

PART 2: PRICING DATA

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C2.1 Pricing instructions: Option B

1. The *conditions of contract*

1.1. How the contract prices work and assesses it for progress payments

Clause 11 in NEC3 Engineering and Construction Contract, June 2005 and 2013 (ECC) Option B states:

Identified and defined terms	11	
	11.2	(21) The Bill of Quantities is the <i>bill of quantities</i> as changed in accordance with this contract to accommodate implemented compensation events and for accepted quotations for acceleration.
		(22) Defined Cost is the cost of the components in the Shorter Schedule of Cost Components whether work is subcontracted or not excluding the cost of preparing quotations for compensation events.
		(28) The Price for Work Done to Date is the total of • the quantity of the work which the <i>Contractor</i> has completed for each item in the Bill of Quantities multiplied by the rate and • a proportion of each lump sum which is the proportion of the work covered by the item which the <i>Contractor</i> has completed. Completed work is work without Defects which would either delay or be covered by immediately following work.
		(31) The Prices are the lump sums and the amounts obtained by multiplying the rates by the quantities for the items in the Bill of Quantities.

This confirms that Option B is a re-measurement contract and the bill comprises only items measured using quantities and rates or stated as lump sums. Value related items are not used. Time related items are items measured using rates where the rate is a unit of time.

1.2. Function of the Bill of Quantities

Clause 55.1 in Option B states, "Information in the Bill of Quantities is not Works Information or Site Information". This confirms that instructions to do work or how it is to be done are not included in the Bill, but in the Works Information. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Works in accordance with the Works Information". Hence the *Contractor* does **not** Provide the Works in accordance with the Bill of Quantities. The Bill of Quantities is only a pricing document.

1.3. Guidance before pricing and measuring

Employers preparing tenders or contract documents, and tendering contractors are advised to consult the sections dealing with the bill of quantities in the NEC3 Engineering and Construction Contract (June 2005) Guidance Notes before preparing the *bill of quantities* or before entering rates and lump sums into the *bill*.

Historically bill of quantities based contracts in South Africa have been influenced by the different approaches of the civil engineering and building sectors of the industry through their respective discipline based standard forms of contract and methods of measurement. This is particularly apparent in the approach to the Preliminary and General bill. On the other hand, because ECC caters for a number of disciplines in the same contract, including electrical works, a different approach not currently found in local methods of measurement to the Preliminary & General bill items may have been used.

The NEC approach to the P & G bill assumes use will be made of method related charges for Equipment applied to Providing the Works based on durations shown in the Accepted Programme, fixed charges for the use of Equipment that is required throughout the construction phase, time related charges for people working in a supervisory capacity for the period required, and lump sum charges for other facilities or services not directly related to performing work items typically included in other parts of the bill.

2. Measurement and payment

2.1. Symbols

The units of measurement described in the Bill of Quantities are metric units abbreviated as follows:

Abbreviation	Unit
%	percent
h	hour
ha	hectare
kg	kilogram
kl	kilolitre
km	kilometre
km-pass	kilometre-pass
kPa	kilopascal
kW	kilowatt
l	litre
m	metre
mm	millimetre
m ²	square metre
m ² -pass	square metre pass
m ³	cubic metre
m ³ -km	cubic metre-kilometre
MN	meganewton
MN.m	meganewton-metre

MPa	megapascal
No.	number
Prov sum ¹	provisional sum
PC-sum	prime cost sum
R/only	Rate only
sum	Lump sum
t	ton (1000kg)
W/day	Work day

2.2. General assumptions

- 2.2.1. Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance has been made in the quantities for waste.
- 2.2.2. The Prices and rates stated for each item in the Bill of Quantities shall be treated as being fully inclusive of all work, risks, liabilities, obligations, overheads, profit and everything necessary as incurred or required by the *Contractor* in carrying out or providing that item.
- 2.2.3. Clause 63.13 in Option B provides that these rates and Prices may be used as a basis for assessment of compensation events instead of Defined Cost.
- 2.2.4. Where this contract requires detailed drawings, designs or other information to be provided, and no rates or prices are included in the *bill* specifically for such matters, then the *Contractor* is deemed to have allowed for all costs associated with such requirements within the tendered rates and Prices in the Bill of Quantities.

¹ Provisional Sums should not be used unless absolutely unavoidable. Rather include specifications and associated bill items for the most likely scope of work, and then change later using the compensation event procedure if necessary. This is because tenderers cannot programme effectively for unknown scopes of work

- 2.2.5. An item against which no Price is entered will be treated as covered by other Prices or rates in the *bill of quantities*. If a number of items are grouped together for pricing purposes, this will be treated as a single lump sum.
- 2.2.6. The quantities contained in the Bill of Quantities may not be final and do not necessarily represent the actual amount of work to be done. The quantities of work assessed and certified for payment by the *Project Manager* at each assessment date will be used for determining payments due and not the quantities given in the Bill of Quantities.
- 2.2.7. The short descriptions of the items of payment given in the *bill of quantities* are only for the purposes of identifying the items. More detail regarding the extent of the work entailed under each item is provided in the Works Information.

