

**GLAZING SCHEDULE**

Window/Door No.	Orientation	Area (msq)	Frame Material	Frame Type	Glazing Material	Min. Thickness	Max. Area
W01, W02, W03, W20, W22, W23	NORTH EAST	4.79msq	ALUMINIUM	AWNING AND FIXED	A - MONOLITHIC ANNEALED GLASS B - TOUGHENED SG	4mm	4.79msq
D01	SOUTH WEST	4.32msq	ALUMINIUM	SIDE-HUNG	TOUGHENED SAFETY GLASS	4mm	4.32msq
W04, W06, W10, W12, W24, W26, W28, W30	NORTH EAST	1.06msq	ALUMINIUM	FIXED	MONOLITHIC ANNEALED GLASS	4mm	1.06msq
W05, W11, W25, W27, W29	SOUTH EAST	2.32msq	ALUMINIUM	FIXED	MONOLITHIC ANNEALED GLASS	4mm	2.32msq
W13, W14, W17	SOUTH WEST	1.62msq	ALUMINIUM	AWNING AND FIXED	MONOLITHIC ANNEALED GLASS	4mm	1.62msq
W15, W16	SOUTH WEST	0.28msq	ALUMINIUM	AWNING	TOUGHENED SAFETY GLASS	4mm	0.28msq
D04	SOUTH WEST	2.16msq	ALUMINIUM	SIDE-HUNG	TOUGHENED SAFETY GLASS	4mm	2.16msq
W21	SOUTH WEST	7.15msq	ALUMINIUM	FIXED	TOUGHENED SAFETY GLASS	8mm	7.15msq
W31, W33, W34, W35	SOUTH WEST	0.54msq	ALUMINIUM	AWNING	TOUGHENED SAFETY GLASS	4mm	0.54msq
W32, W36	SOUTH WEST	1.08msq	ALUMINIUM	AWNING	MONOLITHIC ANNEALED GLASS	4mm	1.08msq
D03	SOUTH WEST	2.10msq	ALUMINIUM	AWNING	TOUGHENED SAFETY GLASS	4mm	2.10msq
W18	SOUTH WEST	9.00msq	ALUMINIUM	AWNING	TOUGHENED SAFETY GLASS	8mm	9.00msq

**GENERAL NOTES:**

- All glazing to comply with SANS 10400-N:2010.
- Float glass to comply with SANS 50572-1/EN 572.1 & 572.2
- Toughened & Laminated safety glass to comply with SANS 1263-1
- ALL individual panes of safety glazing material to be permanently marked by installer and a certificate to such effect be issued to the owner on completion of installation.
- Installer to issue a certificate on completion of the glazing installation & that the glazing material indicated has been installed in the position indicated and such installation complies with the provisions of SANS 10137.
- No changes are to be effected to the size, thickness or type of glazing material without prior approval of the Architectural Professional, as any such changes may affect the compliance with SANS 10400-N and the National Building Regulations.
- All sizes are inclusive of frames and should not be taken as glazing sizes only.
- All frameless shower doors in man house to have minimum 10mm toughened safety glass over a maximum glazed area of 2.1msq.

**solar panel general notes**

SOLAR PANELS ARE TO IDEALLY FACE NORTH AND BE ANGLED AT 10°+LATITUDE LOCATION OF INSTALLATION

PANELS ARE TO BE FIXED TO MANUFACTURES SPECIFICATION & TO COMPLY WITH SANS 1007

SUPPLIER TO VERIFY THAT THE NUMBER OF PANELS PROVIDED WILL ADEQUATELY COVER THE NEEDS OF THE HOUSEHOLD AS PER SANS 10252-1:2012

INSTALLERS ARE TO ENSURE THAT THE PANELS ARE INSTALLED IN A MANNER THAT WILL ENSURE MAXIMUM EXPOSURE TO THE SUN ESPECIALLY BETWEEN 10.00am AND 14.00pm DAILY. SHADOWS CAST BY TREES AND/OR ADJACENT BUILDINGS DURING THESE PEAK HOURS SHOULD BE AVOIDED.

