



Structural Insulated Panels

INDUSTRY LEADERS IN STRUCTURAL INSULATED PANELS

SPECIALISING IN SOCIAL & AFFORDABLE HOUSING



www.thesipcompany.com



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SIPS: THE SOLUTION TO AFFORDABLE SOCIAL HOUSING

Social housing deficit is becoming a major issue in the UK housing landscape. Studies suggest that over one million households are waiting for social homes. **SIPCO** believes that SIP technology offers a cost-effective answer to sustainable, mass-built social housing developments that will ensure safe, energy efficient homes for future generations.

With the demand for social housing and the stringent requirements for sustainable building solutions increasing, **SIPCO** has tailored its product offering to meet the needs of Registered Social Landlords (RSL). Building with **SIPCO** panels can ensure Building Control Compliance without compromising quality and performance. To date, the company has completed a significant number of social housing units with several prestigious clients.

For housing providers, the benefits of using SIPs are well documented. Offsite production allows for large-scale manufacture while retaining precision and accuracy and ensuring minimal material wastage. Cost certainty gives assurance, while **SIPCO**'s experienced technical team can guide clients throughout the project to meet building requirements. SIP panels provide a fast, reliable system tailored to meet the local environmental aesthetic and needs.



SIPCO have developed a range of standard house types which provide a standardised product with cost, time and performance certainties' but provides adaptable layouts from two-bed/two-person units to five-bed/seven-person homes.



SIPCO offers a complete package to include design, manufacture, and project management, adapted and tailored to meet your requirements.

Setting the standards for structural insulated panel systems (SIPs), **SIPCO** has extensive experience designing, manufacturing, and installing high-performance, quality SIPs suitable for small and large-scale projects. Our technical team work with clients from initial planning to site completion to ensure any build achieves the highest possible standards. Our vision is to drive performance and sustainability throughout the SIP industry, and we strive to provide exceptional personalised service that exceeds expectations.



WHY USE SIPs?

- SIPs provide consistency in stiffness, strength, and response assuring certainty in performance
- Offsite factory manufacturing allows for complete precision, accuracy, and minimal wastage
- Thermal and airtightness performance allow for reduced heating systems while maintain ambient temperature
- SIPs provide a sustainable solution, with lower energy consumption and CO₂ emissions
- SIPs offer cost certainty for all projects, and can be utilised for mass or large scale builds
- **SIPCO** offer full design and technical support from start to finish

OUR SYSTEM – YOUR SOLUTION

Designed to meet NDSS (National Described Space Standards), these standard house types have been developed to provide high performance, cost effective buildings, through standardisation and reduced waste.



- This range allows for adaptable layouts from two bedroom, three person units up to five bedrooms, seven person homes, meeting NDSS and is easily adapted to ensure HQI compliance.
- **SIPCO** manufacture the wall and roof panels efficiently and accurately to precise build specifications in our state-of-the-art factory facility
- The SIP panels hold product accreditation from the BBA, the UK's predominant authority offering approval and certification services to manufacturers and installers supplying the construction industry
- Our standard house types can be finished in an array of materials such as bricks, brick stone, polymer and cement renders and timber cladding
- Roof finishes can include various lightweight systems in traditional slate or tiles. SIP construction also allows for the roof space to be used for bedroom accommodation, resulting in better performance and space utilisation



Floor layouts for our detached, semi-detached and terraced standard house types are available on request, contact a member of the team on **0151 424 5346** or email **info@thesipcompany.com**

THE SUSTAINABLE CHOICE

SIPCO has developed a range of products to offer considerable sustainability and energy-efficiency benefits for construction projects in both the private and public sectors.

Sustainability has become a crucial factor in considering building methods and materials used on construction projects. SIPS offer significantly lower embodied energy than traditional construction materials, and exceptional thermal performance. SIPCO SIPS meet changes to building regulations to achieve compliance with new Part L regulations and can offer net-zero options and conform to the RIBA and Leti 2030 challenge.

SIPCO has developed their **ECO, ENHANCED, NET ZERO** and **ULTIMATE** range to provide the correct structural insulated panel thickness, which allows builders to achieve structural stability, insulation, and air tightness via a single element, negating the requirement for insulation to be fitted on-site later.



