control panels from local isolator provided by others. It shall include a push and turn safety switch near the fan for isolation during servicing and maintenance.	1	Item		
	<b>Sub-Total c/f to Next Page</b>				

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ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)
	<b>Sub-Total b/f from Previous Page</b>				
	<b>As-Installed Drawings</b>				
<b>A</b>	Allow for <b>three (3No.) sets</b> of as-installed drawings and operation manuals both in hard and soft copies for mechanical ventilation installations	1	Item		
	<b>Testing and commissioning</b>				
<b>B</b>	Allow for testing and commissioning for mechanical ventilation system to the satisfaction of the Engineer	1	Item		
	<b>Total for Mechanical Ventilation carried forward to Summary Page</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)
<b>7.00</b>	<b>FIRE PROTECTION SERVICES</b>				
<b>7.1</b>	<b>PORTABLE FIRE EXTINGUISHERS</b>				
	Supply, deliver, install and test the following fire fighting equipment in positions indicated on the contract drawings or as shall be instructed by the Engineer. The Contractor must conform to Manufacturer's Printed instructions and the portable fire extinguishers manufactured by reputable manufacturers. They shall conform to NFPA 10.				
	<b>Carbon Dioxide Gas Fire Extinguisher</b>				
<b>A</b>	5kg carbon dioxide gas portable fire extinguisher complete with pressure gauge, initial charge and mounting brackets.	4	No		
	<b>Dry Chemical Powder Fire Extinguisher</b>				
<b>B</b>	6kg dry chemical powder portable fire extinguisher complete with pressure gauge, initial charge and mounting brackets.	4	No		
	<b>Water Fire Extinguisher</b>				
<b>C</b>	9 litres water portable fire extinguisher complete with pressure gauge, initial charge and mounting brackets.	3			
	<b>Manual Alarm Bell</b>				
<b>D</b>	9" (225mm) manual operated alarm bell (Gong)	2	No		
	<b>Fire Notices</b>				
<b>E</b>	Allow for fire signage for fire instructions as directed by the Project Engineer	4	No.		
<b>F</b>	<b>Fire Exit Signs</b>	4	No.		
<b>G</b>	<b>Fire blanket</b>				
	Easy pull down tags to release blanket				
	Fire-resistant glass fibre material				
	Suitable for use on small cooking oil fires & clothing fires				
	Size (m): 1.8 x 1.8	1			
	<b>Sub-Total for Portable Fire Extinguishers c/f to Collection Page</b>				

ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)
7.20	<b>INERT GAS FIRE SUPPRESSION:SERVER ROOM</b>				
	Supply and install fire suppression system complete gas and the following items to the satisfaction of the Engineer. The Server Room volume is 30m <sup>3</sup> . The tenderer <b>MUST</b> submit the technical brochures and working calculations together with the tender for evaluation. Alternative and approved systems utilising inert gases or a mixture of such gases may be provided.				
<b>A</b>	67litre (19.2Kg) normal charged capacity Argonite specified containers charged with Argonite gas at 200bar with dimensions 267mm diameter and 1615mm high when fitted with valve cylinders to be complete with discharge valves gauges and hoses for connection to the manifold. All to be as "Fike" or approved equivalent.	2	No.		
<b>B</b>	67litre (19.2Kg) normal charged capacity Argonite specified containers charged with Argonite gas at 200bar for testing.	1	No		
<b>C</b>	Cylinder support bracket system	1	Item		
	<b>2 CYLINDER MANIFOLD KIT</b>				
<b>D</b>	2 CYLINDER MANIFOLD KIT comprising 2 No. 25mm x 25mm x 25mm Galvanized Equal Tee and 1 No. 25mm NB Galvanized Pipe, 25mm schedule 40 cylinder manifold kit comprising of gauges,safety relief valve,check valve,discharge & connection hoses to the gas cylinders and any other necessary accessory. All to be as "Fike IG71-004-2" or approved equivalent.	1	Item		
<b>E</b>	25mm selector switch	1	No		
<b>F</b>	Actuation package	1	Item		
<b>G</b>	Solenoid valve/ manual release valve assembly inclusive of hoses, connectors etc.	1	Item		
<b>H</b>	25mm pressure reducing valve	1	No.		
<b>I</b>	15mm Argonite discharge Nozzles V type 6 orifice, Nozzle coverage 360 degrees pattern and a radius of 7M. The Nozzle will be located not less than 300mm below the ceiling as "Fike" or approved equivalent.	1	No.		
<b>J</b>	15mm Argonite discharge Nozzles V type 6 orifice, Nozzle coverage 360 degrees pattern and a radius of 3.5M. The Nozzle will be located less than 300mm from the upper floor surface as "Fike" or approved equivalent.	1	No.		
	<b>Sub-Total c/f to Next Page</b>				

