NEC3 Engineering & Construction Contract

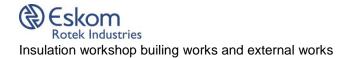
Between Eskom Rotek Industries – Construction Services Reg. No (.....)

and	
	(Reg No)

for Insulation workshop – Concrete foundation, surface bed, wet trades and External works (Paving and Kerbing)

Contents:	No of pages
Part C1 Agreements & Contract Data	[•]
Part C2 Pricing Data	[•]
Part C3 Scope of Work	[•]
Part C4 Site Information	[•]

CONTRACT No. [Insert at award stage]



Part C1: Agreements & Contract Data

Contents:		No of pages
C1.1	Form of Offer and Acceptance	[•]
C1.2a	Contract Data provided by the Employer	[•]
C1.2b	Contract Data provided by the Contractor	[•]

C1.1 Form of Offer & Acceptance

Offer

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of:

Insulation workshop – Concrete foundation, surface bed, wet trades and External works (Paving and Kerbing)

The tenderer, identified in the Offer signature block, has examined the documents listed in the Tender Data and addenda thereto and by submitting this Offer has accepted the Conditions of Tender.

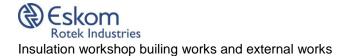
By the representative of the tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance the tenderer offers to perform all of the obligations and liabilities of the *Contractor* under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the *conditions of contract* identified in the Contract Data.

Options B	The offered total of the Prices exclusive of VAT is	R [•]
	Sub total	R [•]
	Value Added Tax @ 15% is	R [•]
	The offered total of the amount due inclusive of VAT is	R [•]
	(in words) [●]	

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document including the Schedule of Deviations (if any) to the tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the tenderer becomes the party named as the *Contractor* in the *conditions of contract* identified in the Contract Data.

Signature(s)

Name(s)		
Capacity		
For the tenderer:		
	(Insert name and address of organisation)	
Name &		
signature of witness		Date
Tenderer's CII	DB registration number (if applicable)	



Acceptance

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the tenderer's Offer. In consideration thereof, the Employer shall pay the *Contractor* the amount due in accordance with the *conditions of contract* identified in the Contract Data. Acceptance of the tenderer's Offer shall form an agreement between the Employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1 Acceptance)	Agreements and Contract Data, (which includes this Form of Offer and
Part C2	Pricing Data
Part C3	Scope of Work: Works Information
Part C4	Site Information

Drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable Schedules as well as any changes to the terms of the Offer agreed by the tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

The tenderer shall within two weeks of receiving a completed copy of this agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the *conditions of contract* identified in the Contract Data at, or just after, the date this agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy signed between them of this document, including the Schedule of Deviations (if any).

Unless the tenderer (now *Contractor*) within five working days of the date of such receipt notifies the Employer in writing of any reason why he cannot accept the contents of this agreement, this agreement shall constitute a binding contract between the Parties.

(Insert name and address of organisation)	
	Date
	(Insert name and address of organisation)



Insulation workshop builing works and external works

Note: If a tenderer wishes to submit alternative tenders, use another copy of this Form of Offer and Acceptance.



Insulation workshop builing works and external works

Schedule of Deviations to be completed by the *Employer* prior to contract award

Note:

- 1. This part of the Offer & Acceptance would not be required if the contract has been developed by negotiation between the Parties and is not the result of a process of competitive tendering.
- 2. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.
- 3. A tenderer's covering letter must not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid be the subject of agreement reached during the process of Offer and Acceptance, the outcome of such agreement shall be recorded here and the final draft of the contract documents shall be revised to incorporate the effect of it.

No.	Subject	Details
1	[•]	[•]
2	[•]	[•]
_		
3	[•]	[•]
4	[•]	[•]
5	[•]	[•]
6	[•]	[•]
7	[•]	[•]

By the duly authorised representatives signing this Schedule of Deviations below, the Employer and the tenderer agree to and accept this Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules, as well as any confirmation, clarification or changes to the terms of the Offer agreed by the tenderer and the Employer during this process of Offer and Acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Form shall have any meaning or effect in the contract between the parties arising from this Agreement.

	For the tenderer:	For the Employer
Signature		
Name		
Capacity		
On behalf of	(Insert name and address of organisation)	(Insert name and address of organisation)
Name & signature of witness		
Date		

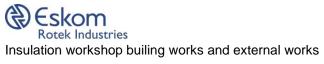
C1.2 ECC3 Contract Data

Part one - Data provided by the *Employer*

Clause	Statement	Data	
1	General		
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option		
		В:	Priced contract with Bill of Quantities
	dispute resolution Option and secondary Options	W1:	Dispute resolution procedure
		X2	Changes in the law
		X5:	Sectional Completion
		X7:	Delay damages
		X16:	Retention
	_	X18:	Limitation of liability
		Z :	Additional conditions of contract
	of the NEC3 Engineering and Construction Contract, April 2013 (ECC3)		
10.1	The <i>Employer</i> is (Name):	Esko	m Rotek Industries – Construction Services
		Eskom Rotek Industries Building Lower Germiston Road Rosherville P O Box Cleveland 2022	
	Address		
10.1	The Project Manager is: (Name)	Aman	da Mpotulo
	Address	Eskom Rotek Industries Building Lower Germiston Road	

		Rosherville P O Box Cleveland 202
	Tel	011629 4399
	e-mail	MpotulAN@eskom.co.za
10.1	The Supervisor is: (Name)	Jacob Molele
	Address	Eskom Rotek Industries Building Lower Germiston Road Rosherville P O Box Cleveland 202
	Tel No.	011629 8000
	e-mail	MoleleSJ@eskom.co.za
11.2(13)	The works are	Insulation workshop – Concrete foundation, surface bed, wet trades and External works (Paving and Kerbing)
11.2(14)	The following matters will be included in the Risk Register	Risk to be identified at the risk meeting
11.2(15)	The boundaries of the site are	Rosherville
11.2(16)	The Site Information is in	Part 4: Site Information
11.2(19)	The Works Information is in	Part 3: Scope of Work and all documents and drawings to which it makes reference.
12.2	The law of the contract is the law of	the Republic of South Africa
13.1	The language of this contract is	English
13.3	The period for reply is	One (1) week
2	The <i>Contractor's</i> main responsibilities	Data required by this section of the core clauses is provided by the <i>Contractor</i> in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data.
3	Time	
11.2(3)	The completion date for the whole of the works is	29 January 2021

	works is		29 January 2021		
11.2(9)	The <i>key date</i> s and the <i>condition</i> s to be met are:	Condition to be met		key date	
		1	Concrete Foundations	05 June 2021	
		2	Surface beds and Brickwork	25 Aug 2021	



		3 Hvac system , paving and 25 Sep 2021 kerbing
30.1	The access dates are:	05 June 2021
31.1	The <i>Contractor</i> is to submit a first programme for acceptance within	One (1) weeks of the Contract Date.
31.2	The starting date is	05 June 2021
32.2	The <i>Contractor</i> submits revised programmes at intervals no longer than	Two (2) weeks.
35.1	The <i>Employer</i> is not willing to take over the <i>works</i> before the Completion Date.	
4	Testing and Defects	
42.2	The defects date is	Fifty two (52) weeks after Completion of the completed <i>work</i> at each site
43.2	The defect correction period is	One (1) weeks
5	Payment	
50.1	The assessment interval is	Between the 20 day of each successive month.
51.1	The currency of this contract is the	South African Rand.
51.2	The period within which payments are made is	Four (4) weeks.
51.4	The <i>interest rate</i> is	the publicly quoted prime rate of interest (calculated on a 365 day year) charged from time to time by the Standard Bank of South Africa Limited (as certified, in the event of any dispute, by any manager of such bank, whose appointment it shall not be necessary to prove) for amounts due in Rands and
		(ii) the LIBOR rate applicable at the time for amounts due in other currencies. LIBOR is the 6 month London Interbank Offered Rate quoted under the caption "Money Rates" in The Wall Street Journal for the applicable currency or if no rate is quoted for the currency in question then the rate for United States Dollars, and if no such rate appears in The Wall Street Journal then the rate as quoted by the Reuters Monitor Money Rates Service (or such service as may replace the Reuters Monitor Money Rates Service) on the due date for the payment in question, adjusted <i>mutatis mutandis</i> every 6 months thereafter and as certified, in the event of any dispute, by any manager employed in the foreign exchange department of The Standard Bank of South Africa Limited, whose appointment it shall not be necessary to prove.