SOLAR PANELS ARE TO BE MAINTAINED AS PER MANUFACTURE'S SPECIFICATIONS IN ORDER TO ENSURE MAXIMUM OUTPUT.

**PART XA - insulation**

Install 50mm thick non-combustible, lightweight glasswool geyser blanket around geyser. Seal edges with duct tape.

Apply 20mm 'snap-on-pep' on incoming cold water pipes and insulate all outgoing hot water pipes to within 1.0m of plumbing fixtures.

provide 100mm thick flexible fibre glass blanket with overlaps of minimum 50mm over a wall member or to be tightly fitted against walls thickness of blanket to be maintained throughout

**GEYSER**

existing ground storey to re-use existing geyser, provide new geyser for first storey.

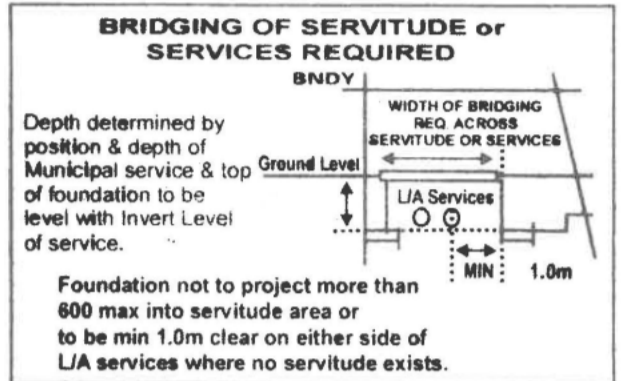
provide blanket to existing geysers

client to consider solar power and/or heat pump to heat existing geyser.

**BUILDING APPLICATION**  
 APPROVED in terms Section 7 of the National Building Regulations and Building Standards Act No. 103/1977

06 Jun 2023

LOCAL AUTHORITY  
 This plan is approved on the basis of the information shown herein. Attention is drawn to the attached documentation & that this approval shall lapse ONE year after the above approval date, unless the erection of the building in terms of NBR Act 103/1977 is commenced.



**ENCROACHMENTS INTO/OVER SERVITUDES**  
 Any construction work undertaken by the owner which encroaches upon a Municipal Servitude is undertaken entirely at the owner's risk. Any authority of the council thereto shall not be waiver of Municipality's right in respect of such servitude. Providing trenches to locate the exact position of Municipal Services is to be done before any building work is undertaken and is the responsibility of the applicant. NO concrete hardening is permitted over the servitude areas

**FENESTRATION CALCULATIONS:**

ORIENTATION	WINDOW NO.	WINDOW AREA
NORTH EAST	W01	4.79msq
NORTH EAST	W02	4.79msq
NORTH EAST	W03	4.79msq
EAST	W04	1.06msq
EAST	W10	1.06msq
SOUTH EAST	W05	2.32msq
SOUTH EAST	W07	1.27msq
SOUTH EAST	W08	1.27msq
SOUTH EAST	W09	1.10msq
SOUTH EAST	D02	2.07msq
SOUTH EAST	W11	2.32msq
SOUTH	W06	1.06msq
SOUTH	W12	1.06msq
SOUTH WEST	W13	3.78msq
SOUTH WEST	W14	3.78msq
SOUTH WEST	W15	0.28msq
SOUTH WEST	W16	0.28msq
SOUTH WEST	W17	3.78msq
<b>TOTAL AREA - GROUND STOREY WINDOWS</b>		<b>40.86msq</b>

