

ENGINEERING GRAPHICS AND DESIGN

INGENIEURSGRAFIKA EN -ONTWERP

PAPER 1

VRAESTEL 1

MEMORANDUM

GR 12

SEPTEMBER 2014

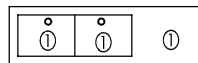
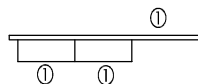
This memorandum consists of 7 pages.

Hierdie memorandum bestaan uit 7 bladsye.

PAPER 1 QUESTION 1
GR 12 SEPTEMBER 2014

VRAESTEL 1 VRAAG 1
GR 12 SEPTEMBER 2014

ANSWERS			
FOUNDATION	1	10	10
BRANDERING	1	7	
DAMP PROOF COURSE	1	5	
SCREED	1	9	
DOWNPIPE	1	3	
RAFTER	1	6	
LINTEL	1	4	
FASCIA BOARD	1	2	
WALL PLATE	1	8	
BATTEN	1	1	
2	NEW EN SUITE		1
3	2013 - 140		1
4	SECTIONAL VIEW		1
5	BIC		1
6	600 mm		1
7	2690 mm		1
8	RED		1
9			4
Show all the calculations for the following three questions			
10	$(9050 \times 2) + (12650 \times 2)$ $= 18,1 + 25,3$ $= 43,4$ meters		2
11	$(3000 \times 4018) + (3000 \times 4478)$ $= 12,05 + 13,43$ $= 25,48$ m ²		4
12	$22,5 \div (400 \times 400)$ $= 22,5 \div 0,16$ $= 141$ tiles		4
TOTAL			31



