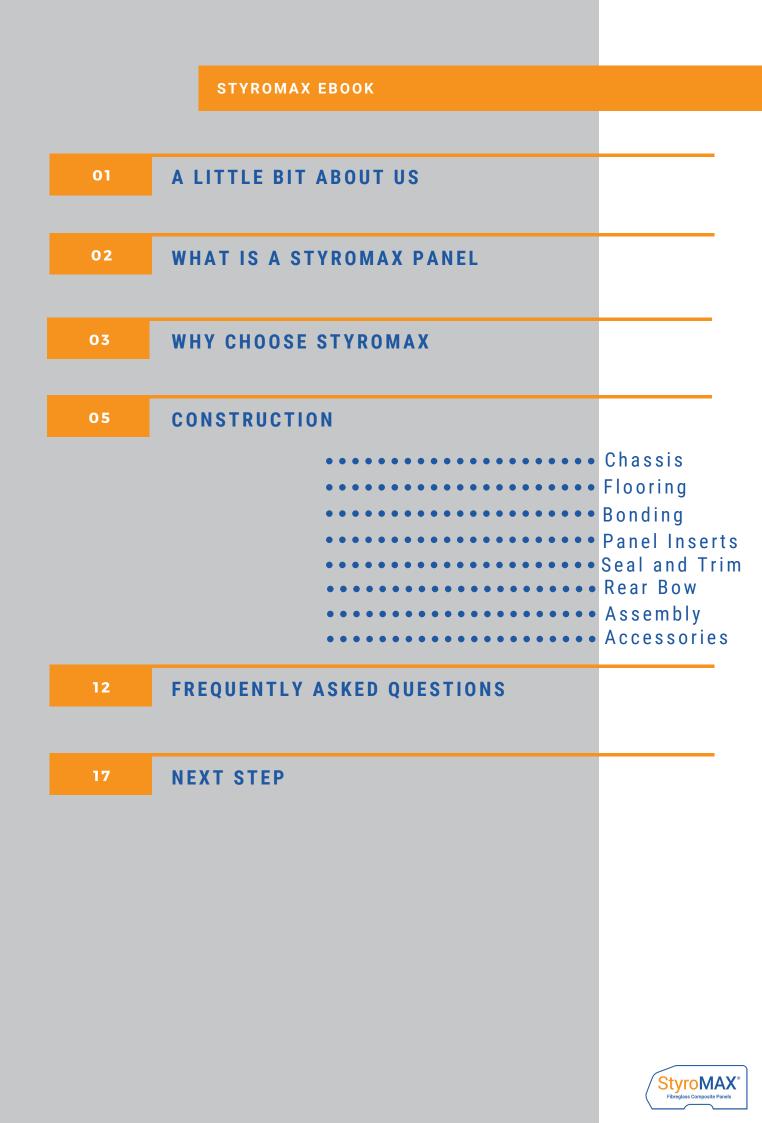
STYROMAX EBOOK

BUILDING A SLIDE ON WITH STYROMAX PANELS



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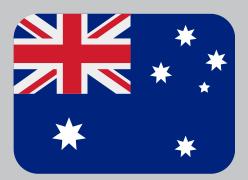


Who is StyroMAX?



A LITTLE BIT ABOUT US

StyroMAX was formed in 1998 and is part of a group of companies that focus on manufacturing for the transport industry and have done so for well over thirty years.



Located at Darra in Brisbane, we are a specialist designer and manufacturer of fibreglass composite insulated panels. Our capabilities extend across a wide range of applications for the RV and transport industries such as mobile homes, caravans, trailers and truck bodies.

We also manufacture panels for the boating, building and construction industries to just about any job that requires an insulated composite panel.



What is a StyroMAX Panel?

A StyroMAX panel is essentially what's known as a 'sandwich panel'. StyroMAX panels consist of two facings and a core (but can also contain other intermediate layers and reinforcements).

The facings are European FRP (fibre reinforced plastic) sheeting and the core, DOW Styrofoam (closed cell, rigid extruded polystyrene). The components are bonded together using a two component polyurethane adhesive system. One being a polyol resin component and the other, an isocyanate hardener.

