

**Lighting and Power**

Max. Energy Demand:	1377	W – Permissible
Max. Energy Consumption per Annum:	3442,5	kWh – Permissible
Lamp power (W) rating:	No. of lamps:	Hours in use / day:
9	1	5
2	87	5
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
Total lamp energy demand (W):	183	Energy demand acceptable.
or		
Total energy demand (W/m <sup>2</sup> ):	0,66	Energy demand acceptable.
Available Energy Demand for Lights:	1194,00	W
Total energy consumption – Lights (kWh):	333,06	Energy consumption acceptable.
or		
Total energy consumption – Lights (kWh/m <sup>2</sup> ):	1,21	Energy consumption acceptable.
Available annual energy consumption – Lights:	3109,44	kWh

**Hot Water Services** (Use actual measured data where available.)

Type of Accommodation?	Dwelling houses - Medium rental : 115-140 L/capita/day
Assumed Hot Water Consumption?	150 L
No. of Persons:	5 Per Day
Assumed Daily Hot Water Consumption:	750 L
Assumed Annual Hot Water Consumption:	273 kL – Based on daily design occupancy per week
50 % of Annual Hot Water Consumption:	136,5 kL – Minimum volume of hot water to be heated by means other than electrical resistance heating
or	
Daily Hot Water Consumption:	375 L – To be heated by means other than electrical resistance heating

**Insulation Requirements**

Internal diameter of Hot Water Service Pipe?	mm
Minimum Required R-value for Pipe Insulation?	

**Hot Water Vessels / Tanks**

Minimum Required R-value for Vessel / Tank?	2	Additional insulation to manufacturer's insulation may be required to achieve this value.
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**Fenestration – Buildings with Natural Environmental Control**

**Constants**

Conductance (C <sub>U</sub> ) constant:	1,4
Solar Heat Gain (C <sub>SHGC</sub> ) constant:	0,12

**Storey Conductance / Solar Heat Gain**

**Ground Storey**

Net Floor Area of Storey / Room: m <sup>2</sup>	275,400
Fenestration Area of Storey / Room: m <sup>2</sup>	28,413
% Fenestration Area to Net Floor Area: %	10,3

**Permissible** FENESTRATION SATISFIES SANS 10400-XA.

Max. Conductance (C <sub>U</sub> ) for Storey / Room:	385,560
Max. Solar Heat Gain (C <sub>SHGC</sub> ) for Storey / Room:	33,048

**Achieved**

Conductance (C <sub>U</sub> ) for Storey / Room:	68,474
Solar Heat Gain (C <sub>SHGC</sub> ) for Storey / Room:	5,840

**Available (In Hand)**

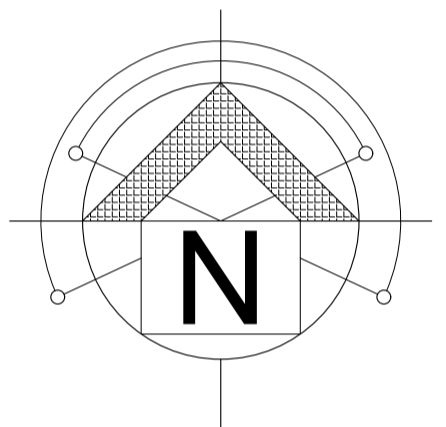
Conductance (C <sub>U</sub> ) for Storey / Room:	317,086	Acceptable & refer SANS 204 (4.3.4)
Solar Heat Gain (C <sub>SHGC</sub> ) for Storey / Room:	27,208	Acceptable & refer SANS 204 (4.3.4)



**ARCHITECTS NOTES**

ALL MATERIALS AND CONSTRUCTION MUST COMPLY WITH NATIONAL BUILDING REGULATIONS ACT NO. 103 OF 1997, INCLUDING ALL AMENDMENTS AS WELL AS THE BY-LAWS OF THE LOCAL AUTHORITIES. ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE AND NO DRAWINGS MUST BE SCALED. ANY INDISTINCTNESS OR DISCREPANCIES MUST BE IMMEDIATELY POINTED OUT TO THE ARCHITECT FOR RECTIFICATION OR EXPLANATION BEFORE ANY CONSTRUCTION CAN COMMENCE. ALL PLANS ARE PROTECTED BY THE COPYRIGHT ACT NO. 98 OF 1978.

