

**GAUTENG DEPARTMENT OF EDUCATION /
GAUTENGSE DEPARTEMENT VAN ONDERWYS
SENIOR CERTIFICATE EXAMINATION /
SENIORSERTIFIKAAT-EKSAMEN**

**WOODWORKING SG /
HOUTBEWERKING SG**

POSSIBLE ANSWERS OCT / NOV 2006

QUESTION 1 / VRAAG 1

1.1

- Make sure that the area on and around the machines is clear from waste and material.
- Cutting blades must be checked for sharpness and proper clamping.
- All necessary guards must be in position.
- Make sure that all electrical wiring, switches and connections are in good order.
- Do not wear loose, hanging clothing.
- Use safety devices supplied with each machine.
- Take up safe position in accordance with the particular machine.
- Push the wood slowly and evenly. Don't jerk or force the material.
- Concentrate fully on the point of action.
- Do not machine second-hand wood.
- Switch off and clean machine after it is used.
- All portable electrical machines must be connected to an earth leakage unit.

ANY TEN

(10)

- *Sorg dat dit op en om die masjien skoon is van afvalmateriaal.*
- *Lemme moet nagegaan word voordat masjien aangeskakel word. Dit moet skerp en stewig wees.*
- *Alle skerms moet in posisie wees.*
- *Sorg dat alle elektriese drade, skakelaars en konneksies in goeie toestand is.*
- *Moenie loshangende klere dra nie.*
- *Maak gebruik van veiligheidstoerusting wat by masjiene voorsien word.*
- *Neem altyd 'n veilige werksposisie by die masjien in.*
- *Stoot altyd die hout egalig en gemaklik. Moenie dit stamp of forseer nie.*
- *Bepaal die volle aandag by die aksiepunt.*
- *Moenie tweedehandse hout masjineer nie.*
- *Skakel die masjien af en maak dit skoon nadat dit gebruik is.*
- *Alle draagbare masjiene moet aan 'n aardlekkasie gekoppel word.*

ENIGE TIEN

(10)

1.2 THE ADVANTAGE OF A SETTING-OUT ROD

- It supplies the exact dimensions of length, breadth and thickness of the material. The possibility of errors is thus largely eliminated. (2)
- The machinist knows exactly where the joints must be and where the mould must be cut. (2)
- The correct quantity of material required can be determined from the rod. (2)
- It is useful for training. A fairly inexperienced person can refer to it regularly to get information. (2)
- When kept, the rod simplifies organisation when the same article is to be manufactured at a later stage. (2)

[10]

VOORDELE VAN 'N MAATSTOK

- *Dit gee die presiese afmetings van lengte, breedte en dikte van die hout aan. Die moontlikheid om verkeerde afmetings te neem is dus redelik min.* (2)
- *Die masjinis weet presies waar die tappe moet wees en waar lyste aangeskaaf moet word.* (2)
- *Die korrekte hoeveelheid materiaal wat benodig word kan vanaf die maatstok bepaal word.* (2)
- *Dit is nuttig vir opleiding. 'n Redelike onervare persoon kan gereeld daarna verwys om die nodige inligting te kry.* (2)
- *As dit bewaar word, vergemaklik dit die organisasie wanneer die artikel weer op 'n latere stadium vervaardig moet word.* (2)

1.3 THE ADVANTAGE OF A CUTTING LIST

- It supplies the correct quantity of rough material required. (2)
- It supplies the dimensions to which timber must be finished off. (2)
- The costs of the material can be readily obtained. (2)
- It simplifies organisations with respect to orders. (2)
- When kept or duplicated, cutting lists are convenient for later references. (2)

[10]

VOORDELE VAN 'N SNYLYS

- *Dit gee die korrekte hoeveelheid rowwe hout benodig aan.*
- *Dit gee die afmetings waartoe die hout afgewerk moet word aan.* (2)
- *Die koste van die materiaal kan maklik bepaal word.* (2)
- *Dit vergemaklik die organisasie ten opsigte van bestellings.* (2)
- *Snylyste of afskrifte daarvan, wat bewaar word, is gerieflik vir latere verwysing.* (2)

[10]

1.4 CLASSIFICATION OF WOOD

- Graded coniferous wood for general purposes. (1)
 - Graded coniferous wood for engineering purposes. (1)
 - Coniferous wood for carpentry. (1)
 - Coniferous wood for furniture. (1)
 - Hardwood for furniture. (1)
- [5]**

HOOFGRADERINGS

- *Sterke gegradeerde naaldhout vir algemene konstruksiedoeleindes* (1)
 - *Sterke gegradeerde naaldhout vir ingenieursdoeleindes* (1)
 - *Naaldhout t vir skrynwerkersdoeleindes* (1)
 - *Naaldhout t vir meubels* (1)
 - *Loofhout vir meubels* (1)
- [5]**

1.5 CHARACTERISTICS OF A GOOD MACHINE GUARD

- The maximum positive protection
- Access to the danger zone locked during operation
- Resistant to corrosion and fire and easily repairable
- It should be a permanent part of the machinery without weakening its structure.
- It should comply with the requirements of the Labour Department.
- No hazards such as splinters and pinch points should be created by the guard.
- It should be strong enough to withstand normal wear and tear.