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	<b>Sub-Total b/f from Previous Page</b>				
<b>A</b>	Wall mounted remote controller	1	No.		
<b>B</b>	Pressure relief/vent	1	No.		
<b>C</b>	Low pressure switch	1	No.		
	<b>Pipework (GMS Class 'C')</b>				
<b>D</b>	25mm diameter seamless black steel pipe Schedule 40	10	LM		
<b>E</b>	20mm diameter seamless black steel pipe Schedule 40	10	LM		
<b>F</b>	25mm diameter steel pipe bend/elbow	5	No.		
<b>G</b>	20mm diameter steel pipe bend/elbow	5	No.		
<b>H</b>	15mm diameter steel pipe bend/elbow	5	No.		
<b>I</b>	25mmX20mmX25mm tees	2	No.		
<b>J</b>	25mmX15mmX25mm tees	2	No.		
<b>K</b>	20mmX15mmX20mm tees	2	No.		
<b>L</b>	25mm x20mm reducer	1	No.		
<b>M</b>	20mm x15mm reducer	1	No.		
<b>N</b>	Addressable Control panel, controls and wiring complete with standby batteries	1	Item		
<b>O</b>	Maintenance switch	1	No.		
<b>P</b>	Double Action manual /electric releasing switch	2	No.		
<b>Q</b>	Abort switch	1	No.		
<b>R</b>	Ionization sensors	2	No.		
<b>S</b>	Thermal sensors	2	No.		
<b>T</b>	Photo electric sensors	4	No.		
<b>U</b>	Audible alarms	1	No.		
<b>V</b>	Visual alarm	1	No.		
<b>W</b>	Electrical works and earthing	1	Item		
<b>X</b>	Allow for associated buiders work	1	Item		
<b>Y</b>	Allow for pipework anchorage/hangers	1	Item		
<b>Z</b>	Allow for painting system pipework	1	Item		
<b>AA</b>	Labelling and warning signs inside and outside the rooms	2	No.		
<b>BB</b>	Calculations, working drawings providing brochures, drawings, and as installed drawings	1	Item		
<b>CC</b>	<b>Testing and commissioning</b>	1	Item		
	Allow for integrating the automatic fire suppression system to the electrical and air conditioning system.	1	Item		
	<b>Sub-Total c/f to Next Page</b>				

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ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)
	<b>Sub-Total b/f from Previous Page</b>				
	<b>SUSPENDED SERVER ROOM FLOOR</b>				
<b>A</b>	Supply and installation of raised floor calcium sulphate resistant panel in the server room with floor decking at 450mm above concrete slab complete with support and fire resistant material subject to approval by the engineer. Fire resistant panels to be of dimensions 400mm x 400mm with steel frame for supporting a load of point load of 500Kg/Sqf	10	SM		
	<b>FIRE DOOR</b>				
<b>B</b>	2-HOURS FIRE RATED DOOR UL-CERTIFIED FOR SERVER ROOM COMPLETE WITH THE FOLLOWING FEATURES:				
	Door Leaf Size: 2100mm*1000mm Door Leaf Thickness: ≥ 45 mm Leaf Steel Sheet Thickness: ≥1.5mm Frame Steel Sheet Thickness: ≥ 2.0 mm Frame Corner: Welded Type Fire Rating: 2-HOURS Material: Cold Rolled Coil and/or Galvanised Steel Paint: Electrostatic liquid coating  Compliance: Manufactured in accordance to , UL 10B & C, NFPA 252,NFPA257,ASTM E2010, BS 476 AND UBC7-2/97.  Temperature rise at 30 min > 344°C Vision Panel; and any other accessories necessary for proper operation of the door.	1	Item		
<b>C</b>	List any other items necessary for complete installation of the entire fire suppression system;				
	i)				
	ii)				
	iii)				
	<b>Total for Inert Gas Fire Suppression Carried Forward to Collection Page</b>				



