



higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE

QUANTITY SURVEYING N4

19 April 2024

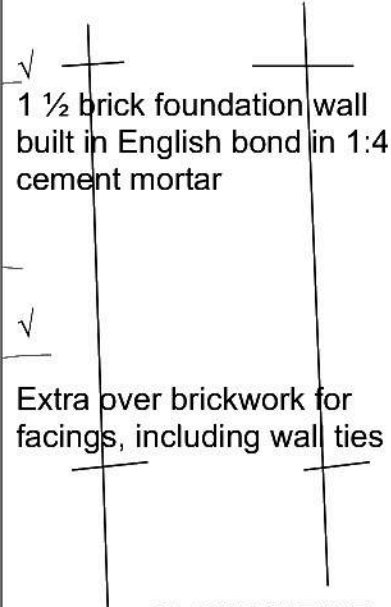
This marking guideline consists of 8 pages.

SECTION A

QUESTION 1

		QUESTION 1 1.1 Length Width 6 000 +2/2000 10 000 11 000 +2/2000 15 000		32.68 0.60 <u>0.20</u>	1.3 15 MPa mass concrete in trenches for foundation footing & Extra over all excavation for carting away surplus material
	15.00 <u>10.00</u>	1.2.1 Clear site of all rubbish, debris and vegetation and prepare site for building		32.68 <u>0.70</u>	1.4 Height of the wall 550 <u>150</u> 700 1½ brick foundation wall built in English bond in 1:4 cement mortar
		1.2.2 Centre line 2/11 000 22 000 2/6 000 <u>12 000</u> 34 000 Less 4/330 <u>1320</u> 32680		32.68 0.33 <u>0.70</u>	Cart away Extra over all excavations for carting away surplus material
		Depth 550 <u>200</u> 750 Excavate in earth for surface trenches not exceeding 2 m deep from ground level		32.68 0.14 <u>0.55</u>	1.5 600 less <u>330</u> 270 ÷ 2 135 Backfill to sides of foundation wall, including part return, fill and ram
2/	32.68 0.60 <u>0.75</u>	1.2.3 Risk of collapse to sides of trenches not exceeding 1.5 m deep from ground level	2/	32.68 0.14 <u>0.55</u>	1.6 Length Width 11 000 less 2/330 <u>660</u> 10340 6 000 660 <u>660</u> 5340 Hard core filling to underside of the surface bed
	Item 	1.2.4 Keep excavation free of water		10.34 5.34 <u>0.15</u>	Ddt Hard core filling to underside of the surface bed
		-1-		4.00 2.00 0.15	-2-

Please turn over

			QUESTION 2.1 Squaring				
	$\checkmark$ 32.68 <u>0.70</u>	$\checkmark$ 22.88	$\checkmark$ 				
2/	$\checkmark$ 11.00 <u>0.30</u>	$\checkmark$ 6.60	$\checkmark$ Extra over brickwork for facings, including wall ties				
2/	6.00 <u>0.30</u>	4.60 <u>10.20</u>	ALTERNATIVE				
	34.00 <u>0.30</u>	10.20					
			-1-				-2-

Abstracting

<u>FOUNDATIONS</u> ✓	
<u>Masonry</u> ✓	<del> m² ✓ ✓ 1 ½ brick foundation wall built in English bond in 1:4 cement mortar 22.88 2 ✓ 23 m² ✓ </del>
<del> Extra over brick work for facing including wall tiles 10.20 3 10 m² </del>	

Billing

NO	DESCRIPTIONS	UNIT	QTY	RATE	RAND	CENTS
	FOUNDATION ✓					
	Bill no 1 ✓					
✓	MASONRY ✓	✓	✓			
1	1 ½ brick foundation wall built in English bond in 1:4 cement mortar	m ²	23			
2	Extra over brickwork for facings including wall ties.	m ²	10			
	Carried forward to summary ✓					

[10]

TOTAL SECTION A: 50

SECTION B

QUESTION 3

3.1	3.1.1	m ²				
	3.1.2	No.				
	3.1.3	m ²				
	3.1.4	m				
	3.1.5	m ³				
					(5 × 1)	(5)
3.2	3.2.1	As before				
	3.2.2	One brick wall				
	3.2.3	Centres				
	3.2.4	Building				
	3.2.5	Ground level				
					(5 × 1)	(5)
						[10]

QUESTION 4

4.1	4.1.1	B				
	4.1.2	D				
	4.1.3	F				
	4.1.4	E				
	4.1.5	A				
					(5 × 1)	

- 4.2
- It promotes financial control to the benefit of all parties.
 - It reduces risks.
 - It ensures that tenders are fully competitive.
 - Tenderers are able to obtain competitive prices from sub-contractors.
 - A mechanism for adjustment is provided, which reduces causes for dispute.
 - It provides a service to the client, architect, and contractor.
 - It can be used for a future database as an estimation guide and tool.
- (Any 5 × 1) (5)
[10]

QUESTION 5

- 5.1
- Quantity surveying is a profession✓ mostly centred on construction and the management of the cost and budget of large projects.✓
 - Quantity surveyor is a professional✓ working within the construction industry concerned with construction costs and contracts.✓ (2 × 2) (4)
- 5.2 Pre-contract duties
- Preparing cost estimates in the early stages of the building project.
 - Cost planning during the design stage of the building project to ensure that the client obtains the best possible value for his or her money.
 - Preparing the bill of quantities to assist in the tendering process.
 - Assisting in the tendering process.
 - Preparing specifications when required.
 - Examining tenders and priced bills of quantities and reporting on the findings.
 - Preparing the schedules of prices and negotiating the contracts with the contractor. (Any 5 × 1)
- Post-contract duties
- Valuating of work progress and recommending payments to be made to the contractor.
 - Pricing variation orders and settling variation accounts.
 - Controlling all costs during the construction period.
 - Assessing the main contractor claims.
 - Assessing specialist sub-contractor claims.
 - Preparing the final account on completion of all the contract works.
 - Providing project management, valuation and insurance claim services. (Any 5 × 1)
(5 × 2) (10)

- 5.3
- Specification
 - Condition of contract
 - Contract drawings
 - Standard system of measuring building work
 - Bill of quantities
 - Interim payment certificate
 - Final account certificate
- (Any 6 × 1) (6)
[20]

QUESTION 6

- 6.1 Sum of ratio
 $1 + 4 = 5$ (1)
- 6.2 Volume of wall = $7 \times 3,8 \times 0,11$ ✓
 $= 2,926 \text{ m}^3$ ✓ (2)
- 6.3 Volume of a brick without mortar = $0,22 \times 0,11 \times 0,075$ ✓
 $= 0,00182 \text{ m}^3$ ✓ (2)
- 6.4 Volume of a brick with mortar = $0,23 \times 0,11 \times 0,085$ ✓
 $= 0,00215 \text{ m}^3$ ✓ (2)
- 6.5 Number of bricks = $\frac{2,926}{0,00215}$ ✓
 $= 1360,930$ ✓
 $= 1369$ ✓ (3)
[10]

TOTAL SECTION B: 50
GRAND TOTAL: 100