

Corus Living Solutions

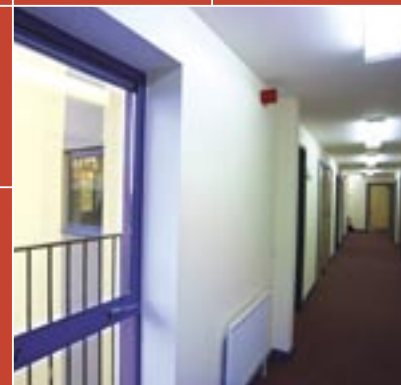
[www.coruslivingsolutions.com](http://www.coruslivingsolutions.com)

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Corus Living Solutions

Start Building with Finished Rooms

Modular Building System



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Ashorne Hill Conference Centre, Leamington Spa



JRSLA Building, Allenby/Connaught Project



Prospects House, Exeter

# Corus Living Solutions

## Value in Steel

**Corus has long supported the use of light steel framing for the system build industry. The research and development of most sections in use for steel framed systems has been led by Corus.**

With an annual turnover of £9 billion and major operating facilities in the UK, Netherlands, Germany, France, Norway and Belgium, Corus employs over 42,000 people in over 40 countries.

Corus has a long and distinguished reputation for delivering innovative products and solutions, which address the needs of the market.

Corus has moved downstream in many sectors to produce building systems, Corus Living Solutions is an example of this move.

Corus Living Solutions was created in 2003, to design, manufacture, deliver and erect fully fitted out steel framed finished room modules at its Shotton Works, based in North Wales, UK.

The business is set up to target the immediate and anticipated demand for high quality, functional and innovative accommodation, such as:

- Defence Estates
- Hotel chains
- Halls of residence and hostels
- Key worker and specialist accommodation

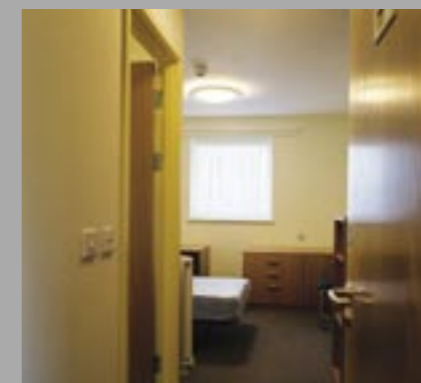
Corus Living Solutions addresses many of the issues currently facing the construction sector. These include:

- Labour and skills shortages
- Escalating building costs
- Tighter thermal and acoustic building regulations
- Quality control
- On-site health and safety concerns
- Waste and efficiency
- Sustainability and whole life costing
- Counter terrorism



# Living Accommodation

**Corus Living Solutions' off-site manufacturing facility provides all the quality, precision and consistency you would expect from factory assembly without compromising on style and living experience.**



**Corus Living Solutions' room modules are ideal for market applications such as:**

## **Defence Estates**

Our modules are well suited for Ministry of Defence accommodation. The robust and durable design meets the requirements for CTM (Counter Terrorism Measures); BREEAM; building physics and safety. Our designs can provide high quality rooms such as ensuite bedrooms, common rooms, utility rooms and baggage stores.

Our off-site manufacturing techniques facilitate the reduction in both deliveries and on-site workforce providing for greater security and limited disruption to surrounding facilities.

## **Hotel chains**

Our modules with ensuite facilities offer choice and flexibility which can accommodate individual corporate styles, capturing this in both the desired interior and exterior aesthetics.

Designing and building with finished rooms provides a reduced construction programme which in turn leads to earlier occupation and revenue.

## **Halls of residence and hostels**

Our range of single person rooms especially designed for students offers high quality and functionality within a compact living space.

The production capacity and ease of erection provide the construction programme to suit this sector.

## **Key worker and specialist accommodation**

Higher land prices, escalating build costs, and shortage of skilled labour mean that traditional build is failing to meet the demand for affordable housing. Our modules can guarantee a high standard of comfortable living with the benefits of affordability, style and spaciousness.

Our range of rooms includes bedrooms, sitting rooms, kitchens and bathrooms all compliant with Building Regulations.