The bonding process is carried out on our large, flat bed vacuum tables. The negative pressure these tables create presses the sandwich panel together. In this way, the adhesive is evenly distributed to produce a sandwich panel of a constant thickness.

CNC Cutting

After the laminating process, panels that are to be cut are sent to our CNC profile centres for trimming.

A 3D solid model of the panel is sent from our drafting department directly to one of our 3 CNC routers. This solid model file allows the CNC router to carry out its process, ensuring the finished product is trimmed to exact engineering requirements and tolerances.

Panels can be manufactured to a <u>maximum</u> <u>length of 14.4mtr and maximum width of</u> <u>3.2mtr.</u>





Why choose StyroMAX?

StyroMAX panels are different to other traditional manufacturing methods and therefore you need to consider some of the benefits when evaluating the



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INCREDIBLY STRONG!

StyroMAX panels are incredibly strong. They have enormous mechanical advantages: The facings absorb traction and compression forces while the core material resists shear and thrust forces. Being structural, they eliminate the need for either a steel or timber frame within the panel.



SUPERIOR THERMAL INSULATION!

The use of DOW's Styrofoam in every StyroMAX panel means you won't have to turn up the heating to full in winter and there will be no need to blast out airconditioning all summer. This, in turn, will reduce your energy consumption and save you money.

product.



EXTREMELY LIGHTWEIGHT!

Amazingly, StyroMAX panels are extremely lightweight due to our exclusive use of DOW's Styrofoam (rigid extruded polystyrene) as a core and lightweight European FRP (Fibre reinforced plastic) sheeting. With this, they offer industry leading KG/SQM weight ratios.



SUPERIOR WATER RESISTANCE!

Once laminated, each StyroMAX panel becomes a one piece insulated structure. The use of DOW's Styrofoam as a closed cell core, enables it to resist all forms of water and moisture penetration.



Each StyroMAX panel is 3D modelled. After the panels lamination process, the solid 3D model is sent to our CNC profile centres for trimming. This process provides assurance that your panels are trimmed to exact engineering requirements and tolerances that will aid in the ease of assembly for your build.



StryoMAX panels are UV stable. Our FRP sheeting utilises a top layer gelcoat that improves UV light and weathering resistance.



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Why choose StyroMAX?



Due to their construction, StyroMAX panels offer exceptional impact resistance. This means fewer dents and dings and your panel will maintain the new look for years.



With the use of DOW Styrofoam as a closed cell core, StyroMAX panels will not rot, meaning no mould or fungal growth.



StyroMAX panels are easy to clean. Externally, it's essentially the same as an automobile, wash it often and wax it periodically. Internally, everyday household cleaners can be utilised such as spray and wipe.



The core of any StyroMAX panel can be installed with conduits prior to panel lamination which provides passageways for internal cabling and plumbing. This process is carried out on our CNC profile centre.



Looking for an aerodynamic roof line? StyroMAX panels can easily be bent to follow a given radius. They will also retain their rigidity due to our specific manufacturing process for this kind of application.





CONSTRUCTING YOUR SLIDE ON WITH STYROMAX PANEL IS VERY QUICK AND EASY! SO EASY, YOU CAN DO IT AT HOME!

Frame

Starting with the sub frmae, you will either have one already or will be buying one that suits your needs. Customers usually have their own ute back for this build.

Like any good build, a solid foundation is required.

Your chassis will determine two further factors:

- 1. What flooring options are available to use
- 2. How to fix your panels to your frame



Can you recommend a chassis manufacturer?

Because we have customers all over Australia and around the world, recommending a frame manufacturer that is convenient to you and suits your requirements is very hard to do!





Flooring

Our most popular option for Toy Hauler flooring is StyroFLOOR/HD. This 19mm floorboard is 8.6kg per sqm and is sold in 2440mm x 1220mm boards. Spacings for this can be up to 610mm.



What flooring options are available? Be sure to check out our <u>YouTube Channel</u> videos on what flooring options are available.