ANY FIVE

5x1=[5]

EIENSKAPPE VAN 'N GOEIE SKERM

- *Dit moet maksimum positiewe beskerming bied.*
- *Die toegang tot die gevaargebied moet gedurende werking afgesper wees.*
- *Dit moet roesvry, brandwerend en maklik herstelbaar wees.*
- *Dit moet 'n permanente onderdeel van die masjien vorm sonder om die struktuur daarvan te verswak.*
- *Dit moet aan die vereistes van die Departement van Arbeid voldoen.*
- *Geen gevare soos afsplintering of knyp punte moet deur die skerm geskep word nie.*
- *Dit moet sterk genoeg wees om normale gebruik en slytasie te weerstaan.*

ENIGE VYF

5x1=[5]
[40]

QUESTION 2 / VRAAG 2

Roof Truss (closed eave)	/	Dakkap (geslot dakrand)
Wall 220 mm	2	Muur 220 mm
Wall-plate 115 x 38	2	Muurplaat 115 x 38
Tie beam 115 x 38	2	Bindbalk 115 x 38
Rafter 115 x 38	2	Kapbeen 115 x 38
Purlin (75 x 50) + (75 x 75)	2	Daklarre (75 x 50) + (75 x 75)
Corrugated iron	2	Golfyster
Branding 38 x 38	2	Plafonlatte 38 x 38 (plafon)
Closed eave branding	2	Dak rand (plafon)
Ceiling 6 mm	2	Plafon 6 mm
Cornice	2	Kroonlys
Fascia 230 x 25	2	Fassie 230 x 25
Gutter 115 x 115	2	Geut 115 x 115
Downpipe	2	Afleipye
Construction truss	4	Konstruksiekap
Line work	2	Lynwerk
Captions	6	Byskrifte
Scale	2	Skaal
[40]		

QUESTION 3 / VRAAG 3

- 3.1 Vertical section through the head of frame and top rail of fanlight / *Vertikale snit deur kosynkop en bo-reling van bo-lig*

Head (115 x 75 mm)	2	Kosynkop (115 x 75 mm)
Top-rail (50 x 45 mm)	2	Bo-reling (50 x 45 mm)
Glass	1	Glas
Scale	2	Skaal
Caption	2	Byskrifte
Hatching	1	Arsering
(10)		

- 3.2 Vertical section through transome, top rail of casement , bottom rail of fanlight / *Vertikale snit van kalfreling onderling van bo-lig en bo-reling van venster*

Bottom rail (65 x 45 mm)	1	Onderrelling (65 x 45 mm)
Transome (130 x 75 mm)	1	Kalfreling (130 x 75 mm)
Top rail (50 x 45 mm)	1	Bo-reling (50 x 45 mm)
Frame style (115 x 75 mm)	1	Kosynstyl (115 x 75 mm)
Sash style (50 x 45 mm)	1	Vensterstyle (50 x 45 mm)
Heading	1	Opskrifte
Captions	1	Byskrifte
Dimensioning	1	Maatskrywings
Scale	2	Skaal
(10)		

3.3 Vertical section through the bottom rail of the sash and the sill / *Vertikale snit van onderrelling van vensterraam en die vensterbank*

Bottom rail (65 x 45 mm)	1	<i>Onderrelling (65 x 45 mm)</i>
Window sill (150 x 76 mm)	1	<i>Vensterbank (150 x 76 mm)</i>
Glass	1	<i>Glas</i>
Scale	2	<i>Skaal</i>
Captions	3	<i>Byskrifte</i>
Heading	1	<i>Opskrifte</i>
Hatching	1	<i>Arsering</i>
	(10)	

3.4 Horizontal section through the mullion and adjacent sash stiles / *Horisontale snit deur die tussenstyle en aangrensende raamstyle*

Mullion	2	<i>Tussenstyle</i>
Two Sash styles	2	<i>Twee aangrensende vensterstyle</i>
Glass	1	<i>Glas</i>
Scale	1	<i>Skaal</i>
Caption	2	<i>Byskrifte</i>
Heading	1	<i>Opskrifte</i>
Hatching	1	<i>Arsering</i>
	(10)	

[40]

QUESTION 4 / VRAAG 4

4.1 4.1.1 Vertical section to illustrate the construction at the top of strip-board panelling **Scale 1:5** / *Vertikale snit om die afwerking by die bo-punt van strook muurpaneelwerk te toon Skaal 1:5*

Wall	1	<i>Muur</i>
Wall plugs	1	<i>Muurproppe</i>
Rough grounds (50 mm x 25 mm)	1	<i>Hegstroke (50 mm x 25 mm)</i>
Stripboard	1	<i>Strookplank</i>
Dimensions	1	<i>Afmetings</i>
Caption	2	<i>Byskrifte</i>
Scale	2	<i>Skaal</i>
Quarter round (22 mm x 22 mm)	1	<i>Kwartrond (22 mm x 22 mm)</i>
	(10)	

4.1.2 Vertical section to illustrate the construction at the bottom of strip-board panelling / *Vertikale snit om die afwerking by die onderpunt van strook muurpaneelwerk te toon*

Wall	1	<i>Muur</i>
Wall plugs	1	<i>Muurproppe</i>
Rough grounds (50 mm x 25 mm)	1	<i>Hegstrokke (50 mm x 25 mm)</i>
Stripboard	1	<i>Strookplank</i>
Skirting (100 mm x 22 mm)	1	<i>Vloerlys (100 mm x 22 mm)</i>
Caption	3	<i>Byskrifte</i>
Scale	1	<i>Skaal</i>
Quarter round	1	<i>Kwartrond</i>
	(10)	