Compensation events 6



Insulation workshop builing works and external works

60.1(13)	The place where weather is to be recorded is:	The <i>Contractor</i> 's Site Establishment Area on site
	The <i>weather measurements</i> to be recorded for each calendar month are,	the cumulative rainfall (mm)
		the number of days with rainfall more than 10 mm
		the number of days with minimum air temperature less than 0 degrees Celsius
		the number of days with snow lying at 09:00 hours South African Time
		and these measurements:
	The <i>weather measurement</i> s are supplied by	The South African Weather Bureau
	The <i>weather data</i> are the records of past <i>weather measurements</i> for each calendar month which were recorded at:	Weather station closest to site monitored by South African Weather Bureau
	and which are available from:	the South African Weather Service 012 367 6023 <u>info@weathersa.co.za</u>
7	Title	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.
8	Risks and insurance	
80.1	These are additional Employer's risks	None
84.1	The <i>Employer</i> provides these insurances from the Insurance Table	as stated for "Format A" available on http://www.eskom.co.za/Tenders/InsurancePolicie sProcedures/Pages/EIMS_Policies_ From_1_April_2014_To_31_March_2015.aspx
84.1	The <i>Employer</i> provides these additional insurances	as stated for "Format A" available on http://www.eskom.co.za/Tenders/InsurancePolicie

sProcedures/Pages/EIMS_Policies_ From_1_April_2014_To_31_March_2015.aspx 84.1 The Contractor provides these additional Whatever the Contractor deems necessary in addition to that provided by the Employer. insurances: 84.2 The minimum limit of indemnity for insurance in respect of loss of or damage to property (except the works, Plant, Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the Contractor) caused by activity in connection with this contract for Whatever the Contractor deems necessary in addition to that provided by the Employer. any one event is 84.2 The minimum limit of indemnity for As prescribed by the Compensation for insurance in respect of death of or bodily **Occupational Injuries and Diseases Act No. 130** injury to employees of the Contractor of 1993 and the Contractor's common law

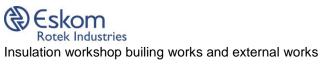


Rotek Industries Insulation workshop builing works and external works

	arising out of and in the course of their employment in connection with this contract for any one event is	liability for people falling outside the scope of the Act with a limit of Indemnity of not less than R500 000 (Five hundred thousand Rand).
9	Termination	There is no reference to Contract Data in this section of the core clauses and terms in italics used in this section are identified elsewhere in this Contract Data.
10	Data for main Option clause	
В	Priced contract with Bill of quantities	Option B

11	Data for Option W1			
W1.1	The <i>Adjudicator</i> is	(or its su Institutio Adjudica dispute Parties o Adjudica	on selected from the accessor body) of the on of Civil Engineeri ators by the Party in to him. (see <u>www.ic</u> to not agree on an A ator will be appointe ion of Southern Afri	e South African ng Panel of tending to refer a <u>e-sa.org.za</u>). If the djudicator the d by the Arbitration
W1.2(3)	The Adjudicator nominating body is:	the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the London Institution of Civil Engineers. (See <u>www.ice-sa.org.za</u>) or its successor body		Civil Engineering of Civil Engineers.
W1.4(2)	The <i>tribunal</i> is:	arbitratio	on.	
W1.4(5)	The arbitration procedure is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.		
	The place where arbitration is to be held is	South A	irica	
	 The person or organisation who will choose an arbitrator if the Parties cannot agree a choice or if the arbitration procedure does not state who selects an arbitrator, is 	of the As	rman for the time be ssociation of Arbitra r its successor bod	tors (Southern
12	Data for secondary Option clauses			
X2	Changes in the law	Option a	no reference to Cor nd terms in italics a re in this Contract D	re identified
X5	Sectional Completion			
X5.1	The <i>completion date</i> for each <i>section</i> of the <i>works</i> is:	Section	Description	Completion date
		1	Concrete	05 June 2021

Foundations



		2	Surface beds and Brickwork	25 Aug 2021
		3	Hvac system , paving and kerbing	25 Sep 2021
X5 & X7	Sectional Completion and delay damages used together			
X7.1 X5.1	Delay damages for late Completion of the sections of the works are:	section	Description	Amount per day
			Demolition of garages	R1000
			Completion of the paving	R1000
	Remainder of the works		Palisade fence and Guard house	R1000
	The total delay damages payable by the <i>Contractor</i> does not exceed:	10% of t	he contract value	
X15	Limitation of the <i>Contractor</i> 's liability for his design to reasonable skill & care	N/A		
X16	Retention (not used with Option B)	5%		
X16.1	The retention percentage is	5 % of the contract value.		
X18	Limitation of liability			
X18.1	The <i>Contractor</i> 's liability to the <i>Employer</i> for indirect or consequential loss is limited to:	R0.0 (zero Rand)		
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to:	event de selected which po http://ww sProcedu	unt of the deductibles re escribed in the insurance in the data for clause 84 plicy is available on w.eskom.co.za/Tenders/Ir ures/Pages/EIMS_Policies April_2014_To_31_March	e policy format 4.1 above, nsurancePolicie
X18.3	The <i>Contractor</i> 's liability for Defects due to his design which are not listed on the Defects Certificate is limited to	 The greater of the total of the Prices at the Contract Date and the amounts excluded and unrecoverable from the <i>Employer</i>'s assets policy for correcting the Defect (other than the resulting physical damage which is not excluded) plus R15M first amount payable in terms of the <i>Employer</i>'s assets policy. 		



X18.4	The <i>Contractor</i> 's total liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than	the total of the Prices other than for the additional excluded matters.
	excluded matters, is limited to:	The <i>Contractor's</i> total liability for the additional excluded matters is not limited.
		The additional excluded matters are amounts
		for which the <i>Contractor</i> is liable under this contract for
		 Defects due to his design which arise before the Defects Certificate is issued, Defects due to manufacture and fabrication outside the Site, loss of or damage to property (other than the works, Plant and Materials), death of or injury to a person and infringement of an intellectual property right.
X18.5	The end of liability date is	(i) seven (7) years after the <i>defects date</i> for latent Defects and
		(ii) the date on which the liability in question prescribes in accordance with the Prescription Act No. 68 of 1969 (as amended or in terms of any replacement legislation) for any other matter.
		A latent Defect is a Defect which would not have been discovered on reasonable inspection by the <i>Employer</i> or the <i>Supervisor</i> before the <i>defects date</i> , without requiring any inspection not ordinarily carried out by the <i>Employer</i> or the <i>Supervisor</i> during that period. If the <i>Employer</i> or the <i>Supervisor</i> do undertake any inspection over and above the reasonable inspection, this does not place a greater responsibility on the <i>Employer</i> or the <i>Supervisor</i> to have discovered the Defect.
Z	The Additional conditions of contract are	Z1 to Z12 always apply.
Z1	Cession delegation and assignment	
Z1.1		assign any of its rights or obligations to any person
Z1.2	delegate its rights and obligations under this	ay on written notice to the <i>Contractor</i> cede and s contract to any of its subsidiaries or any of its be converted into separate legal entities as a result Industry.