**COLLECTION PAGE FOR FIRE PROTECTION WORKS**

ITEM	DESCRIPTION	AMOUNT (KSHS)
1	Total carried forward from Portable Fire Extinguishers	
2	Total carried forward from Inert Gas Fire Suppression	
<b>Total for FIRE PROTECTION SERVICES C/F to Summary Page</b>		

<b>8.00</b>	<b>AIR CONDITIONING SERVICES</b>			
<b>8.1</b>	<b>C.E.O's OFFICE AIR CONDITIONING</b>			
	Supply, install, test and commission the following system upon approval of working drawings or instructions from the Engineer. NB:Outdoor units shall be mounted on external walls/balcony or as per Building Manager's requirements			
<b>A</b>	Single Split Air conditioner of cooling capacity <b>7.1 kW (24,000 Btu/hr)</b> with <b>Ceiling Cassette</b> indoor unit, outdoor unit,, control unit, room thermometer, room thermostat controls and remote control device. It shall be charged using <b>R410A</b> refrigerant or any other none ozone depleting refrigerant.The unit must be filled fully with the first fill of this refrigerant.It must be capable of air filtration,dehumidification with inverter compressor technology. The unit shall be such that if the power supply goes off, it will automatically start after power is restored, with a three (3) minute delay. The outdoor unit shall have a matching capacity with the indoor unit.The air conditioning unit shall have an <b>inverter motor (BLDC)</b> sand hall be complete with wireless remote all other necessary accessories for proper functioning of the system. The unit shall be as ' <b>LG ATUW24GPLS1 inverter</b> ', or equal and approved	1	No.	
	<b>Refrigeration Pipework</b>			
<b>B</b>	Refrigeration liquid pipework of diameter 9.52mm made of copper,including 25mm Amaflex insulation & flared connections	15	Lm	
<b>C</b>	Refrigeration gas pipework of diameter 15.88mm made of copper,including 25mm Amaflex insulation & flared connections	15	Lm	
	<b>Refrigerant</b>			
<b>D</b>	Allow R410A refrigerant for charging the air conditioning system as per manufacturer's instruction	1	Item	
	<b>Drain</b>			
<b>E</b>	32mm PVC condensate drainage pipework, class D, including bends, clips, joints and tees along the running length of the pipe	15	Lm	
	<b>Surge Protector/Automatic Voltage Switcher(AVS)</b>			
<b>F</b>	Power surge protector as of 'Sollatek' or an equal and approved equivalent.	1	No.	
	<b>Sub-Total c/f to Next Page</b>			

PROPOSED PARTITIONING OF OFFICES AT ABSA TOWERS - 15TH FLOOR

ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)
	<b>Sub-Total b/f from Previous Page</b>				
	<b>Mounting Bracket</b>				
<b>A</b>	Mounting bracket for the outdoor unit complete with a cage and provided with purpose-made protective steel iron angle frame and all other anchoring accessories including rawl bolts and anti-vibration rubber mountings to the Engineers approval.	1	Item		
	<b>Wall Mounted Wired Remote Controller</b>				
<b>B</b>	Fully wired wall mounted remote control panel, wiring and conduit circuit works including but not limited to interconnecting cable between the indoor & outdoor units. To be complete with LED panel and thermostat	1	Item		
<b>C</b>	<b>Power &amp; Communication cable:</b> 4C × 0.75 (No. × mm <sup>2</sup> )	15	M		
<b>D</b>	Electrical works including but not limited to wiring and conduits to fans and control panels from local isolator provided by others. It shall include a push and turn safety switch near the fan for isolation during servicing and maintenance.	1	Item		
	<b>Sub-Total for C.E.O's Office Air Conditioning c/f to Collection Page</b>				