4.2 4.2.1 Tongued and grooved boarding to illustrate the nails / *Twee tong-en-groefplanke om blinde bespykering te toon*

Two boards	1	<i>Tweeplanke</i>
Secret nails	1	<i>Blinde bespykering</i>
Caption	1	<i>Byskrifte</i>
Heading	1	<i>Opskrifte</i>
Hatching	1	<i>Arsering</i>
	(5)	

4.2.2 Joint between two plywood panels / *Voeg tussen twee laaghou tpanele*

Wall	1	<i>Muur</i>
Rough grounds	1	<i>Hegstrook</i>
Plywood	1	<i>Laaghouot</i>
Coverstrip	1	<i>Dekstrook</i>
Caption	1	<i>Byskrifte</i>
	(5)	

4.3 After the rafters have been fixed to the wall, and before you put on the corrugated sheeting, the space between the rafters is built up with blocks so that it is level with the purlins.

Nadat die kappe aan die muur bevestig is en voordat die dakbedekking in posisie geplaas word, word die gedeelte tussen die kapbene met steenwerk opgevul tot aan die bokant van die daklatte

(5)

- 4.4 ? To protect your clothes
 ? The industrial law expects it in the workshop
 ? To protect yourself of loose hanging clothes
- ? *Om jou klere te beskerm*
 ? *Fabriekswet vereis di in die werkswinkel.*
 ? *Om jouself te beskerm as gevolg van loshangende klere*

(5)
[40]

QUESTION 5 / VRAAG 5

Raking shores (Heading)	3	<i>Leunskoor (Opskrif)</i>
Wall-plate 228 x 76	2	<i>Muurplate</i>
Cleat 100 x 100	2	<i>Klos 100 x 100</i>
Needle 400 x 100 x 100	2	<i>Naald 400 x 100 x 100</i>
Raking shores	2	<i>Leunskoor</i>
Wrought iron hooks	2	<i>Muurhaak</i>
Cross branching 150 x 38	2	<i>Kruispanstukke 150 x 38</i>
Side bracing 228 x 38	2	<i>Syspanstukke 228 x 38</i>
Wedges	2	<i>Wigpaar</i>
Sole plate	2	<i>Voetplaat</i>
Concrete	2	<i>Beton</i>
Scale	2	<i>Skaal</i>
Linework	5	<i>Lynwerk</i>
Construction	10	<i>Konstruksie</i>

[40]

