



higher education
& training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NASIENRIGLYN

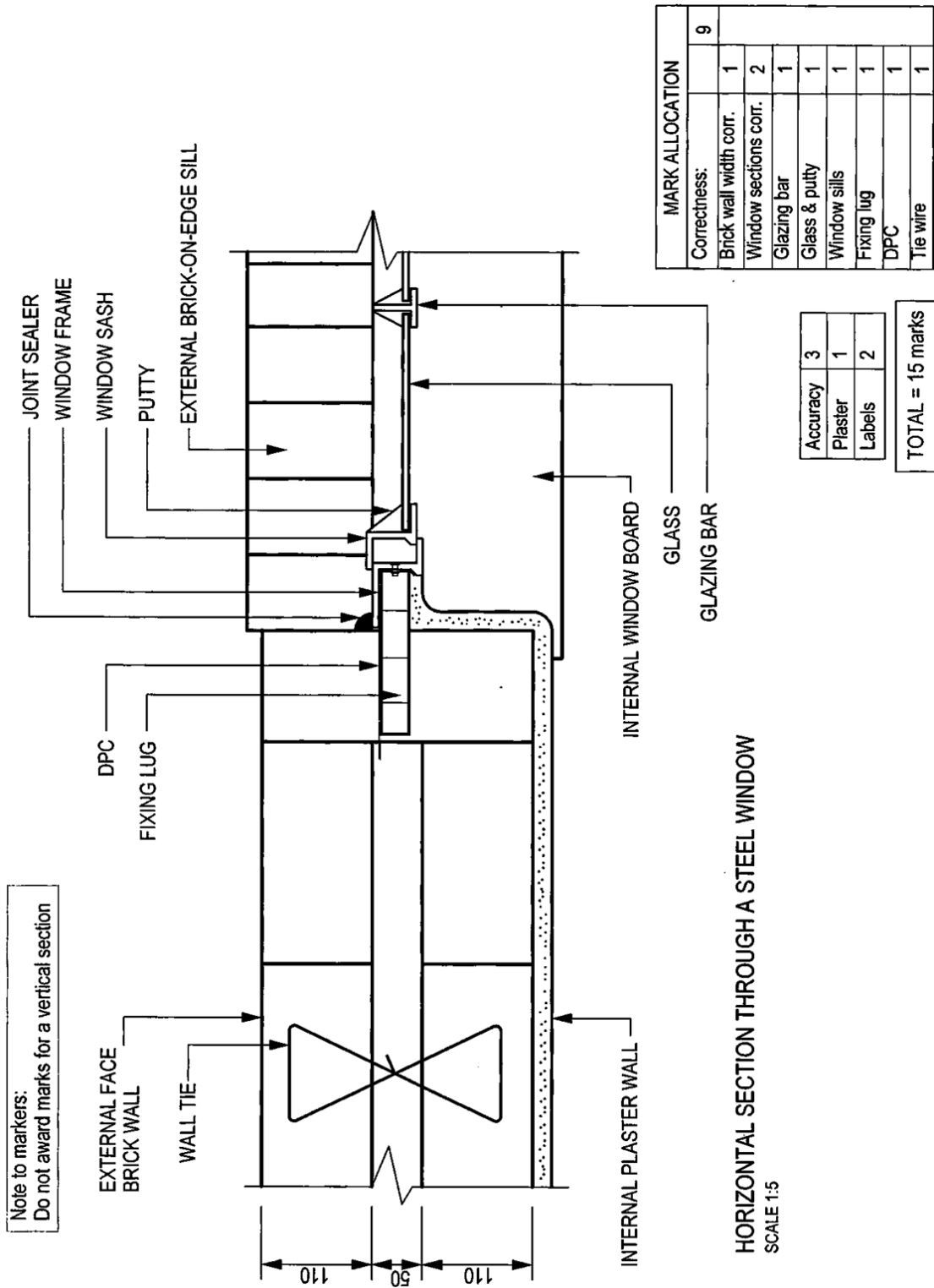
NASIONALE SERTIFIKAAT

BOU- EN STRUKTUURKONSTRUKSIE N4

19 April 2021

Hierdie nasienriglyn bestaan uit 9 bladsye.

