



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NASIONALE SENIOR SERTIFIKAAT

GRAAD 12

INGENIEURSGRAFIKA EN -ONTWERP V1

NOVEMBER 2010

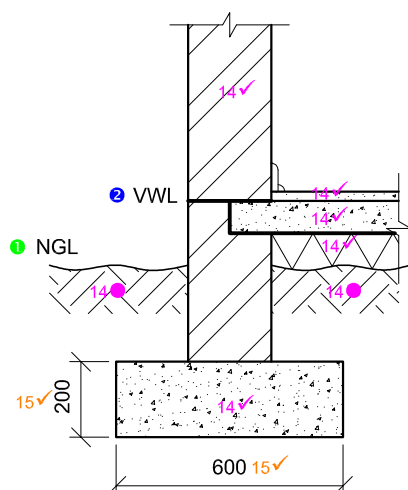
MEMORANDUM

PUNTE: 100

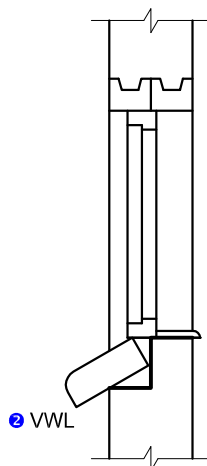
Hierdie memorandum bestaan uit 5 bladsye.