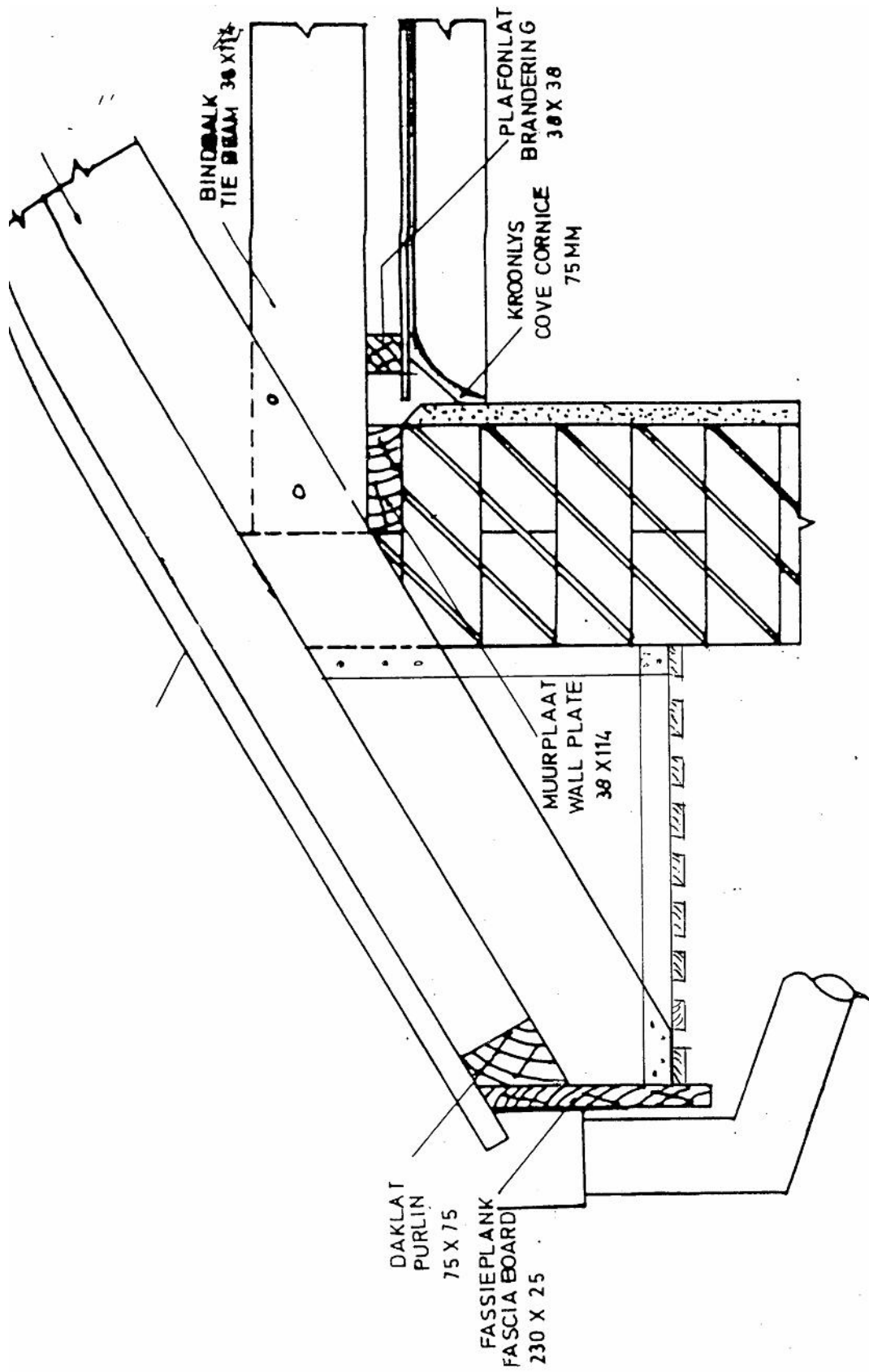
QUESTION 6 / VRAAG 6

6.1

6.2

Dakkap/Truss	Thickness	Width	Length	Amount	Subtotaal	Total	
<i>Beskrywing/ Description</i>	<i>Dikte</i>	<i>Breedte</i>	<i>Lengte</i>	<i>Aantal</i>	<i>Subtotal</i>	<i>Totaal</i>	
1. Rafter <i>Dakkapbeen</i>	38 mm	114 mm	4 400 mm	2	8,8 m		
2. Kingpost <i>Bind balk</i>	38 mm	114 mm	2 240 mm	1	2,24 m		
3. Struts <i>Stutte</i>	38 mm	114 mm	1 700 mm	2	3,4 m		
			1 200 mm	2	2,4 m		
			1 100 mm	2	2,2 m for	1 = 20 m	(5)
6.3 For 7 trusses / Vir 7 kappe 140 m							(5)
6.4 Fascia board <i>Fassieplank</i>	38 mm	228 mm	6 m	2	12 m	12 m	
Tilting fillits <i>Wilplat</i>	75 mm	75 mm	6 m	2	12 m	12 m	
Wall-plate <i>Muurplaat</i>	38 mm	114 mm	6 m	2	12 m	12 m	
Branding <i>Plafonplatte</i>	38 mm	38 mm	6 m	22	132 m	12 m 132 m + 144 m	(5)