Z2		Joint ventures
	Z2.1	If the <i>Contractor</i> constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations then these persons or organisations are deemed to be jointly and severally liable to the <i>Employer</i> for the performance of this contract.
	Z2.2	Unless already notified to the <i>Employer</i> , the persons or organisations notify the <i>Project Manager</i> within two weeks of the Contract Date of the key person who has the authority to bind the <i>Contractor</i> on their behalf.
	Z2.3	The <i>Contractor</i> does not alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the <i>Employer</i> having been given to the <i>Contractor</i> in writing.
Z3		Change of Broad Based Black Economic Empowerment (B-BBEE) status
	Z3.1	Where a change in the <i>Contractor's</i> legal status, ownership or any other change to his business composition or business dealings results in a change to the <i>Contractor's</i> B-BBEE status, the <i>Contractor</i> notifies the <i>Employer</i> within seven days of the change.
	Z3.2	The <i>Contractor</i> is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the <i>Project Manager</i> within thirty days of the notification or as otherwise instructed by the <i>Project Manager</i> .
	Z3.3	Where, as a result, the <i>Contractor's</i> B-BBEE status has decreased since the Contract Date the <i>Employer</i> may either re-negotiate this contract or alternatively, terminate the <i>Contractor's</i> obligation to Provide the Works.
	Z3.4	Failure by the <i>Contractor</i> to notify the <i>Employer</i> of a change in its B-BBEE status may constitute a reason for termination. If the <i>Employer</i> terminates in terms of this clause, the procedures on termination are P1, P2 and P3 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.

Z4 Ethics

- Z4.1 Any offer, payment, consideration, or benefit of any kind made by the *Contractor*, which constitutes or could be construed either directly or indirectly as an illegal or corrupt practice, as an inducement or reward for the award or in execution of this contract constitutes grounds for terminating the *Contractor*'s obligation to Provide the Works or taking any other action as appropriate against the *Contractor* (including civil or criminal action).
- Z4.2 The *Employer* may terminate the *Contractor*'s obligation to Provide the Works if the *Contractor* (or any member of the *Contractor* where the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations) is found guilty by a competent court, administrative or regulatory body of participating in illegal or corrupt practices.

Such practices include making of offers, payments, considerations, or benefits of any kind or otherwise, whether in connection with any procurement process or contract with the *Employer* or other people or organisations and including in circumstances where the *Contractor* or any such member is removed from the an approved vendor data base of the *Employer* as a consequence of such practice.

Z4.3 Notwithstanding the provisions of core clause 90.2, the procedures on termination in terms of this clause are P1, P2 and P3 as stated in the core clause 92 and the amount due is A1 and A3 as stated in core clause 93.

Z5		Confidentiality
	Z5.1	The <i>Contractor</i> does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the <i>Contractor</i> , enters the public domain or to information which was already in the possession of the <i>Contractor</i> at the time of disclosure (evidenced by written records in existence at that time). Should the <i>Contractor</i> disclose information to Others in terms of clause 25.1, the <i>Contractor</i> ensures that the provisions of this clause are complied with by the recipient.
	Z5.2	If the <i>Contractor</i> is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the <i>Project Manager</i> .
	Z5.3	In the event that the <i>Contractor</i> is, at any time, required by law to disclose any such information which is required to be kept confidential, the <i>Contractor</i> , to the extent permitted by law prior to disclosure, notifies the <i>Employer</i> so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the <i>Contractor</i> may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.
	Z5.4	The taking of images (whether photographs, video footage or otherwise) of the <i>works</i> or any portion thereof, in the course of Providing the Works and after Completion, requires the prior written consent of the <i>Project Manager</i> . All rights in and to all such images vests exclusively in the <i>Employer</i> .
	Z5.5	The Contractor ensures that all his Subcontractors abide by the undertakings in this clause.
Z 6		Waiver and estoppel: Add to core clause 12.3:
	Z6.1	Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the <i>Project Manager</i> , the <i>Supervisor</i> , or the <i>Adjudicator</i> does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm

such agreement in writing.

Z7 Health, safety and the environment: Add to core clause 27.4

- Z7.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *works*. Without limitation the *Contractor*.
 - accepts that the *Employer* may appoint him as the "Principal *Contractor*" (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) ("the Construction Regulations") for the Site;
 - warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of *works*; and
 - undertakes, in and about the execution of the works, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.



Insulation workshop builing works and external works

Z7.2 The *Contractor*, in and about the execution of the *works*, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

Z8	Provision of a	Tax Invoice and interest.	Add to core clause 51
20	1 10 13 011 01 0		

- Z8.1 Within one week of receiving a payment certificate from the *Project Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer*'s procedures stated in the Works Information, showing the amount due for payment equal to that stated in the payment certificate.
- Z8.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.
- Z8.3 The *Contractor* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer*'s VAT number 4740101508 on each invoice he submits for payment.

Z9	Notifying compensation events
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Z9.1 Delete from the last sentence in core clause 61.3, "unless the *Project Manager* should have notified the event to the *Contractor* but did not".

Z10 *Employer's* limitation of liability

- Z10.1 The *Employer's* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00 (zero Rand)
- Z10.2 The *Contractor*'s entitlement under the indemnity in 83.1 is provided for in 60.1(14) and the *Employer*'s liability under the indemnity is limited.
- Z11 Termination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":
 - Z11.1 or had a business rescue order granted against it.

Z12 Addition to secondary Option X7 Delay damages (if applicable in this contract)

Z12.1 If the amount due for the Contractor's payment of delay damages reaches the limits stated in this Contract Data for Option X7 or Options X5 and X7 used together, the Employer may terminate the Contractor's obligation to Provide the Works using the same procedures and payment on termination as those applied for reasons R1 to R15 or R18 stated in the Termination Table.

Annexure B: Insurance provided by the Employer

These notes are provided as guidance to tendering Contractors and the Contractor about the insurance provided by the Employer. The Contractor must obtain its own advice. Details of the insurance itself are available from the internet web link given below.

1. For the purpose of works contracts, insurance provided by Eskom (the *Employer*) has been arranged on the basis of "project" or "contract" value, where the value is the total of the Prices at Completion of the whole of the works including VAT.

A "project" is a collection of contracts or work packages to be undertaken as part of a single identified capital expansion or refurbishment of a particular asset or facility.

A "contract" is a single contract not linked to or being part of a "project".

2. For ECC3 there are three main "formats" of cover and deductible structure; Format A, Format B and Format Dx.

Format A is for a project or contract value less than or equal to R350M (three hundred and fifty million Rand) inclusive of VAT.

Format B is for a project or contract value greater than R350M. (three hundred and fifty million Rand) inclusive of VAT.

In the case of contracts / packages within a project:

- For a contract / package of R50M which is part of a R400M project, Format B will apply
- For a contract / package of R250M which is part of a R6 billion project, Format B will apply;
- For a contract / package of R120M which is part of a R350M project Format A will apply;

For a contract which is not part of a project the same limits apply:

- For a contract of R50M, Format A will apply
- For a contract of R355M, Format B will apply.

Format Dx applies only to Distribution Division projects and contracts. If a Distribution Division project or contract exceeds the Format A limit, the Eskom Insurance Management Services [EIMS] need to be contacted for advice on how to formulate the insurance cover. Cover and deductibles for Distribution Division are per the relevant policy available on the internet web link given below.

Format A generally applies to Transmission Division projects and contracts. If a Transmission Division project or contract exceeds the Format A limit, the Eskom Insurance Management Services [EIMS] need to be contacted for advice on how to formulate the insurance cover.

- 3. Tendering *Contractors* should note that cover provided by the *Employer* is only per the policies available on the internet web link listed below and may not be the cover required by the tendering *Contractor* or as intended by each of the listed insurances in the left hand column of the Insurance Table in clause 84.2. In terms of clause 84.1 "the *Contractor* provides the insurances stated in the Insurance Table except any insurance which the *Employer* is to provide". Hence the *Contractor* provides insurance which the *Employer* does not provide and in cases where the *Employer* does provide insurance the *Contractor* insures for the difference between what the Insurance Table requires and what the *Employer* provides.
- 4. When the Marine Insurance is required the *Contractor* needs to obtain a copy of the latest edition of Eskom's Marine Policies Procedures found at internet website given below.