STYROCHAT Want to see what the strength of the StyroFLOOR/HD is like? We're going to drive a

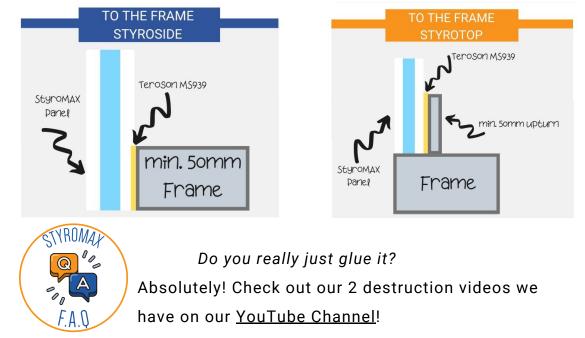
STYROFLOOR





Bonding

Depending whether your chassis is at full width or not, you will either bond the panels to the side of the chassis frame, or on top of the frame. Either way, you need 50mm minimum surface area to bond to.







Panel Inserts

Panel inserts are an excellent way of creating areas within the panel where you can mount fixing, run plumbing and cabling; or provide additional structural support.

The most commonly used items are the StyroBEAM/LT which can be used as a structural support around an opening, like an AC, or to run plumbing or cabling; and StyroPLATE, which is often used for fixtures such as TV's and Awnings.

 If you are using lift legs/jacks, we recommend using StyroPLATES to support the legs.



What panel inserts are available? Check out our <u>YouTube video</u> on panel inserts available. We have a huge range to suit your needs.





Seal, Trim and Pop-Tops

Depending on the shape of your Slide On, you have a few options options for Seals and trims:

- 1. StyroSEAL/LT
- 2. StyroSEAL/HD
- 3. StyroTRIM/RV suitable for rolled roofs
- 4. StyroTRIM/HD suitable for chamfered or angled bodies

You can also opt for three different types of hatch doors for a Slide On build.

You can select a Pop-Top kit from Aussie Traveller, or our own StyroTRIM/RV or RG for a sleek finish.











Overcab area

Usually our Slide On builds are all manufactured with our StyroRV/RG composite panels including, roof and side walls, making it a self-supporting body.

This means it is strong enough for you to stand on without the requirement of any frame work. Be mindful though as flexing can still occur.

What options do I have for my overcab area?

- Our product is strong enough to support an overcab sleeping area.
- You can opt for extra reinforcements with StyroBEAM/LT.
- The overcab area can be either radius or square.





Assembly

Assembling the panel is very easy. Essentially it is panel bonding with the side wall panels rebated to accept opposing panels.

For those who are assembling at home, you can use clamps, straps and StyroTAPE to hold the panels in place while the adhesive cures, which is a minimim 48 hours.

Sequence of assembling is normally side panel and internal walls/rear panel; then the other side and the front panel. Roof is always last.

Can I see one being assembled? You sure can. Check out our <u>YouTube Channel</u> videos on builds that we have done in house. <u>STM/20-</u>136 is an excellent example of a detailed time lapse.







Accessories

We have access to both Aussie Traveller and Coast to Coast catalogues, so we are able to get your accessories, generally 10% off retail price.

Both Aussie Traveller and Coast to Coast have such an extensive range, we can't possible carry it on our website. Be sure to head directly to their website to see what accessories you can kit up with your panel set.





We are also a stockist for LED Autolamps and can provide you all your lighting requirements for both inside and outside of your Slide On!

LED Technologies Excellence in Lighting Solutions







Using different third party logistics companies, we can freight across Australia!

We recommend crating the panels to protect them from damage. Whilst the crate box and transport can be an additional cost, there are other options to collect or have StyroMAX assemble for you.







TRANSPORT OPTIONS

Collecting your panel set is a great option to save on transport cost.

Sometimes you can coincide your collection with a weekend away, a mini holiday or a special event in South East QLD. We recommend collecting on a flat bed trailer (no mudguards), if possible.