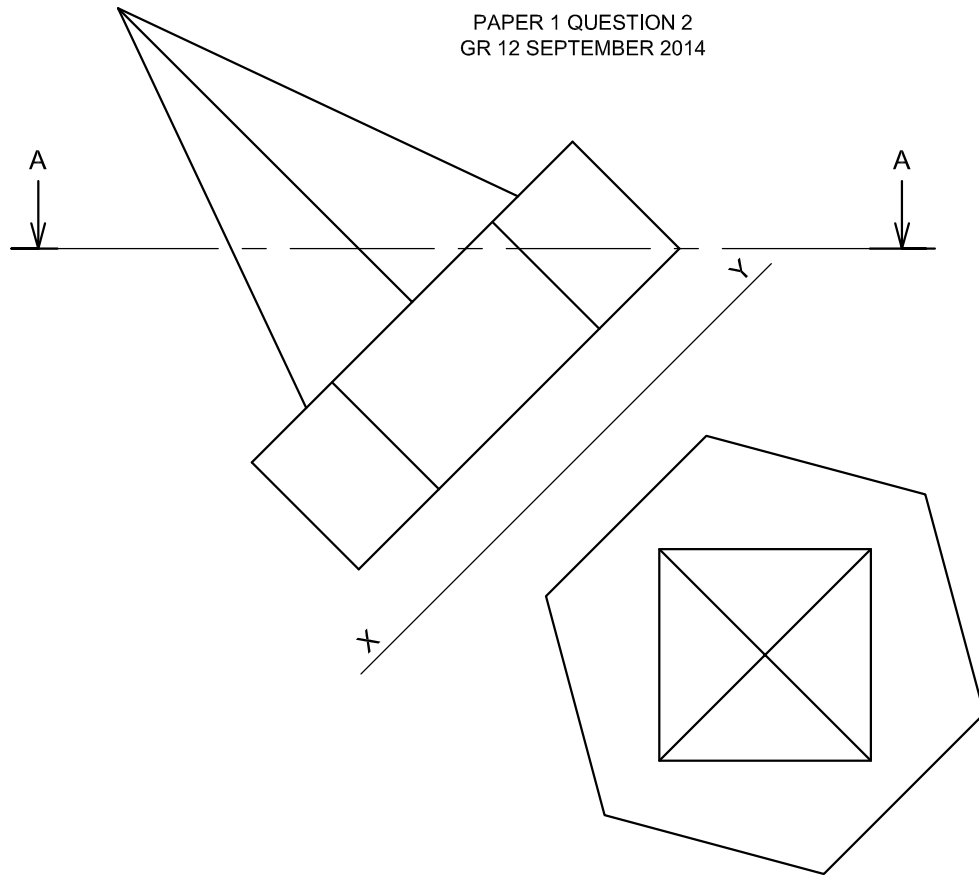
FREEHAND
VRYHAND ①①

ANTWOORDE			
FONDASIE	1	10	10
PLAFONLAT	1	7	
VOGDIGTE LAAG	1	5	
VLAKLAAG	1	9	
AFVOERPYP	1	3	
DAKSPAR	1	6	
LATEI	1	4	
GEUTPLANK	1	2	
MUURPLAAT	1	8	
KAPLATTE	1	1	
2	NUWE ENSUITE		1
3	2013 - 140		1
4	DEURSNEE AANSIG		1
5	IGK		1
6	600 mm		1
7	2690 mm		1
8	ROOI		1
9			4
Toon alle bewerkings vir die volgende drie vrae			
10	$(9050 \times 2) + (12650 \times 2)$ $= 18,1 + 25,3$ $= 43,4$ meter		2
11	$(3000 \times 4018) + (3000 \times 4478)$ $= 12,05 + 13,43$ $= 25,48$ m ²		4
12	$22,5 \div (400 \times 400)$ $= 22,5 \div 0,16$ $= 141$ teëls		4
TOTAAL			31

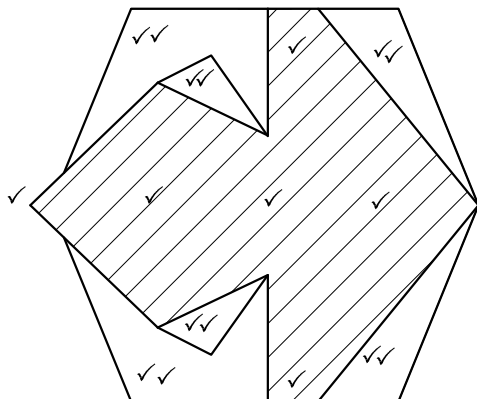
MEMORANDUM

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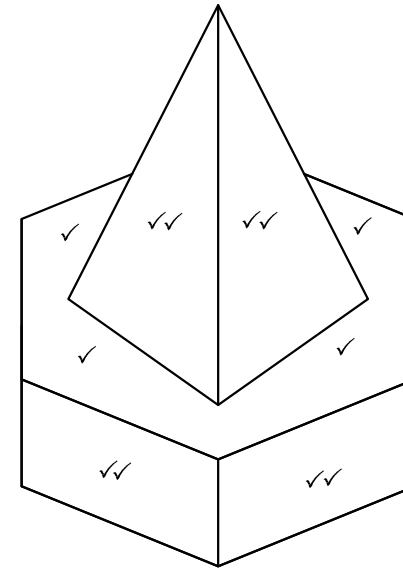
PAPER 1 QUESTION 2
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X₁



X₂



VRAESTEL 1 VRAAG 2
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ASSESSMENT CRITERIA	
Sectional top view	18
Left view	12
TOTAL	30