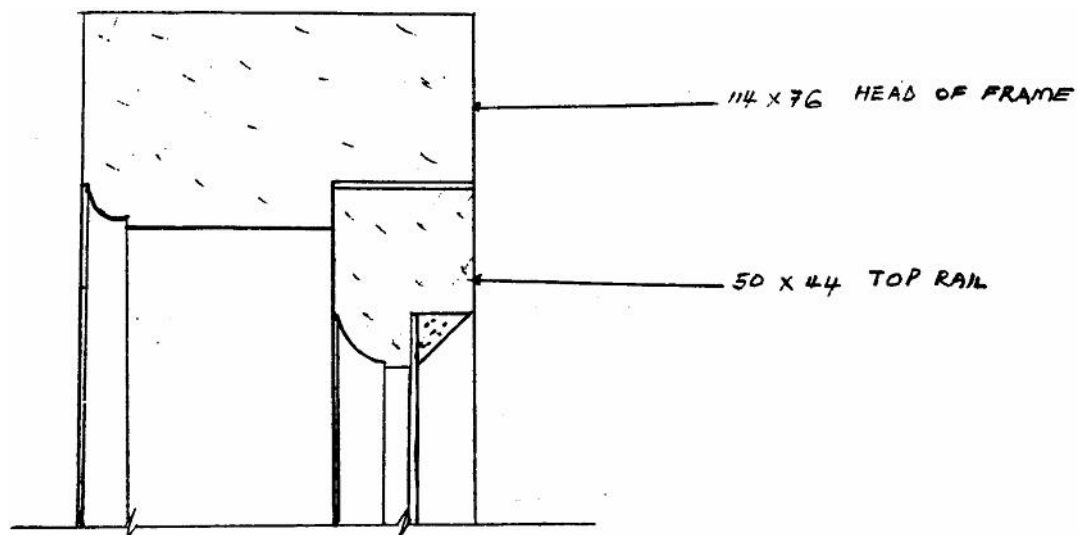
QUESTION 2 / VRAAG 2



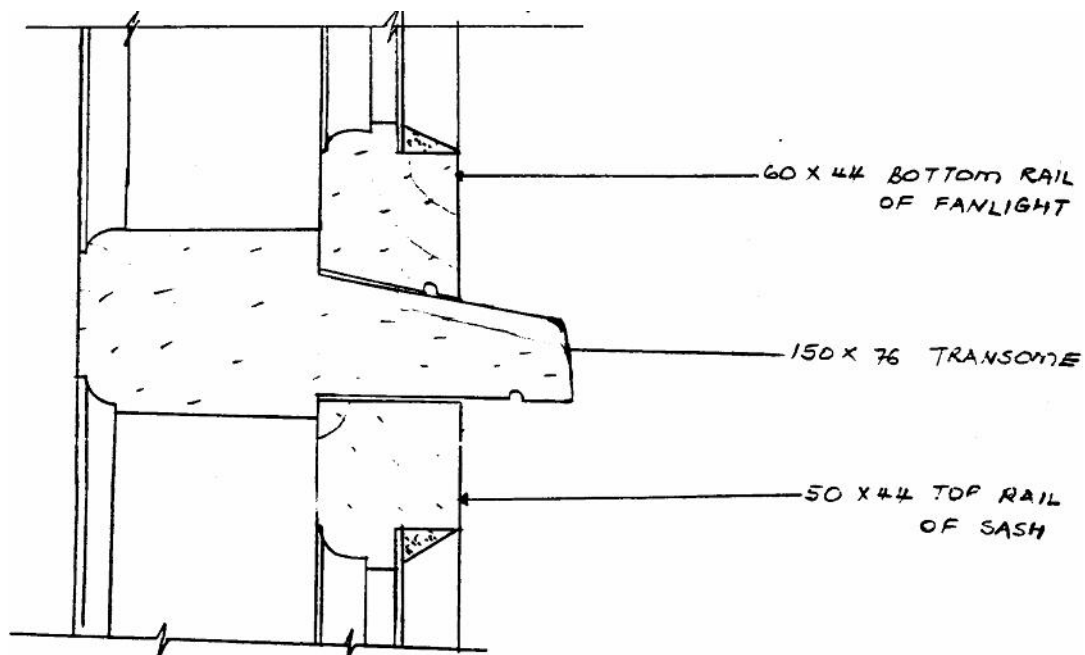
SCALE / SKAAL 1:5 (1)