5. Further information and full details of all Eskom provided policies and procedures may be obtained from:

http://www.eskom.co.za/live/content.php?ltem_ID=9248

C1.2 Contract Data

Part two - Data provided by the Contractor

[Instructions to the contract compiler: (delete this notes before issue to tenderers with an enquiry)

Whenever a cell is shaded in the left hand column it denotes this data is optional. If not required select and delete the whole row, otherwise insert the required Data.]

Notes to a tendering Contractor:

- 1. Please read both the NEC3 Engineering and Construction Contract (April 2013) and the relevant parts of its Guidance Notes (ECC3-GN)¹ in order to understand the implications of this Data which the tenderer is required to complete. An example of the completed Data is provided on pages 156 to 158 of the ECC3 (April 2013) Guidance Notes.
- 2. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data

Completion of the data in full, according to Options chosen, is essential to create a complete contract.

Clause	Statement	Data
10.1	The Contractor is (Name):	
	Address	
	Tel No.	
	Fax No.	
11.2(8)	The direct fee percentage is	%
	The subcontracted fee percentage is	%
11.2(18)	The working areas are the Site and	
24.1	The Contractor's key persons are:	
	1 Name:	
	Job:	
	Responsibilities:	
	Qualifications:	
	Experience:	
	2 Name:	

¹ Available from Engineering Contract Strategies Tel 011 803 3008, Fax 011 803 3009 or see <u>www.ecs.co.za</u>



	Job	
	Responsibilities:	
	Qualifications:	
	Experience:	
		CV's (and further key persons data including CVs) are appended to Tender Schedule entitled
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is	
11.2(14)	The following matters will be included in the Risk Register	
11.2(19)	The Works Information for the <i>Contractor</i> 's design is in:	
31.1	The programme identified in the Contract Data is	

ECC3 Option B

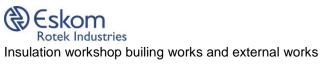
Bill of Quantities attached

TSS INSULATION WORKSHOP AND SHELTERED STORE

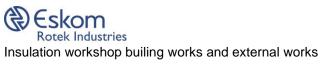
DESCRIPTION	UNIT	QUANTI TY	RATE	AMOUNT
SECTION 1				
CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS				
Contractor's general obligations				
(a) Fixed obligations	L/sum	1		
(b) Value-related obligations	L/sum	1		
(c) Time-related obligations	Month	4		
(d) Health and Safety obligations	Month	4		
Environmental Management				
(a) Environmental Compliance Officer	Month	4		
OVERHAUL				
Overhaul on material hauled in excess of 1,0 km (ordinary overhaul) SECTION 1200: GENERAL REQUIREMENTS AND PROVISIONS	m³-km	10600		
REQUIREMENTS AND PROVISIONS				
The Contractor's obligations in respect of Local and other Labourers:				
(d) Provision for Medical Examination for Local Labourers	PC Sum	1.00	R 30 000.00	R 30 000.00
COVID 19 Requirements for the team as per WHO standards	PC Sum	1.00	R 30 000.00	R 30 000.00



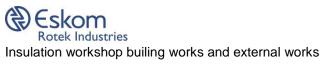
Ad	dvertizing signboards			
	upply, transport to site and erect contract gnboards	No	1	
	cavation for the exposing of , or searching of ervices			
Wo	orks cleaning and clearing (B11.7) Fixed	Item		
Va	alue Related	Item		
Tir	me Related	Item	1	
Ins Fix	struction manuals and guarantees(B11.10) xed	Item		
Va	alue Related	Item		
Tir	me Related	Item		
As	s built information (B11.11) Fixed	Item		
Va	alue Related	Item		
Tin	me Related	Item	1	
SE	ECTION NO.2			
BU	JILDING WORK			
,,, BIL	LL NO.1			
FC	DUNDATIONS			
EA	ARTHWORKS			
FIL	LLING UNDER FLOORS, ETC			



Approved G6 filling supplied and carted by the contractor and compacted in layers not exceeding 150mm to 95% Mod AASHTO			
density			
Under floors, steps, paving etc.	m3	280	
Compaction of surfaces			
Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 93% Mod AASHTO density	m2	3200	
Prescribed density tests on filling			
Modified AASHTO Density test	No	42	
SOIL POISONING			
Soil insecticide			
Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	1600	
CONCRETE, FORMWORK AND REINFORCEMENT			
REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES			
Bases	m3	70	
CONCRETE, FORMWORK AND REINFORCEMENT			
UNREINFORCED CONCRETE			
20MPa/19mm concrete			
Surface beds cast in panels on waterproofing.(LI)	m3	125	



Aprons cast in panels to falls (LI)	m3	14	
Ramps(LI)	m3	3	
Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.(LI)	m	121	
REINFORCED CONCRETE			
30MPa/19mm concrete			
Slabs including beams and inverted beams	m3	55	
Stairs including landings, beams and inverted beams	m3	3	
CONCRETE SUNDRIES			
Finishing top surfaces of concrete smooth with a steel Trowel			
Surface beds, slabs, etc	m2	24	
Finishing top surfaces of concrete smooth with a power float			
Surface beds, slabs, etc	m2	940	
Ramp to falls	m2	25	
Finishing top surfaces of concrete smooth with a wood float			
Aprons to falls	m2	25	
FORMWORK			
SMOOTH FORMWORK			
Smooth formwork to sides			
Concrete base	m2	50	
Smooth formwork on soffits			



n workshop builing works and external works			
Slabs not exceeding 250mm thick, propped up exceeding 3,5m and not exceeding 5m high	m2	26	
Sloping Slabs	m2	3	
Sloping and stepped outer edges of stairs not exceeding 400mm high extreme	m	57	
Slabs with sloping soffits, propped up between 2m and 4m high	m2		
ROUGH FORMWORK (DEGREE OF ACCURACY II)			
Rough formwork to sides			
Edges, risers, ends and reveals not exceeding 300mm high or wide	m	121	
TEST CUBES			
Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith. (Provisional)	Sets	16	
Saw cut joints			
Saw cut joints in top of concrete (Provisional)	m	600	
REINFORCEMENT			
Mild / High tensile steel reinforcement to structural concrete work			
Mild steel reinforcement to structural concrete work			
All Diameters	t	1.81	
High tensile steel reinforcement to structural concrete work			
All Diameters	t	8.5	

-



I	1 1		1	1
Steel Reinforcement Type 395 fabric reinforcement in concrete surface beds, slabs, etc(LI)	m2	940		
MASONRY				-
SUPERSTRUCTURE				
Brickwork of NFP bricks in class II mortar				
Half brick walls	m2			
Half brick walls in beamfilling.	m2			
One brick walls	m2	100		
One brick in parapet walls	m2			
One brick gable walls	m2	29		
Joint forming material in movement joints:				
12mm Bitumen impregnated fibre board built in vertically between brick skins not exceeding 300mm wide.	m2			
Brickwork reinforcement				
75mm Wide reinforcement built in horizontally	m			
150mm Wide reinforcement built in horizontally	m	439		
Turning pieces				
230mm Wide turning piece to lintels etc	m			
Allied Concrete prestressed fabricated lintels				
110 x 75mm Lintels in lengths not exceeding 3m (Provisional)	m			
FACE BRICKWORK				

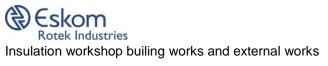


	ј I	1	1
Face bricks (Purchase price of R 6 500,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints			
Extra over brickwork for face brickwork	m2	69	
Clean and wash face brick including removals of cement mortar on brick with acid brick clean or spirit of salt chemicals diluted with water as manufacturer's instruction and etc.			
Face brickwork	m2	900	
QUARRY TILES			
152 x 152 x 16mm quarry tiles on brickwork with continuous joints in both directions and pointed on all exposed surfaces			
150mm Wide sills of one row of tiles set flat and slightly projecting	m		
NUTEC-CEMENT/FIBRE-CEMENT WINDOW SILLS			
Nutec window internal sill, size 150mm x 15mm thick, manufactured in accordance with SANS 803:2005 and installed below window with window sill lug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in Class II mortar with plastic slip joints at end of sills at plaster reveals and projecting from the finished face of wall, all in accordance with the manufacturer's recommendations.			
15mm x 150mm Wide sills set flat and slightly projecting	m		
WATERPROOFING			