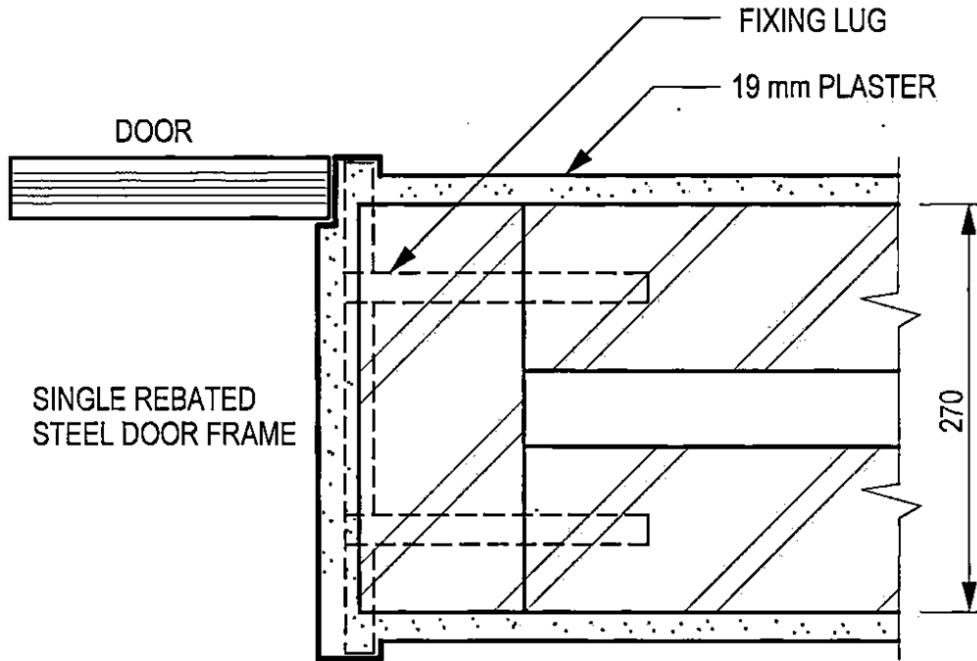
VRAAG 1



[15]

VRAAG 2

(A VERTICAL SECTION MUST NOT BE ACCEPTED)