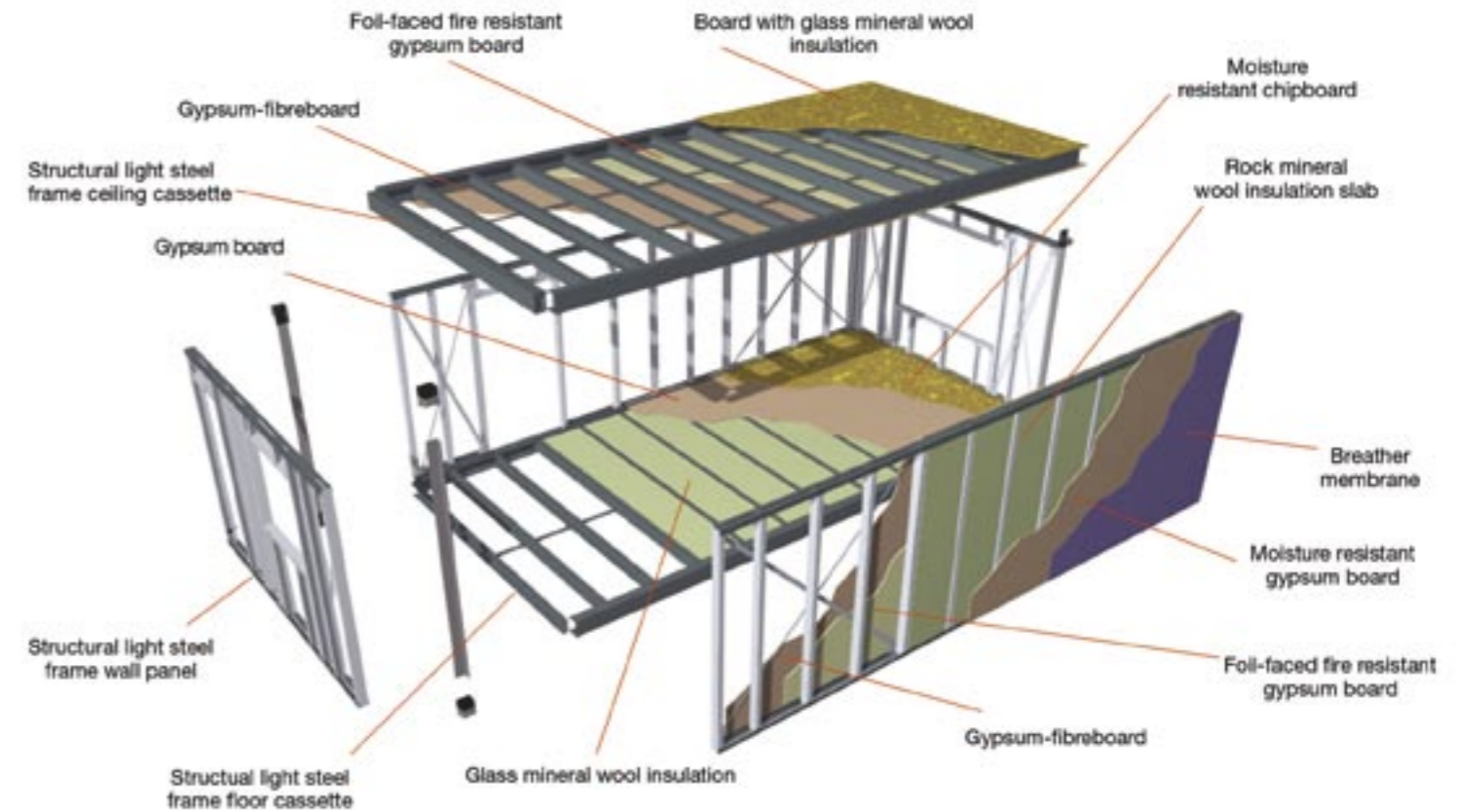
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Off-site manufacturing provides greater certainty of control over cost, quality and programme.

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# High Performance

The client can be certain that our modular system will deliver rooms that comply with all present and anticipated building regulations.



