



NEXT GENERATION SLABS

The **FUTURE** of residential foundations

Revolutionising Foundations

The environmentally sustainable alternative to EPS waffle pods.



Welcome to the future of foundations.

Biax Foundations™ is the fully patented, eco-friendly, user-friendly foundation system that offers engineers, concreters and homeowners a more sustainable foundation option.



Made from 100% recycled plastic & 100% recyclable



Australian made



Faster, safer and easier to install



Fully compliant to Australian Standards

Benefits



Easily Transported

Pods for a 180sqm home can be delivered on a single axle trailer



Lightweight + Easy To Handle

Each pods weighs less than 2.5KG



No Cutting No Waste

Fully adjustable system
Fits any size foundation
No cutting of pods
Providing a totally clean site



Easy storage on site

Significantly reduced storage space required on site



AUTOPod Design Software

Produces fully optimised pod layout and bill of quantities in seconds



No bar chairs required

Engineered ridges eliminates the need for bar chairs



Improves concrete yield

No pod movement during concrete pour due to keystone connection.
Avoids concretes blowouts and overages.



COMPONENTS

BIAX-215

For a 300mm slab

This is considered the "primary" pod as it is the most commonly used for the main body of all slabs. This pod is used in all areas for soils up to H2 soil classification and is supplied in the highest ratio per m² of slab area.



BIAX-145

For a 230mm slab

This pod is used for the simple formation of "step-downs", such as patios, alfrescos, garages and wet areas. It saves the builder from having to 'profile' the site when excavating by allowing them to work with a flat base.



BIAX-500

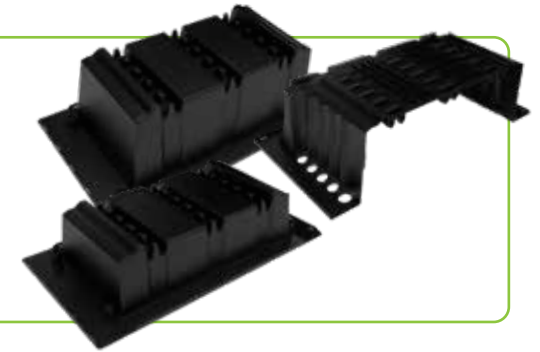
For a 585mm slab

The BIAX-500™ creates a significantly stiffer and stronger slab to cater for multi-story buildings with high loads and lighter residential slabs on expansive E-Class soils.



BIAX-MINI POD™ & BIAX-ADJUSTABLE™

Utilize Biax Mini Pods and Adjustable Pods for tight spaces like edge-beams and step-downs, eliminating on-site cutting and ensuring efficient installation without compromising structural integrity.



AUSCHAIRS

The Auschair is an innovative new combination spacer for pods and all reinforcing steel applications. With Auschair you will only ever need one type for all situations.



BIAX KEYSTONE

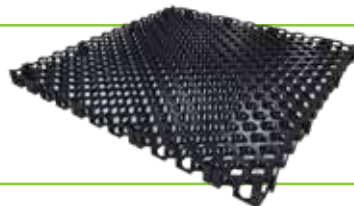
The Keystone is a pivotal part of the Biax system patent. Keystones secure all the Biax pods together for a perfectly modular grid.



OTHER ANCILLARY PRODUCTS

Ausdrain 30mm Drainage Cell

Solutions for managing dropped edge-beams and internal steps.



Thermal DPM & Reflective Tape

To enhance Thermal R-Value, these components can be included in the foundation design.



Customer Experiences and Success Stories

1 We at SJL Consulting Engineers are thoroughly impressed with the innovative solutions offered by Biax Foundations. Their BIAx concrete slab system not only provides a much more sustainable solution, relative to traditional waffle pods, but also simplifies the entire process for efficient design, pod set out and cost estimating, using their Wafflesuite and AUTOPod software.

In addition, we find that builders have been very impressed with the ease of setting out the pods during construction and more people are willing to try the system based on the positive feedback so far. With their ever-present support and forward-thinking approach, working with Biax has been extremely positive.