2.3. Departures from the *method of measurement*

2.4. Amplification of or assumptions about measurement items

For the avoidance of doubt the following is provided to assist in the interpretation of descriptions given in the *method of measurement*. In the event of any ambiguity or inconsistency between the statements in the *method of measurement* and this section, the interpretation given in this section shall be used.

C2.2 The *bill of quantities*

PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE	Total
1	<u>PRELIMINARY & GENERAL, SAFETY AND LABOUR</u>				
1.1	<u>Preliminary and general</u>	Sum	1		
1.2	SHERQ Obligations	Sum	1		
1.3	Safety File	Sum	1		
1.4	Site establishment	Sum	1		
1.5	Site de-establishment	Sum	1		
2	<u>Other fixed obligations</u>				
	<u>Roof</u>				
2.1	Remove all existing roof accessories i.e. fascia boards, barge boards, gutters and downpipes and discard	m	120		
2.2	Remove existing roof sheeting and discard at a suitable dump site.	m ²	540		
2.3	Install industrial box Profile Seamless Gutters 150mm O.G industrial and industrial spreaders	m	120		
2.4	Install industrial 100x75mm downpipes	No.	15		
2.5	Install "Sisalation FR430" heavy industrial grade reinforced aluminium foil insulation. Insulation laid taut over purlins (at approximately 1000mm centres) and fixed concurrent with roof covering, including galvanised steel straining wires.	m ²	540		
2.6	Replace the sheeting with 0.9mm 'Hula Span A7 Profile' aluminium sheeting with mill finish on one side and 'Cloud Grey PVDF' paint coating to other side including the accessories fixed to the purlins	m ²	540		
2.7	Install plain fascia board, size 300 x 0.9mm thick including galvanized steel H-profile joiners.	m	120		
2.8	Install 90 degree L-shaped barge board size 275 x 0.9mm thick including H-profile joiners	m	120		
3	<u>Carport</u>				
3.1	Supply and install carport sheeting(IBR)	m ²	100		

3.2	Supply and install Poles for the carport sheeting and all necessary fitting,	No.	10		
3.3	Supply and install seamless gutter and fascia board in the carport	m	20		
3.4	Supply and install downpipes and industrial spreaders	No.	4		
4	Office 3				
4.1	Prepare walls and paint with 2 coats Polvin paint code EPL 437 Calico	m ²	44		
4.2	Supply and install ceiling board panel with 600x1200mm ceiling tiles	No.	10		
4.3	Widow seal				
4.4	Scrap and paint burglar guard	No.	2		
4.5	Paint doors (match existing)	No.	2		
4.6	Replace exit door with the hard wood door and paint	No.	1		
5	Office 4				
5.1	Prepare walls and paint with 2 coats Polvin paint code EPL 437 Calico	m ²	45		
5.2	Supply and install ceiling board panel with 600x1200mm ceiling tiles	No.	10		
5.3	Widow seal	No.	1		
5.4	Cover electric box make it accessible with super wood cupboard	m ²	10		
5.5	Scrap and paint burglar guard	No.	2		
5.6	Paint doors (match existing)	No.	2		
5.7	Replace exit door with the hard wood door and paint	No.	1		
6	Office 5				
6.1	Prepare walls and paint with 2 coats Polvin paint code EPL 437 Calico	m ²	70		
6.2	Supply and install ceiling board panel with 600x1200mm ceiling tiles	No.	12		
6.3	Widow seal	No.	2		
6.4	Scrap and paint burglar guard	No.	1		
6.5	Paint door (match existing)	No.	1		
6.6	Replace exit door with the hard wood door and paint	No.	1		
7	Office 6				
7.1	Prepare walls and paint with 2 coats Polvin paint code EPL 437 Calico	m ²	48		
7.2	Supply and install ceiling board panel with 600x1200mm ceiling tiles	m ²	2		
7.3	Widow seal	No.	2		
7.4	Scrap and paint burglar guard	No.	2		
7.5	Paint doors (match existing)	No.	2		
7.6	Replace exit door with the hard wood door and paint	No.	1		

