



Compared with Steel Frame Construction





Why Your Choice of Construction Matters

Thermal and sustainable benefits for modern care homes

Choosing the right construction method is one of the most important decisions care-home providers face. Beyond the immediate build cost, the choice of structure impacts sustainability credentials, energy efficiency, speed of delivery, and long-term running costs all of which directly affect resident comfort and the financial performance of the care home.

At SIP Build UK, we specialise in fabric-first solutions that deliver measurable advantages over traditional approaches such as steel frame. This guide highlights the key areas where Structural Insulated Panels (SIPs) outperform steel construction, giving care-home providers confidence in a smarter, greener, and more cost-effective way to build.

Sustainability

- Low Carbon Footprint SIPs use sustainably sourced timber and store carbon throughout the building's life.
- Steel frames have high embodied carbon from energy-intensive production.
- **Minimal Waste** Factory-cut precision means reduced waste and cleaner sites.
- Greener Outcomes SIPs support care providers in meeting sustainability goals and ESG reporting requirements.

Thermal Performance

- Superior Insulation SIPs deliver low U-values off the shelf, preventing heat loss and reducing reliance on large HVAC systems.
- Airtight Envelope Minimises cold bridging and improves comfort for residents.
- Energy Savings Lower heating demand translates to reduced running costs year after year.

Programme Time on Site

- Rapid Installation SIP shells are erected quickly and on program - up to 55% guicker than traditional builds.
- Less Labour Required Off-site manufacture ensures accuracy, fewer trades, and predictable programme delivery.
- Minimal Disruption Faster builds mean reduced impact on existing care facilities and staff.



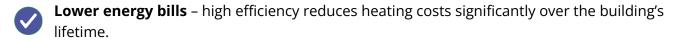






Whole-Life **Running Costs**

With SIPs, care homes gain:





Proven life-cycle savings – studies show SIP buildings achieve over 20% savings within 20 years, outperforming steel-framed equivalents.

Faster ROI – early occupation drives quicker returns for operators.

In Summary

SIPs outperform steel-frame construction across every key metric that matters to care-home providers. They're sustainable, energy-efficient, fast to build, and cost-effective over the building's entire life.

At SIP Build UK, we believe in fabric-first solutions that give care providers peace of mind - comfortable, sustainable, and affordable homes for residents today and tomorrow.

SIPs vs Steel Frame Construction – Care Home Project Performance Comparison		
Category	SIPs (Structural Insulated Panels)	Steel Frame
Sustainability	Low embodied energy, sustainable materials, carbon storage	High embodied carbon, steel-intensive production
Thermal Performance	Excellent insulation, airtight, minimizes thermal bridging	High thermal bridging, higher heat loss and energy demand
Programme Time	Fast on-site erection, precise, less labour	Slower on-site assembly, more variation and trade coordination
Whole-Life Costs	Lower energy bills, downsized systems, savings over life	Higher operational costs, more maintenance, and HVAC sizing



