



Flexible | Affordable | BuiltQuik

A photograph of a pre-engineered building framework under construction. The structure is made of blue-painted metal beams and columns, forming a large, open-sided structure. It is situated on a concrete foundation in a grassy area with trees in the background under a clear blue sky.

# Pre-Engineered Building Framework

Delivered in Partnership with Communities

CATALOGUE

The following products are under patent protection.

PCT/AU 2018/051134

PCT/AU 2012/9248957

*In Partnership with*

 **Robert Bird Group**  
Member of the Surbana Jurong Group

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**An innovative,  
streamlined process from  
design to construction**



# The BuiltQuik Construction Method



BuiltQuik's competitive edge for time, design choice and price are all enabled by our proprietary semi-prefabricated construction system. We have also established a sustainable regional delivery model with our system to easily customise, and locally deliver, affordable housing into regional communities across Australia and internationally.

Our goal is to help local trades build more houses, and help homeowners live in a home designed to their evolving needs and budget.

BuiltQuik's system components are assembled on-site and completed with traditional construction techniques.

We combine the on-site cost and time efficiency benefits of prefab with the quality of customisable finishes of conventional buildings.

- Pre-engineered, semi-modular, prefabricated building components.
- Customisation of internal fit-outs and facades.
- Non-load bearing internal walls allow for easy adaptation of structure to retrofit for future needs.
- Certified by engineering partner RBG (Robert Bird Group), independently of any custom fit-out design.

The maximum building size that can be packaged into a single 20ft container equivalent package is 168m<sup>2</sup> of C5 cyclone-rated structurally rated frames. Multiple frame packages can be joined to create large custom buildings, meeting virtually any customer's spatial requirements.

Our standard manufacturing designs have been refined to ensure cost efficiency in production, supply, install, training and fit-out completion of BuiltQuik structures by local trades.

Explore our designs in detail online at [builtquik.com.au](http://builtquik.com.au)

## Build Process for BuiltQuik Frames

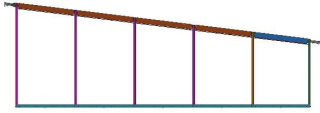


# Small Structures

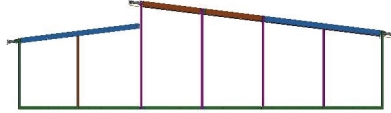


## Roof Pitch Options

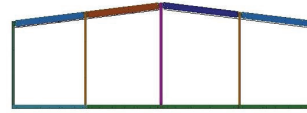
Skillion – SK



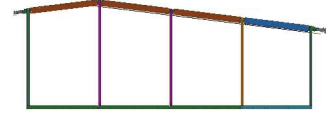
C - Clerestory



Gable - G

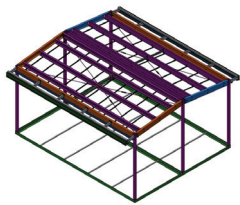


Offset Gable - OG

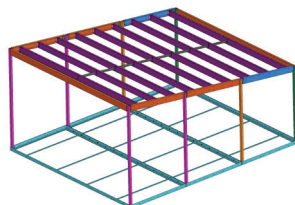


## Small Structures

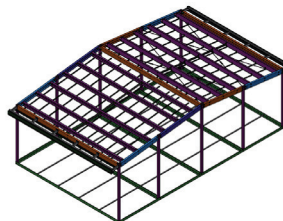
- In each 20ft transportable packaged unit, there can be 2 x modular structures made up of 2, 3, 4 or 5 modules.
- Individual structures can be used for smaller-sized dwellings, joined together, or added onto later, depending on the size requirements of the residents.
- BuiltQuik components can be assembled as 1, 2, 3, 4, 5+ module structures, for use as smaller community facilities, classrooms, small homes or virtually any building application.
- Small structures can be connected together easily, even after already built and in use.
- Add-on components can be used to create different shapes and formats, to match with desired floor plans.