PROPOSED PARTITIONING OF OFFICES AT ABSA TOWERS - 15TH FLOOR

ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)
<b>8.2</b>	<b>BOARD ROOM AIR CONDITIONING</b>				
	Supply, install, test and commission the following system upon approval of working drawings or instructions from the Engineer. NB:Outdoor units shall be mounted on external walls/balcony or as per Building Manager's requirements				
<b>A</b>	Single Split Air conditioner of cooling capacity <b>7.1 kW (24,000 Btu/hr)</b> with <b>Ceiling Cassette</b> indoor unit, outdoor unit,, control unit, room thermometer, room thermostat controls and remote control device. It shall be charged using <b>R410A</b> refrigerant or any other none ozone depleting refrigerant.The unit must be filled fully with the first fill of this refrigerant.It must be capable of air filtration,dehumidification with inverter compressor technology. The unit shall be such that if the power supply goes off, it will automatically start after power is restored, with a three (3) minute delay. The outdoor unit shall have a matching capacity with the indoor unit.The air conditioning unit shall have an <b>inverter motor (BLDC)</b> sand hall be complete with wireless remote all other necessary accessories for proper functioning of the system. The unit shall be as ' <b>LG ATUW24GPLS1 inverter</b> ', or equal and approved	1	No.		
	<b>Refrigeration Pipework</b>				
<b>B</b>	Refrigeration liquid pipework of diameter 9.52mm made of copper,including 25mm Amaflex insulation & flared connections	15	Lm		
<b>C</b>	Refrigeration gas pipework of diameter 15.88mm made of copper,including 25mm Amaflex insulation & flared connections	15	Lm		
	<b>Refrigerant</b>				
<b>D</b>	Allow R410A refrigerant for charging the air conditioning system as per manufacturer's instruction	1	Item		
	<b>Drain</b>				
<b>E</b>	32mm PVC condensate drainage pipework, class D, including bends, clips, joints and tees along the running length of the pipe	15	Lm		
	<b>Surge Protector/Automatic Voltage Switcher(AVS)</b>				
<b>F</b>	Power surge protector as of 'Sollatek' or an equal and approved equivalent.	1	No.		
	<b>Sub-Total c/f to Next Page</b>				

PROPOSED PARTITIONING OF OFFICES AT ABSA TOWERS - 15TH FLOOR

ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)
	<b>Sub-Total b/f from Previous Page</b>				
	<b>Mounting Bracket</b>				
<b>A</b>	Mounting bracket for the outdoor unit complete with a cage and provided with purpose-made protective steel iron angle frame and all other anchoring accessories including rawl bolts and anti-vibration rubber mountings to the Engineers approval.	1	Item		
	<b>Wall Mounted Wired Remote Controller</b>				
<b>B</b>	Fully wired wall mounted remote control panel, wiring and conduit circuit works including but not limited to interconnecting cable between the indoor & outdoor units. To be complete with LED panel and thermostat	1	Item		
<b>C</b>	<b>Power &amp; Communication cable: 4C × 0.75 (No. × mm2)</b>	15	M		
					-
<b>D</b>	Electrical works including but not limited to wiring and conduits to fans and control panels from local isolator provided by others. It shall include a push and turn safety switch near the fan for isolation during servicing and maintenance.	1	Item		
	<b>Sub-Total for Board Room Air Conditioning c/f to Collection Page</b>				