8	<u>Office 7</u>				
8.1	Prepare walls and paint with 2 coats Polvin paint code EPL 437 Calico	m ²	58		
8.2	Supply and install ceiling board panel with 600x1200mm ceiling tiles	m ²	15		
8.3	Widow seal	No.	2		
8.4	Scrap and paint burglar guard	No.	1		
8.5	Paint doors (match existing)	No.	2		
8.6	Replace exit door with the hard wood door and paint	No.	1		
9	<u>Office 8</u>				
9.1	Prepare walls and paint with 2 coats Polvin paint code EPL 437 Calico	m ²	100		
9.2	Supply and install ceiling board panel with 600x1200mm ceiling tiles	m ²	16		
9.3	Widow seal	No.	2		
9.4	Scrap and paint burglar guard	No.	2		
9.5	Paint doors (match existing)	No.	2		
9.6	Replace exit door with the hard wood door and paint		1		
10	<u>Office 9</u>				
10.1	Prepare walls and paint with 2 coats Polvin paint code EPL 437 Calico	m ²	60		
10.2	Supply and install ceiling board panel with 600x1200mm ceiling tiles	m ²	10		
10.3	Widow seal	No.	2		
10.4	Scrap and paint burglar guard	No.			
10.5	Paint doors (match existing)	No.	2		
10.6	Replace exit door with the hard wood door and paint	No.	1		
11	<u>Office 10</u>				
11.1	Prepare walls and paint with 2 coats Polvin paint code EPL 437 Calico	m ²	60		
11.2	Prepare walls and paint with vanish	m ²	20		
11.3	Supply and install ceiling board panel with 600x1200mm ceiling tiles	No.	10		
11.4	Remove the wall mounted cupboard and supply and install new cupboard an shelves	No.	1		
11.5	Widow seal	No.	2		
11.6	Scrap and paint burglar guard	No.	1		
11.7	Paint doors (match existing)	No.	2		
11.8	Replace exit door with the hard wood door and paint	No.	2		
12	<u>Office 11</u>				

12.1	Install new kitchen super wood cupboards (900x800) with all external surfaces covered with maple laminate and granite counter to (Drakensburg black).L shape	No	1		
12.2	Install new Franke single bowl stainless steel sink including basin mixer with cast fixed outlet – 2 ½” female iron 400mm long flexible hoses 3294ST	No	1		
12.3	Install all fittings and piping required for complete functionality (plumbing) 22mm copper pipe,	No	1		
12.4	Prepare walls and paint with 2 coats Polvin paint code EPL 437 Calico	m²	86		
12.5	Replace wall tiles in the bathroom with Fabian Bone 300x500 (Beige/Cream	m²	55		
12.6	Install water proofing in the bathroom same height as wall tiles	m²	55		
12.7	Supply and install shower door include new frame	No.	1		
12.8	Remove sliding door and prepare wall to paint	m²	10		
12.9	Paint office door	No.	1		
12.10	Supply and install ceiling board panel with 600x1200mm ceiling tiles	No.	8		
12.11	Supply and install door lockers	No	2		
12.12	Supply and fit vaal hibiscus WC including 15mm cobra angle valves, B2 toilet seat including adaptor for waste	No	1		
12.13	Supply and fit vaal hibiscus basin including fixation bolts, waste, cobra CP bottle trap, 15mm angle valve & 15mm stella taps	No.	1		
12.14	Replace exit door with the hard wood door and paint	No.	2		
13	<u>Office 12</u>				
13.1	Prepare walls and paint with 2 coats Polvin paint code EPL 437 Calico	m²	60		
13.2	Supply and install ceiling board panel with 600x1200mm ceiling tiles	No	5		
13.3	Widow seal	No	1		
13.4	Scrap and paint burglar guard	No	2		
13.5	Paint doors (match existing)	No	2		

13.6	Replace exit door with the hard wood door and paint	No.	1		
14	<u>Office 13</u>	No			
14.1	Prepare walls and paint with 2 coats Polvin paint code EPL 437 Calico	m ²	44		
14.2	Supply and install ceiling board panel with 600x1200mm ceiling tiles	m ²	5		
14.4	Widow seal		1		
14.5	Scrap and paint burglar guard	No.	1		
14.6	Paint doors (match existing)	m ²	1		
14.7	Replace exit door with the hard wood door and paint	No.	1		
14.8	Replace floor tiles – Famous Black 300x300, dove grey grout and 60mm skirting	m ²	30		
14.9	Replace wall tiles in the bathroom with Fabian Bone 300x500 (Beige/Cream	m ²	20		
14.10	Install new Franke single bowl stainless steel sink including basin mixer with cast fixed outlet – 2 ½” female iron 400mm long flexible hoses 3294ST	No.	1		
14.11	Install all fittings and piping required for complete functionality (plumbing) 22mm copper pipe,	No.	1		
15	<u>Office 14</u>				
15.1	Prepare walls and paint with 2 coats Polvin paint code EPL 437 Calico	m ²	43		
15.2	Supply and install ceiling board panel with 600x1200mm ceiling tiles	m ²	5		
15.3	Widow seal	No.	2		
15.4	Scrap and paint burglar guard	No.	1		
15.5	Paint doors (match existing)	No.	2		
15.6	Replace exit door with the hard wood door and paint	No.	2		
16	<u>Office 15</u>				
16.1	Prepare walls and paint with 2 coats Polvin paint code EPL 437 Calico	m ²	43		
16.2	Supply and install ceiling board panel with 600x1200mm ceiling tiles	m ²			
16.3	Widow seal	No.	1		

16.4	Scrap and paint burglar guard	No.	1		
16.5	Paint doors (match existing)	No.	1		
16.6	Replace exit door with the hard wood door and paint	No.	1		
16.7	Supply and install awning	No.	5		
16.8	Safety file	No.	1		
	Total excluding VAT				