

**ISEBE LEMFUNDO LEMPUMA KOLONI  
EASTERN CAPE EDUCATION DEPARTMENT  
OOS-KAAP ONDERWYSDEPARTEMENT**

**NATIONAL SENIOR CERTIFICATE  
NASIONALE SENIOR SERTIFIKAAT**

**GRADE 11  
GRAAD 11**

**ENGINEERING GRAPHICS AND DESIGN P1  
INGENIEURSGRAFIKA EN -ONTWERP V1**

**NOVEMBER 2020  
MEMORANDUM**

**MARKS / PUNTE: 200**

**TIME / TYD: 3 hours / uur**

**This memorandum consists of 7 pages.  
Hierdie memorandum bestaan uit 7 bladsye.**

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**PAPER 1**  
QUESTION 1: ANALYTICAL MARKING GUIDELINE

<b>ANSWERS</b>		
1	BOTHA ARCHITECTS	1
2	DP 2020 - 04	1
3	TYRON	1
4	LINDO	1
5	2020-04-01	1
6	MRS. X. RUPPING	1
7	BIDET	1
8	ARCH / OPENING IN THE WALL	2
9	NOT TO SCALE	1
10	NO. THE WINDOW MUST HAVE TWO LINES INSTEAD OF ONE	2
11	MECHANICAL HATCHING OR WRONG HATCHING TYPE USED	2
12	BUILD IN CUPBOARD	2
13	WEST VIEW / WEST ELEVATION	2
14	900 mm	2
15	ANSWER BELOW	4
16	ANSWER BELOW	4
<b>TOTAL</b>		<b>28</b>

**VRAESTEL 1**  
VRAAG 1: ANALITIES NASIENRIGLYN

<b>ANTWOORDE</b>		
1	BOTHA ARGITEKTE	1
2	DP 2020 - 04	1
3	TYRON	1
4	LINDO	1
5	2020-04-01	1
6	MEV. X. RUPPING	1
7	BIDET	1
8	BOOG (OPENING) IN DIE MUUR	2
9	NIE VOLGENS SKAAL	1
10	NEE. DIE VENSTERS MOET TWEE LYNE HÊ IPV EEN	2
11	MEGANIESE OF VERKEERDE TIPE ARSERING IS GEBRUIK	2
12	INGEBOUDE KAS	2
13	WESAANSIG / WES ELEVASIE	2
14	900 mm	2
15	ANTWOORD ONDER	4
16	ANTWOORD ONDER	4
<b>TOTAL</b>		<b>28</b>

**QUESTION / VRAAG 15**

Toon alle berekeninge / Show all calculations

calculation: + / x	$2 (L + B)$ ✓	+ / x berekening
correct values	$2 (10 + 5,5)$	korrekte waardes
correct answer	$2 \times 15,5$ ✓	korrekte antwoord
correct unit	$= \underline{31 \text{ m}}$ ✓✓	korrekte eenheid

[4]

**QUESTION / VRAAG 16**

Toon alle berekeninge / Show all calculations

calculation (+)	$7.03$	berekening (+)
correct values	$2.48$ ✓	korrekte waardes
correct answer	$+ 5.95$	korrekte antwoord
correct unit (m)	$\underline{15.46 \text{ m}^2}$ ✓✓	korrekte eenheid (m)

