

**There is significant evidence to suggest that buildings do not perform as well when they are completed as was expected when they were designed. This difference between anticipated and actual performance is known as the 'performance gap'.**

In response to the performance gap in the housebuilding market, Saint-Gobain have developed a rapid pre-occupation testing called QUB to measure a properties thermal performance by providing a heat transfer co-efficient in  $W \cdot K^{-1}$

QUB is a simple and commercially viable overnight test that provides you with a test report demonstrating the fabric heat loss of an unoccupied building. This can then be assessed against the modelled design stage performance in SAP.

It is a simple overnight pre-handover test of an unoccupied building in which the building is heated for a few hours, then left to cool for a few hours, whilst heat loss data is recorded. This testing methodology is able to measure and validate the thermal performance of the building at speed allowing it to be used at scale across development sites.

At the end of the test, house builders can receive a test report that as-built homes achieve thermal standards and comply with design specifications.

In the Future Homes Standard consultation, there was a proposal for a voluntary post occupancy performance test. The QUB system could help support the testing and assessment ambitions of the Government.

The QUB system is an innovative new technology that is yet to be launched, but we're excited about its potential to help assess how buildings perform compared to how they are designed in SAP.

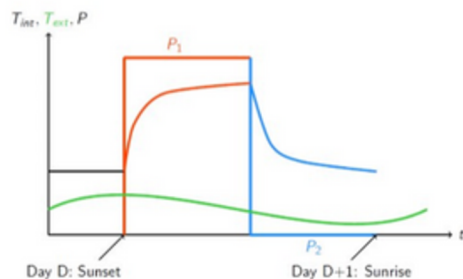
For more information on the QUB system please contact:  
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## What is QUB? How does it work?

- An overnight test conducted between sunset and sunrise
- Conducted on an unoccupied building

A single test has 3 phases

- A heating phase
- A natural cooling phase
- Result calculation



## Contact CESW

If you have a project that provides outstanding benefits and demonstrates best practice to the standards of this case study please share your experience to the industry by contacting us at:

[constructingexcellencesw.org.uk](https://www.constructingexcellencesw.org.uk)

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[Constructing Excellence South West](#)