QUESTION 3 / VRAAG 3

3.1 SECTION: HEAD OF FRAME & TOP RAIL OF FANLIGHT

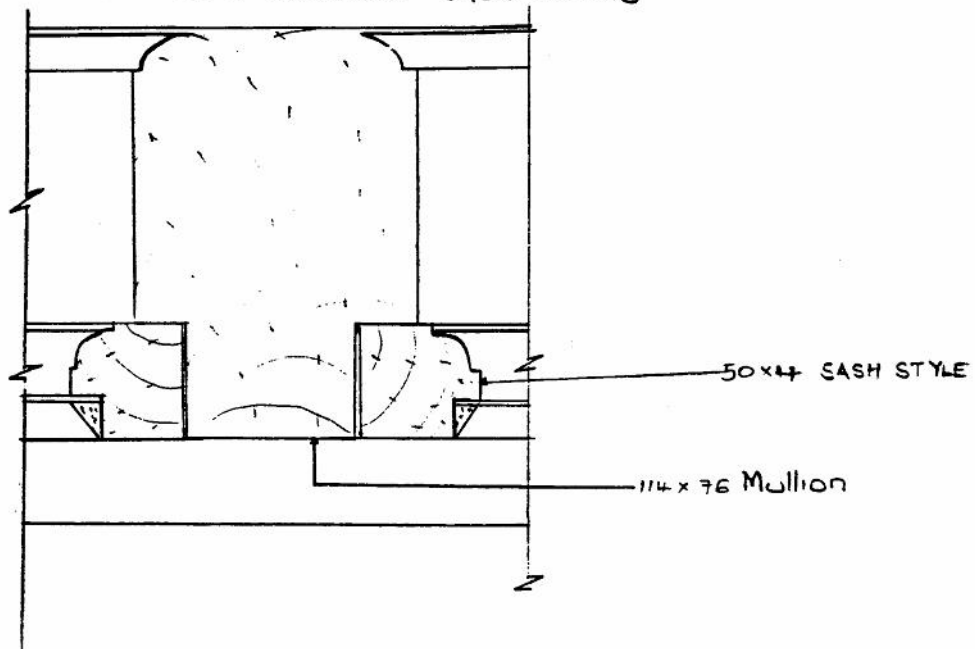


3.2 SECTION: FANLIGHT BOTTOM RAIL, TRANSOME & SASH TOP RAIL

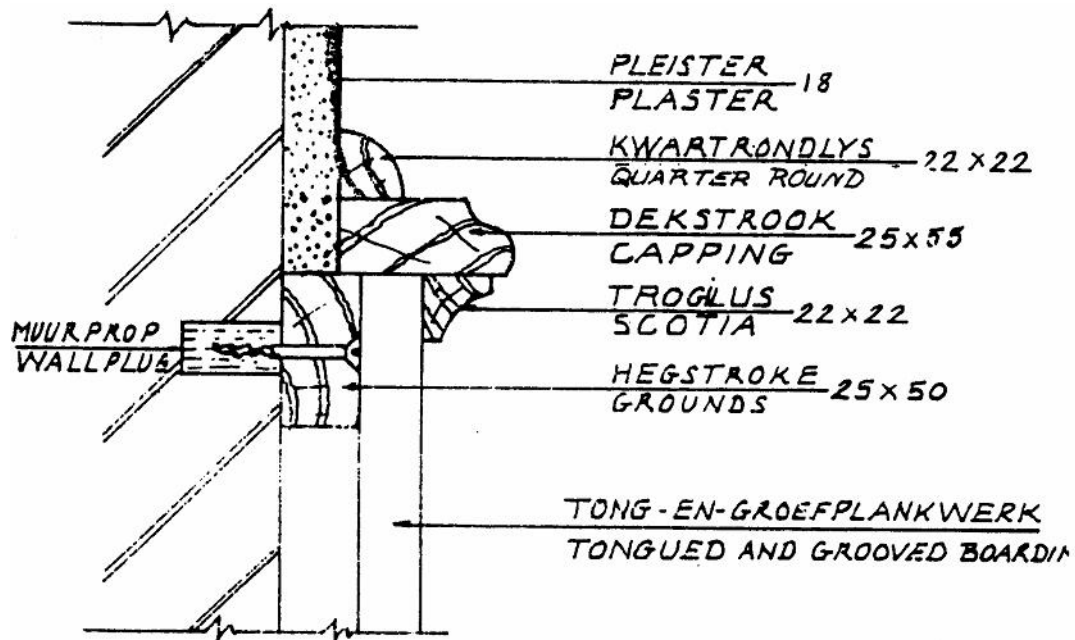


3.4

SECTION: MULLION & ADJACENT SASH STILES



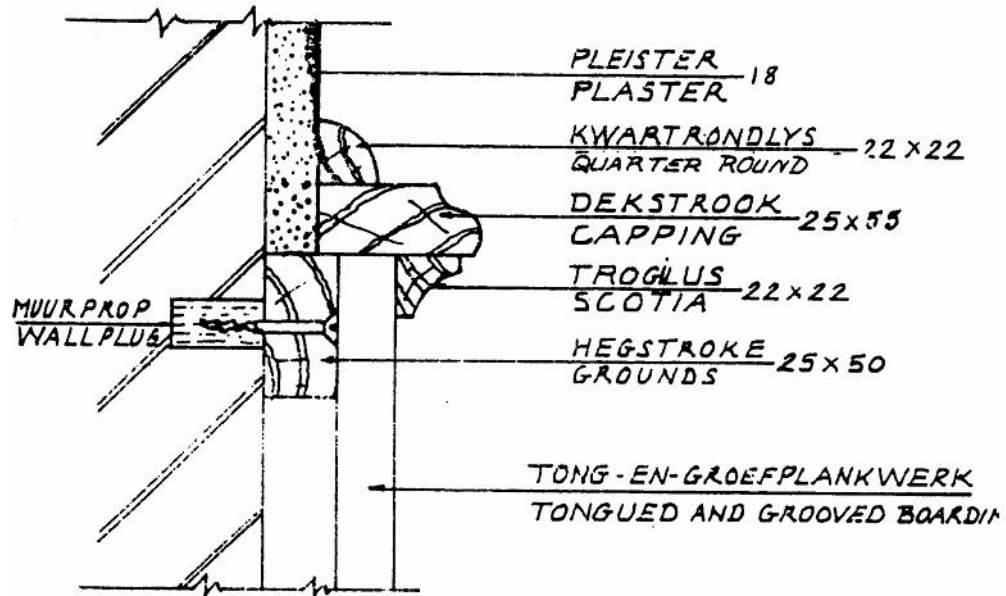
QUESTION 4 / VRAAG 4



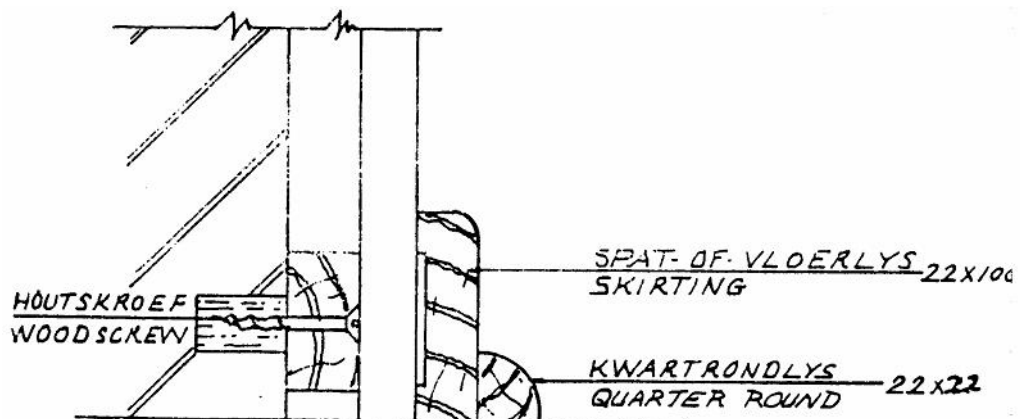
PANELLING DETAIL
BESONDERHEDE VAN PANEELWERK

SCALE 1:5
SKAAL 1:5