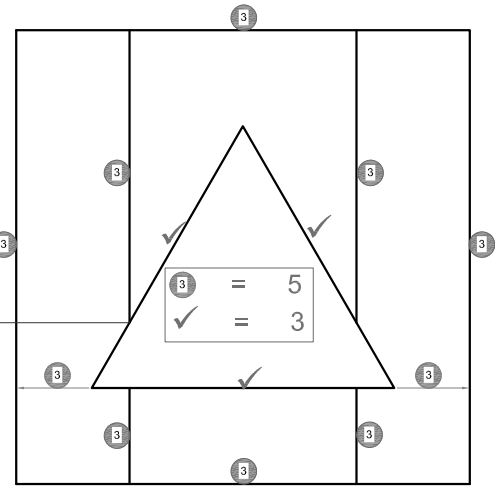
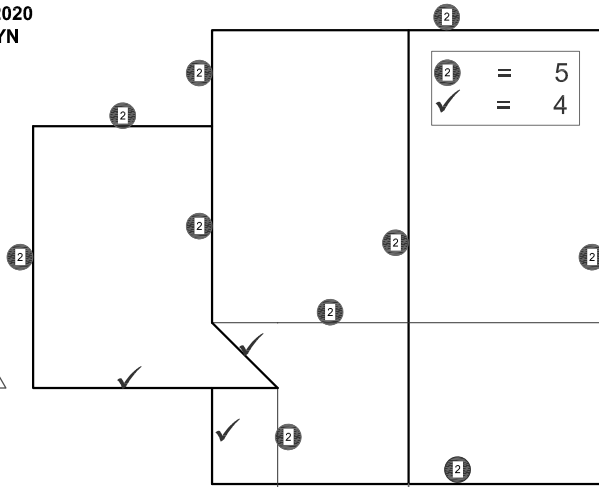
[4]

**PAPER 1 - QUESTION 2: INTERPENETRATION AND DEVELOPMENT**

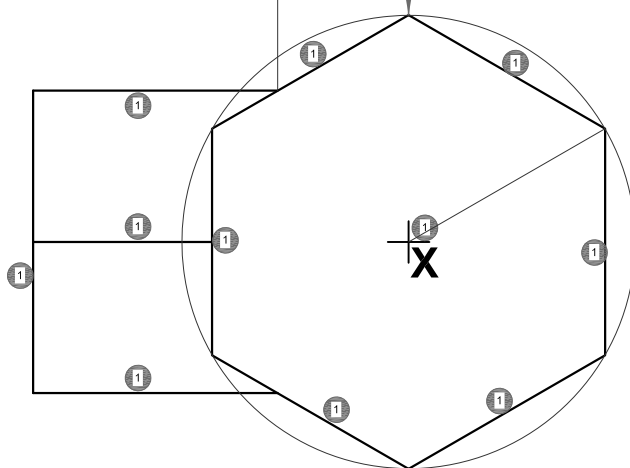
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MARKING GUIDELINE

**VRAESTEL 1 - VRAAG 2: INTERPENETRASIE EN ONTWIKKELING**

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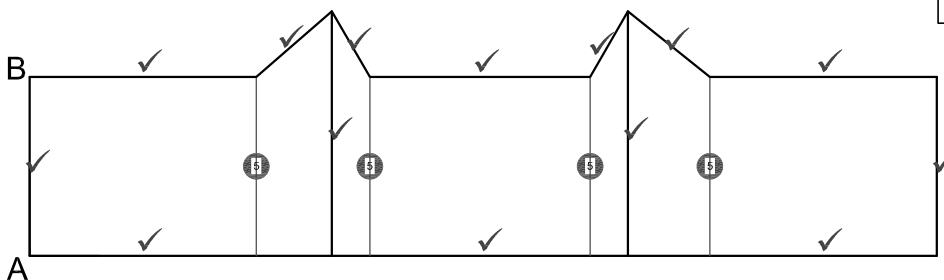
20mm



- Construction** ①
- correct placing
  - hexagon construction
- Konstruksie** ①
- korrekte plasing
  - seskant konstruksie

ASSESSERINGSKRITERIA		
1	BOAANSIG + KONSTRUKSIE	6
2	VOORAANSIG	9
3	LINKERAANSIG	8
4	ONTWIKKELING	16
<b>TOTAAL</b>		<b>39</b>