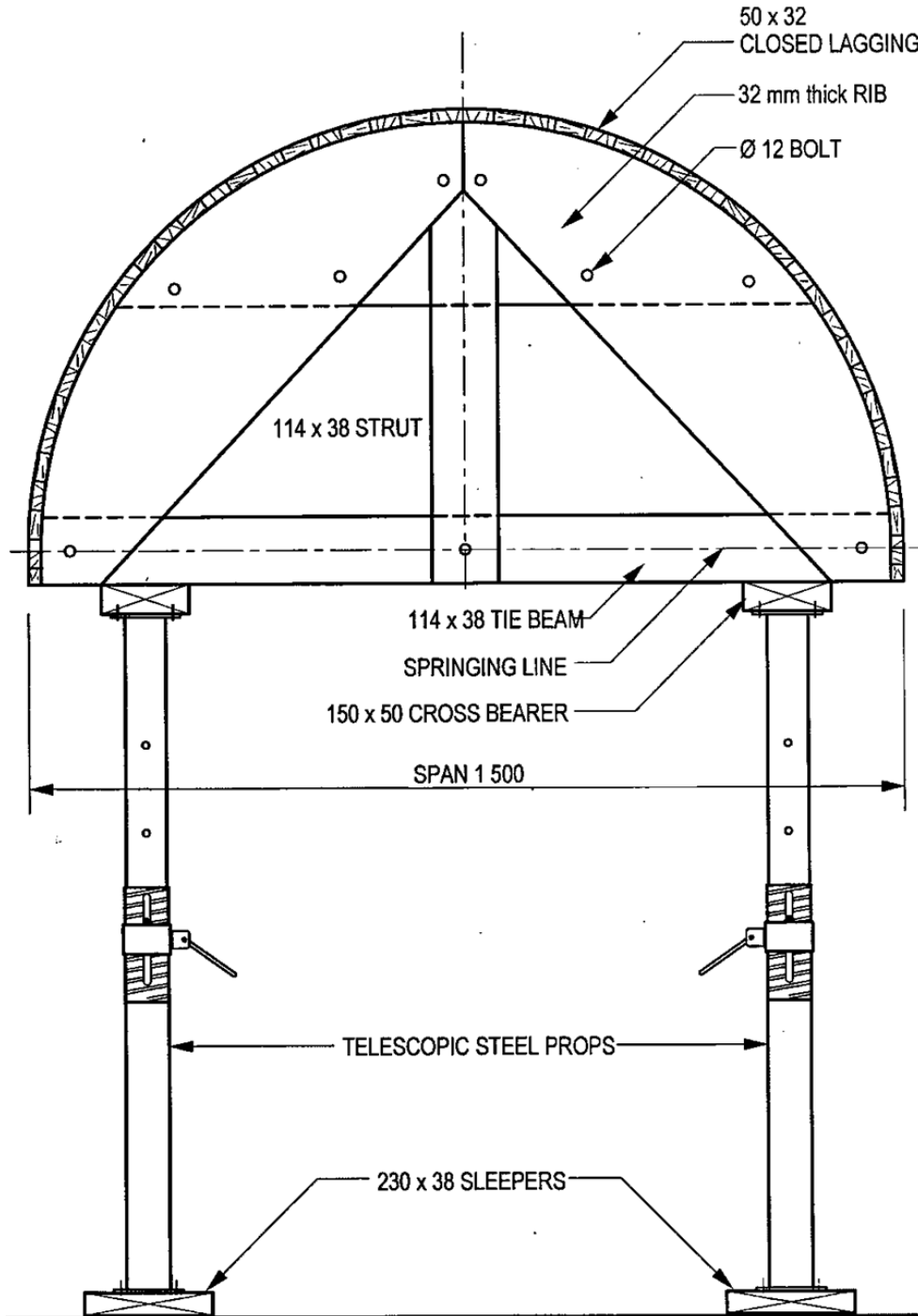


HORIZONTAL SECTION THROUGH A CAVITY WALL WITH A STEEL DOOR FRAME SCALE 1:5

QUESTION 2		
MARK ALLOCATION		
Correctness:		6
Cavity wall corr	1	
Steel frame corr	3	
Door in Place	1	
Fixing lug	1	
Accuracy		
Dimension		1
Labels		1
Total		10

[10]