ENERGY EFFICIENT MEASURES TO BE TAKEN BY CLIENT. ALL LIGHTS TO BE FITTED WITH ENERGY EFFICIENT FITTINGS. ALL WESTERN WINDOWS TO BE SHADED WITH TREES. WATER SAVING SHOWER HEADS TO BE FITTED. TOILETS TO BE WITH WATER SAVING FLUSH CONTROL. ENERGY EFFICIENCY TO BE TAKEN IN BUILDING TO COMPLY WITH PART XA. MIN 50% OF HOT WATER REQUIRED TO BE SUPPLIED BY HEAT PUMP OR SOLAR. ALL EXPOSED HOT WATER TO BE INSULATED WITH A 'R' VALUE OF 1 ROOF OVERHANG 400mm. ROOF ASSEMBLIES TO ACHIEVE A 'R' OF 32 WALLS TO BE 230 BRICK PLASTERED BOTH SIDES. WATER TO BE SLOPED AWAY FROM BUILDING. ALL STRUCTURAL WORK TO COMPLY WITH KKS OF SABS 10400 AND 0401 THE CONTRACTOR ON SITE MUST MAKE SURE THAT THE LEVEL BETWEEN THE HOUSE AND GARAGE IS SO THAT A CAR CAN ENTER THE GARAGE WITH EASE. ALL TIMBER TO BE TREATED ACCORDING TO SABS 1288 STANDARD. ALL FINISHED FLOOR LEVELS ARE TO BE DETERMINED ON SITE AFTER SETTING OUT THE COMPLETED PROJECT. IT IS THE RESPONSIBILITY OF THE OWNER AND OR SUBCONTRACTOR TO CHECK ALL FINISHED DIMENSIONS, AREAS, LEVELS AND SITE BOUNDARIES BEFORE COMMENCEMENT OF THE WORK ON SITE. ANY DISCREPANCY SHOULD BE REPORTED TO THIS OFFICE AT ONCE. NO WORK IS TO COMMENCE BEFORE PLANS ARE APPROVED BY THE LOCAL AUTHORITY AND SUCH APPROVAL IS IN THE POSSESSION OF THE CONTRACTOR. IT SHALL BE DETERMINED ON SITE BY THE CONTRACTOR IF THE GROUND SHALL NEED TO BE INSPECTED BY A ENG TO DETERMINE IF REINFORCING ARE NEEDED IN THE FOUNDATIONS. ANY CONTRACTOR AND OR SUB-CONTRACTOR SHALL AT ALL TIMES MAKE SURE THAT ANY MATERIAL USED ON SITE SHALL BE SUITABLE FOR THE USE THEREOF AND INSTALLED STRICTLY IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION.



**TABLE 1 - FENESTRATION : NATURALLY VENTILATED BUILDING - Allowance made for 75 fenestration elements**

Storey Level	Glazing Elements			Glazing Element Size			Glazing Element Rating		Sector Orientation	Shading			Solar Exposure Factor (E)	Proposed		
	Identifier No.	No. of Units		Width (m)	Height (m)	Area	U-value	SHGC		Projection (m) (P)	Height <sup>1</sup> (m) (H)	Height <sup>2</sup> (m) (G)		P/H	Conductance	SHG
Ground Storey	W1	1		1,185	3,145	3,727	2,41	0,51	North	1,880	0,255	0,000	7,373	0,170	8,982	0,323
Ground Storey	W2	2		0,394	2,295	1,908	2,41	0,51	North	0,300	0,255	0,000	1,176	0,243	4,358	0,224
Ground Storey	W3	1		1,270	0,932	1,184	2,41	0,51	North	0,600	2,000	0,000	0,300	0,450	2,853	0,272
Ground Storey	W4	1		2,899	0,450	1,305	2,41	0,51	East	0,600	2,470	0,000	0,243	0,858	3,144	0,571
Ground Storey	W5	1		1,522	2,445	3,721	2,41	0,51	South	0,600	1,021	0,000	0,588	0,336	8,968	0,638
Ground Storey	W6	1		1,960	2,445	4,792	2,41	0,51	South	0,570	2,400	0,000	0,238	0,468	11,549	1,144
Ground Storey	W7	1		1,199	2,444	2,930	2,41	0,51	West	0,400	0,447	0,000	0,895	0,493	7,062	0,737
Ground Storey	W8	2		0,800	1,430	2,288	2,41	0,51	West	0,400	0,270	0,000	1,481	0,324	5,514	0,378
Ground Storey	W1	1		1,185	3,145	3,727	2,41	0,51	West	0,540	0,487	0,000	1,109	0,430	8,982	0,817
Ground Storey	W7	1		1,199	2,444	2,930	2,41	0,51	West	0,400	0,447	0,000	0,895	0,493	7,062	0,737
															68,474	5,840