-



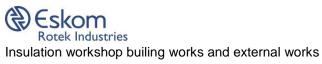
One layer of 250 micron "Consol Plastic USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"			
Under surface beds	m2	940	
			-
CARPENTRY AND JOINERY			
DOORS, ETC			
Hardwood fire escape door with concealed hardwood edges and 4mm thick masonite covering on both sides hung to steel frame and galvanised sheeting on both sides			
40mm Door 813 x 2032mm high.	No	2	
Semi Solid doors with concealed hardwood edges and 4mm thick masonite covering on both sides hung to steel frame			
40mm Door 900 x 2125mm high (D02).	No	3	
			-
IRONMONGERY			
LOCKS			
Solid			
Code 460/313 Blesbok four lever lockset	No	5	
DOOR CLOSERS AND FLOOR SPRINGS			
Dorma			
Dorma DPH301C 150 x 19mm stainless steel "D" shaped straight bolt-through pull handle (St/Steel)	Pairs	5	



 in workshop builing works and external works			
METALWORK			
STAINLESS STEEL BALUSTRADING			
Purpose made steel balustrade			
1000mm High balustrade.	m	9	
STEEL WINDOWS, DOORS, ETC			
Standard Residential steel residential windows burglar bars to all sashes			
5 Panel mild steel window, size 1600 x 1445mm high.	No	10	
2 Panel mild steel window, size 1800 x 1200mm high.	No	3	
STEEL ROLLER SHUTTERS ETC			
Thermoteck or Equal Approved Industrial roller shutters fixed to brickwork or concrete			
Industrial roll up shutter door to suit opening size 4500 x 3000mm high button or remote operated, including roller box and opening mechanism, rubber weather strips, handles, Roll-A-Guides, hinges, fixing bolts, tracks, 2 no bolts and pad locks, etc, fixed to brickwork or concrete with a minimum of 100mm side room and 350mm headroom and pre-paint to match roof sheeting	No	1	
Industrial roll up shutter door to suit opening size 4500 x 3500mm high button or remote operated with pedestrain door, including roller box and opening mechanism, rubber weather strips, handles, Roll-A-Guides, hinges, fixing bolts, tracks, 2 no bolts and pad locks, etc, fixed to brickwork or concrete with a minimum of 100mm side room and 350mm headroom and pre-paint to match roof sheeting	No	1	
and pro-paint to mator roor shooting.			



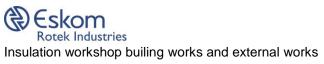
···· · · · · · · · · · · · · · · · · ·			
Industrial roll up shutter door to suit oper size 4500 x 4500mm high button or rem operated with pedestrain door, including box and opening mechanism, rubber we strips, handles, Roll-A-Guides, hinges, fi bolts, tracks, 2 no bolts and pad locks, e fixed to brickwork or concrete with a min of 100mm side room and 350mm headre and pre-paint to match roof sheeting	ote roller eather ixing etc, imum	2	
INDUSTRIAL GUTTER AND DOWN PIP	PE		
Industrial Roof Gutter			
150 x 150 mm Industrial gutter	m	75	
Down pipe			
3000mm x 100 x 75mm Down pipe inclusion shoes, projection and etc.	lding No	18	
PLASTERING SPECIALIST PLASTER, WALL COVER	INGS.		
FLOOR COATINGS, ETC.	,		
Industrial heavy traffic rough epoxy resir	n floor		
On floors including 100mm high against	walls m2	940	
INTERNAL PLASTER			
Cement plaster on brickwork			
On walls(LI)	m2	160	
			-
GLAZING			
GLAZING TO STEEL WITH PUTTY			
4 mm Clear float glass			
	•		



Panes exceeding 0,5 m2 and not exceeding 2m2	m2	90	
PAINTWORK			
FAINTWORK			
PAINTWORK ETC TO NEW WORK			
ON FLOATED PLASTER			
Plascon Wall & All Suede Sheen Finish to interioir new cement plaster.Surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer with an overcoating time of 16 hours and finish with two coats of Plascon Wall & All Suede Sheen Finish with 1 hour drying time between coats, for a maintenance cycle of 5 years in a C1 - inland environment.			
On internal walls(LI)	m2	160	
ON SMOOTH CONCRETE			
Prepare surfaces and remove all loose material, and rinse. Apply flexible crackfiller to holes and cracks, one coat plaster primer and two coats Plascon Professional Copolymer Acrylic paint			
On ceilings, beams, walls and columns(LI)	m2	26	
ON METAL			



Plascon Velvaglo Satin to exterior new mild steel (NW 683).Surface to be clean and dry. Remove surface contaminants using Plascon Aquasolv Degreaser (GR 1) with bristle brush or Brillo pads. Rinse thoroughly with tap water until surface is water break-free. Remove rust and millscale by abrasive blasting to ISO 8501 - 01:1988 - Sa2½ or by hand/mechanical wire brushing to St3of the same standard. Allow to dry completely and prime within 4 hours of cleaning. Prime with one coat of Metal Primer (UC 501) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C1 - inland environment.			
On steel windows(both sides measured)	m2	55	
On roof trusses	m2	90	
ON WOOD			
Plascon Velvaglo Satin to interior new wood (NW 571).Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) < 14% or less. Prime with one coat of Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.			
On doors(LI)	m2	16	
SECTIONAL SUMMARY BUILDING WORKS			
Foundations	Page		
Concrete, Formwork and Reinforcement	Page		
Masonry	Page		
Waterproofing	Page		



ion workshop builing works and external works			
Capentry and Joinery	Page		-
Ironmongery	Page		-
Metalwork	Page		-
Plastering	Page		-
Glazing	Page		-
Paintwork	Page		-
PAVING (PROVISIONAL)			
BILL NO. 1			
INTERLOCKING PAVING IN ROADS			
Pavers			
Concrete paving blocks			
80mm Thick class 25Mpa plain concrete interlocking paving blocks	m2	700	
20mm River sand			
Under concrete pavers	m3	35	
Approved weed killer			
Hyvar X or other equally approved soil herbicide at a rate of 50 gram/m2 under paving etc.	m2	650	
Precast concrete kerbs:			
Kerb (SABS 927 fig 8b) 330 x 300mm x 175mm high with 150 x 150 x 300mm Class 15/19 unreinforced concrete haunching at back of each joint including excavation, backfilling,	m	140	

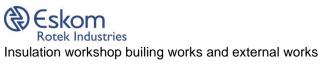


in workshop builing works and external works		
etc		
PROVISIONAL SUMS		
SUPPLEMENTARY PREAMBLES		
NOTE: Tenderers are referred to the definition of general attendance on nominated sub- contractors given in Clause 9 of the Preliminaries		
NOTE: Under no circumstances may any Prime Cost - Provisional Amount, etc be extended at an amount lower than the amount given in the Bill		
THE FOLLOWING PROVISIONAL SUMS ARE FOR WORK TO BE EXECUTED BY SELECTED SUBCONTRACTORS The following Provisional Sums are for specialists work to be executed by a selected Sub- contractor who upon appointment in terms of the Conditions of Contract shall be deemed to be a Domestic Sub-Contractor to the Contractor A Selected Sub-Contractor shall be a Sub-contractor executing work for which a sum of money is provided for in the Bills of Quantities or a Sub-contractor executing additional specialist work which arises as a result of an instruction by the Principal Agent/Engineer Tender documents for such work shall be prepared by the Principal Agent/Engineer in consultation with and to the approval of the Contractor and such tender document shall be issued by the Principal Agent/Engineer to a list of tenderers agreed upon between the Principal Agent/Engineer and Contractor. Tenders shall be submitted to the Principal Agent/Engineer The Selected Sub-contractor shall be chosen by the Principal Agent/Engineer and the Contractor, and the Contractor shall satisfy himself that such selected sub-contractor can meet the requirements of the Sub-Contract agreement and the Contractor shall inform the Principal Agent/Engineer accordingly The procedure relating to the method of selection, obtaining of tenders, adjudication thereof and the appointment of the Selected Sub-contractor		