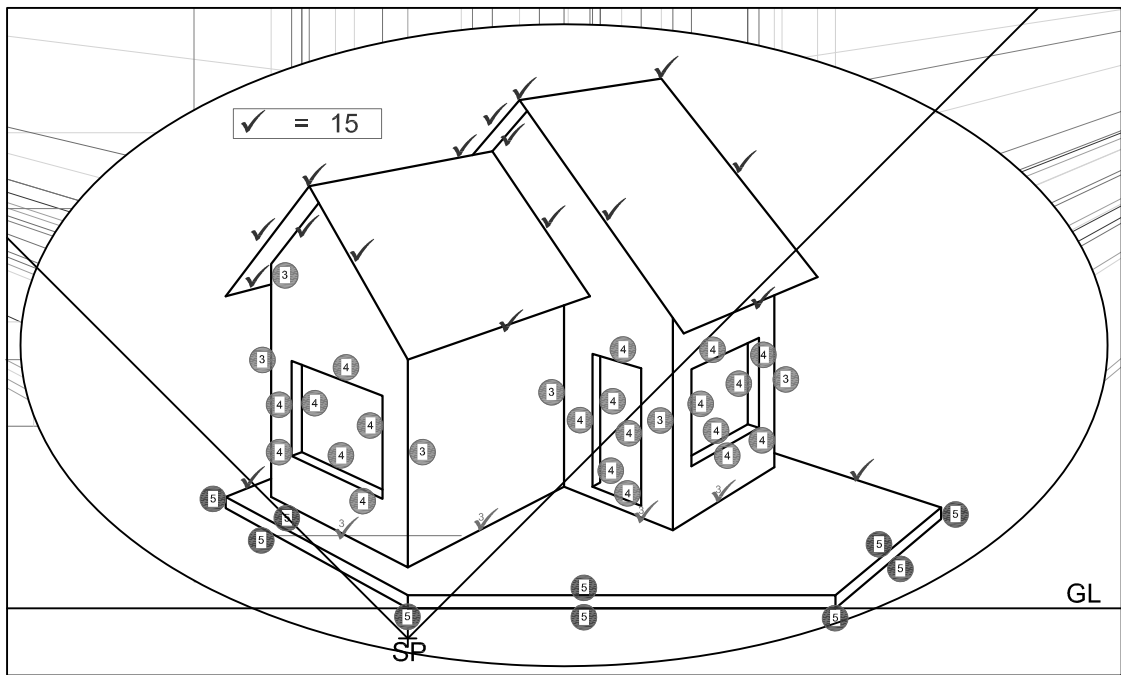
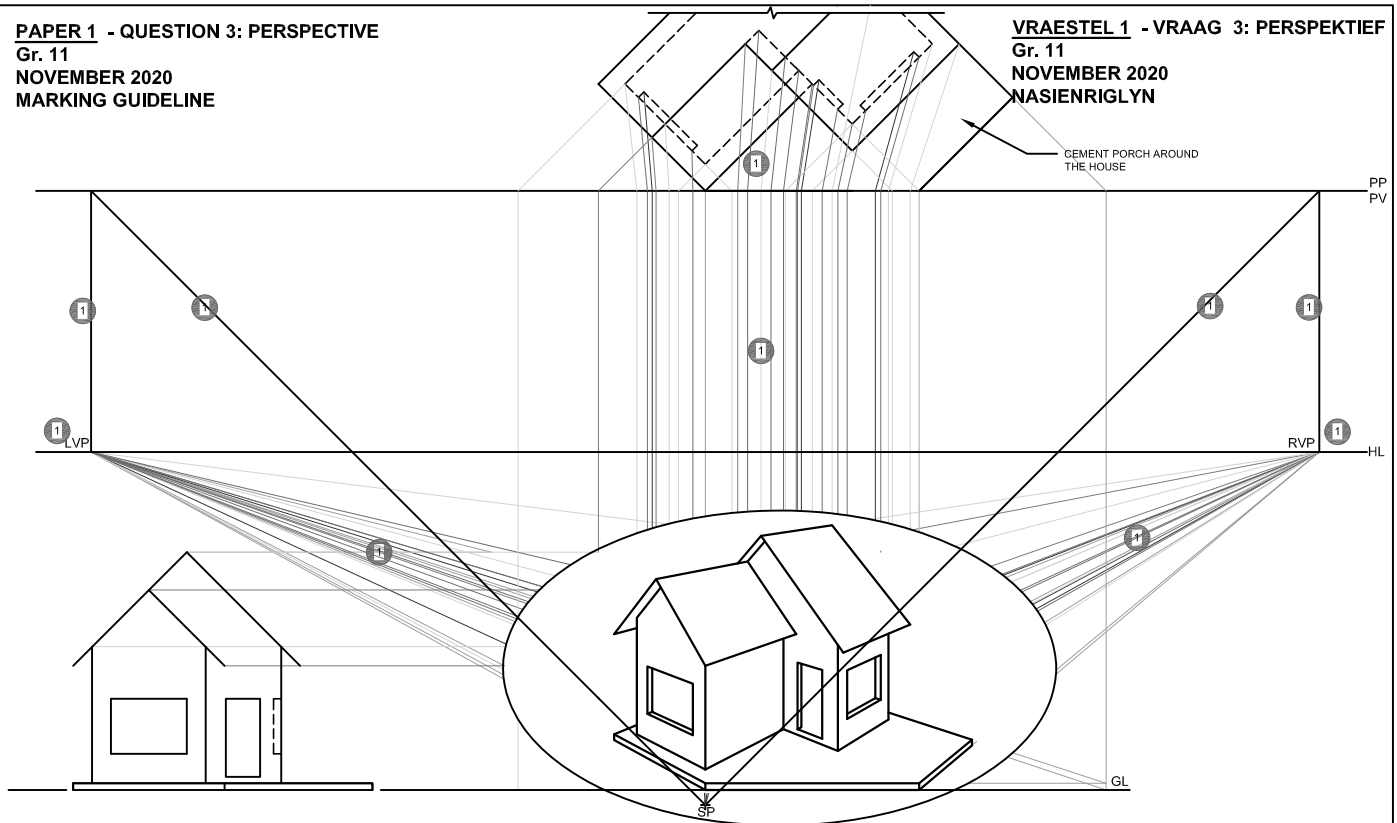
ASSESSMENT CRITERIA		
1	TOP VIEW + CONSTRUCTION	6
2	FRONT VIEW	9
3	LEFT VIEW	8
4	DEVELOPMENT	16
<b>TOTAL</b>		<b>39</b>



