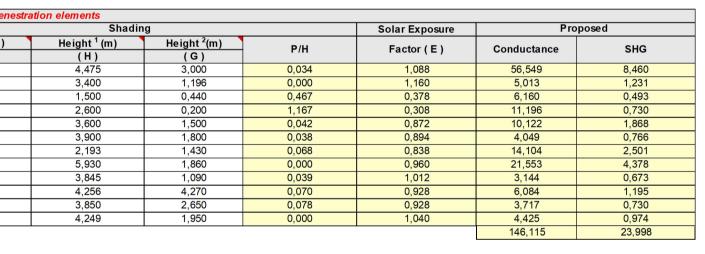
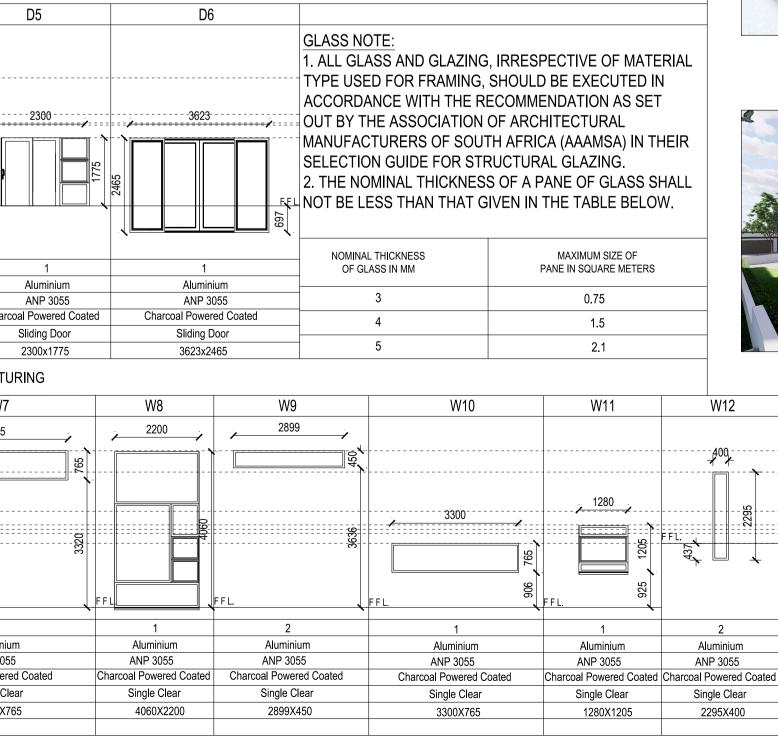
Building Floor Area	Fenestration – Buildings with Natural Environm	nental Contro	
Total Floor Area of Building: 351,3 m ²	Constants		
Lighting and Power Max. Energy Demand: 1757 W – Permissible	Conductance(C _U)constant:	1,4	
Max. Energy Consumption per Annum: 1757 kWh – Permissible	Solar Heat Gain(C _{SHGC})constant:	0,12	
Lamp power (W) rating: No. of lamps: Hours in use / day:	Storey Conductance / Solar Heat Gain	-,	
9 15 5,0 9 1 5,0	Ground Storey		
2 75 5,0	Net Floor Area of Storey / Room: m ²	351,300	
	Fenestration Area of Storey / Room: m ²	47,262	
	% Fenestration Area to Net Floor Area: %	13,5	
	Permissible FENESTRATION SAT	TISFIES SANS 10	0400-XA.
Total lamp energy demand (W): 294 Energy demand acceptable.	Max. Conductance (C_U) for Storey / Room:	491,820	
or Total lamp energy demand (W/m²): 0,84 Energy demand acceptable.	Max. Solar Heat Gain(C _{SHGC})for Storey / Room:	42,156	
Available energy demand – Lights: 1463 W	Achieved		
Total annual energy consumption – Lights (kWh): 535,08 Energy consumption acceptable.	Conductance (CU) for Storey / Room:	146,115	
Total energy consumption – Lights (kWh/m²):1,52Energy consumption acceptable.Available annual energy consumption – Lights:1221,42kWh	Solar Heat Gain (CSHGC) for Storey / Room:	23,998	
Hot Water Services (Use actual measured data where available.)	Available (In Hand)		
Type of Accommodation ? Dwelling houses - Medium rental : 115-140 L/capita/day Assumed Hot Water Consumption ? 150,0 L	Conductance(C _U)for Storey / Room:	345,705	Acceptable & refer SANS 204 (4.3.4)
No. of Persons: 5 Per Day Assumed Daily Hot Water Consumption: 750,0 L			
Assumed Annual Hot Water Consumption: 273,00 kL – Based on daily design occupancy per week kL – Minimum volume of hot water to be heated by means other than	Solar Heat Gain (C _{SHGC}) for Storey / Room:	18,158	Acceptable & refer SANS 204 (4.3.4)
electrical resistance heating			
or Daily Hot Water Consumption: 375,0 L – To be heated by means other than electrical resistance heating			
Insulation Requirements :			
Internal diameter of Hot Water Service Pipe ? mm Minimum Required <i>R</i> -value for Pipe Insulation ?			
Hot Water Vessels / Tanks : Minimum Required <i>R</i> -value for Vessel / Tank ? 2,0 Additional insulation to manufacturer's insulation may be required to achieve this value.		1.00	

