



Thinking of building with Sandbags? ... what to remember

An EcoSteps Sandbag Building kit combines leading edge technology and patented processes, resulting in homes and buildings that are substantially lower in cost to build and run.

The inherent eco friendly elements that are part of our system are ideal for custom homes and together with our design team, you are assured of a home that reflects your individualism.

It is important to note that the team at EcoSteps are totally focused on modular kit design and manufacture and we do not provide any architectural, engineering or construction capabilities or expertise in-house.

However, we do provide custom kit manufacturing in conjunction with your architect and engineer AND we are able to refer you to Architects and Engineers that know our system well.

Once your plans have been approved, we can also recommend a builder who has been trained and certified on the EcoSteps system. If you have your own builder, our experienced consulting team can train and guide your crew on site.

Custom home design and building can be a complex and challenging exercise as multiple disciplines and expertise are brought together.

It is therefore important to understand the role that we play in the exercise and how our Sandbag kits can be used to create and deliver your dream home.

Modular KIT Concept

Your home will be comprised of a modular frame kit which is manufactured from EcoSteps CAD / CAM drawings which are based on your architect's plans.

That means that the kit arrives on site **ready to be installed** and it is therefore critical that all aspects of the plan are finalised **before** we start manufacturing your kit.

The Team Members

Good coordination and collaboration is needed to ensure that your dreams become reality and there are five key participants in the exercise.

YOU

As the home owner, you are vital to the exercise. It is your dream that is being realized and your money being spent. Ensure you remain part of the exercise all the way.

YOUR ARCHITECT

Your architect converts your dreams to drawings, plans and blue prints, which are used by everyone to build your home.

The use of a modular building system makes the architect even more important as ALL aspects of the plan MUST be finalized BEFORE we start manufacturing.

Simply put, your home design will become a reality at our factory, so "on the fly" changes at site will not be possible.

YOUR ENGINEER

Structural elements like load bearing walls and all the other essential aspects of a well designed home that is safe and long lasting are the domain of your engineer. Whilst we can provide specialized assistance, it is your engineer that will define the materials and structural requirements and sign off or plan approval.

THE EcoSteps TEAM

We take your architect's drawings and process them through our CAD/CAM system, converting the plans into manufacturing specifications which are used by our factory to produce your Sandbag Building kit.

We work closely with your architect and engineer, ensuring that their design requirements are met by our system. Once we have their approvals, we start manufacturing your custom kit.

YOUR BUILDER

Your builder receives the kit, together with our CAD drawings, your architect and engineer plans, instructions and starts "assembling" your home on site.

All the specialized trades and skills needed for building are also required for our kits, so ensure that your builder has trained and certified plumbers, electricians, plasterers and experienced building crews.

"Converting your builder" to our system is quick and easy but building experience is important. On site consulting and training can be provided, depending on your builder and whether they have built a sand bag home before.

Converting to Sandbags

Most of the tools, techniques and processes used in traditional building can be utilized when building an EcoSteps Sandbag Home.

The biggest difference is however the structure and materials for the walls.

Sandbag walls are quite a bit thicker than a traditional wall, providing far better sound and thermal properties.

It is therefore critical that your architect uses the following EcoSteps dimensions for plans.

Wall thickness

The most critical measurement that needs to be taken into consideration are the wall thicknesses.

- **External walls - 225mm**
- **Internal walls - 180mm**

Please note that your architect needs to convert the plans to the above wall thickness as this will affect the overall plan and design.

We do have architects that can provide this conversion service, but it is quicker and easier to get the original architect to make the changes.

In Summary

- **Architectural Plans**

Have plans drawn up by your architect taking the sandbag wall dimensions into account. (You may need to convert plans if they are already done.)

- **EcoSteps CAD Conversion**

Send the plans to EcoSteps and we will convert them into CAD/ CAM drawings for production.

- **Architect / Engineer Review**

The architect will receive CAD/CAM drawings for review and corrections.

- **EcoSteps CAD Finalization**

The EcoSteps CAD drawings are finalized based on the architect and engineer changes.

- **Final Approval & Sign Off**

The EcoSteps CAD drawings, which includes the manufacturing cutting sheets are signed off by the architect and engineer.

- **KIT Manufacturing begins**

We provide an ETA for completion and start manufacturing your frames.

- **KIT Hand over**

The kit, together with the bags and other supplies and tools that have been ordered are packaged and ready for collection.