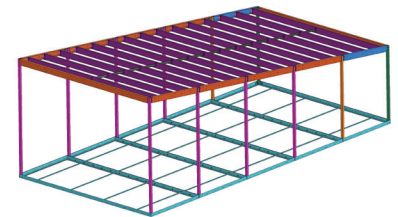
2 Module



3 Module



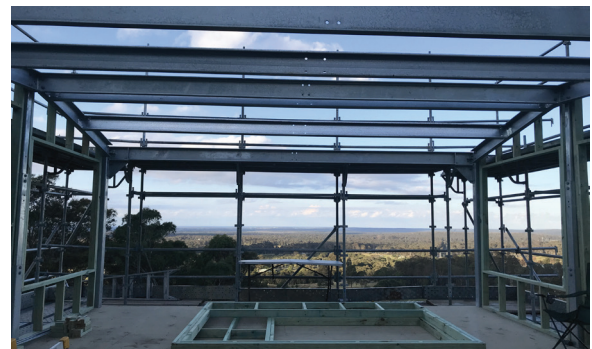
4 Module



5 Module



2 Module Assembled



3 Module Assembled



2 Module Tiny Home



3 Module Studio

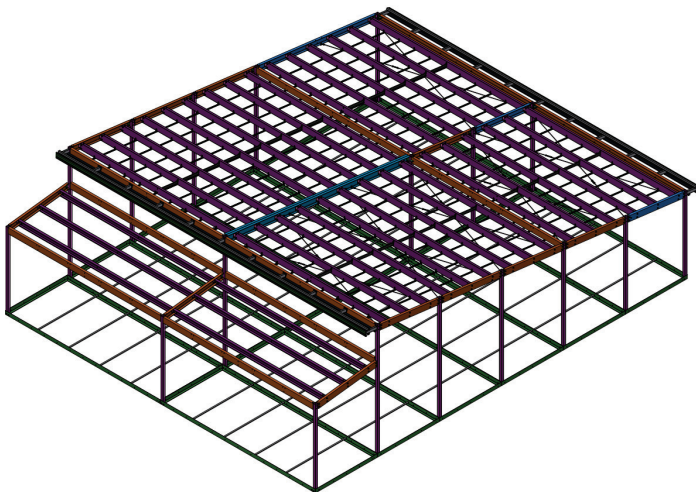
# Medium-Large Structures



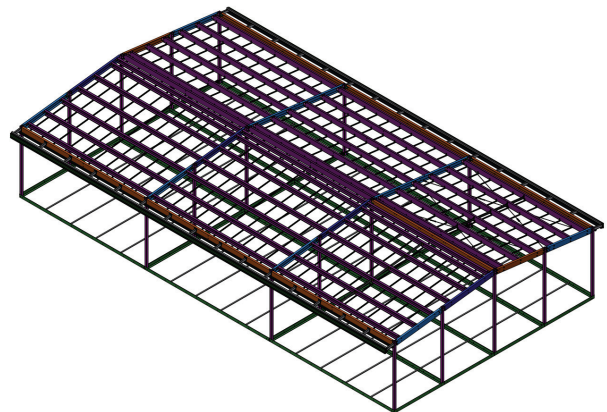
When standard single modules are connected, larger structures can be created with a variety of roof and formatting options.

Custom-sized and shaped buildings are easily achieved by connecting standard frames in a variety of formats, creating a wide range of aesthetics and roof lines. These project-specific designs will incur recertification fees for each custom-designed structure.

Add-ons such as lean-tos, extensions and carport components have been developed to easily connect to BuiltQuik frames.



5 x 2 (10 Module) Skillion with Lean-to Veranda



4 x 3 (12 Module) Gable

# BuiltQuik Design Principles - Locally Focused



PRINCIPLE	BENEFITS
Pre-engineered, pre-certified, pre-fabricated	Simple and fast on-site installation, seamless design-build process.
No external or internal walls	Allows for custom fit-out design and retrofitting over time to meet changing tenant requirements, using locally available material & trades.
Pre-fabrication can be done by regional fabricators	Decentralised economic opportunity through the use of local trades, providing reduced transport cost.
Easy to assemble prefab components	Reduced WHS risk from shorter project timelines, use of local labour and trades, local plant hire, develop regional teams.
Designed to fit into existing industry processes	Structural frame designs can be exported directly into Revit/ArchiCAD design platforms. For the fit-out, builders and suppliers sourced regionally can complete structures with minimal change to their existing trade processes.
Co-design & co-build	The design and delivery model allows for co-design with tenants/clients, as well as providing the opportunity for meaningful skills development in the construction processes.
Faster, simpler, safer	Reduced project costs & lifetime costs.