ORIENTATION	WINDOW NO.	WINDOW AREA
NORTH EAST	W20	4.79msq
NORTH EAST	W22	4.79msq
NORTH EAST	W23	4.79msq
SOUTH EAST	W24	1.06msq
SOUTH EAST	W25	2.32msq
SOUTH EAST	W26	1.06msq
SOUTH EAST	W27	2.32msq
SOUTH EAST	W28	1.06msq
SOUTH EAST	W29	2.32msq
SOUTH EAST	W30	1.06msq
SOUTH WEST	W31	0.54msq
SOUTH WEST	W32	1.08msq
SOUTH WEST	W33	0.54msq
SOUTH WEST	W34	0.54msq
SOUTH WEST	W35	0.54msq
SOUTH WEST	W36	1.08msq
<b>TOTAL AREA - FRST STOREY WINDOWS</b>		<b>29.89msq</b>

**ROOF ASSEMBLY CALCULATIONS**

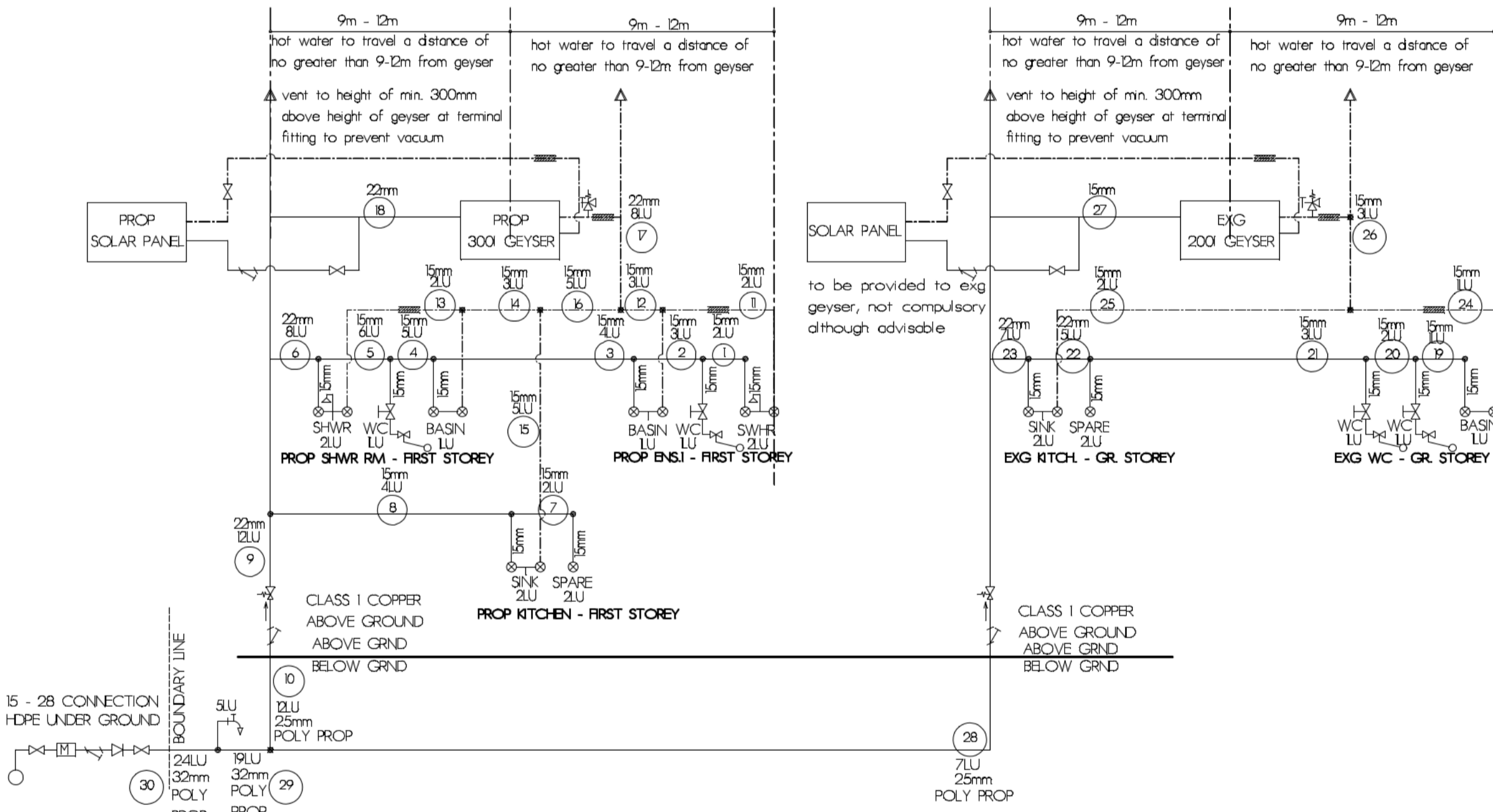
ZONE	DIRECTION OF HEAT FLOW	MIN. TOTAL 'R' VALUE REQD
SH1	DOWNWARD	2.7msq/K/W

'R' VALUE OF PROPOSED ROOF ASSEMBLY - ALUMINIUM ROOF SHEETING	
OUTDOOR AIR FILM (7m/s)	0.05msq.K/W
METAL ROOF SHEETING	0.00msq.K/W
9.0mm RHINOBOARD CEILING	0.06msq.K/W
105mm x 12kg FIBRE GLASS BLANKET INSULATION	2.63msq.K/W
INDOOR AIR FILM (sh11)	0.15msq.K/W
<b>TOTAL</b>	<b>2.89msq.K/W</b>

ZONE	NET FLOOR AREA - GROUND STOREY	TOTAL GLAZED AREA	%AGE OF AREA OP GLAZING TO FLOOR AREA	CONDUCTIVITY VALUE OF FRAME - U-value	MAX. SOLAR HEAT GAIN COEFFICIENT (SHGC value)
SH	214.4msq	40.86msq	19.06%	>20% (42.89msq) therefore, ANY SOLUTION	>20% (42.89msq) therefore, ANY SOLUTION

ZONE	NET FLOOR AREA - FRST STOREY	TOTAL GLAZED AREA	%AGE OF AREA OP GLAZING TO FLOOR AREA	CONDUCTIVITY VALUE OF FRAME - U-value	MAX. SOLAR HEAT GAIN COEFFICIENT (SHGC value)