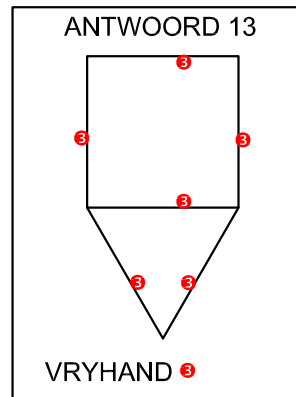
ANTWOORDE 1, 2, 14 & 15



ANTWOORD 2



ANTWOORD 13

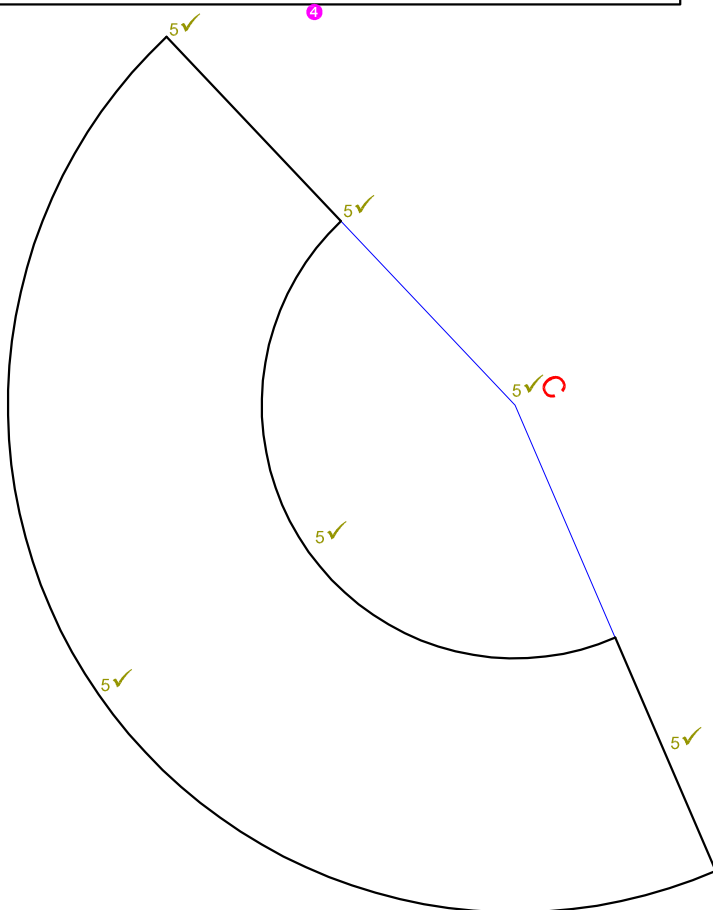
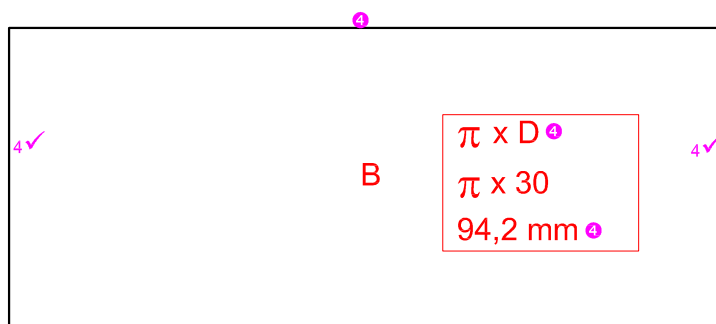
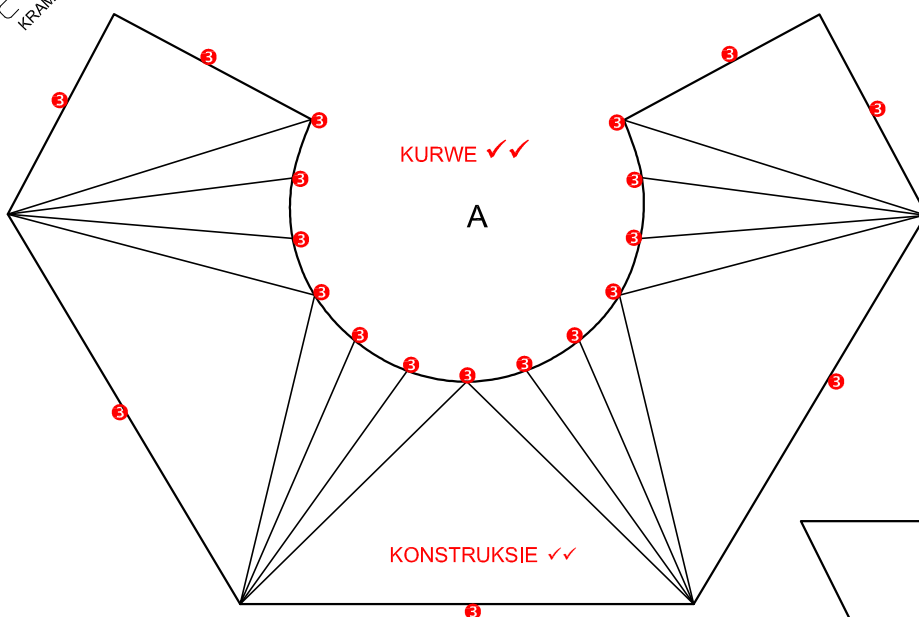


ANTWOORDE		
1		$\frac{1}{2}$
2		1
3	A. SPAR/DAKSPAR	1
	B. SPYKERPLAAT	1
	C. BINDBALK	1
	D. MUURPLAAT	1
4	TEËLS	1
5	LATEI	1
6	OM DIE GEWIG BO DIE VENSTER TE DRA.	1
7	OM TE WYS DIE MUUR GAAN AAN.	1
8	SPOUMUUR/HOL MUUR	1
9	VIR GESTREMDE MENSE	1
10	3	1
11	ND6/6 & ND9/12	2
12	$5.766 \times 5.036 = 29.0376 \text{ m}^2$ ① $2.124 \times 2.124 = 4.5114 \text{ m}^2$ ① $4.5114 / 2 = 2.2557 \text{ m}^2$ ① $29.0376 - 2.2557$ ① = 26.7819 ✓ m² ✓	4
13		$\frac{1}{32}$
14		6
15		2