**Affordable Housing**  
2 Bedroom Home (4x2 Gable Roof BQ Frame)



**Affordable Housing**  
2 Bedroom Home (2x2 Skillion Roof)

# BuiltQuik - A Community Driven Housing Supply Chain Solution



BuiltQuik supplies frames and material packages for on-site assembly and fit-out completion by local trades into Australian and international markets.

The BuiltQuik designs service cyclonic and non-cyclonic residential buildings, schools, site sheds, granny flats, clinics/medical facilities, homes, and two-storey construction projects utilising BuiltQuik's single and double-height structural framing system.

The residential delivery and fit-out process is enabled by partnering with regional building design firms, construction companies, and even regional steel fabricators, to drive sales, production, and local trade opportunities, sharing the commercial benefits of the system over the long-term with regional businesses.

BuiltQuik will continue to collaborate with key supply chain stakeholders, to explore the system's potential for different construction applications and international market opportunities.

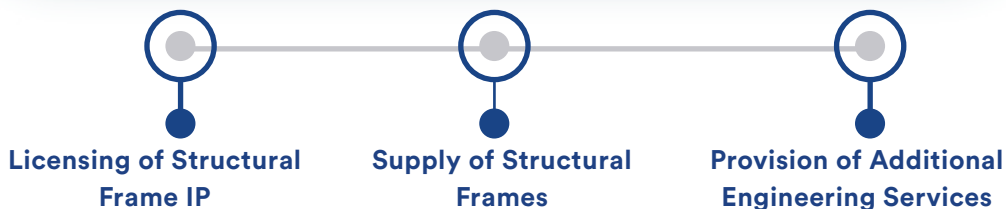
BuiltQuik's objective is to provide a construction solution that empowers and enables regional communities to determine their own socio-economic growth, wellbeing, housing design and employment status.



Try our online design tool to see various size and roof line options at [builtquik.com.au](http://builtquik.com.au)

BUILTQUIK DESIGN SERVICES	SERVICE PROVISIONS
<b>Structural Frame Certification</b>	<ul style="list-style-type: none"> <li>• Standard frame certification.</li> <li>• Bespoke frame design certification to regional building code and client specific requirements.</li> </ul>
<b>Custom Fit-Out Design Support</b>	<ul style="list-style-type: none"> <li>• Certification of client-specific frame design for main structural elements.</li> <li>• Studwork CAD detailing for local wall supply.</li> <li>• Excluding architectural, plumbing and electrical design services.</li> </ul>
<b>Site Specific Footing/ Foundation Design (BuiltQuik &amp; RBG (Robert Bird Group)/ Local Engineers</b>	<ul style="list-style-type: none"> <li>• Town planning and professional advisory services.</li> <li>• Foundation engineering.</li> <li>• Pile design and certification.</li> </ul>
<b>Other Advisory Services</b>	<ul style="list-style-type: none"> <li>• Production QA.</li> <li>• Installation management, training &amp; support.</li> <li>• Coordination support.</li> <li>• Project management support.</li> <li>• Local supply chain facilitation/production facility design/process advisory.</li> </ul>

**We offer different levels of involvement according to our client's internal capabilities**

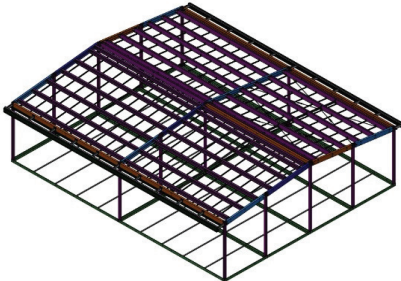


# Structural Certification

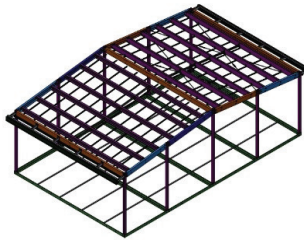


## Cyclonic Designs

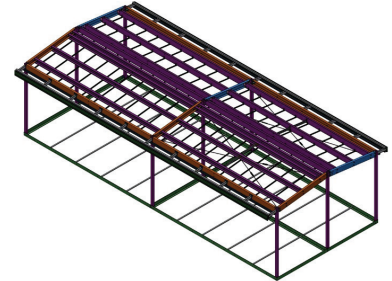
The following project designs meet the requirements of both non-cyclonic and cyclonic wind regions, and are certified by our international engineering partner RBG (Robert Bird Group).



