



**higher education
& training**

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE

QUANTITY SURVEYING N6

13 APRIL 2018

This marking guideline consists of 8 pages.

QUESTION 1

- | | | | | |
|-----|-------|--|---------|-----|
| 1.1 | 1.1.1 | Square metres | | |
| | 1.1.2 | Square metres | | |
| | 1.1.3 | Cubic metres | | |
| | 1.1.4 | Metres | | |
| | 1.1.5 | Square metres | | |
| | 1.1.6 | Metres | | |
| | 1.1.7 | Square metres | | |
| | 1.1.8 | Metres | | |
| | | | (8 × 1) | (8) |
| 1.2 | 1.2.1 | <ul style="list-style-type: none"> • Such quantities will be described in the bills of quantities as provisional. • These are quantities temporarily allowed for work that could not be measured at tender stage. • These are quantities for work that could not be established due to its difficult nature. • The work will be measured as the work proceeds. • The contract amount will be adjusted using the rates supplied at tender stage. | | (5) |
| | 1.2.2 | <ul style="list-style-type: none"> • Subcontractor is appointed by the architect or engineer. • He is a subcontractor that does specialist work. • He will supply all materials and labour to the site. • He works under the supervision of the main contractor. • Main contractor may allow for attendance and for profit upon subcontractor. | | (5) |
| 1.3 | | <ul style="list-style-type: none"> • Descriptions should contain the information required by the Standard System of Measuring Building Work. • Descriptions must be clear, concise, precise and unambiguous. • Descriptions must be consistent both in their wording and the order in which details and sizes are given. • Good grammar and punctuation are essential. • Descriptions must be as brief as possible and repetitive words must be avoided. • The word 'ditto' must be used carefully as it is difficult to understand. • The order of the trades and items in the Standard System of Building Work must reflect in the bills of quantities. | | (7) |

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QUESTION 2

Reinforced concrete piles

	✓ Item	Allow to establish plant on site. ✓	4 / 4,50	✓ Ditto, but exce. 15 n.e. 20 m. ✓
		&	5 / 5,00	<i>Pile A</i> <i>Pile B</i>
		Testing plant on site. ✓		19,500 – 15,000 = 4,500
	9	Setting up plant at pile positions ✓		Ditto, but exce. 20 n.e. 25 m. ✓
		4+5+ = 9 No.	5 / 4,00	<i>Pile B</i>
4 / 6	20,00	✓ 12 mm dia. h.s. reinf. ✓ <i>Pile A</i>		24,000 – 20,000 = 4,000
5 / 6	24,00	✓ 16 mm dia. h.s. reinf. ✓ <i>Pile B.</i>	9	E.o. drilling for under-Reaming for piles ✓ 450 – 770 mm dia. <i>Pile A,B,.</i>
9 /	10,00	✓ Aug. drill 450 – 710 mm Dia. in firm grnd. n.e. 10 m. ✓ <i>Pile A,B,</i>	4 / 19,80	✓ 25 MPa reinf. conc. in 450 mm dia. pile. ✓ <i>Pile A.</i>
9 /	5,00	✓ Ditto, but exce. 10 n.e. 15 m. ✓ <i>Pile A,B,</i>	5 / 24,30	✓ 19,500 + 0,300 = 19,800 m Ditto, but 710 mm dia. pile. ✓ <i>Pile B.</i>
				24,000 + 0,300 = 24,300 m
		(1)		(2)

	✓ 4	{ Add. Conc. in enlarged bulb 450 – 755 mm. ✓ <i>Pile A.</i>				
	✓ 5		{ Ditto, but 610 – 970 mm ✓ <i>Pile B,</i>			
4	0,45	{ ✓ E.o. drilling for c.a. ✓				
	0,45					
5	19,50					
	0,61					
	0,61					
	24,00					
		(3)				