**Door Schedule** NOTE: ALL TIMBER TO BE TREATED AGAINST UV AND WATER

Door Nr.	D1	D5	FD	D3	D2	ID	D6	D8	D7
UNTEL LEVEL 3947									
UNTEL LEVEL 3914									
UNTEL LEVEL 2887									
UNTEL LEVEL 2180									
UNTEL LEVEL 2160									
Total Quantity	1	1	1	1	1	6	2	2	1
Frame	Aluminium	Aluminium	Mid Steel Frame	Aluminium	Aluminium	Timber	Aluminium	Aluminium	Aluminium
Code	ANP 3055	ANP 3055	FIRE DOOR	ANP 3055	ANP 3055	Horizontal Slatted	ANP 3055	ANP 3055	ANP 3055
Color	Charcoal Powdered Coated	Charcoal Powdered Coated	To Owner	Charcoal Powdered Coated	Charcoal Powdered Coated	Stain – Meranti Finish	Charcoal Powdered Coated	Charcoal Powdered Coated	Charcoal Powdered Coated
Glass	None	Sandblasted	None	Sandblasted	Sandblasted	None	Sliding Door	Sliding Door	Sliding Door
Size	2451x4800	3740x2160	2100x813	2100x813	2100x813	2100x813	2100x1500	2272x2200	3978x2704

**GLASS NOTE:**

- ALL GLASS AND GLAZING, IRRESPECTIVE OF MATERIAL TYPE USED FOR FRAMING, SHOULD BE EXECUTED IN ACCORDANCE WITH THE RECOMMENDATION AS SET OUT BY THE ASSOCIATION OF ARCHITECTURAL MANUFACTURERS OF SOUTH AFRICA (AAAMSA) IN THEIR SELECTION GUIDE FOR STRUCTURAL GLAZING.
- THE NOMINAL THICKNESS OF A PANE OF GLASS SHALL NOT BE LESS THAN THAT GIVEN IN THE TABLE BELOW.

**Window Schedule** NOTE: ALL FIND MEASUREMENTS TO BE TAKEN ON SITE BEFORE MANUFACTURING

Window Nr.	W1	W2	W3	W4	W5	W6	W7	W8
UNTEL LEVEL 3400								
UNTEL LEVEL 3080								
UNTEL LEVEL 2485								
UNTEL LEVEL 2465								
Total Quantity	2	2	1	1	1	1	2	2
Frame	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium
Code	ANP 3055	ANP 3055	ANP 3055	ANP 3055	ANP 3055	ANP 3055	ANP 3055	ANP 3055
Color	Charcoal Powdered Coated	Charcoal Powdered Coated	Charcoal Powdered Coated	Charcoal Powdered Coated	Charcoal Powdered Coated	Charcoal Powdered Coated	Charcoal Powdered Coated	Charcoal Powdered Coated
Glass	Single Clear	Single Clear	Single Clear	Single Clear	Single Clear	Single Clear	Single Clear	Single Clear
Size	3145x1185	394x2295	1270x932	2899x450	2445x1522	1960x2445	1199x2444	800x1430



**DRAWING STATUS**

Sketch plan only

**ZONING:** RESIDENTIAL 1

**ARCHITECTS**

**domus and Associates Architects** (Pty) Ltd  
 @ Office, 67 BRINK STREET  
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 P.O. BOX 1360, RUSTENBURG  
 TEL: 014 592 1960 FAX: 0866177275

**PROJECT:**

New Proposed House for  
**Mr. & Mrs. Cussons**  
 on Erf 2229, Blue Wildebeest Street  
 Schoongezicht Estate, Cashan Ext 7  
 Rustenburg

**DRAWING DESCRIPTION:**

Sketch plan  
 Site & Floor layout

SACAP No - 21044

**DRAWN:** Janine **SCALE:** See plan

**DATE:** 08/09/2022 **REVISION:** 03

**PROJECT NO.:** 222-09 **DRAWING NO.:** SK101