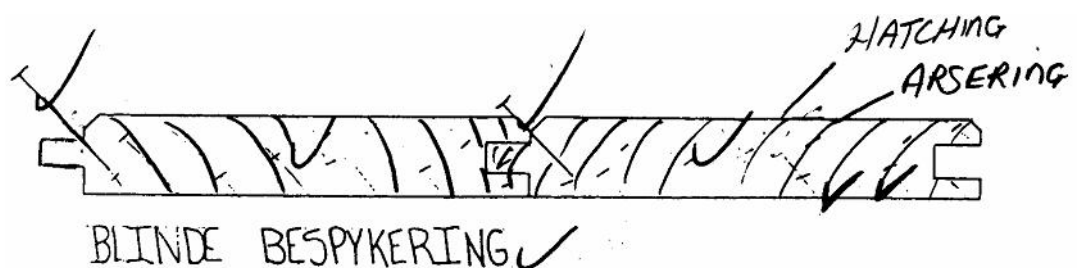
4.1 4.1.1



4.1.2



4.2



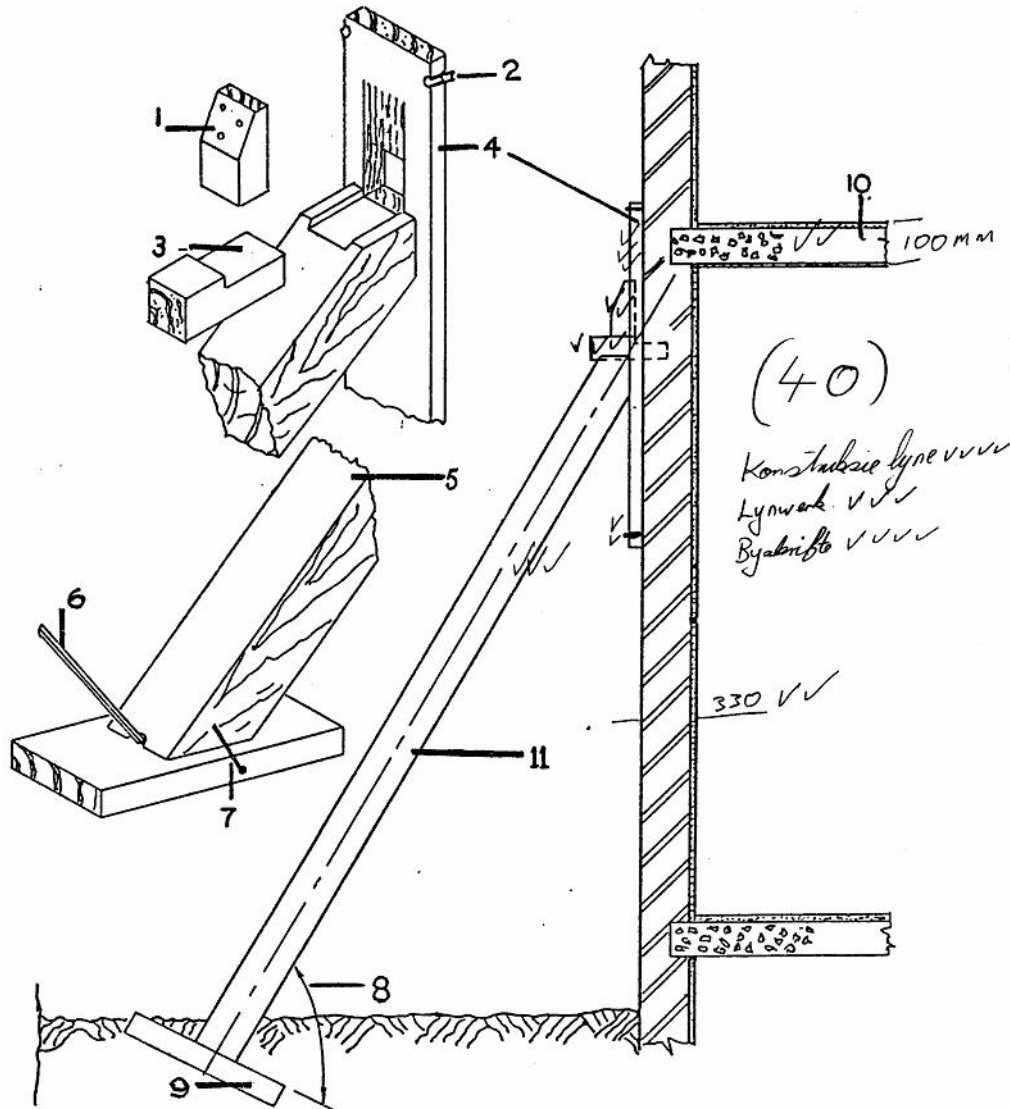
QUESTION 5 / VRAAG 5

DETAILS OF A RAKING SHORE
 BESONDERHEDE VAN DIE LEUNSKOOR

Scale 1:10
 Skaal 1:10

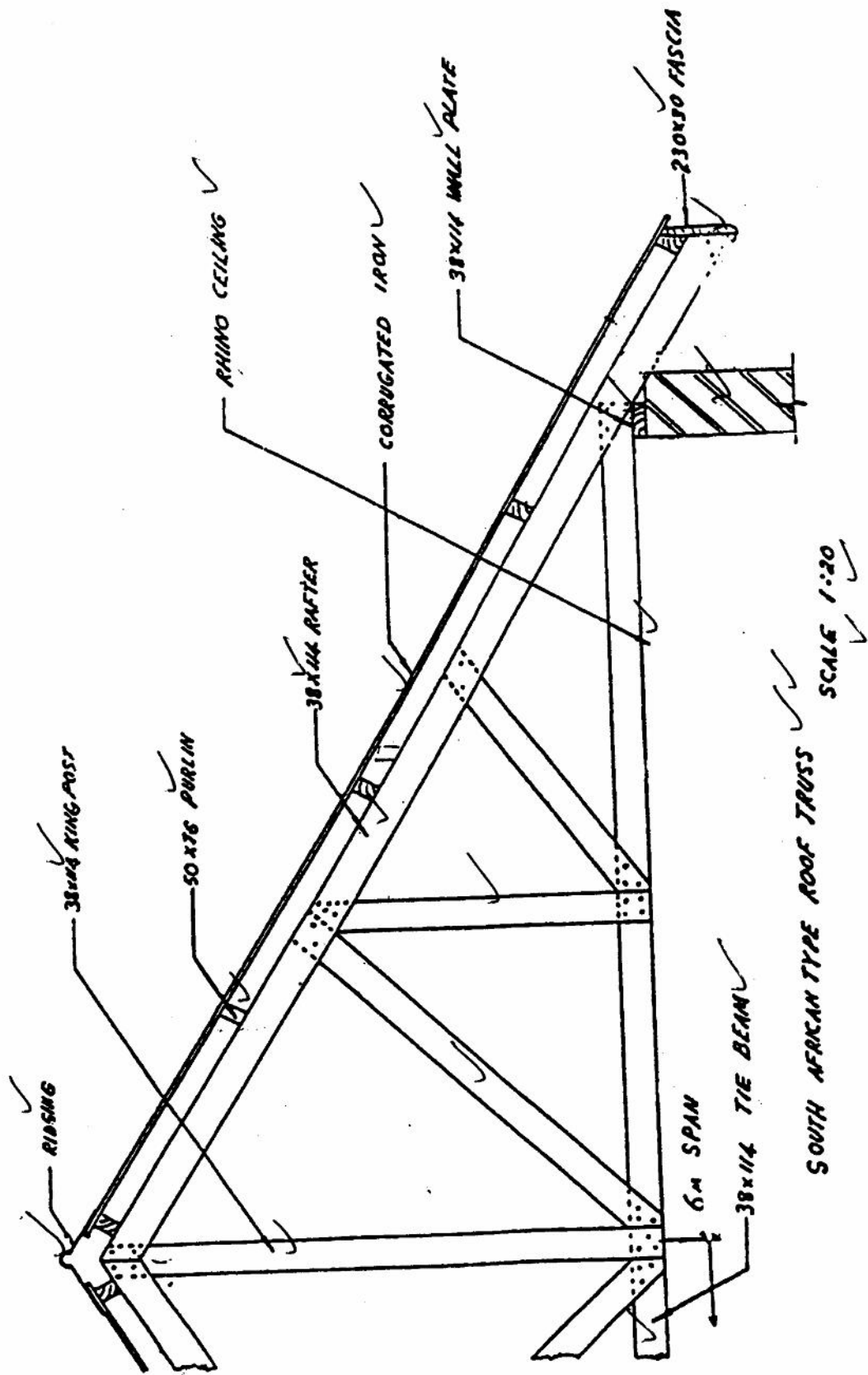
A SINGLE RAKING SHORE
 'N ENKEL LEUNSK OOR

Scale 1:10
 Skaal 1:10



- | | | | | |
|---|----------------------------------|--|----------------------------|---|
| 1. Cleat
Klos | 2. Wall hook
Muurhaak | 3. Needle