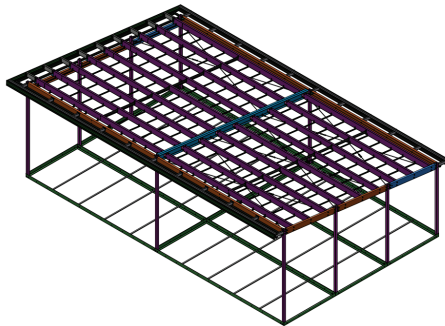
4x2 (8 Module) Gable



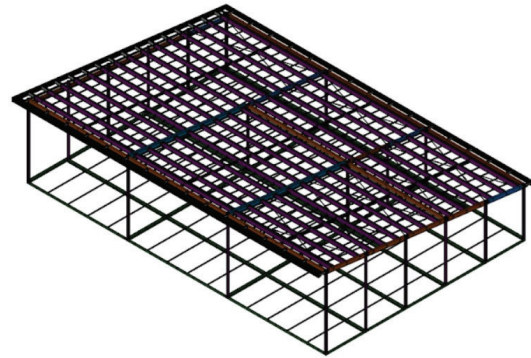
4x1 (4 Module) Gable



2x2 (4 Module) Gable



3x2 (6 Module) Skillion



5x3 (15 Module) Skillion

## Category 5 Cyclone Rated Standard Building Sizes

For Category 3-5 rated regions, the floor panels provide a strong bracing element, that works together with the vertical bracing and structural roof members to allow the superstructure to withstand the wind loads, without considering the fit-out walls and cladding. Suitable cladding can be specified to the clients needs, and local material availability to suit the cyclonic wind and impact rating requirements.

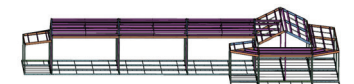
The standard 2, 3, 4, & 5 module structures can be joined with connecting base modules to create larger structures.

Site installation is supervised by BuiltQuik trained, structural steel qualified teams, or contractors, with local labour support.

The sizes of the basic C3-5 BuiltQuik assembly variations are as follows:

SIZE	FOOTPRINT TOTAL (M2)	SIZE	FOOTPRINT TOTAL (M2)
2 Modules	28.8	12 Modules	173
3 Modules	43.2	14 Modules	201.6
4 Modules	57.2	15 Modules	216
5 Modules	72	16 Modules	230
6 Modules	86.4	18 Modules	259
7 Modules	100.8	20 Modules	288
8 Modules	115	21 Modules	302.4
9 Modules	130	24 Modules	346
10 Modules	144	All sizes can be cyclone or non-cyclone rated	

**Standard BuiltQuik structures can be connected to create unique building shapes and sizes.**



The above design is a combination of the following standard BuiltQuik componentry.

2 x 2 + 2 x 3 Gable Assembly @ 26 degrees with lean-to and wrap around veranda add-ons.

# Cladding Options



To provide an opportunity for regional trades to fit-out the BuiltQuik structures, the wall, floor, and roof materials, windows and doors, and internal wall positioning, are all left to be defined by the client/end user of the desired building.

To meet the various aesthetic requirements and standards in the Australian and global construction industry, BuiltQuik has developed optional structural components to support the use of standard stud walls, insulated panels, and masonry (Brickwork/Hebel) options, for building completion.

Upon selection of the building size and design, the client advises the intended cladding material in order for the appropriate components to be supplied.



