

Glavloc® Build Systems designs, manufactures and supplies quality energy efficient buildings.



#### www.glavloc.ie

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### Glavloc is a building technology company

Glavloc® helps construction companies and developers increase profit margins by supplying a quality patented building system that reduces the cost and build times of the average unit.

A Glavloc® building is constructed on site by assembling pre-manufactured timber and insulation components without the use of heavy lifting equipment or mechanical fixings.

Glavloc® Build Systems Ltd specialise in all aspects of building from design through to manufacture and supply. Our projects have included bespoke houses, pre-designed homes, extensions, and commercial buildings.

"It didn't take me long to understand how the system works. It is simple and well thought out- I can now guarantee my profit margins" *Aiden Glynn - Builder* 

#### Glavloc understands your issues



#### Rapid Build-

Our simple interlock design results in a rapid build offering time savings of 70% on masonry builds and 50% on traditional timber/steel constructions.



 Ease of construction-Minimal cutting on site.
Every detail such as roof detailing, connections, window surrounds have been pre-designed and fully certified, offering a high quality, low risk build on site.



Fully certified future proofed-against new building performance regulations, offering super insulated BER A rated energy efficient buildings with zero thermal bridging.

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# No heavy lifting cranes required-

Light weight components can be safely lifted by site personnel and assembled entirely by hand. Perfect for hard to access sites.



# Fast installation of services-

A 24mm service cavity incorporated in the wall system used for services . Only a first and final fix is required with no plaster crack problems.



#### Reduced labour costs-

Our system does not require highly skilled and scarce tradespeople who can be expensive to employ.

#### What is a Glavloc Build System

A Glavloc® Build System is made up of standardised components manufactured using engineered timber and EPS insulation that clip together to form most types of structure.

A Glavloc® Build System offers superior insulation, structural strength and air tightness.

The Glavloc® Build System includes:

- wall, roof and passive insulated floor system,
- EPS insulation
- membranes
- full certification of all structural elements.

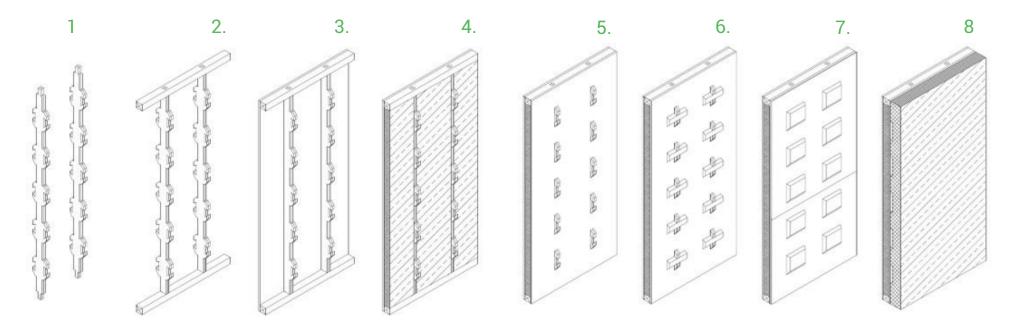
### **Standardised Components**

Glavloc's G-LOC wall system is made of a small number (OSB 3 board, gluelam and birch ply) and EPS insulation components of CNC cut generic interchangeable components which can be used to build most building sizes and shapes with limitless scope to facilitate architectural design.

Since the components are interchangable, any surplus components can be reused on another building.

"In the walls you have a service cavity, you aren't chasing or drilling, so it's a lot faster to put together." *Ross McCarthy- Electrician* 

#### Glavloc® G-LOC wall System



- 1. OSB studs
- 2. OSB Studs are inserted into pre-machined slots within the gluelam sole and head plate.
- 3. Internal face of the studs are clad in OSB racking board, secured to the studs using Birch ply wedges
- 4. 90 mm pre-cut EPS insulation inserted between each timber stud. No mechanical fixings used
- 5. External face of the studs clad in OSB racking board
- 6. Gluelam wedges secured to the studs
- 7. Semi rigid profile waterproof membrane attached to external OSB racking
- 8. 125mm external envelope of EPS insulation

#### Comparable to Masonry Walls

The Glavloc® G-LOC walls have a similar capacity to masonry walls, with similar load dispersal rates and can take up to to 4 times the load over a traditional timber frame.

This highly engineered timber based system has all the benefits of an off-site traditional timber frame while also mirroring the benefits of a traditional masonry building.

#### **Passive Foundation System**

Our Glavloc® passive foundation system is an insulated passive foundation system for one to three storey buildings. It has a certified U-value of 0.12 W m-2 K-1. And is suitable for buildings that are finished with acrylic render, cladding boards, masonry or stone finish.

"The plastering was just as fast as any other build. I'd have no problem working again with Glavloc Build Systems." *Michael Walsh- Plasterer* 

#### **Glavloc Parapet System**

The Glavloc® Parapet System is a parapet flat roof system that has U-values of 0.12 W m-2 K-1 and is a warm type roof.

#### **Traditional Truss**

A traditional truss can be fitted to any roof and can carry traditional finishes such as tile or slate with a zero thermal bridging option



## Manufacturing

Glavloc® Build System components are cut to exact dimensions in a fully automated manufacturing process in our factory and delivered to site in a 'Just in time' fashion in a matter of weeks.

The exact number of components required for the build arrive on site flat packed and construction can be undertaken by just one/two people without the use of heavy lifting equipment.

A Glavloc® Build System can be installed to a builders finish in 4-12 weeks, reducing onsite labour and minimising waste.

## **Energy Efficiency**

Glavloc® Build System buildings have industry leading thermal properties. Our ratings are well inside the requirements for either A1, Passive or nZEB certification.

Our wall, roof and foundation systems have BBA certified thermal properties of between BBA Certified U-Value of 0.14 -0.12 W m-2 K-1 and are the first build systems to have a zero thermal (cold) bridge rating.



#### **Sustainability**

Our building systems are manufactured to the highes' timber products, using the latest computer controlle facilities in Cork, and are fully tested and certified.

- Timber waste is turned into wood pellets/briquettes for local consumption.
- Our patented insulated passive foundation reduces the amount of concrete required by two thirds.
- Our lean fully automated factory for the manufacture of the system results in zero waste.
- The EPS used for insulation is made up of 20% recycled materials.
- All components of the build can be taken apart and recycled.

Glavloc® Build System offers a simple, sustainable alternative to brick or block.



#### Certifications

60 min BRE fire rating SIRO centre acoustic testing BBA certified thermal rating EN and BS standards



#### Contact Us



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