

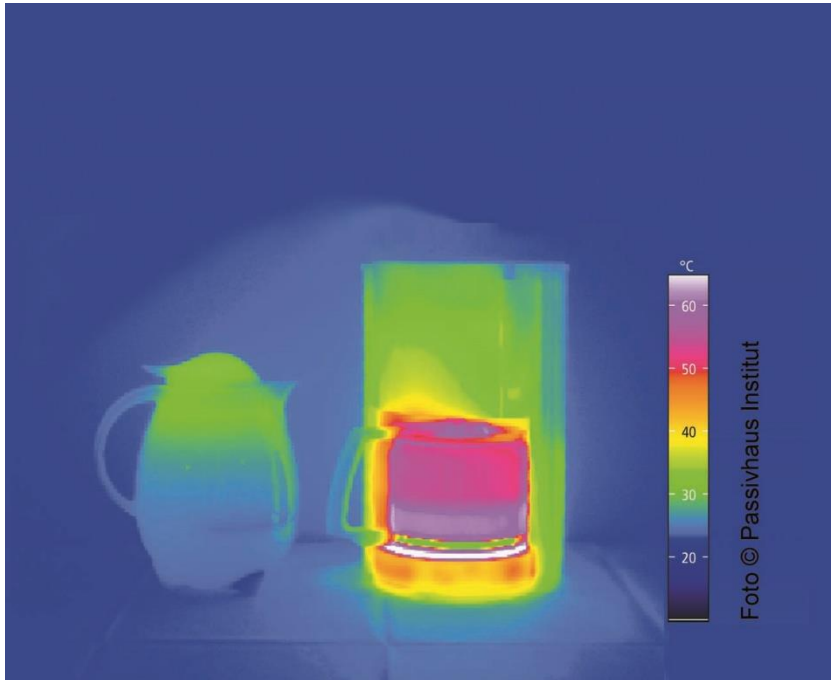


## Dublin City Council Staff Briefing: passive house & NZEB, 24 May 2019

- 14.00 **Introduction – Jeff Colley – Passive House Plus Magazine**
- 14.10 **Archie O’Donnell – i3PT**  
Compliance: passive house, BCAR & NZEB
- 14.40 **Glenn Massey - Fabrite**  
The World’s Tightest Building?
- 15.10 **Shane Colclough – University College Dublin**  
Low-Energy Housing Performance: the figures
- 15.40 **Barry McCarron – Queens University Belfast**  
Radon levels in passive houses & adjacent homes
- 16.10 **James Walsh – Low Energy Design**  
St Bricin’s Park - EnerPHit Certified Retrofit – Dublin City Council’s 1<sup>st</sup> Passivhaus project
- 16:40 **Questions & Answers Session**
- 17:00 **Finish**

# Background and definition

## Climate independent Passive House definition



A Passive House is a building in which thermal comfort [ISO 7730] can be guaranteed by post-heating or post-cooling the fresh-air flow required for a good indoor air quality without additional recirculation.

# Background and definition

## Passive House criteria\*

Heating demand  $\leq$   
15 KWh/(m<sup>2</sup>yr)

OR Heating load  $\leq$   
10 W/m<sup>2</sup>

Cooling demand  $\leq$   
15 KWh/(m<sup>2</sup>yr)

OR Cooling load  $\leq$   
10 W/m<sup>2</sup>

Primary energy  
demand  $\leq$  120  
KWh/(m<sup>2</sup>yr)\*\*

Airtightness  
n50  $\leq$  0.6ac/h

*\*all based on  
treated floor  
area*

*\*\*including  
(DHW, heating,  
cooling, auxiliary  
& household  
electricity)*

# The Passive House classes: Efficiency first!

Basic requirement Very low heating/cooling demand  $\leq 15 \text{ kWh}/(\text{m}^2\text{a})$

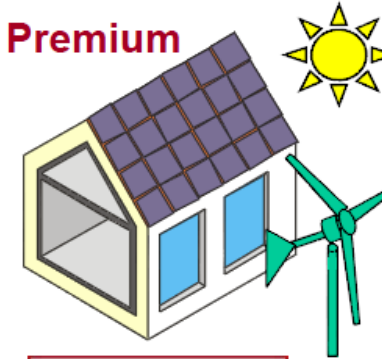
**Classic**



**Plus**



**Premium**



**PH + Generation of renewable energy  
and high energy efficiency (PER)**



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