Y₁

ASSESSERINGSKRITERIA	
Deursnit boansig	18
Linkeraansig	12
TOTAAL	30

Y₂

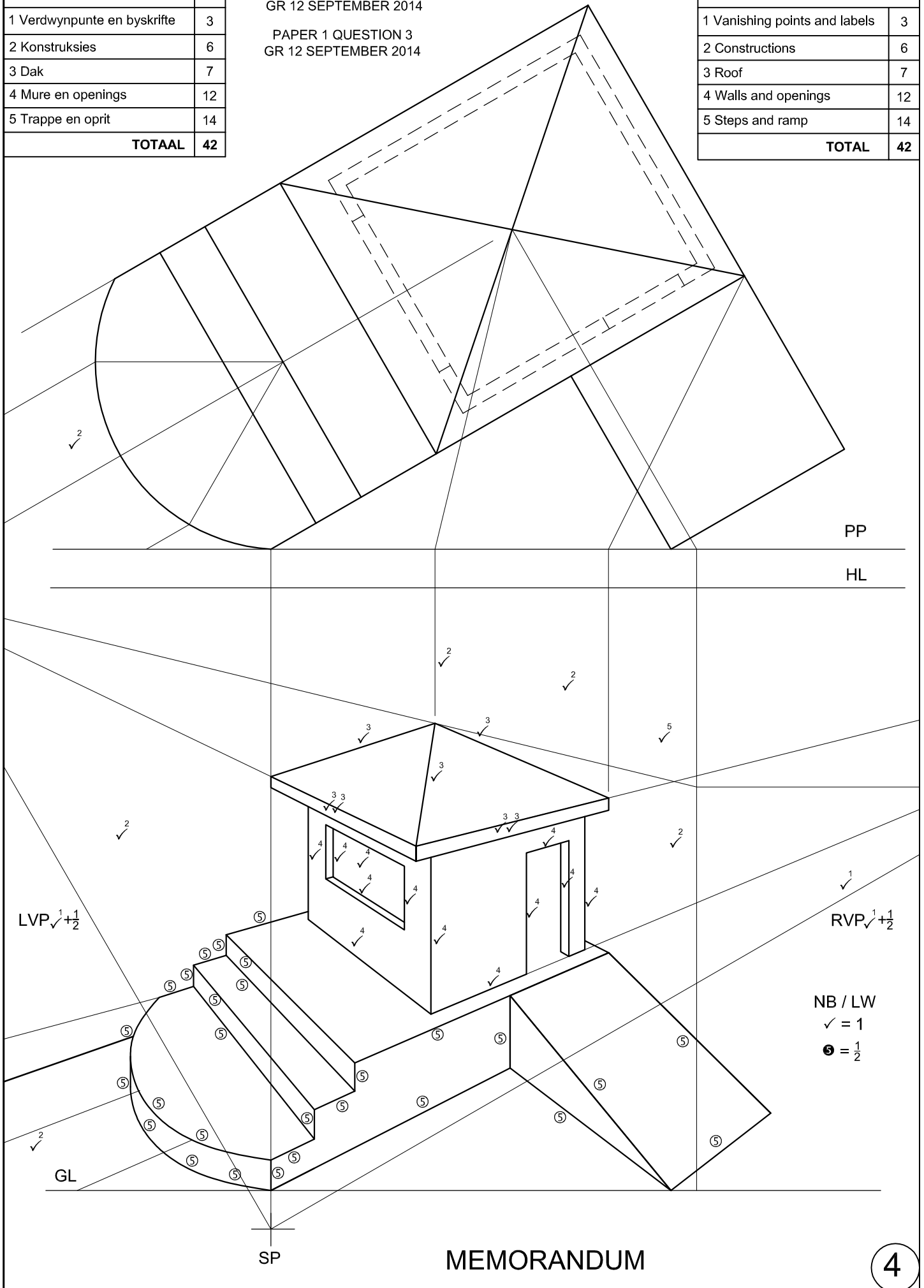
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ASSESSERINGSKRITERIA	
1 Verdwynpunte en byskrifte	3
2 Konstruksies	6
3 Dak	7
4 Mure en openings	12
5 Trappe en oprit	14
TOTAAL	42

VRAESTEL 1 VRAAG 3
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PAPER 1 QUESTION 3
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ASSESSMENT CRITERIA	
1 Vanishing points and labels	3
2 Constructions	6
3 Roof	7
4 Walls and openings	12
5 Steps and ramp	14
TOTAL	42