PROPOSED PARTITIONING OF OFFICES AT ABSA TOWERS - 15TH FLOOR

ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)
<b>8.30</b>	<b>SERVER ROOM AIR CONDITIONING</b>				
	Supply, install, test and commission the following system upon approval of working drawings or instructions from the Engineer. NB:Outdoor units shall be mounted on external walls/balcony or as per Building Manager's requirements				
<b>A</b>	Single Split Air conditioner of cooling capacity <b>7.1 kW (24,000 Btu/hr)</b> with <b>High Wall Mounted</b> indoor unit, outdoor unit,, control unit, room thermometer, room thermostat controls and remote control device. It shall be charged using <b>R410A</b> refrigerant or any other none ozone depleting refrigerant.The unit must be filled fully with the first fill of this refrigerant.It must be capable of air filtration,dehumidification with inverter compressor technology. The unit shall be such that if the power supply goes off, it will automatically start after power is restored, with a three (3) minute delay. The outdoor unit shall have a matching capacity with the indoor unit.The air conditioning unit shall have an <b>inverter motor (BLDC)</b> sand hall be complete with wireless remote all other necessary accessories for proper functioning of the system. The unit shall be as ' <b>LG M24AKH-NK7 inverter</b> ', or equal and approved	2	No.		
	<b>Refrigeration Pipework</b>				
<b>B</b>	Refrigeration liquid pipework of diameter 9.52mm made of copper,including 25mm Amaflex insulation & flared connections	30	Lm		
<b>C</b>	Refrigeration gas pipework of diameter 15.88mm made of copper,including 25mm Amaflex insulation & flared connections	30	Lm		
	<b>Refrigerant</b>				
<b>D</b>	Allow R410A refrigerant for charging the air conditioning system as per manufacturer's instruction	1	Item		
	<b>Drain</b>				
<b>E</b>	32mm PVC condensate drainage pipework, class D, including bends, clips, joints and tees along the running length of the pipe	20	Lm		
	<b>Surge Protector/Automatic Voltage Switcher(AVS)</b>				
<b>F</b>	Power surge protector as of 'Sollatek' or an equal and approved equivalent.	2	No.		
	<b>Sub-Total c/f to Next Page</b>				

PROPOSED PARTITIONING OF OFFICES AT ABSA TOWERS - 15TH FLOOR

ITEM	DESCRIPTION	QTY	UNIT	RATE (KSHS)	AMOUNT (KSHS)
	<b>Sub-Total b/f from Previous Page</b>				
	<b>Mounting Bracket</b>				
A	Mounting bracket for the outdoor unit complete with a cage and provided with purpose-made protective steel iron angle frame and all other anchoring accessories including rawl bolts and anti-vibration rubber mountings to the Engineers approval.	2	Set		
	<b>Wall Mounted Wired Remote Controller</b>				
B	Fully wired wall mounted remote control panel, wiring and conduit circuit works including but not limited to interconnecting cable between the indoor & outdoor units. To be complete with LED panel and thermostat	2	Set		
C	<b>Power &amp; Communication cable:</b> 4C × 0.75 (No. × mm2)	30	Lm		
D	Electrical works including but not limited to wiring and conduits to fans and control panels from local isolator provided by others. It shall include a push and turn safety switch near the fan for isolation during servicing and maintenance.		Item		
	<b>As-Installed Drawings</b>				
E	Allow for <b>three (3No.) sets</b> of as-installed drawings and operation manuals both in hard and soft copies for mechanical ventilation installations	1	Item		
	<b>Trunking</b>				
F	75*50mm approved PVC trunking for concealing the refrigerant pipeworks	20	Lm		
	<b>Testing and commissioning</b>				
G	Allow for testing and commissioning for mechanical ventilation system to the satisfaction of the Engineer				
	<b>Sub-Total for Server Room Air Conditioning c/f to Collection Page</b>				

<b>COLLECTION PAGE FOR FIRE PROTECTION WORKS</b>		
<b>ITEM</b>	<b>DESCRIPTION</b>	<b>AMOUNT (KSHS)</b>
1	Total carried forward from CEO's Office Air Conditioning	
2	Total carried forward from Board Room Air Conditioning	
3	Total carried forward from Server Room Air Conditioning	
	<b>Total for AIR CONDITIONING SERVICES C/F to Summary Page</b>	



<b>SUMMARY PAGE FOR MECHANICAL WORKS</b>		
<b>ITEM</b>	<b>DESCRIPTION</b>	<b>AMOUNT (KSHS)</b>
1	Preliminaries	
2	Washroom Sanitary Fittings	
3	Kitchen Fittings and Equipment	
4	Internal Plumbing	
5	Internal Foul Water Drainage	
6	Mechanical Ventilation	
7	Fire Protection Services	
8	Air Conditioning Services	
9	Contingency Sum	
	<b>TOTAL</b>	

  

Amount in words (Kenya Shillings).....

.....

Tenderer's name and Stamp:.....

P.O. Box:.....

Date: ..... Signature:.....

PIN NO. .... VAT CERTIFICATE NO: .....

(Provide copy) (Provide copy)

Witness: ..... Address:.....

Date: ..... Signature:.....