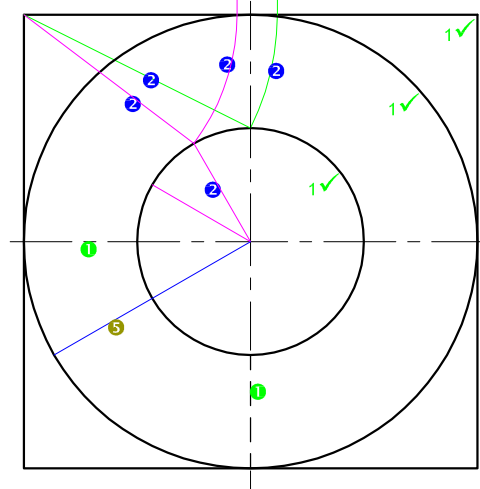
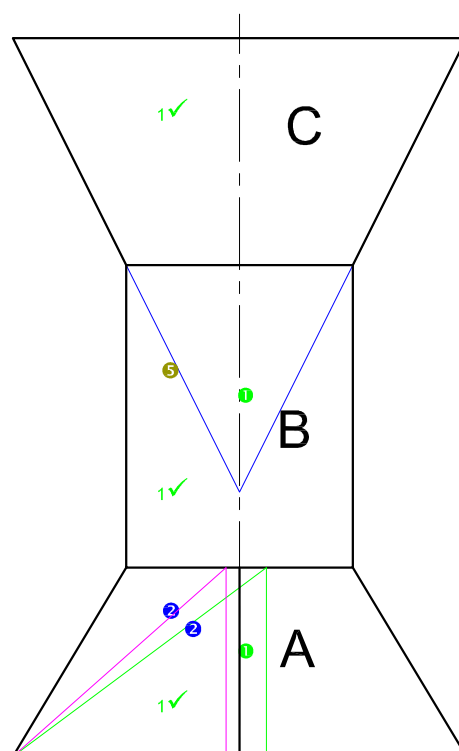
TOTAAL: 30

