

SAP 2012 Overheating Assessment

Calculated by Stroma FSAP 2012 program, produced and printed on 11 June 2020

Property Details: Flat 4

Dwelling type:	Flat
Located in:	England
Region:	Thames valley
Cross ventilation possible:	Yes
Number of storeys:	1
Front of dwelling faces:	South East
Overshading:	Average or unknown
Overhangs:	None
Thermal mass parameter:	Indicative Value Medium
Night ventilation:	True
Blinds, curtains, shutters:	
Ventilation rate during hot weather (ach):	8 (Windows fully open)

Overheating Details:

Summer ventilation heat loss coefficient:	391.25	(P1)
Transmission heat loss coefficient:	48.3	
Summer heat loss coefficient:	439.58	(P2)

Overhangs:

Orientation:	Ratio:	Z_overhangs:
South West (SWx3)	0	1
North West (NW)	0	1

Solar shading:

Orientation:	Z blinds:	Solar access:	Overhangs:	Z summer:	
South West (SWx3)	1	0.9	1	0.9	(P8)
North West (NW)	1	0.9	1	0.9	(P8)

Solar gains:

Orientation		Area	Flux	g_	FF	Shading	Gains
South West (SWx3)	0.9 x	14.4	119.92	0.76	0.7	0.9	744.15
North West (NW)	0.9 x	14.4	98.85	0.76	0.7	0.9	613.36
Total							1357.51 (P3/P4)

Internal gains:

	June	July	August
Internal gains	377.31	363.44	370.14
Total summer gains	1820.64	1720.94	1566.14 (P5)
Summer gain/loss ratio	4.14	3.91	3.56 (P6)
Mean summer external temperature (Thames valley)	16	17.9	17.8
Thermal mass temperature increment	0.25	0.25	0.25
Threshold temperature	20.39	22.06	21.61 (P7)
Likelihood of high internal temperature	Not significant	Medium	Slight

Assessment of likelihood of high internal temperature: Medium