Shane Lutze - Director
SJL Consulting Engineers

3 RYSE Construction is an emerging building company working throughout Southeast Queensland. We specialise in full turnkey investment home packages, built on our own land. A fundamental part of our journey has been careful product selection, with a clear emphasis on sustainability and reliability. The Biax foundation system is a perfect fit, utilising recycled plastic pods, reduced transport weight and costs, Australian made, zero waste to landfill and structurally the best slabs I have had the pleasure in delivering during my 40+ years in the industry. All our designs have been prepared ready for the updated NCC requirements so from set downs in wet areas to step free transitions the 300mm low profile design for our H1 site classifications is the perfect solution. The team behind the Biax products are readily available to assist in design, site training and assistance in identifying trade contractors experienced in their system.

Our mantra at RYSE Construction is "Considered Homes" and the Biax Foundation System is the perfect business partner for our quality builds.

Greg McGee - Building Manager
RYSE Construction

2 Biax from a supplier point of view is a fantastic product. A space efficient system that allows us to hold large amounts of stock with minimal yard space used, also being a recycled plastic polymer wrapped on a pallet means outdoor storage with no fear of water damage.

With each pod only weighing 2.5kg each, picking, packing and delivery are of no concern either. The Biax team are fantastic in their support of promoting the product and getting any technical questions or details to us so we can better help customers and engineers.

The Biax foundation system has been a great success for Bianco in S.A with over 1 million in sales for 1 year. We look forward to supply more sustainable, cost saving, polystyrene free slabs.

Luke Pietrobon - Kilburn Store Manager
Bianco Construction and Industrial Supplies

4 At Final Finish Concreting we have been using Biax for nearly two years, with over 10,000m² lay we have found the system to be very easy to work with, it is saving us hours of labour on each job allowing us to get more slabs on the ground.

The Biax system has been an easy transition for all skill levels compared to other pod slabs and with no cutting or waste, our sites have never been this clean which has aided in us winning more work in sensitive areas and on windy days.

With the pods being plastic, our slabs are more consistent in the finish with even drying times and no cracking being found.

Tom Edwards - Owner
Final Finish Concreting



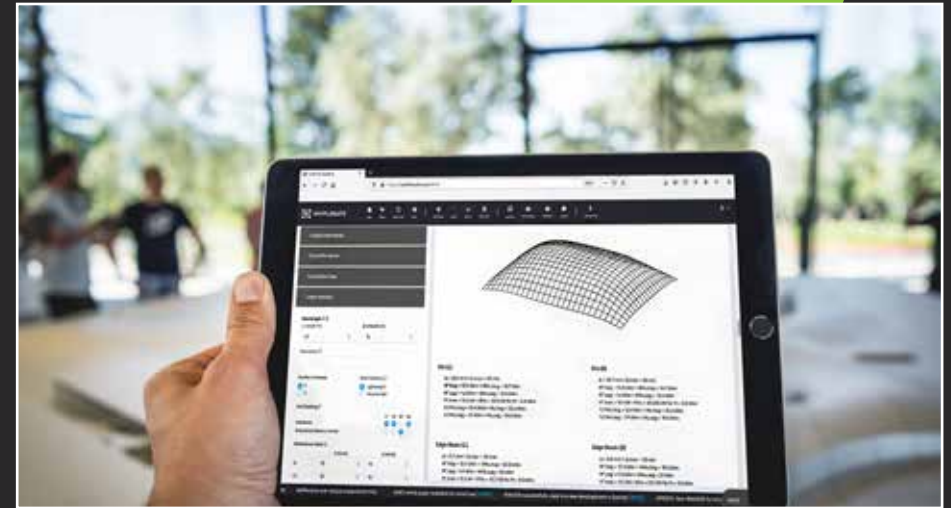
INNOVATIVE SOFTWARE SOLUTIONS

Wafflesuite

Elevate Structural Insights with Wafflesuite

Introducing **Wafflesuite**: our specialized three-dimensional finite element analysis software for Biax Foundations™. Unlike traditional methods, Wafflesuite employs advanced waffle raft on mound analyses, enhancing accuracy and efficiency in structural assessments.