PP

HL

LVP $\checkmark^1 + \checkmark^1 + \checkmark^2$

RVP $\checkmark^1 + \checkmark^1 + \checkmark^2$

NB / LW

$\checkmark = 1$

$\textcircled{5} = \frac{1}{2}$

GL

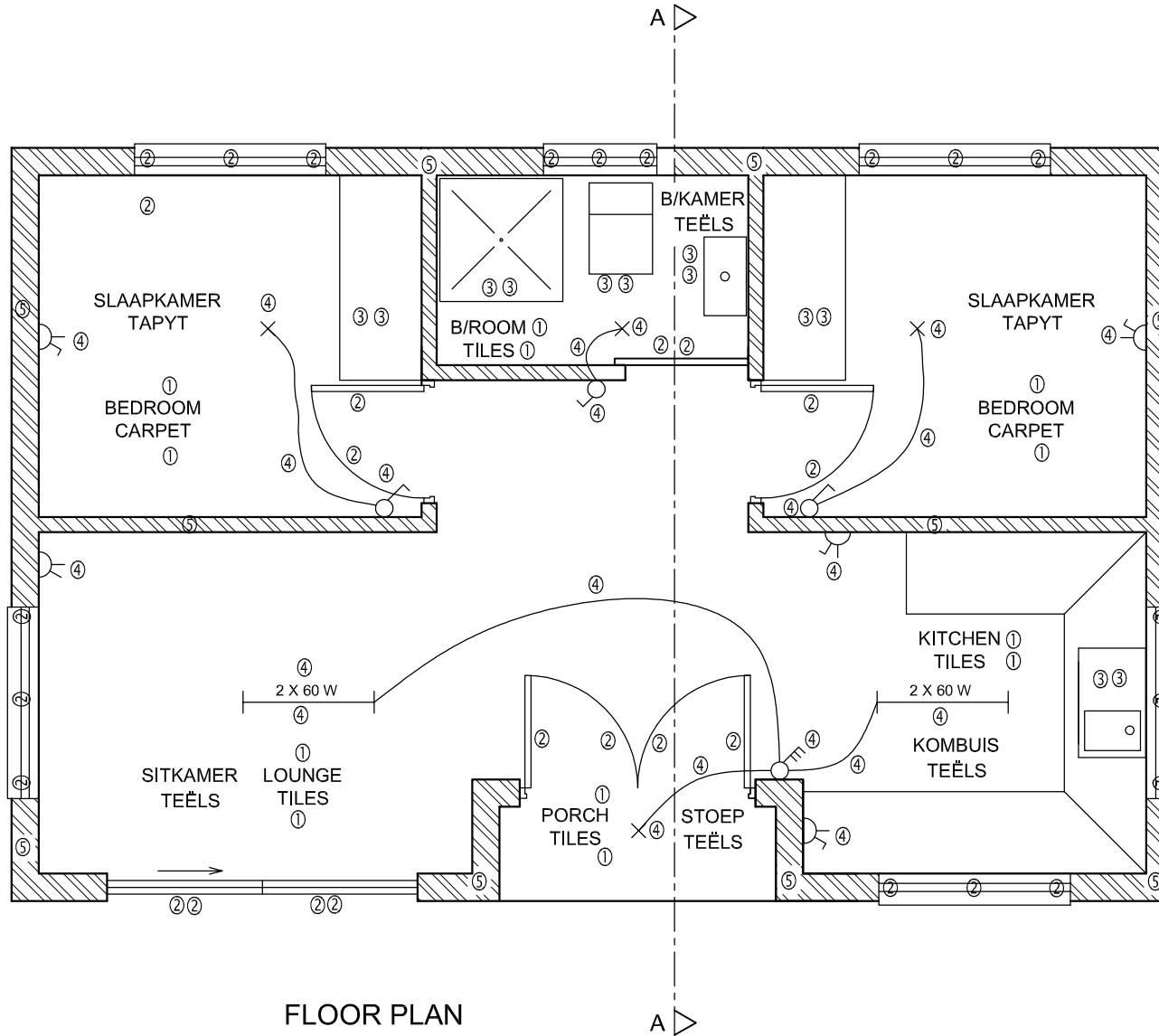
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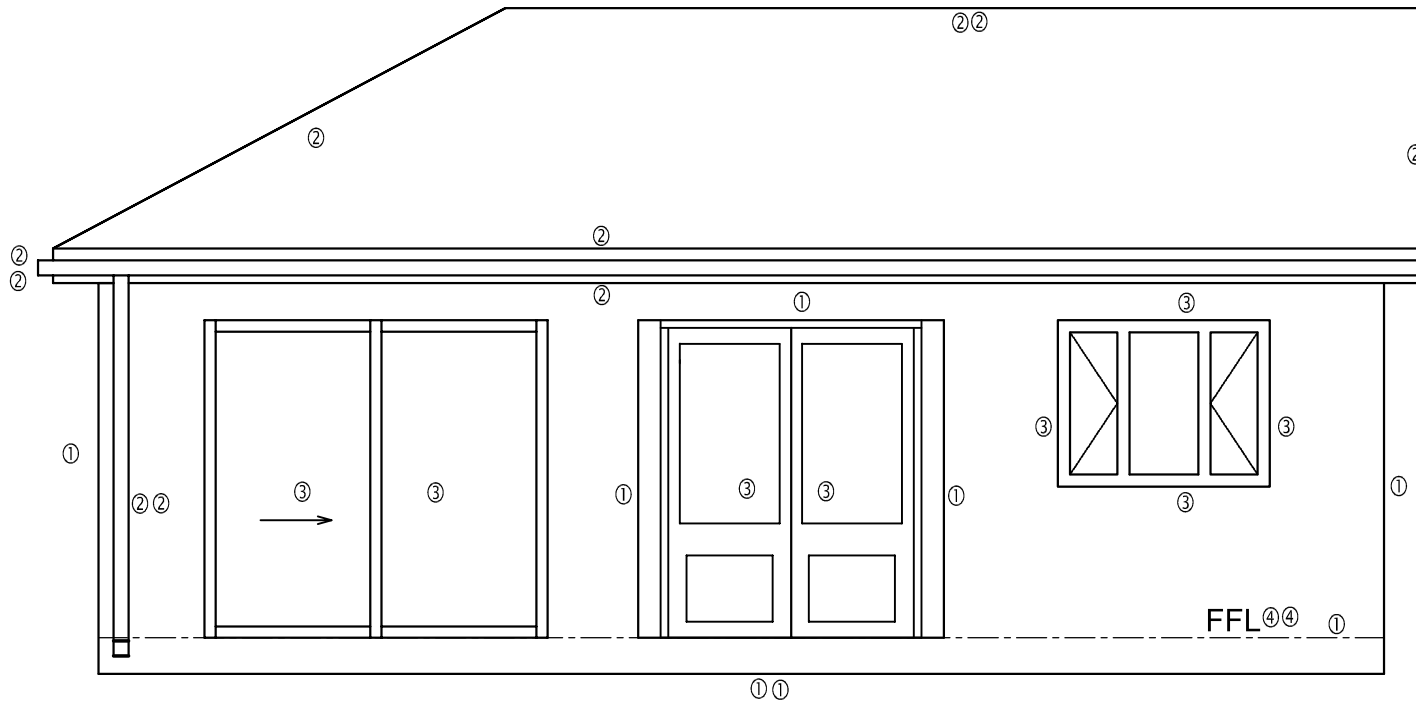
FLOOR PLAN

