

Sustainable Housing Design Guide

2024 Addendum (incorporating the Cam Standard)



The Cambridge Sustainable Housing Design Guide - Addendum 2024

The 2021 Cambridge Sustainable Housing Design Guide provides a summary of the council's expectations for sustainable design and placemaking for council homes. It promotes a well-integrated, placemaking approach to delivering new sustainable homes and neighbourhoods. We highlight how sustainable design and a spirit of good placemaking can work hand in hand to give us great places to live.

This addendum sits alongside the 2021 guide, while allowing us to incorporate technical and delivery lessons learnt from our pilot projects delivered following its initial adoption. A central outcome from the pilot projects has been the development of a 'Cam Standard' for sustainable homes - and it is to cover this new standard that this Addendum has been produced.

The 'Cam Standard'

Since 2021 the City has piloted 5 highly sustainable small 'infill' projects, delivered by the Cambridge Investment Partnership (CIP). This has provided 35 council homes.

The pilot showed that for many of the city's complex sites, a classic Passivhaus standard was not flexible enough to deliver our requirements for practical sustainability. In the light of this, the new 'Cam Standard' was developed.

The Cam Standard provides a robust baseline maintaining low-energy and climate change resilience requirements which all our housing developments must either meet or exceed. It is a stepping stone to increasingly sustainable outcomes. All council developments should prioritise lowering their energy targets and by 2030 all proposed council homes will be expected to target Net Zero Carbon.

Alignment with the 2021 Guide

Excluding the technical Passivhaus requirements that are replaced by the Cam Standard as a minimum baseline, all the other requirements of the 2021 Guide remain in place and should be therefore be applied.



Recently completed pilot family homes at Fen Road by CIP/Pollard Thomas Edwards
Photographs by Tom Bright

Cam Standard certification requirements (minimum)

Requirement	Limiting Value
Annual space heating demand	Up to 40 kWh/(m2.a)
Annual space cooling demand	< 15 kWh/(m2.a)
Primary energy renewable (PER) demand	60 to 75 kWh/m2a (up to 75 kWh/m2a with PVs); or a project specific PER calculated using the PHPP for high occupancy density buildings
Airtightness	Up to 1.0 Air Changes per Hour @50Pa
Overheating	< 10% occupied hours above 25°C
Design temperature (winter)	20°C
Design temperature (summer)	25°C in conjunction with Building Regulations Part O assessment for residential buildings
Window installed U-value	< 0.85 W/(m2K)
MVHR efficiency	>=75%
MVHR Specific Fan Power (SFP)	< 0.45 Wh/m3 (1.62 W/l/s)
Passivhaus Consultant	Passivhaus or AECB Consultant
Passivhaus Certifier	Not applicable
Passivhaus Institute (PHI) Assessment	Not applicable

Quality Assurance

PHPP Model	Required for all schemes
Evidence	Certificates, delivery notes, photographs, confirmation of performance specification, declarations
Independent Certification	Not applicable



**Produced by Pollard Thomas Edwards
with Cambridge City Council**



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**This publication was produced in 2024 and is to be
read alongside the 2021 Guide.**