5 = 2  
✓ = 14

**PAPER 1 - QUESTION 3: PERSPECTIVE**  
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**VRAESTEL 1 - VRAAG 3: PERSPEKTIEF**  
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ASSESSMENT CRITERIA		
1	CONSTRUCTION + VP's	5
2	ROOF	15
3	WALLS	7
4	DOOR + WINDOWS	10
5	PORCH	7
<b>TOTAL</b>		<b>44</b>

ASSESSERINGSKRITERIA		
1	KONSTRUKSIE & VPte	5
2	DAK	15
3	MURE	7
4	DEUR + VENSTERS	10
5	STOEP	7
<b>TOTAAL</b>		<b>44</b>

**PAPER 1 - QUESTION 4: FLOOR PLAN**

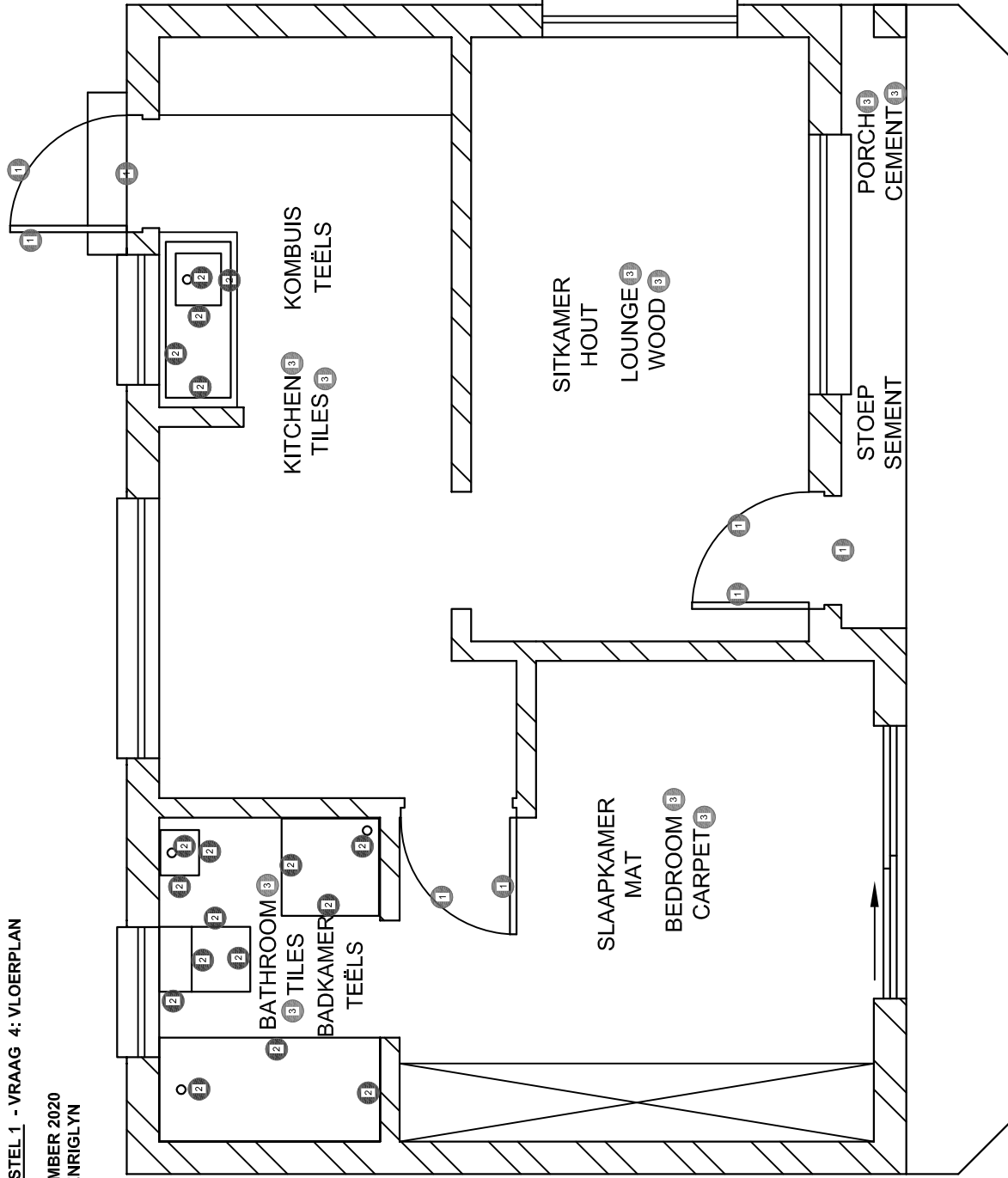
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**VRAESTEL 1 - VRAAG 4: VLOERPLAN**

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**Arsering:** Alles gearseer ✓4 ✓4 ✓4 ✓4  
Volgens SANS riglyne ✓4  
Siviele arsering is gebruik ✓4  
Moet instrumente gebruik ✓4

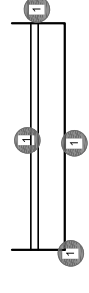
**Hatching:** All hatched ✓4 ✓4 ✓4 ✓4  
SANS compliant ✓4  
Civil hatching used ✓4  
Instruments must be used ✓4



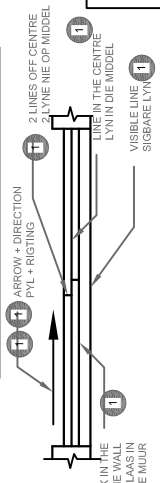
ASSESSMENT CRITERIA	
FLOOR PLAN	
1	DOORS + WINDOWS 17
2	FIXTURES 9
3	LABELS 5
4	HATCHING 5
<b>SUB TOTAL 36</b>	