<https://au.wafflesuite.com/>

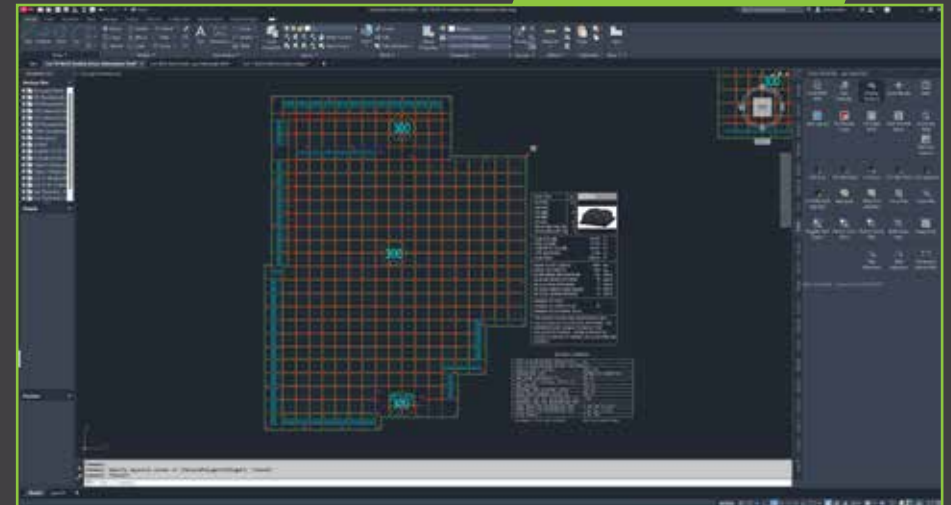


Revolutionize Design with AutoPOD CAD Software

Elevate your foundation design process with AutoPOD, the state-of-the-art CAD software by Biax. This powerful tool empowers engineers and drafters to seamlessly create Biax Foundations™ slabs, automating design tasks and enhancing accuracy. With its integrated bill of quantities feature, AutoPOD not only streamlines the design phase but also provides material quantity insights.

For further information or to obtain a copy of the software, please get in touch with us.

AutoPOD



Get in touch biax.com.au

FAQs & COMMON MISCONCEPTIONS

1. Can I switch out my existing waffle pod floor to a Biax system?

Yes you can, however you will need to get an engineer to design the floor specifically as a Biax slab.

2. How does Biax compare in cost to polystyrene waffle pods?

For H1 and H2 slab classifications, Biax Foundations™ are comparably priced or cheaper than standard polystyrene waffle pods.

3. Can I use normal concrete, or does it need a special mix?

Biax slab designs are based upon a minimum requirement of 20MPa concrete.

4. Is it quick and easy to install?

Absolutely! Biax's lego-like installation method, combined with no cutting of pods and no bar chairs, allows for a significantly faster installation process compared to polystyrene waffle systems.

5. Does Biax use more/less concrete?

For H1 & H2 soils, concrete usage can be less than a polystyrene alternative providing the site preparation is managed properly and all components placed as drawn.

6. Can I have a decorative concrete finish with Biax?

Yes. One of Biax's biggest advantages over polystyrene is the elimination of shrinkage cracking on the surface. When designed in accordance with our recommendations, polished or burnished concrete finishes are superior using Biax.

7. What is the R-Value?

A 300mm standard Biax slab has an additional R-Value of R1.10 (in winter) over a conventional concrete slab on ground. This includes the use of a reflective damp-proof membrane in lieu of traditional black buildinging film (plastic).

8. What are the heights of Biax slabs?

Biax slabs are 300mm overall in height for all soil classifications up to H2. This is due to the extra stiffness provided by our 750mm rib centres.



COMMON MISCONCEPTIONS

“Biax does not comply with Australian Standards”

Biax slabs are fully compliant to AS2870, Section 4 and have been third party peer reviewed by leading Australian structural and geotechnical engineers. Every Biax slab is a bespoke engineered solution using Finite Element Analysis (see details about our Wafflesuite design program).

“The mesh sits too low in the slab and needs to be chaired up”

Biax slabs have been engineered to maximise the strength capabilities of reinforcing mesh in a structural sense. Biax pods are superior at protecting the reinforcing from moisture due to their 2mm thickness of polypropylene plastic construction, unlike polystyrene waffle pods that are manufactured using moisture which is retained within the pod.

“Biax using imported recycled plastic (as opposed to locally sourced) is not helping our Australian waste problems”

Biax pods are manufactured by Holloway Group, a leading manufacturer based in Sydney NSW. Holloway Group specialises in various construction and materials handling products made from 100% post-industrial polypropylene waste. Recycled polypropylene is not in abundance like other consumer based 'soft plastics' and therefore up to 80% of Holloway's Australian leading demand needs to be sourced offshore. It is fully verified and certified for complete proof of origin and raw material make-up.



Watch our product
overview video!



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