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QUESTION 3

<p>2/2 2/2 2/2 2/2 2 2 2</p>	<p>1,61 0,90 0,90 5,02 1,61 1,61</p>	<p>✓ ✓</p>	<p><u>Timber casement window</u> <u>All × 2</u> <u>FRAME</u> 56 × 44 mm Meranti tbr. once rebated & once grooved. ✓ -Head & cill -stile 56 x 44 mm Meranti tbr. ✓ twice rebated. -Mullion Prime backs of tbr. frame. ✓ 2 × 1,611 = 3,222 2 × 0,900 = <u>1,800</u> - Canopy <u>5,022</u> m ✓ 18 × 22 mm tbr. once grooved. ✓ -Canopy</p>	<p>2/2 2/2 2/2 2/2 2 2 2 2 2/2</p>	<p>1,61 0,14 0,90 0,14 0,90 0,20 1,61 0,20 2 2 0,41 0,81</p>	<p>✓ ✓</p>	<p>Two cts. clear varnish to tbr. surfaces. ✓ -Head, cill -stiles -Mullion -Canopy <u>Girths</u> <u>Stile, head & cill</u> 2 × 0,044 + 0,056 = <u>0,144</u> m ✓ <u>Mullion</u> 2 × 0,044 + 2 × 0,056 = <u>0,200</u> m ✓ <u>Canopy</u> 0,018 + 0,022 = <u>0,202</u> m ✓ <u>CASEMENTS</u> 406 × 812 mm tbr. casement w. 32 × 44 mm stiles, top rail & bot. rails, once rebated. Two cts. clear varnish to tbr. surfaces of casement. ✓</p>
			(1)				(2)

$\frac{2}{2}$	$\frac{0,34}{0,75}$		<p><u>GLAZING</u></p> <p>3 mm thick clr. float glass ✓ exce. 0,1 n.e 0,5 m² ✓</p> <p><u>Sizes (casements)</u> 406 – 2 x 32 = <u>0,342</u> m ✓ 812 – 2 x 32 = <u>0,748</u> m ✓</p>						
$\frac{2}{2}$	$\frac{0,62}{0,83}$		<p>✓ Ditto, but exce. 0,5 n.e. 2 m² ✓</p> <p><u>Fixed light</u> 603 + 2 x 10 = <u>0,623</u> m ✓ 812 + 2 x 10 = <u>0,832</u> m ✓</p>						
$\frac{2}{2}$	$\frac{4}{2}$		<p><u>IRONMONGERY</u></p> <p>32 mm concealed brass hinge. ✓</p>						
$\frac{2}{2}$	$\frac{2}{2}$		<p>✓ 300 mm brass stay and pins.</p>						
(3)									

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QUESTION 4.1: OMISSIONS

2	19,86		E.o. bkwrk. for fcgs. ✓				
2	2,59	✓					
	0,33		Ddt.				
	2,59	✓					
2	0,91		E.o ord. bks. for fcgs. ✓				
	2,13	✓					
2	0,06		Ditto, but in reveals. ✓				
2	2,13	✓					
2	0,06		Ditto, but to hor. soffits. ✓				
	0,91	✓					
							(9)

QUESTION 4.2: ADDITIONS

✓ 2 19,86 2,59	✓	15 mm thick vert. pls. 1:4 c.m. mix. ✓	2 0,06 0,91	✓	15 mm thick pls, to hor. bk. wl. in n.w. n.e. 300 mm wide. ✓
2 0,33 2,59	✓	&			&
		✓ ✓ One undercoat & two cts. pva pt. to vert. pls. wls.			✓ One ct. undercoat & two. cts. pva pt. to hor.surf. n.e. 300 mm wide ✓
		<u>Adjustments</u>			
✓ 2 0,91 2,13	✓	<u>Ddt.</u> 15 mm thick a.b. ✓			
		&			
		Ddt. ✓ ✓ One ct. undercoat & two cts. pva a.b.			
✓ 2 2 0,06 2,13	✓	<u>Add</u> 15 mm thick pls. to reveals n.e. 300 mm wide. ✓			
		&			
		✓ ✓ One ct. undercoat & two cts. pva pt. to vert. pls. wls. n.e. 300 mm wide			
					(16)

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TOTAL: 100