VRAESTEL 1 VRAAG 1
 GRAAD 12
 NOVEMBER 2010
 MEMORANDUM

KRAM

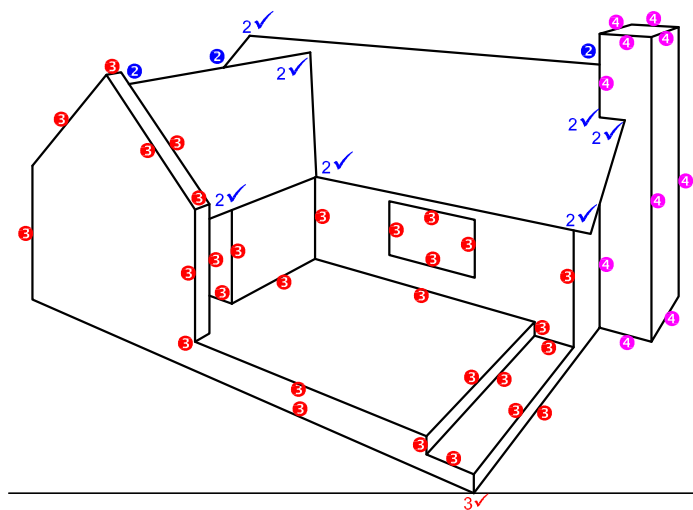
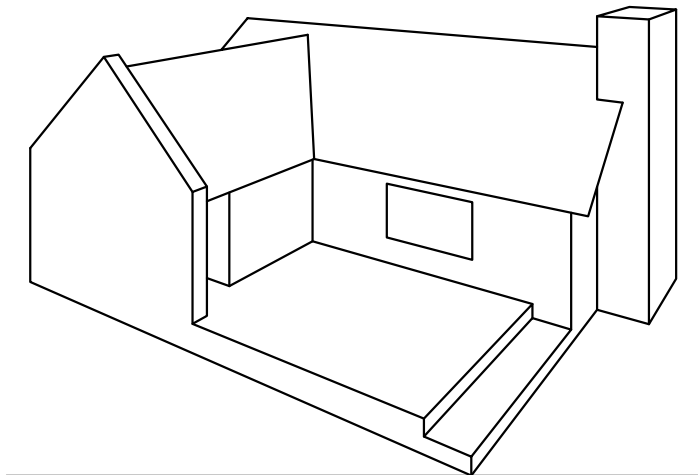
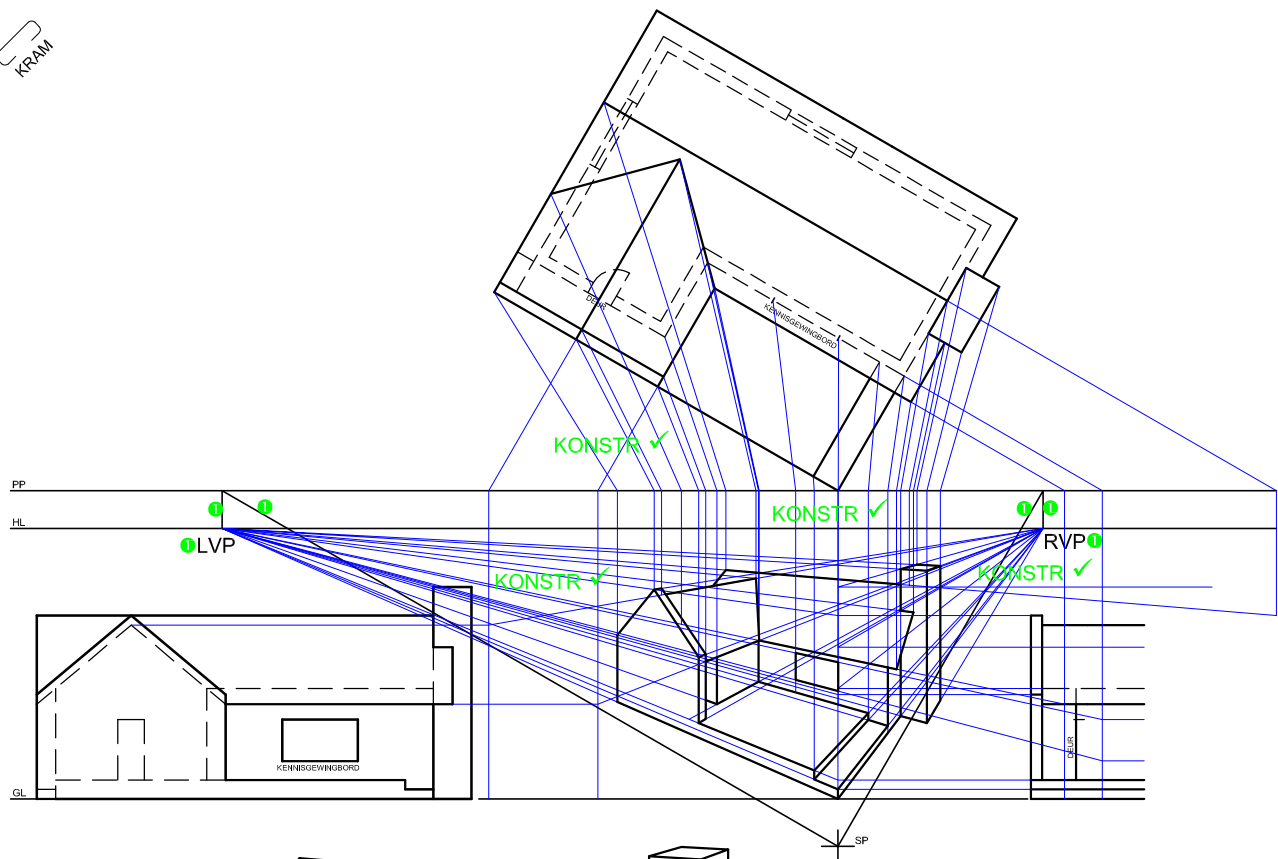


ASSESSERINGSKRITERIA	
1. GEGEE	8
2. WARE LENGTES	4
3. ONTWIKKELING A	14
4. ONTWIKKELING B	4
5. ONTWIKKELING C	7
TOTAAL	37

