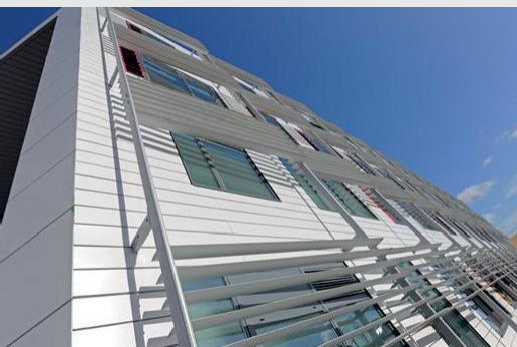




SIP BUILDING SYSTEMS

Leading the way in
Structural Insulated Panel
technology



BBA APPROVED SUSTAINABLE BUILDING SOLUTIONS





- Fast Track Construction Method
- Robust and Lightweight Solution
- Delivers Programme and Cost Certainty
- Reduces 'Performance Gap' Issues
- Creates Energy Efficient Buildings
- Provides Design Flexibility
- Maximises Use of Space
- Creates Habitable Roof Space
- Offers Excellent Acoustic Performance
- Reduces Onsite Wastage and Disposal Costs
- Delivers Ongoing Operational Cost Savings
- Minimises Working at Height
- Enhances Onsite Health & Safety
- Environmentally Sustainability Solution
- Exceptional Thermal Performance
- Delivers Low U-values
- Provides Integral Insulation
- Reduces Thermal Bridging

ADVANCED CONSTRUCTION METHOD



SIP Building Systems (SBS) have been at the forefront of Structural Insulated Panel (SIP) technology for over 10 years and were one of the first manufacturers to gain BBA Certification.



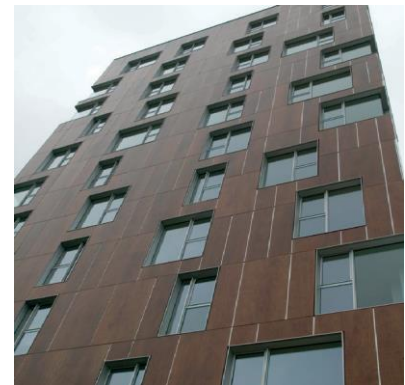
Drawing on over 60 years of experience in the composite panel industry, our expertise extends across many mainstream sectors including: residential, education, commercial, retail and leisure, to more specialist applications such as modular buildings, cold store and military solutions.

We can produce SIPs up to 6,250mm in length with thicknesses ranging from 75mm – 250mm. We can produce a range of finishes to the SIP system - please speak to our technical department for assistance.

Our ability to produce bespoke panels to meet the exacting demands of our clients gives SBS a leading advantage over our competitors. We continuously invest in production technology to advance the development of the Structural Insulated Panel industry.



SIPS EXPLAINED



Structural Insulated Panels are an advanced method of construction, exploiting composite panel techniques - delivering excellent structural and thermal characteristics in one system.

SIPS have two parallel faces - usually Oriented Strand Board (OSB3) - sandwiching a rigid core of Polyurethane (PUR) foam. The result is a lightweight system which is quick to erect and free from the complications surrounding compression shrinkage and thermal bridging, that is often associated with other forms of construction.

Delivering rapid and robust energy efficient buildings, with superior insulation, structural strength and airtightness - SIP systems are used for walls, roofs and floors. Using SBS SIPS for roof elements provides an additional habitable 'room in the roof' - as they do not require trusses.

SBS SIPS offer extremely high thermal performance throughout the lifecycle of the building, whilst minimising wall thickness. The Polyurethane (PUR) core of rigid insulation and OSB3 facing panels achieve U-values as low as 0.10 W/m²K, making significant savings on operating costs.