**Corrugated Iron**



**Weatherboards**



**Masonry (Brick)**

KEY FEATURES	CONSTRUCTION BENEFITS	COST SAVING
<p><b>Sustainably sourced, co-designed, and affordable building solution</b></p>	<ul style="list-style-type: none"> <li>● Offering versatility to easily customise.</li> <li>● Unlimited fit-out retrofitting renovations.</li> <li>● No re-engineering required for internal changes. Additional units can be added later (extensions).</li> <li>● Region A1-7 &amp; Category 3-5 cyclone rated.</li> <li>● Versatile wall finishes suiting local preferences.</li> <li>● Manufacture to meet local building code requirements in any global region.</li> <li>● Patented construction system - giving manufacturing security to licencees.</li> <li>● Support development of regional manufacturing hubs, engaging with industry.</li> <li>● Components can be pre-processed and ready to assemble at more remote facilities with minimal equipment, supporting remote employment.</li> </ul>	<ul style="list-style-type: none"> <li>● Reduce on-site time up to 40%.</li> <li>● Transparent &amp; consistent project costings.</li> <li>● Maximum involvement of local trades &amp; suppliers, reducing overall project costs.</li> <li>● Structural pre-engineering reduces custom fit-out design fees.</li> <li>● Economies of scale when producing standard components reduces overall material cost.</li> <li>● Supplied through local businesses, allowing investments to support your local communities.</li> </ul>
<p><b>Structural frame (103m<sup>2</sup>) installed in a day (6-8 hours)</b></p>		
<p><b>Quickly installed &amp; assembled on-site by regionally available labour under the supervision of trained BuiltQuik installers (training manual available)</b></p>		
<p><b>Easily transported unit (20ft/6m package with ISO blocks for shipping &amp; handling, equivalent size of a standard shipping container)</b></p>		

# Sample Orders



## 3 MODULE NOWRA HILL, NSW

### 3-Module BuiltQuik Module and Footings

This 3 module structure is engineered for up to A7 wind regions, meeting the local Nowra wind loading requirement of A5. Engineering services were provided by SMEC.

BuiltQuik developed the production designs for the footings and managed the structural pier, footing design and supply, and structural frame supply and installation on-site. BuiltQuik have also managed the fit-out design, and material supply elements of this project for the client.



### BUILTQUIK SCOPE

BuiltQuik 3 Module Structural Frame  
(A1-7 Certified)

Footing/Engineering drafting services  
(SMEC & BuiltQuik)

Basic site and fit-out design  
project management

Footing and frame supply  
and installation management

# Sample Orders

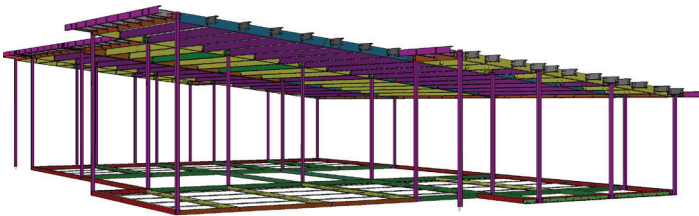


## 15 MODULE SKILLION MUDGE 4 BEDROOM FOR NSW AHO

### BuiltQuik 15 Module Skillion Roof Structure with Add-on Garage, Facade and Veranda Modules

This build was won through public tender in Australia with a partnered builder. The design was developed to meet standard NSW Government community housing design requirements. The selected frame design was a 15 module structure with add-on features made of additional prefab components.

The build was completed in the middle of Covid in under 6 months after breaking ground on-site.



QTY	BUILTQUIK COMPONENTS
1	1 x 15 Module A7 Rated BuiltQuik Frame + Add-on Components
1	Design Phase project management for client - managing sub-consultants
1	Coordination with site foreman for installation of BuiltQuik frame





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## RAPID IMPACT

- R Retrofit/Re-deployable
- A Affordable Building Solution
- P Pre-Engineered & Pre-Fabricated
- I Investment localised through regional trade completion of BQ structures
- D Designs can be customised to the local cultural expectations
  
- I Increase local business and community engagement
- M My home, designed and built by me, for my family
- P Partnerships support sustainable, local supply chains
- A Alignment with local needs & industry capability
- C Certified up to category 5 cyclone ratings
- T Transfer of BuiltQuik System knowledge and skills to locals

For more information, please get in touch

 1300 015 048  [enquiries@builtquik.com](mailto:enquiries@builtquik.com)

 [builtquik.com.au](http://builtquik.com.au)

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