Naald | 4. Wall-plate
Muurplaat | 5. Raking shore
Leunskoor
150 x 150 |
| 6. Crowbar to tighten shore
Bevestig skoor met koevoet | 7. Dog
Grypklou | 8. Angle less than 90°
Hoek minder as 90° | | |
| 9. Sole plate
Voetplaat | 10. Concrete floor
Betonvloer | 11. Raking shore
Leunskoor
228 x 228 | | |

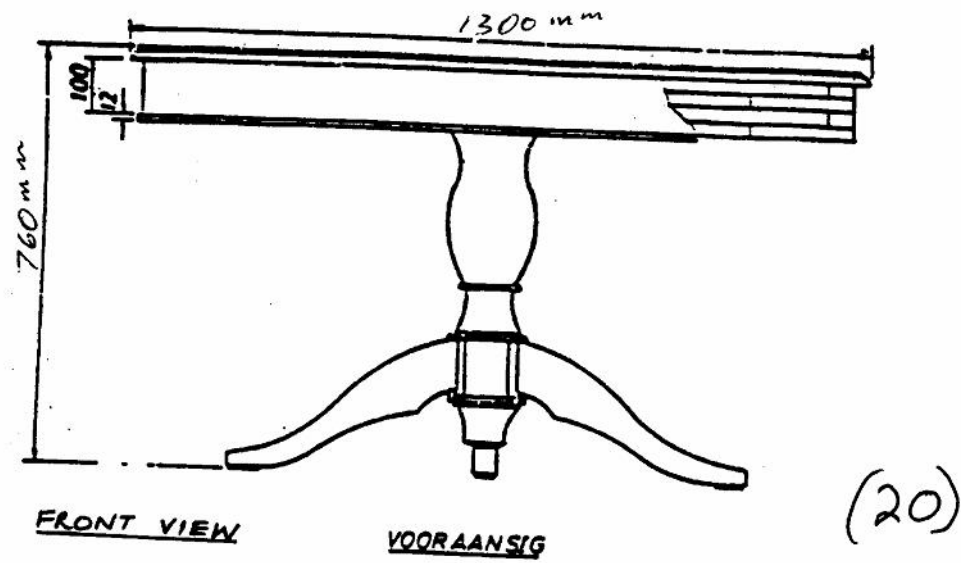
QUESTION 6 / VRAAG 6



(25)

QUESTION 7 / VRAAG 7

7.1



7.2 VERTICAL SECTION OF TOP / VERTIKALE SNIT VAN BLAD