VRAAG 3



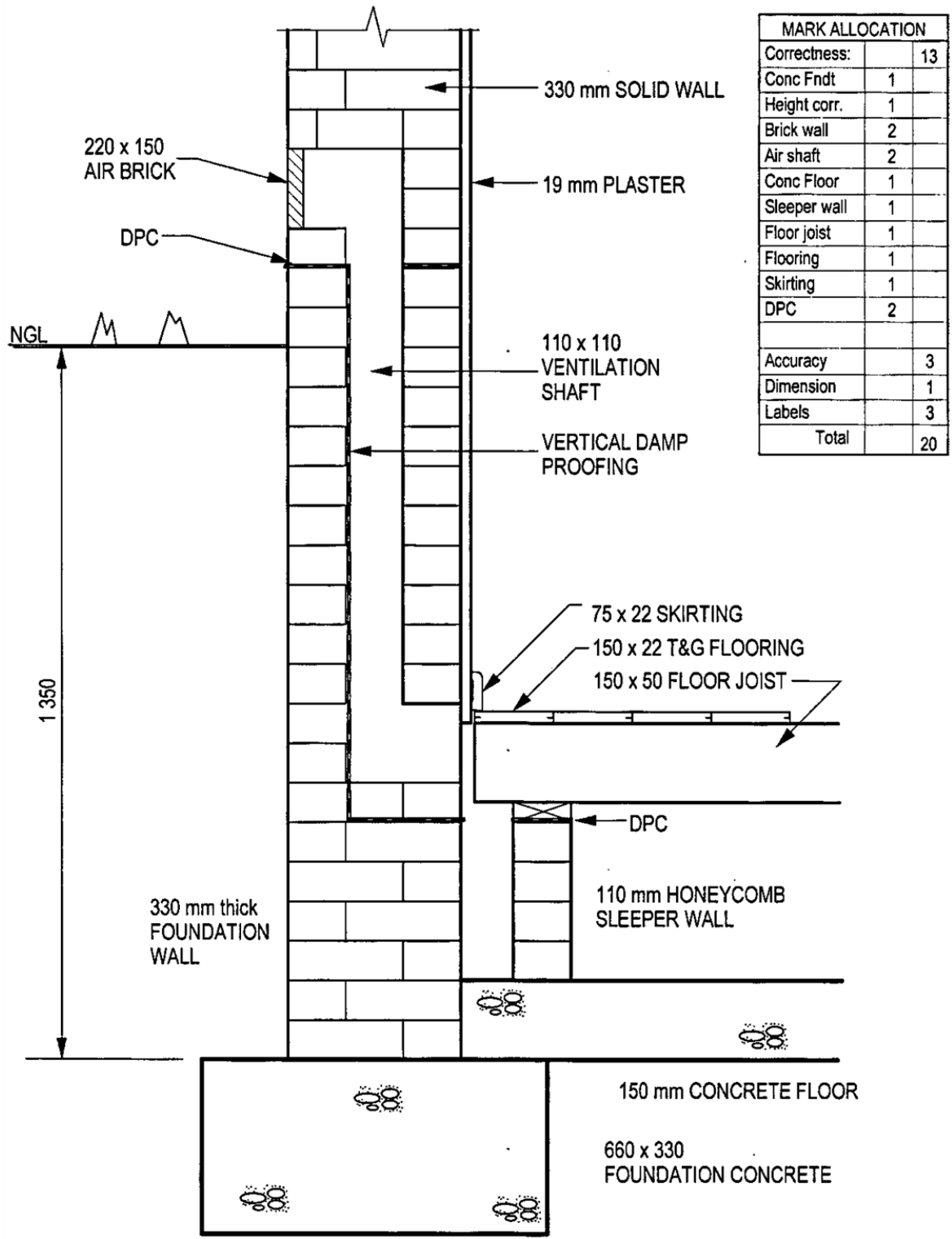
CENTERING FOR A LIGHT SEMI-CIRCULAR ARCH
SCALE 1:10

MARK ALLOCATION			
Correctness:	10	Accuracy	3
Span corr	1	Labels	2
Centering	3	TOTAL = 15	
Lagging	1		
Steel Props	3		
Bearers	1		
Sleepers	1		

[15]

VRAAG 4

4.1

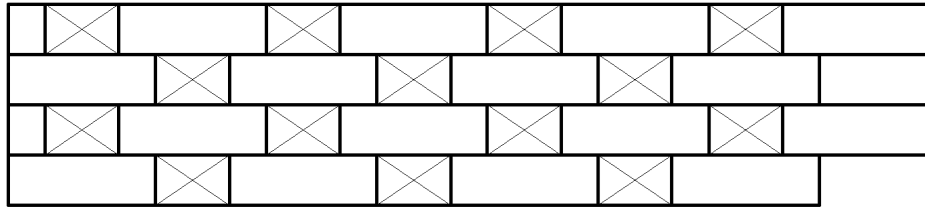


MARK ALLOCATION		
Correctness:		13
Conc Fndt	1	
Height corr.	1	
Brick wall	2	
Air shaft	2	
Conc Floor	1	
Sleeper wall	1	
Floor joist	1	
Flooring	1	
Skirting	1	
DPC	2	
Accuracy		3
Dimension		1
Labels		3
Total		20

VERTICAL SECTION THROUGH AN EXTERNAL BASEMENT WALL
SCALE 1:10

(20)

4.2 4.2.1



GAPS BETWEEN THE BRICKS
TO ALLOW FOR VENTILATION
BETWEEN THE FLOOR JOISTS

Mark Allocation	
Bricks laid corr	2
Gaps corr	1
Total	3

(3)

