SAP 2009 Overheating Assessment

Calculated by Stroma FSAP 2009 program, produced and printed on 28 March 2012

Property Details: Victorian Mid Terrace, worst case

Dwelling type:	Mid-terrace House
Located in:	England
Region:	Midlands
Cross ventilation possible:	Yes
Number of storeys:	2
Front of dwelling faces:	South
Overshading:	Average or unknown
Overhangs:	None
Thermal mass parameter:	0
Night ventilation:	False
Blinds, curtains, shutters:	Net curtain (covering whole window)
Ventilation rate during hot weather (ach):	0.8 (Windows slightly open (50 mm))

Overheating Details:

Summer ventilation heat loss coefficient:	102.09	**(P1)**
Transmission heat loss coefficient:	268.7	
Summer heat loss coefficient:	370.76	**(P2)**

Overhangs:

Orientation:	**Ratio:**	**Z_overhangs:**
North (North Windows)	0	1
South (South Windows)	0	1

Solar shading:

Orientation:	**Z blinds:**	**Solar access:**	**Overhangs:**	**Z summer:**	
North (North Windows)	0.8	0.9	1	0.72	**(P8)**
South (South Windows)	0.8	0.9	1	0.72	**(P8)**

Solar gains:

Orientation		**Area**	**Flux**	**g_**	**FF**	**Shading**	**Gains**	
North (North Windows)	0.9 x	4.04	79.85	0.76	0.76	0.72	120.74	
South (South Windows)	0.9 x	4.04	106.3	0.76	0.76	0.72	160.73	
						Total	281.48	**(P3/P4)**

Internal gains:

	June	**July**	**August**	
Internal gains	687.12	663.24	677.87	
Total summer gains	983.69	944.71	932.15	**(P5)**
Summer gain/loss ratio	2.65	2.55	2.51	**(P6)**
Mean summer external temperature (Midlands)	14.9	17.2	17.1	
Thermal mass temperature increment	1.74	1.74	1.74	
Threshold temperature	19.29	21.49	21.35	**(P7)**
Likelihood of high internal temperature	**Not significant**	**Slight**	**Slight**	

Assessment of likelihood of high internal temperature: Slight