

## Internal heat gains for residential buildings (IHG)

Energy balance calculation with PHPP Version 10.4 EN

PHPP 

"Stūrīši" / Climate: LV0003b-Zilāni / TFA: 565 m<sup>2</sup> / Heating: 125,9 kWh/(m<sup>2</sup>a) / Overheating: 42 % / PER: 207,3 kWh/(m<sup>2</sup>a)

Number of occupants  P  
Treated floor area  m<sup>2</sup>

Building use:   
Values used for IHG:

[Link to drop-down list](#)

	IHG winter	IHG summer
No input necessary		
Used for energy balance:	<b>4,10</b>	<b>5,25</b>

W/m<sup>2</sup>

Application	Number / number of occupants		Consider for IHG?	Norm consumption		Utilisation factor	Frequency		Useful energy (kWh/a)		Included in electricity balance?	Availability		Utilisation period [kh/a]		IHG winter [W]	IHG summer [W]
Persons	30	P	1	80,0	W/P	1,00	8,76	kh/a	20852	*		0,55	/	8,76	=	1309	1309
Evaporation	30	P	1	-25,0	W/P	1,00	8,76	kh/a	-6516	*		1,00	/	8,76	=	-744	-744
Refrigerator	0		1	0,3	kWh/d	1,00	365	d/a	0	*		1,00	/	8,76	=	0	0
Freezer	0		1	0,6	kWh/d	1,00	365	d/a	0	*		1,00	/	8,76	=	0	0
Refrigerator-freezer combination	1		1	0,6	kWh/d	1,00	365	d/a	6234	*		1,00	/	8,76	=	712	712
Cooking	1		1	0,3	kWh/Use	1,00	500	/(P*a)	3719	*		0,50	/	8,76	=	212	212
Dishwashing	1		1	1,0	kWh/Use	1,00	65	/(P*a)	1959	*		0,30	/	8,76	=	67	67
Clothes washing	1		1	0,9	kWh/Use	1,00	57	/(P*a)	1520	*		0,30	/	8,76	=	52	52
Drying with Condensation dryer	1		1	2,4	kWh/Use	0,75	57	/(P*a)	3073	*		0,70	/	8,76	=	246	246
Gas demand (for gas dryers)			1	0,0	kWh/Use				0	*		0,80	/	8,76	=	0	0
Energy demand from evaporation													/		=	0	0
Lighting inside of dwelling unit	1		1	12,0	W	4,20	1,2	kh/(P*a)	1800	*		1,00	/	8,76	=	205	205
Lighting outside of dwelling unit	0		1						0	*		1,00	/	8,76	=	0	0
Other devices (see 'Electricity' worksheet)	1		1,0						8014	*		1	/	8,76	=	915	915
Auxiliary appliances (cf. 'Aux electricity' worksheet)													/		=	0	0
													/		=		
													/		=		

Pielikums4.2.  
Ēkā izmantoto imženiersistēmu  
novērtējuma izmantotās vērtības

			Winter or Summer Power		Useful energy winter or summer		Utilisation period winter or summer						
DHW - circulation	0	0			0	0	kWh/a	/	5,04 or 3,72	=	0	0	
DHW - individual pipes	1	1			0	0	kWh/a	/	5,04 or 3,72	=	0	0	
DHW storage tank	0	0	0,0	0,0						=	0	0	
Cold water	30	P 1	-16,1	-0,1						=	-480	-4	
<b>Internal heat gains (IHG)</b>											<b>2494</b>	<b>2970</b>	W
											<b>4,41</b>	<b>5,25</b>	W/m <sup>2</sup>