SH	219.30msq	29.89msq	13.63%	>20% (43.86msq) therefore, ANY SOLUTION	>20% (43.86msq) therefore, ANY SOLUTION



**SCHEMATIC WATER RETICULATION SYSTEM HOT WATER DEMAND**

OCCUPANCY	OCCUPANCY TYPE	NO. OF BEDRMS	NO. OF PEOPLE	TOTAL HOT WATER DEMAND/CARTA/DAY	TOTAL HOT WATER DEMAND
H4	MEDIUM TO HIGH RENTAL	3	6	15L PER CARTA PER DAY	6 x 15L/d = 90L/DAY +20% water loss = 828L/DAY 50% x 104L/DAY = 414L/DAY

SOLAR HEAT INPUT REQD	AREA OF SOLAR COLLECTORS REQD.
$H = (V \times C \times \Delta T) / n$	$A = H / S$ (winter solar radiation)
$H = (0.44 \times 4184 \times 40) / 0.56$	$A = 123\ 608.571\ \text{kJ} / 11000$
$= 123\ 608.571\ \text{kJ/DAY}$	$= 114\ \text{msq}$

STORAGE VOLUME/ CARTA/DAY @60°C	SIZE OF STORAGE TANK
40L PER CARTA	$6 \times 40L/d = 240L/DAY$ +20% water loss = 288L/DAY MIN. TANK SIZE = 300L

owner  
**BRIGHT THOUGHTS (pty) ltd**  
 signature *MALATI B*  
 billing no.  
 project  
**PROPOSED DWELLING UNIT & ALTERATIONS TO EXISTING OFFICES**  
 address  
**319 LILIAN NGOYI ROAD**  
 cadastral description  
**REM OF ERF 756 OF DURBAN**

scale  
 AS SHOWN  
 sheet no.  
 2/2  
 job no.  
 n22-12wd02 rev A  
 date  
 15.09.2022

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