higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE

QUANTITY SURVEYING N4

13 August 2021

This marking guideline consists of 9 pages.

MJ

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SECTION A

QUESTION 1

1.1
- W.p. & pt.
- Trusses & lab.
- Fas. brds.
- Brge. brds.
- Purlins.
- R.shtg.
- Rdge. Cover.
- St.ends.
- Gutter & extras.
- d.pp.
- S.neck.
- Shoe.

(Any 10 × ½) (5)

1.2 Wall plate

2 /	11,06	✓	114 × 38 mm S.S.A.P. tbr. w.p. ✓ 11,500 – 2/0,220 = 11,060m ✓				
2 /	11,06 0,30	✓	Treat tbr. W.p. with carbolineum. ✓ 2/0,114 + 2/0,038 = 0,304m ✓				

(5)

1.3 Trusses & Roof covering

			No. of trusses 11,060 ÷ 1,200 = 9,217 Say 10 + 1 = 11 no. ✓	2	11,90	✓	Fib. c. corr. Roof shtg. ✓ 4,160 + 0,050 = 4,210m
11			114 × 38 mm S.S.A.P. tbr. n.e. 2,4m long ✓		4,21		
2				2			
	1,86	✓		2			200 x 200 mm fib. c b.b. capping. ✓
11			Diag. st.		4,21	✓	
	2,25	✓	K.p.				
11							
2			Ditto, ditto, but exce. 3,9 n.e. 6,6 m long. ✓				200 x 38 mm W.S.S.A.P. f.brd. ✓
11	4,16	✓		2	11,90	✓	
	5,28	✓	Raft. Tie 5,500 – 2/0,110 = 5,280 m				
11							
	2	✓	Vert. plumb cut to rafter ends. ✓				
2							
5							
	11,90	✓	76 × 50 mm S.S.A.P. tbr. purlins. ✓ 11,500 + 2/0,200 = 11,900m				

(14)

1.4 Rain water goods

2							
	11,90		100 × 75 mm rect. Pl. gutter.✓		2		75 × 75 mm sq. pl. swan neck. ✓
	2		100 × 75 mm rect. pl. outlet. ✓		2		75 × 75 mm sq. pl. shoe. ✓
2							
	3,15		75 × 75 mm square pl. d.pp. ✓				
			2,400 + 0,600 + 0,150 = 3,150m✓				

(6)
[30]