-



shall not create any contractual relationship between the Client and the Selected Sub- contractor				
Electrical installation, etc				
Provide the sum of R 200 000,00 (two				
Hundred Thousand rands) for electrical instillation by Specialists	Item	1	200 000.00	200 000
Allow for giving every facility to Specialists as				
described	ltem	1	5 000.00	5 00
Mechanical Installation, etc				
Supply and installation for HVAC units as per the drawings and provide shopdrawings	Lumpsu m	1		
Plumbing and Drainage, etc				
Provide the sum of R 70 000,00 (sixty				
Thousand rands) for plumbing and drainage installation by Specialists	Prov sum	1	70 000.00	70 00



FINAL SUMMARY				
PRELIMINARIES	Page			-
BUILDING WORKS	Page			-
PAVING	Page			-
PROVISIONAL SUMS	Page			
Sub Total - A	ST			
CONTINGENCY SUM				
Allow the amount of R 150 000.00 (One hundred and Fourty Thousand Rands) for contingencies for building work, to be used as directed by the Principal Agent and deducted in whole or in part if not required.	Item	1	150 000.00	150 000.00
Sub Total - B	ST			
Add: Value Added Tax at 15%	ТАХ	15%		
ESTIMATED CONSTRUCTION COST (INCLUDING VALUE ADDED TAX)				



Insulation workshop builing works and external works

Document reference	Title	No of pages
C2.1	Pricing assumptions: Option B	
C2.2	The bill of quantities	8

C2.1 Pricing assumptions: Option B

The conditions of contract

How work is priced and assessed for payment

Clause 11 in NEC3 Engineering and Construction Contract, June 2005 (ECC3) Option B states:

Identified and 11 defined terms 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.
		(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.

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.

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*.



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.

The P & G section of the bill is not used for the assessment of compensation events.

Measurement and payment

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
I	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 ²	provisional sum
PC-sum	prime cost sum
R/only	Rate only
sum	Lump sum
t	ton (1000kg)
W/day	Work day

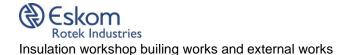
General assumptions

Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance has been made in the quantities for waste.

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.

An item against which no Price is entered will be treated as covered by other Prices or rates in the bill of quantities.

² 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.



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.

The short descriptions of the items of payment given in the bill of quantities are only for the purposes of identifying the items. Detail regarding the extent of the work entailed under each item is provided in the Works Information.

Departures from the *method of measurement*

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.



PART 3: SCOPE OF WORK

Document reference	Title	No of pages
	This cover page	1
C3.1	Employer's Works Information	
C3.2	Contractor's Works Information	
	Total number of pages	

C3.1: EMPLOYER'S WORKS INFORMATION

Description of the *works*

Executive overview

Construction Services – Insulation workshop – Concrete foundation, surface bed, wet trades and External works (Paving and Kerbing)

Employer's objectives and purpose of the works

Construction Services – Insulation workshop – Concrete foundation, surface bed, wet trades and External works (Paving and Kerbing)

The full scope is contracted, including the provision of transport, SHEQ requirements, and supervision of your teams, testing and reporting, and technical support and submission of all the QA/QC documents for handover

Management and start up.

Management meetings

Regular meetings of a general nature may be convened and chaired by the *Project Manager* as follows:

Title and purpose	Approximate time & interval	Location	Attendance by:
Site Meetings including the Risk, scheduling and progress and feedback	Weekly, time to be advised	Site	Employer, Contractor, Subcontractors Supervisor.

Meetings of a specialist nature may be convened as specified elsewhere in this Works Information or if not so specified by persons and at times and locations to suit the Parties, the nature and the progress of the *works*. Records of these meetings shall be submitted to the *Project Manager* by the person convening the meeting within five days of the meeting.

All meetings shall be recorded using minutes or a register prepared and circulated by the person who convened the meeting. Such minutes or register shall not be used for the purpose of confirming actions or instructions under the contract as these shall be done separately by the person identified in the *conditions of contract* to carry out such actions or instructions.

Documentation control

The *Contractor* will utilise templates provided by Eskom rotek industries for all NEC documents including drawings, minutes etc

Health and safety risk management

The *Contractor* shall comply with the health and safety requirements contained in Annexure ______ to this Works Information.

Environmental constraints and management

The Contractor shall comply with the environmental criteria and constraints stated in Annexure

Quality assurance requirements



The *Contractor* shall comply with the quality management requirements, criteria and constraints stated in Annexure

Programming constraints

A programme showing the key activities is to be submitted with the tender documents showing the following:

- The *Contractor* shall provide a detailed programme with easily measurable activities scheduling all of the work.
- It must clearly show linkages between the activities and clearly show the critical path. This must be done on Microsoft Projects and approved by the employer.
- Provide Bar Chart outlining start and completion date for construction activities on site. All critical path items must be identified and outlined on the Bar Chart.
- The order and timing of operations which the *Contractor* plans in order to provide the works.

The programming will be done on Microsoft Projects. The Employer reserves the right to change the application to be utilised for programming during the duration of the project to Primevera. A detailed programme in either Primavera or MS Project to level 3 demonstrating understanding of the Works to be performed as well as the ability to meet key milestone dates is to be provided. The duration will be 8 months consisting of two distinct phases to be completed separately. The entire work including all direct Subcontractors' work will be indicated in a detailed programme.

Strict adherence to the programme will be monitored and updated on a weekly basis to achieve the completion dates and submitted to Project Manager or his delegated representative. Non-conformance to the stated programme will be liable for delay damages. Any deviations on time and cost are subject to Eskom approval.

Contractor's management, supervision and key people

The *Contractor* will submit an organogram for the construction activity showing lines of authority/communication.

Invoicing and payment

The Z clauses make reference to invoicing procedures stated here in this Service Information. Also include a list of information which is to be shown on an invoice.

The *Contractor* will submit his claim as per the NEC Payment Certificate format with supporting Bill of Quantities on the assessment day. The Contract Number must be clearly visible on the NEC Payment Certificate. The *Employer* will assess Payment certificates on actual work completed. Any possible issues regarding the claim will be addressed by the Employer to the *Contractor*. On acceptance of the Payment Certificate by the Employer the *Contractor* submits his invoice as agreed upon with the Employer. Payment will take place as per the NEC Conditions of Contract.

In terms of core clause 50 the *Contractor* assesses the amount due and applies to the Employer for payment. The *Contractor* applies for payment with a tax invoice addressed to the Employer as follows:

The *Contractor* includes the following information on each tax invoice:

- Name and address of the Contractor
- The contract number and title;
- Contractor's VAT registration number;
- The Employer's VAT registration number 4740101508;
- The total Price for Work Done to Date which the Contractor has completed;
- Other amounts to be paid to the Contractor,
- Less amounts to be paid by or retained from the *Contractor*

Description of the *subcontract works*



The scope of work covers the provision of suitably qualified and experienced labour, , consumables, health & safety, environmental and quality management, and all other items that may be required to perform effective and construct the general works.