RESIDENTIAL APPLICATIONS



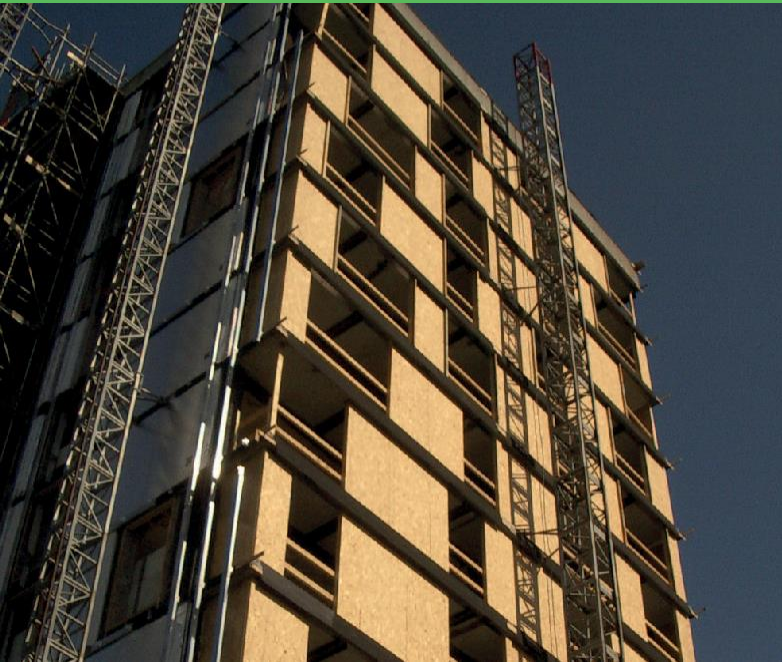
Energy efficient buildings are achieved through good building fabric design.

Optimising the performance of the building envelope reduces capital and on-going running costs, improving energy efficiency and reducing carbon emissions. Up to Passivhaus standards can be achieved if the brief demands.

SIPS are designed to incorporate airtight joints and SBS's insulated spline connection system reduces thermal bridging even further by providing additional insulation at each panel to panel junction.

Using SIPS technology for residential applications will reduce build programmes, enabling houses to be completed much faster than conventional building methods. If the house design facilitates habitable living space in the roof zone – then SIPS are a fantastic solution to ensuring maximum space availability whilst providing superb thermal performance and limited air leakage.

COMMERCIAL APPLICATIONS



Using Structural Insulated Panels systems, Building Regulation requirements can easily be achieved and exceeded, right up to BREEAM Excellent - especially when the SIP provider is integrated early enough in the process to allow efficient and effective design.

There are two fundamental applications for SIPS – SIP Envelope or a Full SIPS Structure - in all cases the product will be engineered for load bearing capability, racking resistance and wind loading requirements.

SIP Envelope - infill/wrap

SBS SIPS are often specified as infill to steel, concrete or engineered timber structural frames and can sit inside or outside the frame itself. The SBS SIP Envelope - infill or wrap, is incredibly quick to install, making it an innovative solution for high-rise construction to deliver a rapid dry building envelope.

Full SIPS Structure

Our System can be used to form a loadbearing Full SIPS Structure. Large format sections of SBS SIPS can reduce the need for expensive and time consuming scaffolding in most situations. SBS SIPS have been subjected to robust testing procedures. These include loading the panels with a uniformly distributed load (UDL) to measure strength and deflection between two supports, axial loads centrally and eccentrically placed, racking loads and shear and bending loads on the panel joints.

ACCREDITATIONS AND ASSOCIATIONS



BBA certification is widely known throughout the construction industry as a symbol of quality and reassurance. BBA approval is recognised by building control, government departments, architects, local authorities, specifiers, and industry warranty providers such as the National House Building Council (NHBC). The BBA's robust testing and assessment procedures cover durability, strength and stability, thermal performance, air permeability, behaviour in relation to fire and resistance to airborne sound.



The Programme for the Endorsement of Forest Certification (PEFC) is an international organisation dedicated to promoting Sustainable Forest Management (SFM). PEFC works to ensure that timber and non-timber forest products are produced with respect for the highest ecological, social and ethical standards



The Structural Timber Association (STA) promotes the use of structural timber products and systems within the UK construction industry. The STA leads the industry on quality, health and safety, education, technical knowledge and customer service.

SERVICE & SUPPORT

Key to the success of any project is professional advice and support. SBS work closely with designers, architects, engineers and contractors throughout the design and construction journey. With early engagement in the design process, SBS can optimise the benefits of using our SIP systems, through DTMs and design workshops. From structural engineering advice and thermal calculations to condensation and risk analysis – our team, with over 60 years' experience in composite panel technology, are available to offer guidance and technical support.

Visit our website to download technical information including:

- BBA Certificate
- SBS Construction Details
- SBS Fire Certificate
- OSB3 Green Credentials
- Design Guide
- COSHH Data
- Thermal Comparison
- BASF Energy Efficiency
- BASF Insulation Core
- BASF House
- ISOPA PU
- PU Refrigeration
- BRUFMA Sustainability
- Acoustic Certificate
- PEFC Certificate

SIP BUILDING SYSTEMS WILL BE PLEASED TO PROVIDE GUIDANCE AND SUPPORT.

CALL OUR TECHNICAL HELPLINE FOR ASSISTANCE



SIP BUILDING SYSTEMS

For further information
about our company, services,
specialist products
or capabilities call:

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