ECO 
PERFORMANCE

ENHANCED 
PERFORMANCE

NET ZERO 
PERFORMANCE

ULTIMATE 
PERFORMANCE

	ECO	ENHANCED	NET ZERO	ULTIMATE
Total Primary Energy kWh/year*	3839	2567	969	300
Total CO ₂ kg/Per Year	382	95	- 100	- 105
EPC Rating	C	B	A	A
Wall Thickness (mm)	150	175	200	225
Roof Thickness (mm)	175	200	225	225

* 3 bed, 5 person unit offers same heating, lighting, and orientation with different fabric

PERFORMANCE BENEFITS OF SIPS



FIRE PERFORMANCE

SIPs panels comply with Building Regulations with regard to fire resistance when lined with plasterboard, similar to those for timber frame construction. A single layer provides 30 minutes rating and a double layer 60 minutes rating. **SIPCO** can provide standard construction details and results from independent fire tests.



THERMAL PERFORMANCE

Thermal conductivity of **SIPCO**'s polyurethane core is typically 0.025 W/m²K. Using **SIPCO** SIPs offers extremely low U-values for walls. Ranging from 0.21 to 0.10 W/m²K depending on detail of construction. SIP roof designs can deliver U-values in the range 0.21 to 0.10 W/m²K.



ACOUSTIC PERFORMANCE

Acoustic insulation between party walls and external walls is improved by the plasterboard lining. The team at **SIPCO** can offer guidance in order to achieve levels of sound reduction required by Building Regulations.



AIR TIGHTNESS PERFORMANCE

The use of the SIPs panel and jointing system creates an airtight structure to exceed future Building Regulations requirements. Due to the effectiveness of the system positive ventilation methods should be considered.



DURABILITY PERFORMANCE

A building constructed with SIPs will have durability comparable to other construction methods. With best practice design, maintenance and weather tightness, a life of at least 60 years may be expected. The durability of the **SIPCO** system has been independently assessed and certified by the BBA.



STRUCTURAL PERFORMANCE

SIPs form a light and strong structure which is excellent for in-plane loads. SIPs buildings actually behave as thin shell structures, dispersing point loads throughout the entire surface area to improve structural performance.

Furthermore, we can offer the Chain of Custody accreditation for FSC and PEFC-certified timber. Combining this accreditation and the inherent thermal, air tightness, and acoustic advantages of structural insulated panels can help drive sustainability scores and deliver proven environmental benefits.

- Factory made with minimal site wastage and less landfill use
- OSB made from sustainable harvested spruce, thinning and managed plantations
- Up to 35% less raw timber use in SIPs buildings. All timber used is FSC graded
- SIPs can help reduce the carbon footprint of the building due to superior air tightness
- U-values out perform current building regulation

CASE STUDIES

Over a decade delivering high-quality SIPs to the construction market

Since the company began in 2010, **SIPCO** have delivered hundreds of projects across the UK for numerous high-profile clients, partnering with major developers such as ISG, Morgan Sindall, and Vinci. Operating in a wide range of sectors such as residential, social and affordable housing, education, and commercial, **SIPCO** offers a breadth of technical knowledge based on constantly improving system performance, research and performance testing, and integrated management systems. Here is a sample of our work:



MONTROSE - BOURNEMOUTH

A high-quality residential development comprising 10 houses and 18 apartments.



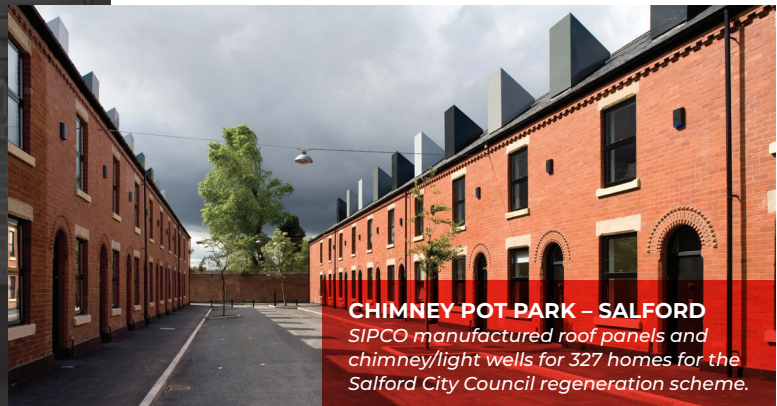
DIXON STREET - MANCHESTER

Affordable housing comprising twelve houses for regional developer ForHousing.



SHARP STREET - MANCHESTER

SIPs were chosen for this affordable housing development to achieve high thermal efficiency values.



CHIMNEY POT PARK - SALFORD

SIPCO manufactured roof panels and chimney/light wells for 327 homes for the Salford City Council regeneration scheme.



NELSON STREET - MANCHESTER

Affordable housing development which was part funded by Homes England.



HAYDOCK STREET - MANCHESTER

Social housing bungalows for tenants with accessibility requirements.



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