The Subcontractor is to provide the following in the course of their construction

- travel to the *Site* where construction is done, transporting all personnel, equipment and other items required,
- Prepare and submit SHEQ file and statutory appointments as required by the *Employer*,
- Suitable qualified and experienced team to perform the construction activities interact with the *Employer's* personnel, and provide feedback to consultant engineers
- Authorized person(s) to take a permit to perform testing without supervision by others,

2. Drawings

Drawing number	Revision	Title
2 Spacifications		

3. Specifications

All construction to be supplied under this contract must be performed according to the latest versions of the following specifications and/or procedures and/or works instructions:

Title	Date or revision	Tick if publicly available
Design notes and list of plans ERI-BB-01-2020-001	Latest	Yes
Site Layout 01 ERI-IW-01-2020-002	Latest	Yes
General arrangement ERI-IW-01-2020-003	Latest	Yes
Reinforcement Details t ERI-IW-01-2020-004	Latest	Yes
15040-7400-003 GROUND FLOOR PLAN –C04	Latest	Yes
15040-7400-004 LAYOUTS, SECTIONS AND DETAILS -C04	Latest	Yes
10172-MV-1011-R	Latest	Yes
15040-77-00-001 SITE ELECTRICAL LAYOUT	Latest	Yes
15040-77-00-002 SITE SLEEVES LAYOUT	Latest	Yes
15040-77-00-003 WORKSHOP HIGH LEVEL INFRASTRUCTURE	Latest	Yes
15040-77-00-004 WORKSHOP LIGHTING	Latest	Yes
15040-77-00-005 WORKSHOP SMALL POWER	Latest	Yes
15040-77-00-006 SINGLE LINE DIAGRAM	Latest	Yes

Insurance provided by the *Employer*



First read ECC3 Core Clause 87.1 and then add anything necessary for the <u>management</u> of insurance related issues such as a cross reference to where procedures for making claims can be found. Also provide contact details for persons capable of being able to answer any insurance related queries the *Contractor* may have, as well as to whom the information required by Marine Insurance may be addressed.

Contract change management

Any changes in scope and variations to the scope can only be approved by the Employers representative. The *Contractor* is advised that Eskom processes require an approval of all compensation events by a committee which may not convene when required. Submissions to this committee are dependent on the timeous provision of quotations by the *Contractor*.

As-built drawings, operating manuals and maintenance schedules

The *Contractor* would need to provide 'As built" drawings of the buildings as well as the various services installed. This will include all external work and reticulated services. Operating manuals will be provided for relevant installations and commissioning.

Procurement

Where provisional sums have been provided in the Bill of Quantities for various items, the *Contractor* will be required to provide 3 quotations for the work required to be done by Subcontractors. Subcontractors must meet the statutory requirements related to their field of expertise and comply with the required regulatory accreditations.

People

Minimum requirements of people employed on the Site

All *Contractors* personnel will be subject to access control conditions as per Eskom Rotek industries requirements. All workers employed on site must comply with Eskom's health and safety standards. Workers will not be allowed to be transported on the back of vans or bakkies. Workers must be restricted to the area of activity in close proximity to the construction and not allowed to wonder about other areas of the site or beyond the boundary of the construction site.

BBBEE and referencing scheme

The *Contractor* is expected to remain at the similar BBBEE level or improve to a better level during the period of contract.

The successful tenderer shall be requested to submit detailed plan with milestones on how they shall improve and maintain upon their B-BBEE Contributor Levels of 1 to 4 or to Level 1 - 4.

Subcontract documentation, and assessment of subcontract tenders

The *Contractor* would need to use the NEC Subcontractor agreements. All Subcontractor quotations, for which provisional sums or budgets have been allowed, must first be approved by the Employer or his representative with documentary proof. This must be done well in advance of the planned scheduling of the work.

Limitations on subcontracting

The *Contractor* would need to incorporate the activities of Eskom's direct Subcontractors into the contract works in order to achieve the completion date.

Attendance on Subcontractors

The *Contractor* would need to attend to the activities of all Subcontractors including direct Subcontractors. The responsibility of coordinating the activities of will remain with the main *Contractor*, who will arrange all meetings and interfacing to ensure the activities are aligned to the agreed programme.

Plant and Materials

Quality

The *Contractor* shall comply with the quality management requirements, criteria and constraints stated in Annexure

Plant & Materials provided "free issue" by the *Employer*



The *Contractor* is to verify the suitability of the materials prior to incorporating them into the works. When materials are delivered to the Site, the *Contractor* is to issue the Project Manager with certificates from the supplier(s) confirming that the materials supplied comply with the specifications. This will also apply to any subcontracts.

All plant and or equipment brought to Site must comply with the Employer's Health and Safety requirements and therefore requires an assessment by the Project Manager prior to it working on Site

Contractor's procurement of Plant and Materials

The *Contractor* is to provide own security on site and will be held liable for excess of insurance in case of theft or loss

- Storage and security of material will be the responsibility of the *Contractor* until the Completion Certificate is certified. The *Contractor* is responsible for all costs involved to expedite lost, damaged or stolen material.
- Eskom's Bill of Quantities provided in the price list is provisional.

Contractor to ensure that all materials used is in accordance with Eskom requirements and specification.

Tests and inspections before delivery

The *Contractor* may be required to demonstrate that the *works* can operate as guaranteed by the *Contractor* (in *Contractor's* Works Information) or specified by the *Employer*.

- The *Contractor* is to test ensure the lux levels for the lighting is correct and in accordance to the SANS requirements
- The *Contractor* is to test the backup lighting system to ensure is it fully functional for the required time period.
- The *Contractor* is to provide test cubes for concrete poured.
- The Contractor is to provide compaction tests for layer works to driveways and parking



Construction

This part of the Works Information addresses constraints, facilities, services and rules applicable to the *Contractor* whilst he is doing work on the Site during the construction and maintenance phase. It does not specify the work itself as that is included in Section 6 of the Works Information.

For contracts involving civil works the approach may be to incorporate SANS1200A or SANS 2000 into the contract. Whilst many of the headings below address the same issues, the list of headings below is more comprehensive. If the headings below are used, it may be prudent to delete paragraphs 3, 4 and 5 from 1200A after checking that their requirements have been included below as necessary. A similar approach can be used in contracts involving building works where the Model Trade Preambles are incorporated. Care should be taken to avoid inconsistency or ambiguity between this part of the Works Information and standard specifications incorporated by reference.

Temporary works, Site services & construction constraints

Employer's Site entry and security control, permits, and Site regulations

All *Contractors* personnel will be subject to Eskom security requirements with regard to access to the site. The *Contractor* would need to provide ID numbers and copies of IDs of all personnel who would be working on site. This must be done at least a day prior to access being required.

People restrictions on Site; hours of work, conduct and records

Working after normal working hours and on weekends will require special permission. The Employer must be given adequate notice if this is planned

Health and safety facilities on Site

Environmental controls, fauna & flora, dealing with objects of historical interest

The *Contractor* will ensure that all fauna and flora is preserved and protected during his activity on site. All such flora and flora will be reinstated after completion of the work.

All waste will be disposed at registered waste disposal sites, with documentary proof of this.

Title to materials from demolition and excavation

Where materials or plant from the construction activity are permitted to be removed, the *Contractor* will refrain from distributing such plant or material to any Eskom staff or other *Contractor*s within Eskom premises.

Cooperating with and obtaining acceptance of Others

The areas adjacent to the works will be occupied by Eskom staff. The *Contractor* should ensure that his work is carried out in a manner that causes least disruption and inconvenience to the Eskom staff. Noise levels should be minimised and safe working conditions maintained at all times

Publicity and progress photographs

The *Contractor* may only take photographs with the permission of the *Project Manager*. No interviews or media coverage will be allowed to be given or agreed to by the *Contractor* without the permission of the *Employer*.

Contractor's Equipment

The *Contractor* will keep an inventory of equipment brought to site. This will be verified and acknowledged by Eskom security to allow removal of such equipment when required by the *Contractor*.

Equipment provided by the Employer

None

Site services and facilities



An area will be allocated for the *Contractor* to set up a site office and storage facility. The *Contractor* will be responsible for all link services to the allocated site for water sewerage and electricity. The *Contractor* would need to keep the facility safe and tidy in compliance with Eskom's health and safety standards. It would be the *Contractor's* responsibility to secure the materials stored at the facility.

The Contractor will provide everything else necessary for providing the Works.

Facilities provided by the *Contractor*

A clearly demarcated area will be provided by the *Contractor* for the following:

- suitable facilities for his employees for changing
- Facilities for the consumption of food
- Site offices
- Toilet/Ablution facilities
- Other temporary facilities required by the Contractor
- Appropriate storage facilities for material to be used

Existing premises, inspection of adjoining properties and checking work of Others

The Contractor is required to familiarise himself with the location of connection points for water, sewerage, and storm water.

