Approved [Document Part O	Simplified overheatir	ng Calculations				
Site Address		Results					
				Target	Result	Pass/Fail	
Name/Number	Land West of 14	Maximum Glazing Area	must be less than	25.6896	15.66	PASS	
Street	Victoria	Maximum area of glazing in t	the most glazed room	10.9594	4.85	PASS	
Town	Lostwithiel	Total Minimum Free Area (%	of the floor area)	> 9%	11.55409	PASS	
County	Cornwall	Total Minimum Free Area (%	of the glazing area)	> 55%	105.3001	PASS	
Postcode	PL22 OAX	Bedroom Minimum Free Are	a	> 4%	See blow	PASS	
			Bed 1 5.186590765	Bed 2			
			3.100370703	0.103414	3.037073		
Does the dwelling	meet the simplified require	ments for moderate risk with cross	Ventilation?			YES	
		_					
Building Detail	ls	Part O Simplified Meth	od Overheating Asses	ssor			_
Use	Residential dwelling	Name		Stuart Tho	mas BSc(Ho	ns) C.Build E FCABE	<u> </u>
Site Location	Cornwall	Orginisation		Energy Acc	•	,	
Risk	Moderate	Email address		s.thomas@	energyacce	ess.org.uk	
Cross Ventilation	Yes	Date of assessment		3rd	April	_	202
					03	ess (South West) Ltd	1
					sed or repr	oduced without the author	
				1			

			Glazing Pern (% Floor area	nitted Table 1.1 a)	Area of glazing allowed on this project
Floor Area of House	LGF	0	North	18	, ,
	GF	72.8	East	18	18
	FF	69.92	South	15	
	SF	0	West	11	
					18
	Total	142.72			
Largest Glazed Façade -		permitte	ed 25.6896		Notes
Elevation - Galzing m2	N	25.68	96		
	NE	25.68	96 *take North as worse ca	se	
	E	25.68	96		
	SE	21.4	08 *take South as worse ca	se	
	S	21.4	08		
	SW	15.69	92 *take West as worse cas	se	
	W	15.69	92		
	NW	15.69	92 *take West as worse cas	se	
			0		
		0			

Maximum area of glazin	n in the most	alazed roor	n (%floor a	rea of room	١			Λroa	of glazing		
iviaxiiliulii alea ol giazili	y iii tiie iiiost	giazeu i ooi	11 (7011001 a		y %Glazing Permi	tad Ta	hla 1 1		nis project		
Most glazed room is	Kitch / Din	29.62			North	37	DIC 1.1	OII ti	iis project		
iviost glazea room is	KILCIT DIII	27.02			East	37			37		
					South	30			37		
area of the room					West	22					
area or the room					Wost	22			37		
	Total	29.62							07		
Largest Glazed Façade -	Proposed	Glazing	permitted	10.9594			Notes				
Elevation - Galzing m2	N		10.9594				opening s	iz h	W	ar	ea
	NE	4.85	10.9594	*take North	as worse case		W1		0.85	0.6	0.51
	E		10.9594				W2		0.95	0.4	0.38
	SE		8.886	*take South	as worse case		W3		1.8	2.2	3.96
	S		8.886				W4		0	0	0
	SW		6.5164	*take West	as worse case		W5		0	0	0
	W		6.5164								
	NW		6.5164	*take West	as worse case				total		4.85
			4.85								
		4.85									

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Calculator 2a - Minimum free area for the whole dwelli	ing		
Free area or equivalent area of windows	16.49		
Floor area of Whole dwelling	142.72		
Glazing area of whole dwelling	15.66		
Free Area as a % of floor area	11.55409 %	target is > than 9% of the floor area	
Free Area as a % of the glazing area	105.3001 %	target is > than 55% of the glazed area	
Calculator 2b - Minimum free area for the bedrooms			
Bedroom 1 Free area or equivalent area of windows for the bedroom	0.82	Bedroom 2 Free area or equivalent area of windows for the bedroom	0.82
Floor area of the bedroom	15.81	Floor area of the bedroom	13.3
% of floor area	5.186591	% of floor area	6.165414
Bedroom 3 Free area or equivalent area of windows for the bedroom	0.82		
Floor area of the bedroom	14.49		
% of floor area	5.659075		

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Vhol e	Dwelling Equiva	alent Free Area	3	*assumed 50	mm frame ar	ound glazing				
	Window	Window	Window	Glazing*	Glazing*	Glazing	Opening	Equivilent Area	Structural	Structural
	Location	Reference	Orientation	Height	Width	Areas	Angle	(tables D1-D9)	Op Height	Op Width
1	Entrance		South West	1.1	0.7	0.77	90	1.86	2.1	1
2	Living		South West	1.15	8.0	0.92	45	1.16	1.35	1.8
				1.25	0.5	0.625	45			
3	Study		South West	1.15	8.0	0.92	45	1.16	1.35	1.8
				1.25	0.5	0.625	45			
4	WC		South West	0.85	0.4	0.34	45	0.8	1.05	0.6
5	Bedroom 1		South West	1	0.6	0.6	45	0.82	1.2	1.5
				1.1	0.4	0.44	45			
6	Bedroom 2		South West	1	0.6	0.6	45	0.82	1.2	1.5
				1.1	0.4	0.44	45			
7	Hall		South West	1	0.7	0.7	45	0.74	1.2	0.9
									Total area	6.98
8	Utility		North East	1.8	0.7	1.26	90	1.77	2.1	0.9
9	Kitch / Din		North East	0.85	0.6	0.51	45	0.7	1.05	1.5
				0.95	0.4	0.38	45			
10	Kitch / Din		North East	1.8	2.2	3.96	90	4.24	2.1	2.7
11	En Suite		North East	0.85	0.9	0.765	45	0.8	1.05	1.2
12	Bathroom		North East	0.85	0.9	0.765	45	0.8	1.05	1.2
13	Bedroom 3		North East	1	0.6	0.6	45	0.82	1.2	1.5
				1.1	0.4	0.44	45			
									Total area	8.68

25

15.66 16.49

Notes

2 sides open fixed centre 2 sides open fixed centre

2 sides open fixed centre 2 sides open fixed centre

2 sides open fixed centre

2 sides open fixed centre

droom - Equ	uivalent Free Ai	·ea					
	Window	Window	Glazing	Glazing	Glazing	Opening	Equivilent Area
	Reference	Orientation	Height	Width	Area	Angle	(tables D1-D9)
edroom 1		-	-		<u>.</u>	-	
1		South West	1	0.6	0.6	45	0.82
2			1.1	0.4	0.44	45	
3							
4 5							
3					1.04		0.82
edroom 2					1.01		0.02
1		South West	1	0.6	0.6	45	0.82
2			1.1	0.4	0.44	45	
3							
4							
5					1.04		0.00
edroom 3					1.04		0.82
1		North East	1	0.6	0.6	45	0.82
2		NOI (II Last	1.1	0.4	0.44	45	0.02
3							
4							
5							
					1.04		0.82

The Equivalent Areas have also been Derived using Dr B Jones Window Discharge Coefficient calculator

The window discharge coefficient calculator was developed by Dr Benjamin Jones of Nottingham University.

And is a copy of the calculator found on the governement website here.