ASSESSERINGSKRITERIA	
VLOERPLAN	
1	DEURE & VENSTERS 17
2	TOEBEHORE 9
3	BYSKRIFTE 5
4	ARSERING 5
<b>SUBTOTAAL 36</b>	

5 X VENSTERS / WINDOWS



1 X SKUIFDEUR / SLIDING DOOR

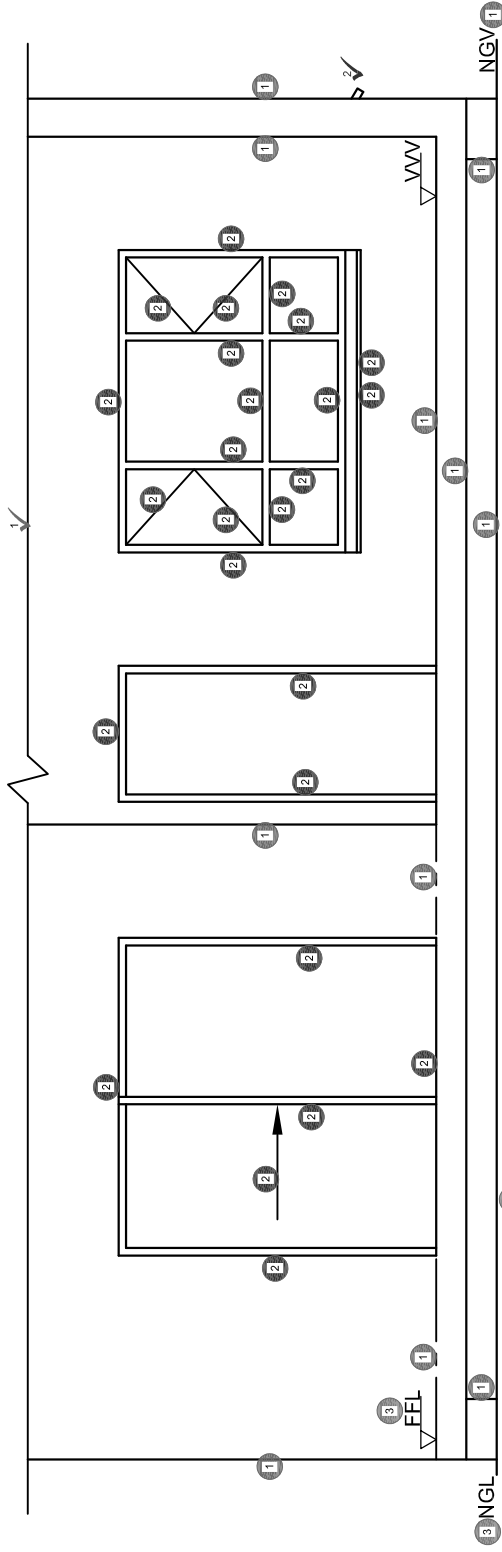


**VLOERPLAN**  
SKAAL 1 : 50

**FLOOR PLAN**  
SCALE 1 : 50

PAPER 1 - QUESTION 4: ELEVATION  
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 MARKING GUIDELINE

VRAESTEL 1 - VRAAG 4: ELEVASIE  
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**3 SOUTH ELEVATION**  
 SCALE 1 : 50

**1 SUID ELEVASIE**  
 SKAAL 1 : 50

ASSESSMENT CRITERIA	
SOUTH ELEVATION	
1	WALLS + STEPS + FFL + BREAK LINE
2	DOOR + WINDOWS
3	LABELS
<b>SUB TOTAL</b>	
<b>23</b>	

ASSESSERINGSKRITERIA	
SUID ELEVASIE	
1	MURE + TRAPPE + VVV + BREEKLYN
2	DEURE + VENSTERS
3	BYSKRIFTE
<b>SUBTOTAAL</b>	
<b>23</b>	