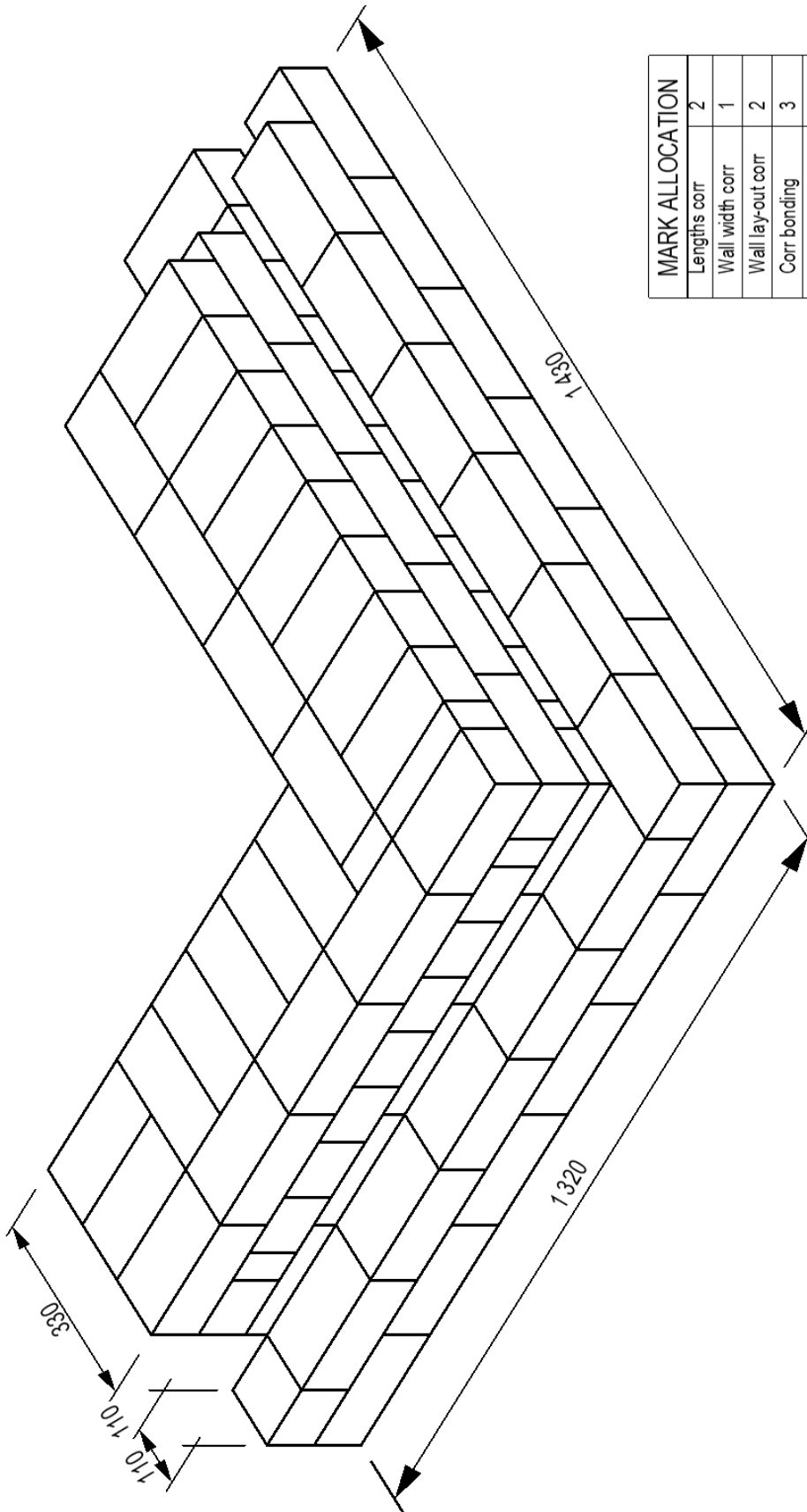
4.2.2

Die ventilasieskag maak dit moontlik dat lug onder die houtvloer van die kelder sirkuleer en die vloer sodoende teen droëvrot te beskerm.

(2)

[25]