	TABLE 1 - FENESTRATION : NATURALLY VENTILATED BUILDING - Allowance made for 75 fen								
	Glazing Elements		Glazing Element Size			Glazing Element Rating		Sector	
Storey Level	Identifier No:	No. of Units	Width (m)	Height (m)	Area	U-value	SHGC	Orientation	Projection (m)
Storey Lever									(P)
Ground Storey	W1	1	2,475	4,080	10,098	5,6	0,77	North West	0,300
Ground Storey	W2	1	1,000	2,080	2,080	2,41	0,51	North West	0,000
Ground Storey	W3	3	0,800	1,065	2,556	2,41	0,51	North	0,700
Ground Storey	W4	1	1,900	2,445	4,646	2,41	0,51	South East	3,035
Ground Storey	W5	1	2,000	2,100	4,200	2,41	0,51	South East	0,300
Ground Storey	W6	1	0,800	2,100	1,680	2,41	0,51	South East	0,300
Ground Storey	W7	2	3,825	0,765	5,852	2,41	0,51	South East	0,300
Ground Storey	W8	1	2,200	4,065	8,943	2,41	0,51	South East	0,000
Ground Storey	W9	1	2,899	0,450	1,305	2,41	0,51	North East	0,300
Ground Storey	W10	1	3,300	0,765	2,525	2,41	0,51	North East	0,600
Ground Storey	W11	1	1,280	1,205	1,542	2,41	0,51	North East	0,600
Ground Storey	W12	2	0,400	2,295	1,836	2,41	0,51	South West	0,000

Door Sch	edule				NOTE: A	LL TIMBER TO BE T	REATED	AGAINST UV A	ND WATER
Door Nr.		D1	D2	FD	ID	D3		D4	D5
LINTEL LEVEL 3334			, 1329						
LINTEL LEVEL 2382 LINTEL LEVEL 2160 LINTEL LEVEL 2163 LINTEL LEVEL 2103	48	00		× ⁸¹³ ⊳	<u>883</u>	<u>813</u>	<i>i</i>	-2300	
LINTEL LEVEL 1775	FFL.	350 2453	FFL. 25	Z FFL 0912	FFL. 9917	557 2125 2125	F F L	1775	P FFL.
				Fire door	Interior Door				
Total Quantity Frame	1		1 Aluminium	1 Mild Steel Frame	7	1 Aluminium	1		1 Alumir
Code			Auminium ANP 3055	FIRE DOOR	Aluminium ANP 3055	ANP 3055	Aluminium ANP 3055		Alumir ANP 3
Color			Charcoal Powered Coa			Charcoal Powered Coated			Charcoal Power
Glass	No	one	Sandblasted	None	Sandblasted	Sandblasted	Sliding Door		Sliding [
Size	Size 2453x4800		3077x1329	2160x813	2160x883	2125x813	2	2300x1775	2300x1
Window \$	Schedule			NOTE: AL	L FIND MEASUREMEN	NTS TO BE TAKEN O	N SITE B	EFORE MANU	ACTURING
Window Nr.	W1	W2	W3	W4	W5	W6		W	
LINTEL LEVEL 4080	2475							·	3825
LINTEL LEVEL 3530									
		<u>, 1000 </u> ,	<u>, 800 -</u>	/ <u>1900</u> /	2000	800	ż		
LINTEL LEVEL 2150 ENTEL LEVEL 2035 LINTEL LEVEL 1930 LINTEL LEVEL 1670	4080	5080		2445	FFL.	001 FFL.	5100		
FFL.			FFL. 598		675	675		FFL.	
Total Quantity	1	1	3	1	1	1	1		2
Frame	Aluminium Aluminium		Aluminium	Aluminium	Aluminium		Aluminium		Aluminium
Code			ANP 3055	ANP 3055 Charcoal Powered Coated	ANP 3055 ANF Charcoal Powered Coated Charcoal Po				NP 3055
Color			Charcoal Powered Coated Single Clear	Charcoal Powered Coated Single Clear	Single Clear		Charcoal Powered Coated Single Clear		I Powered Coated
Glass Size	4080X2475	Single Clear 2080X1000	1065X800	2445X1900	2100X2000		2100X800		3825X765
		2000/1000	1000/000	2770/1000	2100//2000	2100/0			0020/1100













Drainage:

All drainage to be in accordance with NBR. All sewer downpipes to be concealed in accessible ducts with access hatch. RE and IE to be fitted before and after entering and exiling building underground. Inspection eye's to all bends abd junctions suitably marked at ground level 70mm re-seal anti syphon two-way traps to all waste fillings. All showers on floor to have bras traps. All waste and soil pipes to fall min 1:100 accept otherwise indicated. No bends or junctions of drain pipes to be under floor slabs. All galleys to be in an open space. Cleaning Eyes at every 25m intervals. All pipes running under a building or with IL less than 400mm below ground level must be encased in 100mm concrete.



SK102

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