QUESTION 2

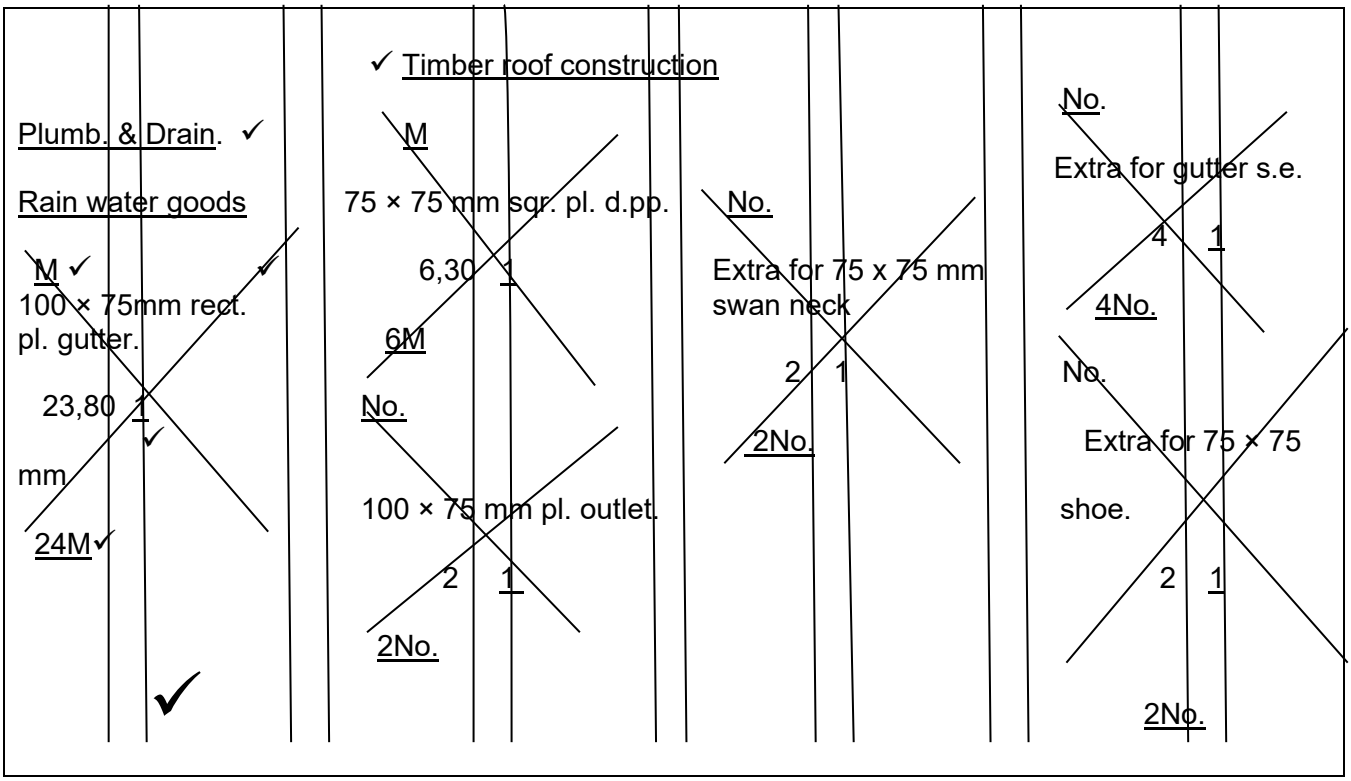
2.1 Squaring

2	✓	✓					
	11,90	*23,80*	*100 × 75 mm rect. Pl. gutter.*		*2*	*2*	*Extra for75 × 75 mm sq. pl. swan neck.*
		✓					
	2	*2*	*100 × 75 mm rect. pl. outlet.*		*2*	*2*	*Extra for 75 × 75 mm sq. pl. shoe.*
2							
	3,15	*6,30*	*75 × 75 mm square pl. d.pp.*		*2*	*2*	*Extra for gutter s.e.*
			2,400 + 0,600 + 0,150 = 3,150m✓				

(3)

Squaring		
Check side casts. (ticks)	1	
Check dimensioning. (ticks)	0,5	
Square dimensions.	0,5	(3)
Check squaring answers. (ticks)	0,5	
Transfers to abstract.	0,5	

2.2 Abstracting



(6 ÷ 2) (3)

Abstracting		
Section of work.	0,5	
Trades.	0,5	
Units.	0,5	
Page referencing.	0,5	(3)
Use of columns.	0,5	
Transfers to bill.	0,5	

2.3 Billing

	Timber roof construction✓ Bill No. 1✓ Plumbing and Drainage✓ Rain water goods✓	✓	✓		
✓ 1.	100 mm × 75 mm rectangular plastic gutter. ✓	M	24		
2.	75 mm × 75 mm square plastic down pipe.	M	6		
3.	100 mm × 75 mm plastic outlet.	No.	2		
4.	Extra for 75 mm × 75 mm plastic outlet.	No.	2		
5.	Extra for 75 mm × 75 mm plastic shoe.	No.	2		
6.	Extra for gutter stopped ends.	No.	4		
	✓ Carried to summary			R	

(8 ÷ 2) (4)
[10]

Billing Section of work. Bill no. Trade. Item no. Descriptions. (No abbreviations) Units. Quantities. Summary	 0,5 0,5 0,5 0,5 0,5 0,5 0,5 0,5	 (4)

TOTAL SECTION A: 40

SECTION B

QUESTION 3

3.1	3.1.1	Internal cement plaster		
	3.1.2	Clear sheet glass		
	3.1.3	Risk of collapse		
	3.1.4	Extra over		
	3.1.5	Face brick	(5 × 1)	(5)
3.2	3.2.1	Square meters		
	3.2.2	Cubic meters		
	3.2.3	Square meters		
	3.2.4	Meters		
	3.2.5	Item	(5 × 1)	(5)
				[10]

QUESTION 4

4.1 Items allowed in the bills of quantities for the installation✓ of p.c. materials.✓

4.2 To allow for cost over and above work✓ already measured.✓

4.3 It is a product made up outside the norm✓ of materials or measurements.✓

4.4 Measurements taken to exact measurements✓ not allowing for overlaps or extras.✓

4.5 These are reference notes✓ next to measurements taken off.✓

(5 × 2) **[10]**

QUESTION 5

5.1
- Check waste calculations
- Check side casts
- Check dimensioning
- Multiply sequences
- Check answers
- Check final answers (Any 5 × 1)

5.2
- Transfer items
- Insert section of work
- Insert correct units of measurement
- Insert page referencing
- Transfer quantities
- Do casting up
- Reduce quantities (Any 5 × 1)

(2 × 5) **[10]**

QUESTION 6

6.1 True
6.2 True
6.3 False
6.4 True
6.5 False
6.6 False
6.7 True
6.8 False
6.9 True
6.10 True

(10 × 1) **[10]**

QUESTION 7

7.1 Provisional sums are monies✓ allowed in the bills of quantities to make provision for specialist work✓ to be carried out by a specialist contractor✓ who would supply and fix material to a project.✓ (4)

7.2 Prime cost sums are monies✓ allowed in the bills of quantities to make provision for specialist materials or units✓ to be supplied only✓ by a specialist supplier to a project.✓ (4)

7.3 Contingencies are monies✓ allowed in the bills of quantities to make provision for extras or unforeseen work not measured.✓ (2)

[10]

QUESTION 8

Total bags cement = 600 ÷ 50 ✓
= 12 bags ✓

Cost of cement = 12 × 105 ✓
= R1 260 ✓

Cost of sand = 1,3 m³ × R350 ✓
= R455 ✓

Cost of stone = 1,7 m³ × 400 ✓
= R680 ✓

Total cost of materials = (1260 + 455 + 680) × 16 ✓
= R38 320 ✓ **[10]**

TOTAL SECTION B: 60
GRAND TOTAL: 100

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