higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

MARKING GUIDELINE

NATIONAL CERTIFICATE

NOVEMBER EXAMINATION

CARPENTRY AND ROOFING THEORY N2

12 NOVEMBER 2014

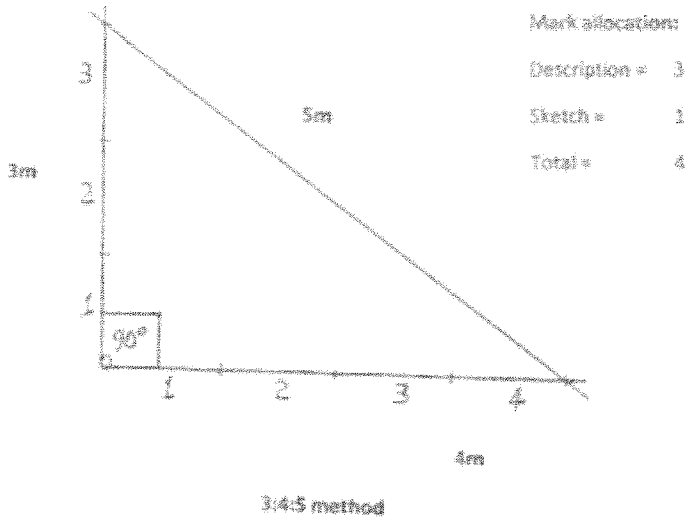
This marking guideline consists of 8 pages.

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QUESTION 1: SETTING OUT OF BUILDINGS

1.1
1.1.1 Main documentation √
1.1.2 Quantity surveyor √
1.1.3 Descriptive notes √
1.1.4 Larger scales √
1.1.5 Engineers √
1.1.6 Working plans √ (6)

1.2
- From the corner place a peg 4 metre along the wall line. √
- From the same corner place a peg 3 metre along the adjacent wall line. √
- The diagonal distance (between the 3 metres and 4 metre peg) must be 5 metres. √



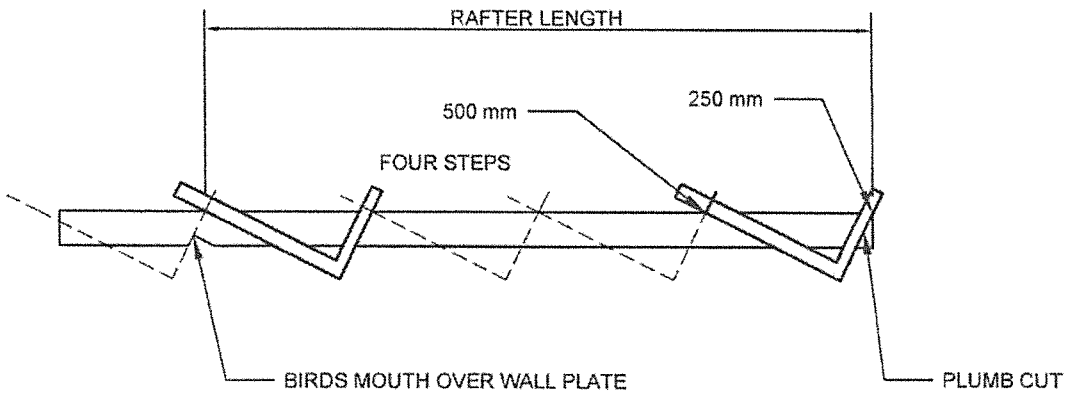
(4)
[10]

QUESTION 2: ROOF CONSTRUCTION

2.1
2.1.1 Gable end/wall√
2.1.2 Ridge√
2.1.3 Eaves/overhang√
2.1.4 Common rafter√
2.1.5 Flying hip rafter√
2.1.6 Valley rafter√
2.1.7 Jack rafter√
2.1.8 Half truss √
2.1.9 Hipped end√
2.1.10 Hip rafter√ (10)

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2.2



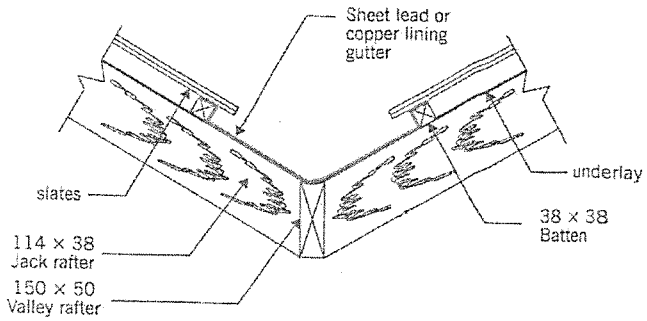
Mark allocation

Labels	
250 mm mark	1√
500 mm mark	1√
plumb cut	1√
4 steps	1√
rafter length	1√
birds mouth	1√
Drawing	
correct method applied	4√√√√
Total	10

(10)
[20]

QUESTION 3: ROOF COVERING

3.1



Sketch = 3

Labels = 5

Total = 8

(8)

3.2

- Mastic√
- Acrylic√
- Asphalt√
- Plastic√
- Coatings – a brush application that hardens. √

(5)

3.3
- It can rust easily if not treated properly.
- It is not a good isolator against weather conditions.

