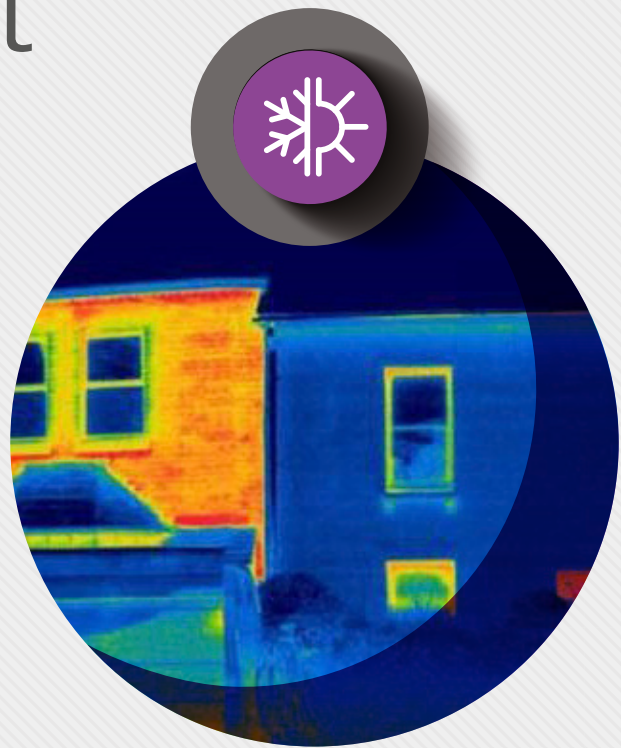


Fact Sheet

Thermal and Airtight

Innovare's i-SIP modular off-site construction systems mean that buildings can be built to the highest standards of airtightness and thermal comfort. Starting with the building fabric, the use of i-SIPs reduces heating costs in the winter and eliminates draughts.

This is because our large-format panels and meticulous precision-fitting mean that air leakage is almost non-existent. What is known as unintended air infiltration levels of 0.6M3/M2/hr can be easily achieved.



Thermal transmittance, also known as a building's U-value, is the rate of transfer of heat through a structure divided by the difference in temperature across that structure. The better insulated a structure is, the lower the U-value will be. Using i-SIPS results in extremely low U-values.

Differing ventilation strategies are available using off-site design and construction methods. Flexible window placement and other structural solutions allow a building to be designed to fit in with specific climate data model requirements.

Using i-SIPs allows for the inclusion of phase change materials (a substance which is capable of storing large amounts of heat) without the need for using concrete, reducing the amount of load-bearing foundations needed, and so cutting project costs.

The ability to precisely 'tune' the phase change materials prior to installation means that structures can be designed and constructed to fit in with specific geographical locations and climate data model requirements, to remain ideally warm both in the winter and the summer.