## Sound insulation

The Corus modular system exceeds the minimum requirements of the Building Regulations in relation to airborne and impact sound insulation.

## Durability

In 'warm frame' modular construction, the frame components can achieve a design life in excess of 60 years, provided that the building envelope is properly maintained.

## Environmental performance

Modular construction provides energy efficient buildings thereby reducing CO<sub>2</sub> emissions over the life of the building. The efficiency of factory production reduces the amount of waste produced and modular construction generally requires less material than traditional construction methods.

## Fire resistance

The walls and floors of the modular construction achieve 60 minutes fire resistance, sufficient to meet the requirements of the Building Regulations.

## Thermal efficiency

Modular construction can satisfy the requirements of the Building Regulations. The external walls of a brick clad light steel framed structure with 45 mm Celotex insulation in the external cavity will achieve a U-value  $\geq 0.27$  W/m<sup>2</sup>K.

## Design life

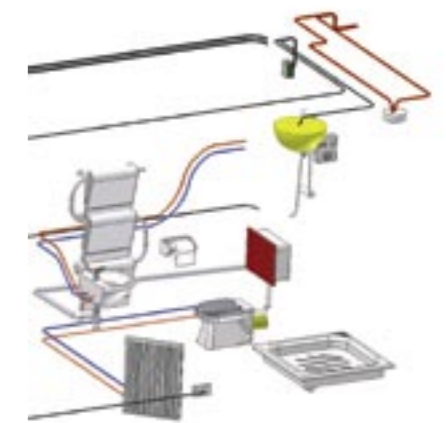
Subject to the implementation of an effective and regular regime of maintenance throughout the life of the building, it is anticipated that a design life of in excess of 60 years can be achieved on the steel modular construction, ancillary steel framing and metalwork elements. All of the light steel framed structural elements are galvanized which will provide more than adequate corrosion resistance in a dry environment.

## Flexibility

We recognise that the world we live in is not a one size fits all. Corus Living Solutions offers a range of sizes and configurations to suit a wide range of layouts.

Want to extend the building in the future? Just add more units upwards or outwards. Corus Living Solutions can go up to five storeys. If you need to reduce the number of modules, this is also possible. Corus modules are connected on site using bolts and brackets engineered to allow for ease of assembly or disassembly of the modular building if required.

While the internal elements of the building will benefit from the quality and precision of factory build, the external walls and roof can look and feel as traditional or modern as you choose.



## Manufacturing Excellence

### Assurance in Manufacturing

Corus has a reputation for excellence in manufacturing and a strong focus on delivering quality products and solutions. This is delivered through:

- Commitment to continuous improvement.
- Quality Management systems which underpin all company activities.
- Commitment to ISO9001 to design and manufacture to which all UK sites are approved.
- Health and safety of all personnel and process being a number one priority and never be compromised.
- Training, including behavioural based training, of all Corus employees.
- CAD-CAM manufacturing line with the most advanced technology in Europe.



## Certainty in delivery

Once the modules are fitted out in the factory we load and deliver them to site.

Modules can be craned into difficult spaces where access makes traditional construction unsuitable.

We then fix the modules into place to form a weather tight structure until the roof and walls can be completed.

Off-site manufacturing allows site preparation and module manufacture to be programmed in parallel, reducing overall project time, delay and expense on-site and minimising disruption for the client.



## Simplicity on site

By moving more of the activity into factory-controlled conditions, we are able to:

- Simplify the level of prelims, on-site supervision and inspection.
- Significantly reduce the number of tradesmen required on-site, minimising congestion, delays and rework.
- Simplify the number of interfaces during the project life.
- Deliver, install and complete to a predictable programme.



## Finishing options

We are happy to advise on the most suitable finishing options for the module superstructure. The choices include:

### Cladding options:

- Brick
- Corium
- Render
- Composite panels
- Rain screen cladding
- Terracotta rain screen cladding
- Cedar cladding

### Scheme options:

- Pitched timber truss roof
- Pitched light-steel frame roof
- Flat roof
- Lift shaft
- Staircases
- Balconies
- Canopies



Corus Hi-Point



# Sustainability

## Meeting the needs of the present without compromising the future.

### Sustainable future

Ensuring a sustainable environment for future generations is a key deliverable for Corus, which we are working towards.