ASSEMBLY OPTIONS

Another option is to have StyroMAX assemble the build for you. Whilst this isn't our core business, we can accommodate approx 2 builds per month, so if you are happy to join the wait list, we can assemble for you.

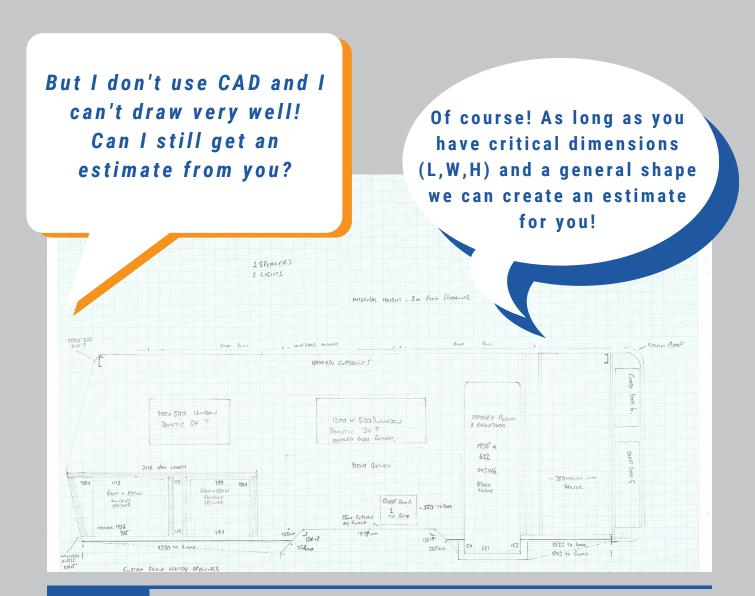




WHAT DO I NEED TO PROVIDE TO GET AN ESTIMATE?

Simply a dimensioned sketch of what you want to build.

If you know what flooring, seal, doorhardware, trim and accessories you want, please include that, so we can put together a complete estimate.







LEG JACKS AND LIFT OPTIONS

Lift off legs should be reinforced with StyroPLATEs. This will prevent compression of the panel.

If not reinforced correctly, it can cause delamination.

No, but they do help by adding a certain amount of stability to rough grounds.

Do I need lift off legs in order for it to be stable?



Next step



Order a Designer's Sample Pack. This sample pack contains everything you need to start planning your build.

Be sure to subscribe to our YouTube Channel to stay up to date with product and build videos.



Start with your design. Sketch out the shape of your build and add your dimensions on the next page.

Consider the accessories you need. Windows, doors, vents, trim, flooring, lighting etc.



Consider the panel inserts you will need for the accessories.

Email through your design and build requirements to Samantha@styromax.com.au



SLIDE ON EXAMPLES

STM20-159

This overview is based on the STM build seen in example photos throughout this E-book. This body was manufactured with StyroRV/RG+ panel by StyroMAX

The dimensions of this build:

- 5407mm overall length
- 2203mm overall width
- 2006mm inside height (closed)

The StyroRV/RG+ CNC cut panel set was \$11,032.11 including GST. That includes a one piece floor, side walls, over cab and roof panel. This build had no panel inserts.

The accessories for this build \$3,694.55 including GST. This includes:

- 1 x 508mm x 1175mm Wind Out Window
- 1 x 380mm x 762mm Wind Out Window
- 1 x Caravan Door 1750mm x 675mm
- 1 x 6.0m Pop Top Kit
- 4 x StyroBOARD/LT
- 4 x StyroBOARD/RG
- 1 StyroGUN/M
- 6 x Teroson MS939
- 1 x StyroCLEAN
- 1 x StyroGLASS/LT 2.53m x 1.7m

This build was assembled at StyroMAX in 28 hours for \$3,080 including GST.



SKETCH OUT YOUR IDEAS

Your initial sketch can help us to provide an accurate estimate. Remember to keep it clear and simple. Please consider the including the following information to your sketch.

- Height
- Windows
- Length Doors
- Width

When you have finished with your sketch, you can email it through to info@styromax.com.au for a initial estimate.