**PAPER 1 - QUESTION 4: DETAILED SECTION**

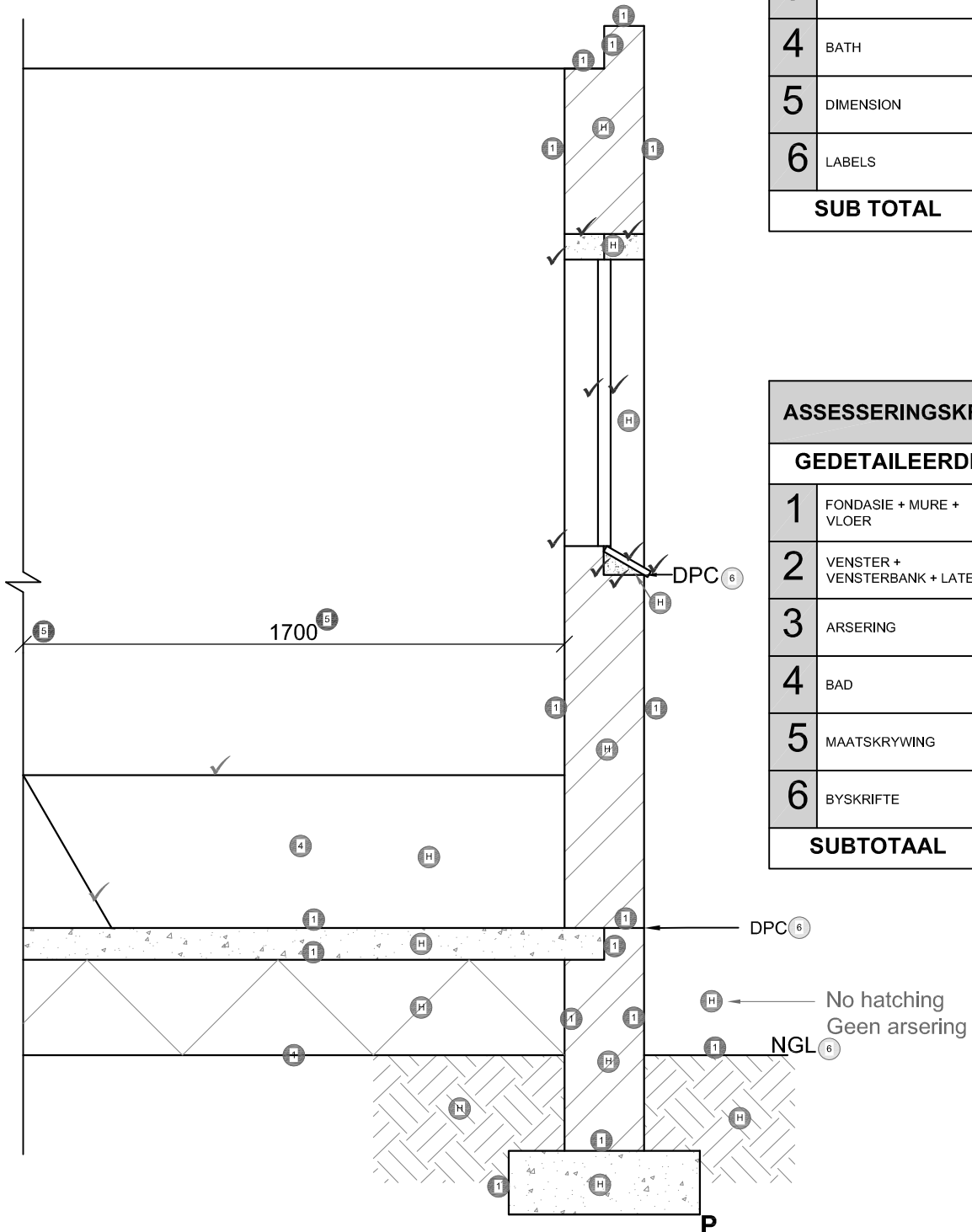
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**VRAESTEL 1 - VRAAG 4: GEDETAILEERDE SNIT**

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ASSESSMENT CRITERIA		
DETAILED SECTION		
1	FOUNDATIONS + WALLS + SLAB	8 1/2
2	WINDOW + SILL + LINTEL	10
3	HATCHING	6 1/2
4	BATH	2 1/2
5	DIMENSION	1
6	LABELS	1 1/2
<b>SUB TOTAL</b>		<b>30</b>

ASSESSERINGSKRITERIA		
GEDETAILEERDE SNIT		
1	FONDASIE + MURE + VLOER	8 1/2
2	VENSTER + VENSTERBANK + LATEI	10
3	ARSERING	6 1/2
4	BAD	2 1/2
5	MAATSKRYWING	1
6	BYSKRIFTE	1 1/2
<b>SUBTOTAAL</b>		<b>30</b>



**GEDETAILEERDE SNIT A : A**  
**SKAAL 1 : 20**

**DETAILED SECTION ON A : A**  
**SCALE 1 : 20**