

# Sustainability

The Panaloc system actively benefits the environment

## CO<sub>2</sub>

A typical 120m<sup>2</sup> Panaloc Magnum Board building, insulated with Kronotherm woodfibre insulation and clad using timber weatherboarding will use upwards of 75 m<sup>2</sup> of PEFC 100% certified timber products which will remove approx 52,500 kg of CO<sub>2</sub> from the environment for decades to come!! A return on your investment that demonstrates a clear environmental contribution and a commitment to the UK's carbon reduction policies.



## Transport

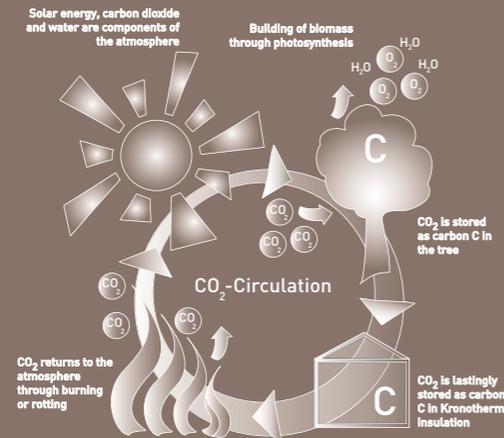
Panaloc imports all the OSB4 and woodfibre required for the process via shipping directly to their quayside warehouse, further reducing the environmental impact of the building system by reducing road freight and the associated pollution and CO<sub>2</sub> production.

## Energy Efficiency

The Panaloc system is an inherently airtight form of construction as the panels are monolithic and accurately machined providing airtight joints and interfaces providing a sound foundation for the thermal design and an energy efficient building. The Panaloc external insulation system provides the specifier with the ultimate in flexibility allowing an increase in insulation levels for a minimal footprint.

## Waste

Panaloc's offsite construction reduces waste and its transportation. The OSB4 off-cuts can be re-used in the manufacture of Magnum Board, processed into bio mass pellets for bio mass solid fuel boilers, or used in the heating of the Panaloc factory.



# panaloc

Panaloc Ltd • Alba Way • Off Barton Dock Road • Manchester • M32 0ZH

Tel: 0161 864 4436 Fax: 0161 864 4438 E-mail: enquiries@panaloc.co.uk  
www.panaloc.co.uk

# panaloc

## Sustainable Modern Methods of Construction

Design

Manufacture

Installation

Sustainability



## Company Profile

Looking to change the face of the offsite construction and timber frame industry sectors here in the UK is Manchester-based Panaloc Ltd. Established following an extensive research and development period involving multi million pound investment, Panaloc is a seamless process led offsite construction and MMC specialist with the capability to deliver mass customised products on an unprecedented scale.

Operating out of 350,000 sq ft head office and manufacturing facilities located in Manchester's Trafford Park, Panaloc has the technology to design and manufacture structural components in the form of wall panels, roofs, pods and ceilings, all within a strict and efficient factory controlled environment.

Achieved through the deployment of automated intelligent CAD software - designed in-house by Panaloc's technical team and which is the driver behind an advanced and fully-automated CAD-CAM manufacturing process - all components are produced to exacting standards in terms of dimensional stability and accuracy. Exhibiting excellent thermal, acoustic and fire protection properties, they are suitable for fast-track construction programmes and can incorporate mass customisation. What's more, all components are universally suitable across all sectors of the construction industry, including low and high-rise housing, hotels, key worker and student accommodation, leisure, education, hospitals and healthcare, and the commercial arena.

## Quality

Panaloc take quality seriously which is why we have developed an innovative integrated design and manufacture process which when incorporated into the structure of ISO9001 provides a robust and secure quality control system for a 21st century offsite manufacture.

Alongside the ISO9001 quality control systems sits the destructive testing regime as required by the TRADA QMark certification carried out in our own materials laboratory using our UKCAS approved computer controlled rig. Panaloc has also obtained LPCB certification under the LPS 1181 standard.



## Design and Manufacture



Down the line

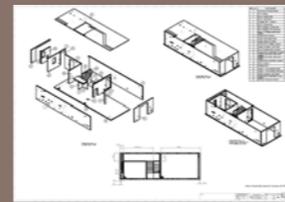
Panaloc is a young innovative business which has, in the last three years, invested multi millions of pounds to develop the world's most advanced and innovative CAD-CAM process specifically for the offsite construction industry.

CAD	Computer Aided Design
CAM	Computer Aided Manufacturing

These two processes are linked into the unique Panaloc intelligent software design databases; it is this integration together with use of state of the art CNC machinery which has produced a world class solution.

Panaloc is able to create 3 dimensional computer generated working models in graphic form by using the intelligent software to bring forward repeatability on an enormous scale. From the tens of thousands of items contained within its databases Panaloc is then able to use and manipulate the information to carry out its seamless manufacturing process.

The use of these innovative offsite manufacturing techniques has enabled Panaloc to produce bespoke items on a very large scale. Panaloc can now undertake mass customisation which is, in reality, the mass production of bespoke items on a very large scale.



Computer generated working model



Intellectual software driving production design



Volumetric pod production line



Volumetric housing



CNC driven render panel production line



CNC driven brick panel production line



Volumetric bathroom pods

## Product range

Panaloc's range of products utilising Magnum Board and OSB4 include:

- Volumetric construction including Hotel rooms, Student Accommodation, Housing, Apartments and more
- Flat panel construction suitable for virtually all building types, framed and unframed
- Hybrid where a building configuration requires a combination of both Volumetric and Flat panel approaches
- Cladding panels in a large format incorporating insulation and finishes
- WC and Bathroom pods for Residential Schemes, Hotels, Healthcare Hospitals, Schools etc
- Stressed skin insulated panels for Roof, Floors and Walls for all building types



Volumetric housing

## Installation

Panaloc can provide installation services or can arrange for contractor training on our range of products. We will also provide advice and design input on the choice of foundations best suited to the product, the specific design and the site conditions.



Panel mover



Fixing of external cladding panels