Survey control and setting out of the *works*

The employer does not have any information on any survey controls. The *Contractor* is required to determine these for setting out of the works.

Any errors or suspected discrepancies with regard to levels, co-ordinates, dimensions or other related aspects of the existing or proposed works that come to light during the execution of the Works is to be brought to the attention of the Project Manager without delay.

Underground services, other existing services, cable and pipe trenches and covers

It remains the *Contractors* responsibility to ensure that all visible overhead services such as electrical lines, telephone lines etc. are protected during construction. It is also the responsibility of the *Contractor* to ensure that the site is inspected to locate any such services that are easily visible and identifiable. It would remain the *Contractor's* responsibility to protect these from damage during construction. Any damage to services, lines etc which the *Contractor* should have reasonably been aware of or inspected will be for the *Contractors* own account.

Control of noise, dust, water and waste

The *Contractor* is made aware of the fact that an adjacent portion of the site is being utilised by Eskom. The *Contractor* must ensure that his work is conducted with little or no inconvenience to the functioning of the operations of Eskom. Health and safety standards must be maintained as per legislation. The *Contractor* is also required to communicate any possible inconvenience to Eskom, well in advance of the activity. Noise and dust generated from the construction activity must be mitigated.

Sequences of construction or installation

The *Contractor* will allow access to the site to direct *Contractors* employed by Eskom rotek industries to complete their work in coordination with work to be done by the *Contractor*. The *Contractor* must incorporate all of the work to be done by direct or nominated Subcontractor into his programme.

Giving notice of work to be covered up

The *Contractor* must notify the *Supervisor* to inspect reinforcing to foundations prior to the casting of concrete. Compaction tests results to layer works must be verified by the *Supervisor* prior to proceeding with he next layer.

Hook ups to existing works

N/A

Completion, testing, commissioning and correction of Defects

Work to be done by the Completion Date

On or before the Completion Date the *Contractor* shall have done everything required to Provide the Works except for the work listed below which may be done after the Completion Date but in any case before the dates stated. The *Project Manager* cannot certify Completion until all the work except that listed below has been done and is also free of Defects which would have, in his opinion, prevented the *Employer* from using the *works* and Others from doing their work.

Item of work	To be completed by
As built drawings of all the works.	Within 15 Days after Completion
Performance testing of the <i>works</i> in use as specified in paragraph of this Works Information.	See performance testing requirements.

Use of the works before Completion has been certified

N/A

Materials facilities and samples for tests and inspections

State what materials facilities and samples for tests and inspections the *Contractor* and the *Employer* are to provide, per core clause 40.2.

Commissioning

When the whole or any part of the Works is in a fit and safe condition to operate continuously and prior to issue of a Taking-Over Certificate, the completed Works or part thereof will be tested in accordance with the Works Information and relevant test codes and procedures, to the Project Manager's acceptance, to determine its operational characteristics and performance guarantees and to verify that these are in accordance with the Contract. Testing will be carried out, not necessarily in the following sequence although the Performance Guarantee Tests must be carried out after the Reliability Test Run:

- · Tests of correct functioning
- Functional Tests
- Equipment Tests
- Plant Capability Tests
- Reliability Test Run
- Performance Guarantee Tests

The Works must comply with all environmental limitation during start-up, commissioning and testing. All test procedures including functional tests procedures, will be submitted in writing to the Project Manager for acceptance twelve (8) weeks prior to the commencement of the test.

The *Contractor* will be responsible for ensuring the correct implementation of his control functions and protective logic of the control and instrumentation system and to ensure that the control functions and protective logic is fully tested and documented.

The *Contractor* will provide the equipment, calibrated precision instrumentation, specialist and additional staff necessary to conduct the tests. The Project Manager's operational personnel will operate the Works for the tests in accordance with standard practice under the supervision and control of the *Contractor*, but it will be the *Contractor's* responsibility to ensure that all staff is properly instructed in the tasks assigned to them during tests. All liability for the safe and proper operation of the Works during the start-up and testing of the Works remains with the *Contractor*.



The tests on completion will be made in accordance with the requirements of this Works Information or otherwise as agreed in writing.

To ensure clear and unambiguous roles, accountability and responsibility and to ensure smooth communications and recorded evidence, the *Contractor* will prepare, and submit twelve (8) weeks prior to the commencement of commissioning, detailed documentation in support of the commissioning strategy to be agreed with the Project Manager and taking into account the requirements of this Section. This documentation will include but not be limited to preparation of the following on a system by system and total Works basis using plant identification system:

- Commissioning Intent Memorandum
- Commissioning Schedule
- Commissioning Procedure
- Test Reports and Check Lists/Sheets

Safety and Hazard assessments, procedures and mitigation measures adopted

Take over procedures

The Building will be deemed ready for occupation when the appropriate 'Occupation Certificate' is issued when all of the following have been satisfied:

- All the Works have been substantially completed, based on reports signed by the Project Manager.
- The Works has passed all the safety, commissioning, operational and emissions tests.
- The Works has completed its Reliability Test Run.
- The Works has fully met its minimum guaranteed performance.
- The Project Manager has received a complete set of "red-lined" (marked up during the commissioning / reliability run periods) Operation & Maintenance Manuals.
- Defects which the Project Manager deems to affect the safety, reliability or availability of the plant have been rectified by the *Contractor* to the satisfaction of the Project Manager.
- The local municipality has issued the certificate of occupancy in accordance with SANS10400

Access given by the Employer for correction of Defects

The *Contractor* will advise the *Employer* at least 2 days prior to when access is required to proceed with the rectification of defects. This will be arranged by the *Employer*.

Project Manager may arrange for the *Employer* to allow the *Contractor* access to and use of a part of the *works* which has been taken over if needed to correct a Defect. After the *works* have been put into operation, the *Employer* may require the *Contractor* to undertake certain procedures before such access can be granted (for example barricading a motorway or in a nuclear power station).

Performance tests after Completion

The *Contractor* may be required to demonstrate that the *works* can operate as guaranteed by the *Contractor* (in *Contractor*'s Works Information) or specified by the *Employer*.

- The Contractor is to test ensure the lux levels for the lighting is correct and in accordance to the SANS requirements
- The *Contractor* is to test the backup lighting system to ensure is it fully functional for the required time period.

Training and technology transfer

N/A

Operational maintenance after Completion

N/A



Plant and Materials standards and workmanship

This section of the Works Information contains all the specifications for the work which is left behind; the permanent works. It is likely to be the largest section by far and may even be compiled in volumes, e. g. Section 6 Volume 1: Civil Engineering Works. In design and construct contracts, it may be compiled in accordance with systems within the *works*; e. g. Section 6 Volume 4: Crushers.

Because practice varies widely between employers it is not practical in a general template such as this to deal with all arrangements. Only the discipline based section subheadings are provided below in the order the *works* are likely to be constructed together with some notes of a general nature.

Investigation, survey and Site clearance

The site must be cleared of all debris, shrubs and vegetation prior to construction. The site must be inspected for the availability of water and sewerage services and connections. The *Contractor* must make he aware of the site restrictions with regard to access and the conducting of construction activity on site.

C3.2 CONTRACTOR'S WORKS INFORMATION

This section of the Works Information will always be contract specific depending on the nature of the *works*. It is most likely to be required for design and construct contracts where the tendering *Contractor* will have proposed specifications and schedules for items of Plant and Materials and workmanship, which once accepted by the *Employer* prior to award of contract now become obligations of the *Contractor* per core clause 20.1.

Typical sub headings could be

- a) Contractor's design
- b) Plant and Materials specifications and schedules
- c) Other

This section could also be compiled as a separate file.



PART 4: SITE INFORMATION

Document reference	Title	No of pages
	This cover page	1
C4	Site Information	
	Total number of pages	

PART 4: SITE INFORMATION

General description

Site will be accessible from Monday to Friday 07:00 am 16:30 pm. No access to site will be given over weekends or public holidays unless overtime is applied for and approved.

All overtime application must be completed by Wednesday before the weekend or public holiday wished to be worked upon