VRAAG 5

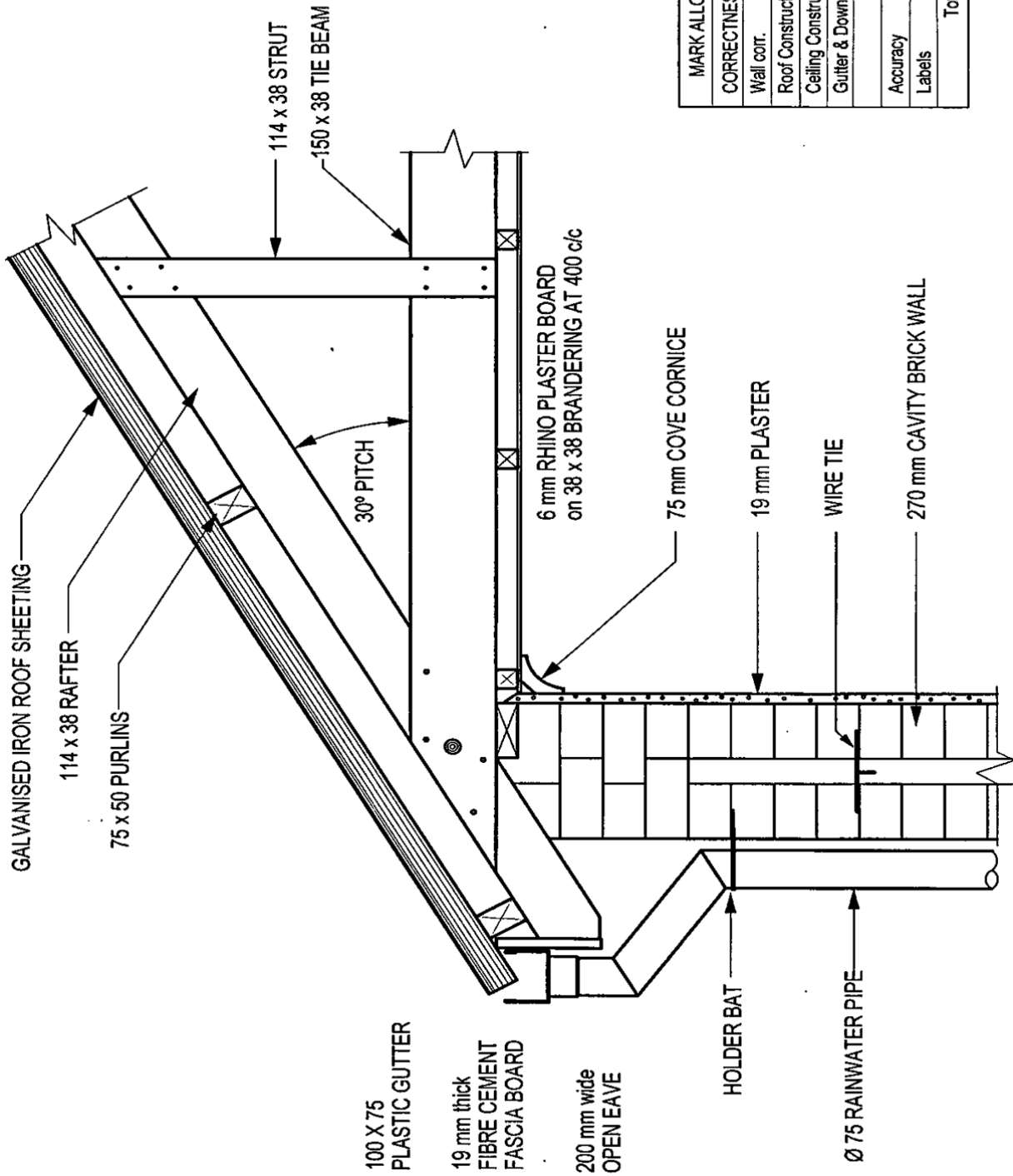


MARK ALLOCATION	
Lengths corr	2
Wall width corr	1
Wall lay-out corr	2
Corr bonding	3
Raking back	2
Stopped end	2
Accuracy	3
Total	15

[15]

VRAAG 6

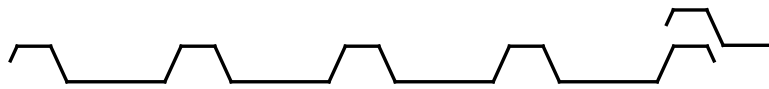
6.1



MARK ALLOCATION	
CORRECTNESS	10
Wall corr.	2
Roof Construct	3
Ceiling Construct	2
Gutter & Downpipe	3
Accuracy	3
Labels	3
Total	16

(16)

6.2 6.2.1



INVERTED BOX RIB (IBR) ROOF SHEET

6.2.2



BIG SIX FIBRE-CEMENT ROOF SHEET

MARK ALLOCATION	
Shape corr	1
Title cor	1
Total	2
2 x 2 = 4 Marks	

(2 × 2) (4)
[20]

TOTAAL: 100