

National Transmission Company of South Africa Bill of Quantities				Template Identifier			
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				Effective Date			
				Review Date			
Project Name: HEATING VENTILATION AND AIR CONDITIONING SERVICES FOR THE SOUTHERN GRID ON AN AND AS AND WHEN REQUIRED BASIS FOR 36 MONTHS							
ITEM NO	PAYMENT REFERS TO	ERP Number	SHORT DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
			<u>BILL NO 1</u>				
			<u>PRELIMINARY AND GENERAL</u>				
1			Complying with Health and Safety Specifications	Sum	1		
2			Complying with Environmental Management Programme Act and all other statutory environmental requirements	Sum	1		
3			Living out accommodation	Ea	1		
4			Cost of transport/ travelling (Toll Fees to be allowed for in tendered rates) Transport cost are charged as per the business office to task point.	Km	1		
			<u>BILL NO 2</u>				
			<u>MECHANICAL WORK</u>				
			<u>HEATING, VENTILATION AND AIR CONDITIONING INSTALLATIONS.</u>				
			The Tenderer is referred to the relevant clauses in the Model Preambles for Trades, to the Supplementary Preambles				
			SUPPLEMENTARY PREAMBLES				
			Refer to the "Eskom Maintenance of HVAC Equipment" , TOPAC-001 document and the "Installation of HVAC equipment - Window / Console / Split units " , TPOAC-002 document.				
			<u>Window/ Console / split units maintenance</u>				
			<u>Equipment</u>				
			Supply only 9000 BTU inverter split indoor unit	Ea			
			Supply only 9000 BTU inverter split outdoor unit	Ea			
			Supply only 12000 BTU inverter split indoor unit	Ea			
			Supply only 12000 BTU inverter split outdoor unit	Ea			
			Supply only 18000 BTU inverter split indoor unit	Ea			
			Supply only 18000 BTU inverter split outdoor unit	Ea			
			Supply only 24000 BTU inverter split indoor unit	Ea			
			Supply only 24000 BTU inverter split outdoor unit	Ea			

		<u>Services</u>				
		<u>Minor service</u>				
		Standard installation cost for 9000 BTU up to 24 000 BTU (Inclusive of labour and material within a 50km radius of ESKOM business task point)	Ea	1		
3.2.1		<u>Minor service</u>				
	1	Check air filter and clean where necessary.	Ea	1		
	2	Check condensate drains and clear if necessary to prevent internal water leaks	Ea	1		
	3	Clean equipment generally and observe its operation in all its functions.	Ea	1		
	4	Check amperage readings on cooling/heating - fan only operation and compare to name plate ratings.	Ea	1		
3.2.2		<u>Major service</u>				
	1	Check air filter and clean where necessary.	Ea	1		
	2	Check condition of evaporator coil and clean.	Ea	1		
	3	Check condition of condensor coil and clean.	Ea	1		
	4	Check condensate drip trays and treat for corrosion if necessary.	Ea	1		
	5	Check condensate drains and clear if necessary. .	Ea	1		
	6	Check fans to ensure that they are secured.	Ea	1		
	7	Check fans motor (s).	Ea	1		
	8	Check compressor.	Ea	1		
	9	Check thermostat/s Switches / Contactors.	Ea	1		
	10	Check refrigerant sytem for leaks and repair.	Ea	1		
	11	Clean equipment generally and observe its operation in all its functions.	Ea	1		
	12	Check amperage readings on cooling/heating - fan only operation and compare to name plate ratings.	Ea	1		
	13	Check and tighten where necessary all refrigerant pipe fittings	Ea	1		

Other service

Issue Certificate of Compliance

Ea

1

Material

1/4" Armerflex (2m)

Ea

1

3/8" Armerflex (2m)

Ea

1

5/8" Armerflex (2m)

Ea

1

7/8" Armerflex (2m)

Ea

1

1/4" Copper Tubing (15.5) - R410

M

1

3/8" Copper Tubing (15.5) - R410

M

1

1/2" Copper Tubing (15.5) R410

M

1

5/8" Copper Tubing (15.5) - R410

M

1

7/8" Copper Tubing (15.5) - R410

M

1

25mm PVC Trunking (3m)

Ea

1

75mm PVC Trunking (3m)

Ea

1

Raw Bolts M8

Ea

1

Plug Tops

Ea

1

3 Core Cable 2.5m² Surfex

M

1

5 Core Cable 2.5m² Surfex

M

1

Rimmed Nail-in Anchor 6mm x 60mm

Ea

1

20mm Black Sprague Tubing

M

1

Cable Straps

Ea

1

20mm PVC Couplings

Ea

1

Outdoor Cantilever 450 mm Brackets / Plinths

Ea

1

Outdoor Cantilever 600 mm Brackets / Plinths

Ea

1

Self Drilling Screws 5.5mm x 32mm

Ea

1

Lockable Electrical Isolator 15 Amp Single Phase Outdoor

Ea

1

Lockable Electrical Isolator 20 Amp Three Phase Outdoor

Ea

1

R32 refrigerant (difluoromethane)

Kg

1

Battery, AA Alkaline Battery

Ea

1

Battery, AAA Alkaline Battery

Ea

1

Remote controller

Ea

1

Fan motor capacitor

Ea

1

Fan motor: 9000 BTU inverter split unit	Ea	1
Fan motor:12000 BTU inverter split unit	Ea	1
Fan motor:18000 BTU inverter split unit	Ea	1
Fan motor:24000 BTU inverter split unit	Ea	1
Coil sensor indoor	Ea	1
Coil sensor outdoor	Ea	1
Air filter	Ea	1
Compressor: 9000 BTU inverter split unit	Ea	1
Compressor:12000 BTU inverter split unit	Ea	1
Compressor:18000 BTU inverter split unit	Ea	1
Compressor: 24000 BTU inverter split unit	Ea	1
<u>Labour</u>		
Work to be done during normal working hours		
Technician (Air con & Electrical Qualified)	Hr	1
Assistant Technician	Hr	1
Work to be done after normal working hours Weekends and Public Holidays (during breakdowns)		
Technician (Air con & Electrical Qualified)	Hr	1
Assistant Technician	Hr	1
Total Carried Forward to Main Summary Page		