MEMORANDUM

ASSESSMENT CRITERIA	
FLOOR PLAN	
1 LABELS	6
2 WINDOWS + DOORS	16
3 FIXTURES	6
4 ELECTRICAL	11
5 HATCHING	5
SUB TOTAL	44
ASSESERINGSKRITERIA	
VLOERPLAN	
1 BYSKRIFTE	6
2 VENSTERS + DEURE	16
3 TOEBEHORE	6
4 ELEKTRIES	11
5 ARSERING	5
SUBTOTAAL	44

PAPER 1 QUESTION 4
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VRAESTEL 1 VRAAG 4
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SOUTH ELEVATION
④④

SOUTH ELEVATION	
1 WALLS + FFL	4
2 ROOF + FASCIA + RWDP	5
3 WINDOW + DOORS	4
5 LABELS	2
SUB TOTAL	15
SUIDAANSIG	
1 MURE + VVL	4
2 DAK + FASSIEBORD + RWAP	5
3 VENSTER + DEURE	4
5 BYSKRIFTE	2
SUBTOTAAL	15

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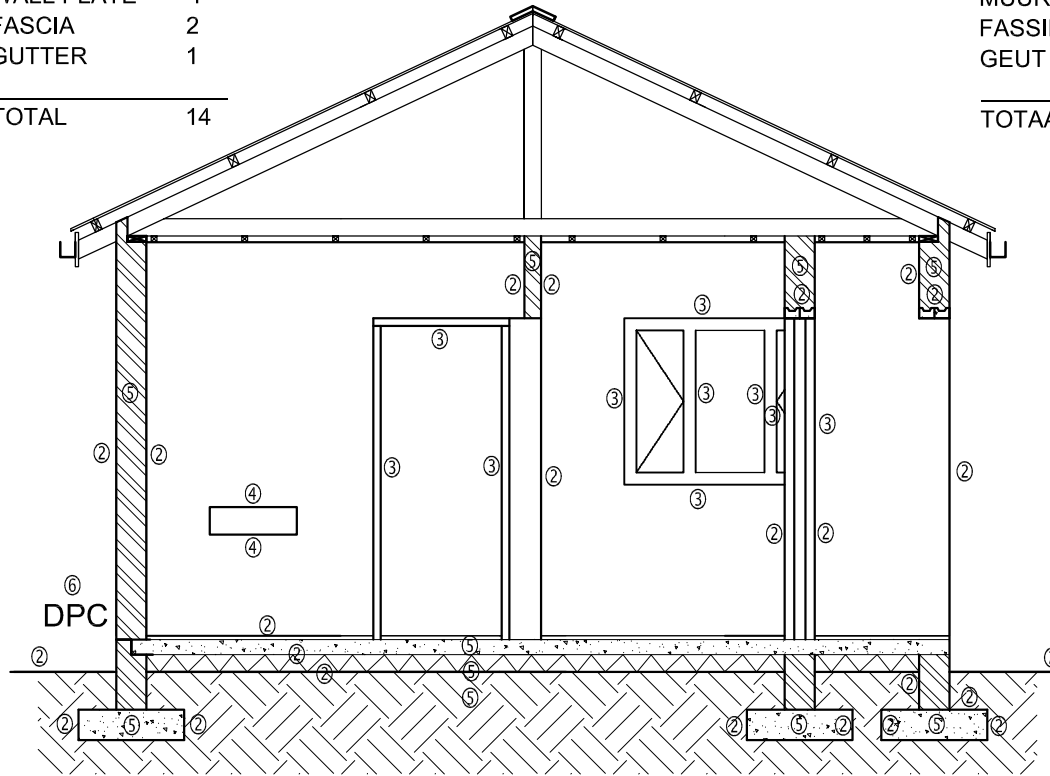
ROOF:

COVERING	2
ROOF CAP	1
PURLINS	2
TRUSSES	2
BRANDERING	2
CEILING	1
WALL PLATE	1
FASCIA	2
GUTTER	1
<hr/>	
TOTAL	14

DAK:

DAKBEDEKKING	2
KAPPING	1
DAKLATTE	2
DAKKAPPE	2
PLAFONLATTE	2
PLAFON	2
MUURPLAAT	2
FASSIEBORD	1
GEUT	1
<hr/>	
TOTAAL	14

VRAESTEL 1 VRAAG 4
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SECTION AA
SNIT AA

SECTIONAL ELEVATION	
1 ROOF + CEILING	14
2 WALLS + FLOOR + FOUNDATION	12
3 WINDOW + DOORS	5
4 BASIN	1
5 HATCHING	5
6 LABELS	1
SUB TOTAL	38
TOTAL	97
SNITAANSIG	
1 DAK + PLAFON	14
2 MURE + VLOER + FONDASIE	12
3 VENSTER + DEURE	5
4 WASBAK	1
5 ARSERING	5
6 BYSKRIFTE	1
SUBTOTAAL	38
TOTAAL	97

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