Corus places great emphasis on the contribution we make to a sustainable society and is committed to incorporating the principles of sustainability into all aspects of our operations.

Corus designers ensure we minimise the use of scarce natural resources while maximising the potential of low energy and products. Corus in the construction sector advises on the economic, environmental and social performance of its buildings and structures, in order to improve sustainability awareness throughout the supply chain.

By using steel, Corus has developed products which are lighter, stronger, and most importantly, consume less energy when they are used.

- Since 1970 we have reduced the amount of energy used in steel making by 40%.

- Since 1992 we have reduced waste going to UK landfill by 62%.
- We spend over 3 million Euros per year reducing the environmental impact of our processes.
- Stock market indices have recently been developed as a global benchmark for socially responsible investors. Through our commitment to sustainability and people development we are listed in:
  - The FTSE4Good Index
  - Dow Jones Sustainability Index.
- We are continuously developing products and solutions which provide alternative forms of energy e.g. wind farms and reduce the amount of energy used in heating homes e.g. modules.
- Steel is a fully traceable product with a very high rate of recyclability, which we support and encourage.



### At Corus Living Solutions we take a strong stance on sustainability by:

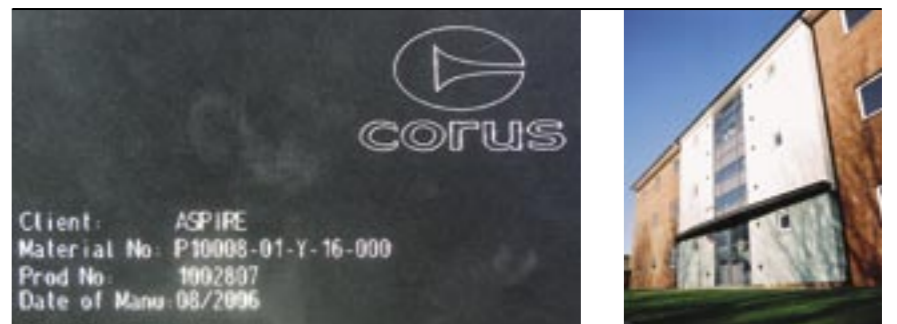
- Minimising waste through use of precision materials in the factory and a structured approach to the recycling of any waste materials generated.
- Reducing the average number of deliveries to the building site up to 75%.
- Supporting communities providing employment opportunities in factory conditions, which have a strong emphasis on health and safety.
- Reducing the amount of hazards and congestion on-site.
- Tracking and providing full traceability of all modules using a unique identification number. This will identify

all materials used and can form part of any life cycle assessment for the building.

- Providing energy efficient buildings reducing CO<sub>2</sub> emissions over the life of the buildings.
- At the end of its life, a building can be dismantled with the potential for reuse elsewhere.

Living Solutions produced the first modular buildings in the UK to achieve a BREEAM rating of excellence.

Perham Down demonstrator JRSLA completed in 2005, included a rainwater harvesting system, solar heating panels, low carbon index and low energy consumption levels.





## Corus People

### Corus Living Solutions is developing new and sustainable positions at its Shotton site in North Wales.

Corus recognises the importance of its people and strives to provide them with the tools to carry out their roles effectively and develop further their opportunities in the company.

Corus spends an average of 1400 Euros per year on each employee providing training and career development:

- On the job training and secondments.
- Apprenticeships in disciplines such as Engineering.
- Professional qualifications and educational development such as MBAs.
- Residential training at a Corus funded management college in Warwickshire.
- Management development and mentoring.
- NVQ qualifications in:
  - PMO (Performance Manufacturing Operation)
  - BIT (Business Improvement Technique)
  - ILM (Institute of Leadership Management).
- Construction Skills Certificate Scheme (CSCS).
- Construction Plant Competence Scheme (CPCS).
- Graduates Entry Scheme.
- Partnership with Deeside College.