(2)
[15]

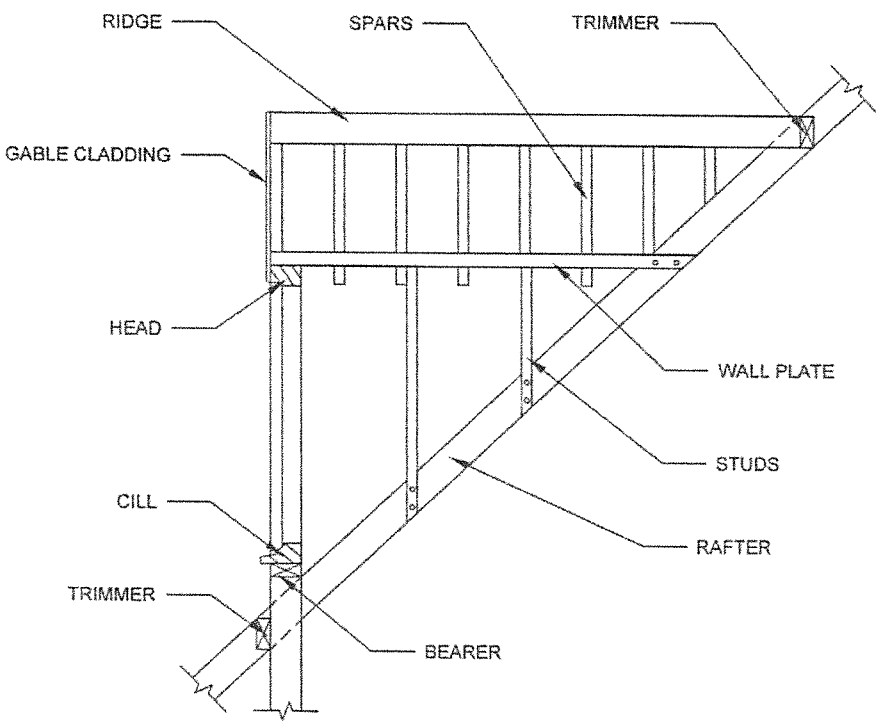
QUESTION 4: CEILINGS

4.1 Create a datum mark on the walls√
Fix end brandering to tie beams along opposite walls 50 mm away from each wall√
Mark out the centre to centre batten spacing on the wall√
By means of a chalk line, transfer all the lines onto the tie beams and fix the brandering to the tie beams. √
With the aid of loose spacer blocks check and adjust the brandering for correct alignment and where necessary level the brandering. √
Fix intermediate brandering to accommodate the width of the ceiling board. √
Fit and fix the ceiling board with cloud nails +/- 150 mm apart. √
Fit and fix the cornice to cover the joint/opening between the ceiling board and the wall. √
Fit and fix a suitable cover strip or H-bar to cover the joint between the ceiling boards. √

[8]

QUESTION 5: DORMER ROOF CONSTRUCTION

5.1

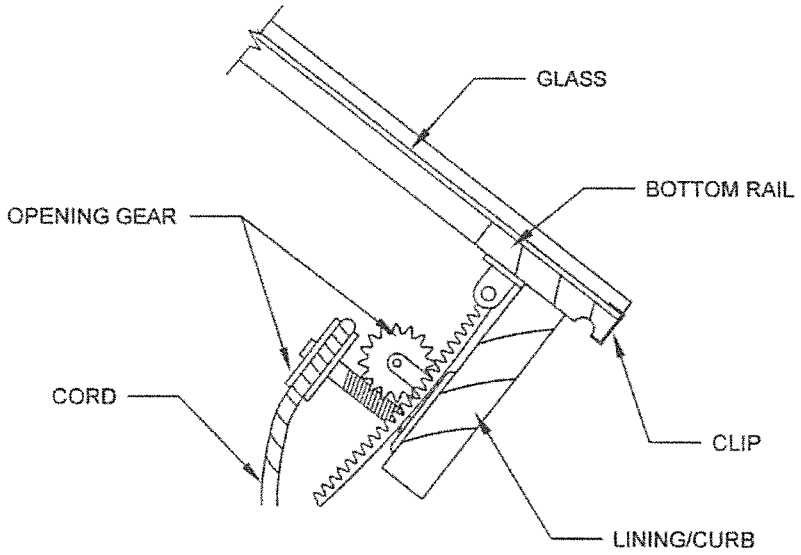


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Mark allocation
Labels = 10 maximum (1 mark per label)
Drawing = 5
Total 15 **[15]**

