

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, April 2013 (ECC3) Option B states:

Identified and defined terms 11.2

(21) The Bill of Quantities is the *bill of quantities* 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 *Contractor* 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 *Contractor* 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 ECC3 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

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. 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.
- 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.

C2.2 the bill of quantities

PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE	Total
1. PRELIMINARY & GENERAL, SAFETY AND LABOUR					
1.1.	Site establishment	Sum	1		
1.2.	Supervisory during period of the project	Sum	1		
1.3.	Safety officer to be on site during period of the project	Sum	1		
1.4.	Safety File including permits for hot work on site	Sum	1		
1.5.	Safe working at height equipment	Sum	1		
1.6.	Appointment of an Approved Asbestos Inspection Authority	Sum	1		
1.7.	Waste collection and Disposal	Sum	1		
1.8.	Site De-establishment	Sum	1		
Sub-Total (excluding VAT)					
2. Building B3/097					
2.1.	Remove all existing roof accessories i.e. fascia boards, barge boards, gutters and downpipes and discard.	sum	1		
2.2.	Remove asbestos roof according to Transnet Asbestos Management Plan including disposal	m ²	1400		
2.3.	Supply and install new 'Hula Span' 0,8 mm 'A7 Profile' aluminium sheeting with mill finish on one side and corporate grey Colour-Tech PVDF paint coating to other side including accessories fixed to timber purlins, with stainless steel grade 304 self-tapping screws.	m ²	1400		
2.4.	Installation of Isotherm Insulation at a minimum thickness of 100mm	m ²	1400		
2.5.	Install Medium density plain fascia board, size 300 x 12mm thick (code 041-206) including galvanised steel H-profile joiners	m	180		
2.6.	Install 90 degree L-shaped barge board size 275 x 80mm thick (code 721-740) H-profile joiners	m	80		
2.7.	Supply and install industrial box Profile Seamless Gutters	m	165		
2.8.	100 x 75mm rectangular rainwater downpipes including necessary bends and shoes.	m	72		
2.9.	Supply and install aluminium ridging to match sheeting	m	95		
2.10.	Remove damaged wooden Rafters and replace with new (50 x228)purlins	m	60		

Sub-Total (excluding VAT)					
3. Building B3/098					
3.1.	Remove all existing roof accessories i.e. fascia boards, barge boards, gutters and downpipes and discard.	sum	1		
3.2.	Remove asbestos roof according to Transnet Asbestos Management Plan	m ²	22		
3.3.	Supply and install new 'Hula Span' 0,8 mm 'A7 Profile' aluminium sheeting with mill finish on one side and corporate grey Colour-Tech PVDF paint coating to other side including accessories fixed to timber purlins, with stainless steel grade 304 self-tapping screws.	m ²	22		
3.4.	Installation of Isotherm Insulation at a minimum thickness of 100mm	m ²	22		
3.5.	Install Medium density plain fascia board, size 300 x 12mm thick (code 041-206) including galvanised steel H-profile joiners	m	6		
3.6.	Install 90 degree L-shaped barge board size 275 x 80mm thick (code 721-740) H-profile joiners	m	6		
3.7.	Supply and install 150mm industrial box Profile Seamless Gutters	m	6		
3.8.	100 x 75mm rectangular rainwater downpipes including necessary bends and shoes.	m	3		
Sub-Total (excluding VAT)					
4. Building B5/307					
4.1	Remove all existing roof accessories i.e. fascia boards, barge boards, gutters and downpipes and discard.	sum	1		
4.2	Remove asbestos roof according to Transnet Asbestos Management Plan	m ²	20		
4.3	Supply and install new 'Hula Span' 0,8 mm 'A7 Profile' aluminium sheeting with mill finish on one side and corporate grey Colour-Tech PVDF paint coating to other side including accessories fixed to timber purlins, with stainless steel grade 304 self-tapping screws.	m ²	20		
4.4	Installation of Isotherm Insulation at a minimum thickness of 100mm	m ²	30		
4.5	Install Medium density plain fascia board, size 300 x 12mm thick (code 041-206) including galvanised steel H-profile joiners	m	24		
4.6	Supply and install 150mm industrial box Profile Seamless Gutters	m	6		
4.7	Supply and install 100 x 75mm rectangular rainwater downpipes including necessary bends and shoes.	m	8		

TRANSNET NATIONAL PORTS AUTHORITY
 ENQUIRY NUMBER: TNPA/2022/01/0039/RFQ
 DESCRIPTION OF THE WORKS: THE REPLACEMENT OF DAMAGED ASBESTOS ROOFING AT VARIOUS BUILDING AROUND THE PORT OF DURBAN.

4.8	Remove damaged wooden beams and replace with new.	m	18		
Sub-Total (excluding VAT)					
5. Building B5/254					
5.1	Remove all existing roof accessories i.e. fascia boards, barge boards, gutters and downpipes and discard.	sum	1		
5.2	Remove asbestos roof according to Transnet Asbestos Management Plan	m ²	190		
5.3	Supply and install new 'Hula Span' 0,8 mm 'A7 Profile' aluminium sheeting with mill finish on one side and corporate grey Colour-Tech PVDF paint coating to other side including accessories fixed to timber purlins, with stainless steel grade 304 self-tapping screws.	m ²	190		
5.4	Installation of Isotherm Insulation at a minimum thickness of 100mm	m ²	190		
5.5	Install Medium density plain fascia board, size 300 x 12mm thick (code 041-206) including galvanised steel H-profile joiners	m	30		
5.6	Install 90 degree L-shaped barge board size 275 x 80mm thick (code 721-740) H-profile joiners.	m	30		
5.7	Supply and install 150mm industrial box Profile Seamless Gutters	m	30		
	Supply and install aluminium ridging to match sheeting	m	15		
5.8	Supply and install 100 x 75mm rectangular rainwater downpipes including necessary bends and shoes.	m	12		
Sub-Total (excluding VAT)					
Total (excluding VAT)					