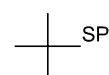


VRAESTEL 1 VRAAG 2
 GRAAD 12
 NOVEMBER 2010
 MEMORANDUM

KRAM



ASSESSERINGSKRITERIA	
1. KONSTRUKSIE + VP'e	7
2. DAK	8½
3. MURE + VENSTER	15½
4. SKOORSTEEN	5
TOTAAL	36

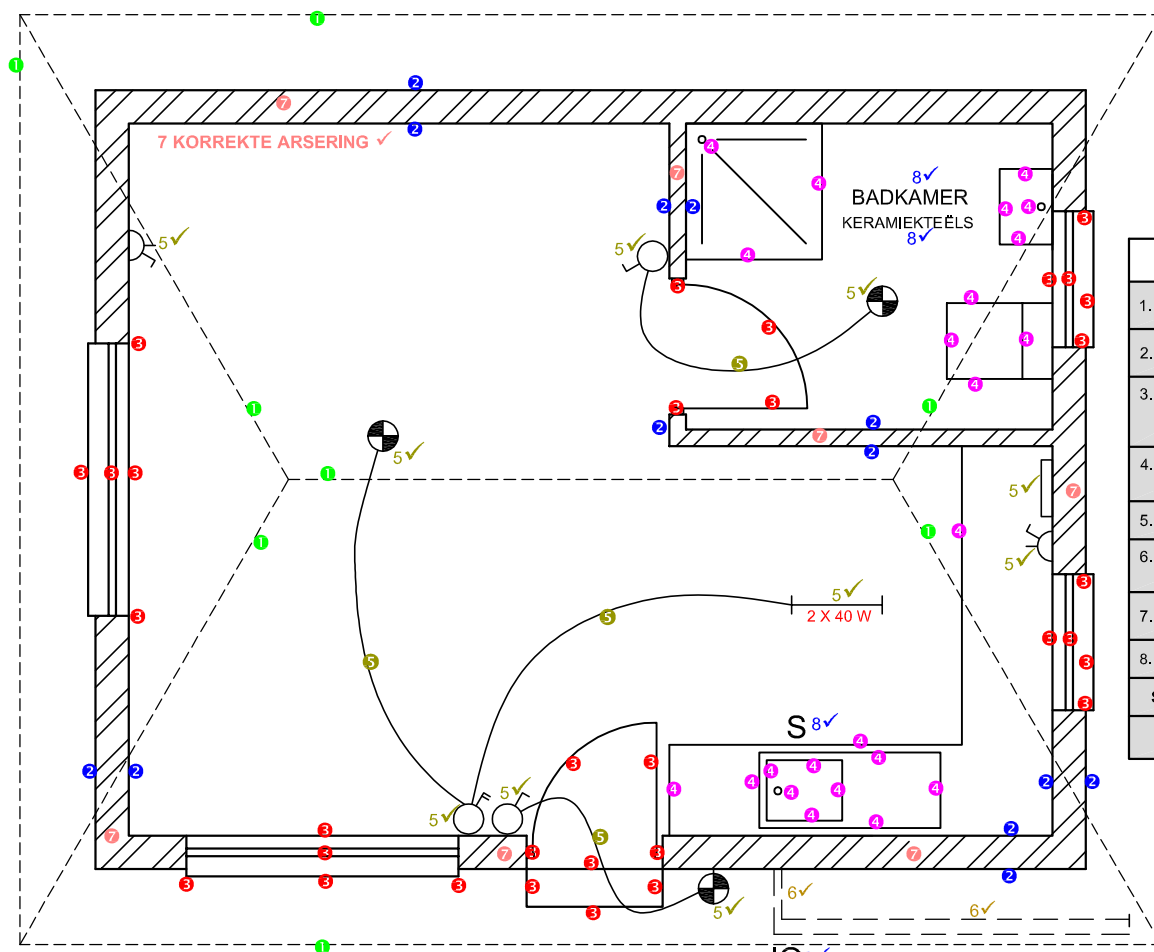
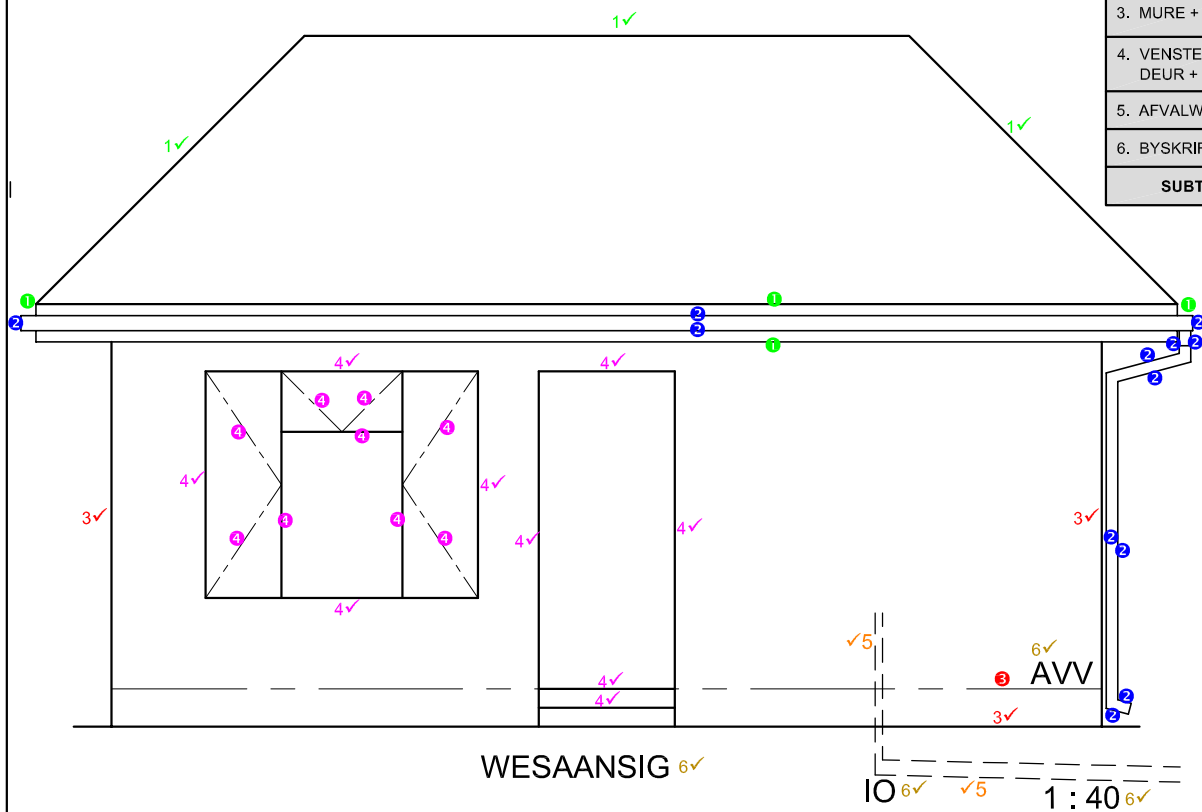


VRAESTEL 1 VRAAG 3
GRAAD 12
NOVEMBER 2010
MEMORANDUM

KRAM

WESAANSIG

1. DAK + FASSIE	5
2. GEUT + RWAP	6
3. MURE + VVV	3½
4. VENSTER + DEUR + TRAP	13½
5. AFVALWATER	2
6. BYSKRIFTE	4
SUBTOTAAL	34

**VLOERPLAN**

1. DAK	4½
2. MURE	6½
3. VENSTERS + DEUR + TRAP	16
4. KOMBUIS + BADKAMER	11½
5. ELEKTRIES	12
6. AFVALWATER	2
7. ARSERING	4½
8. BYSKRIFTE	6
SUBTOTAAL	63
TOTAAL	97

VRAESTEL 1 VRAAG 4
 GRAAD 12
 NOVEMBER 2010
 MEMORANDUM