QUESTION 6: ROOF-LIGHT CONSTRUCTION

6.1



Mark allocation
Labels = 3 maximum (1 mark per label)
Drawing = 3
Total 6 (6)

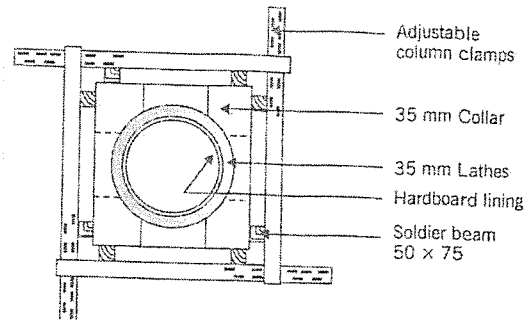
6.2 Create an opening between the rafters and cut away the battens. √
Make a timber frame in the opening created according to the size of the roof light. √
Apply waterproofing (a sticky rubber strip) to the underside of the roof light and press it tightly over the opening until the roof light is set. √
Replace the roof covering around the roof light and apply flashing and sealant to cover any openings between the roof light and the main roof. √ (4)

6.3 Flashing is a waterproof membrane√ use to seal off areas for possible water penetration. √ (2)
[12]

QUESTION 7: THIS QUESTION IS FOR CARPENTRY CANDIDATES ONLY

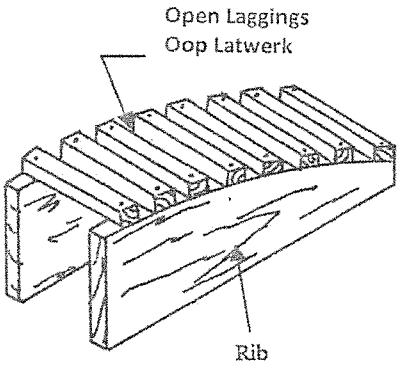
7.1
7.1.1 Dado capping √
7.1.2 Rough Grounds √
7.1.3 Panel top rail √
7.1.4 Raised and fielded panel √
7.1.5 Panel bottom rail √
7.1.6 Skirting √
7.1.7 Soldier √
7.1.8 Moulded fillet √ (8)

7.2



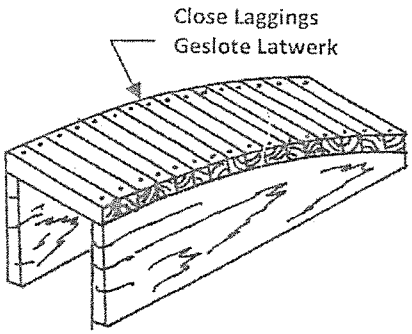
Mark allocation
Labels = 4 maximum (1 mark per label)
Drawing = 2
Total 6 (6)

7.3.1



Mark allocation
Labels = 1
Drawing = 2
Total 3 (3)

7.3.2



Mark allocation
Labels = 1
Drawing = 2
Total 3

(3)
[20]

QUESTION 8: THIS QUESTION IS FOR ROOFING CANDIDATES ONLY

8.1 8.1.1 COPPER
- Roof coverings√
- Rivets√
- Roof flashing (Any 2 × 1) (2)

8.1.2 LEAD
- Flashing√
- Roof coverings√ (2)

8.1.3 GALVANISED IRON
- Flashing√
- Roof coverings√
- Gutters (Any 2 × 1) (2)

8.1.4 ALUMINIUM
- Flashing√
- Gutters√ (2)

8.1.5 BRASS
- Use externally√
- Used in severe weather conditions√ (2)

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8.2
- **Outlet:**. √.
- **Swan's neck offset (elbow):** √.
- **Downpipe:** √ **Shoe:** √.
- **Holderbat**√**:**

(5)

8.3 The surface where the membrane will be fixed must be clean, free of oil, smooth and even. √
All loose particles must be brushed off. √
The material must be rolled out on the surface. √
As it is rolled out, heat is applied and gets pasted down and rolled with a steel roller or hand rolled. √
Any excess of bubbles is removed whilst rolled. √

(5)
[20]

TOTAL: 100

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