

1340X

WILDERNESS 1340X

STUDY PLANS



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Hello and thank you for showing interest in our Design.

Schionning Marine is a family based Australian business, we are very passionate about our designs and continually strive to offer the best options to get you out there and make your dream a reality.

Choosing the right design can be a real challenge, there are so many options and variations and purposes a boat needs to meet. We will help you to determine which design will best suit your lifestyle and purpose, also your budget. We have plenty of options!

These Study plans contain a lot of information directed at the "OWNER BUILDER", the aim being to show you how simple and achievable it really is and to help you determine whether you will be able to do it yourself. Be assured, hundreds of absolute novices have and are doing it so if you really want to build a boat, go for it, we will help you all the way.

If you are NOT an owner builder and would like to buy one of our designs, we work closely with several excellent boat building yards in Australia and overseas. Using one of these builders to build a custom boat for you, rather than buying a molded production boat is very rewarding, you can get exactly what you want and you'll be surprised just how well priced this can be too. Later re-sale value is high and the quality of a hand build composite boat, built by a recommended builder far out strips any production process in terms of strength, quality and lightness (therefore performance).

We look forward to hearing from you once you've studied the following pages. We have not included kit pricing due to the many variations and options so please email or call us and we'll furnish these on request.

Good luck with your research and project.

*Jeff, Corrairie, Brett and Ben Schionning
& Rob Shenn.*

DESIGN OVERVIEW

The Wilderness 1340X is a comfortable live aboard performance cruiser. With plenty of payload and all the modern features that make a boat really comfortable to live on, she is still very easy to handle alone or short-handed. Her Waterline length of 43' gives her the long legs to sail the World and her accommodation with comfortable cabins with lots of storage and privacy, make her highly recommended for families or if you like to take friends sailing with you. She's an extremely efficient sailing cat with a beam to length ratio of 12.4:1.

The generous waterline length with centralized weight and long fore and aft overhangs, loads of buoyancy including reserves high up forward in the hulls, a moderate rig and easily driven hulls, she has every desirable feature, making her extremely safe and an excellent design choice.

The very strong, easy to build KIT construction system makes her a possibility even for those who never thought they could afford to buy a completed cat, or if you are going to have a boat built for you, builders will love the speed and ease of this pre-cut panel system. The boat is fully pre-cut from light composite flat panels with either foam or balsa cores. The curved areas (deck to hull joins forward beam and cabin roof) are strip planked. She uses all our latest technical improvements including our new striker-less forward beam, composite chain plates, and carbon rudder shafts, these improve strength, save money and look good too.

Layout

In the port hull aft, is the luxury of a separate head and shower with the option of a twin tub washing machine for Marina use. Forward of this is a dedicated nav station set up at saloon height and ahead of this is a wide shelf with lockers below. A work top and lockers are located on the outboard side with the daggerboard case built into this. Going forward again, you'll find a queen size double cabin with the option of a workshop, walk-in robe or single bunk forward in the hull. A forward double cabin to starboard has the luxury of an en-suite, in this area.

LOA	13.40 Metres
BOA	7.40 Metres
Draft	0.450 Metres
Headroom/ Bridgedeck	1.9 metres
Headroom/ Hulls	1.9 metres
Mast Height	17 Metres
Bridgedeck Clearance	0.800 Metres
Sail Area	96 Square Metres
Displacement	6289 Kilograms
Payload	2000 Kilograms
Motor Option	2x Outboards or Diesels
Sailing Speed—Cruise	10+ Knots
Sailing Speed—Top	20+ Knots
Fuel Capacity	40 Litres
Water Capacity	400 Litres
Building Time (Approx)	5000 Hours

Amidships on the starboard side is the galley, it is a good size and very practically laid out with plenty of locker storage. We keep the galley open to the saloon for airflow and so the chef can be sociable whilst on duty. Plenty of hatches and hull port light ensure good airflow.

Aft in the starboard hull is a third double cabin with queen size berth, the bulkhead is angled forward slightly to create more room in the cabin making it very comfortable and private. There are lots of lockers under the cockpit seats accessed from this cabin, as well as under the forward end of the bunk itself to accommodate personal items, clothing etc.

The saloon is a good size, spacious with a comfortable dinette, the table size can be adjusted to suit one's living style. Having the galley down in the hull allows a much more open living space on the bridgedeck. If you choose not to build using our pre-cut furniture kit, you could custom build a galley up on the bridgedeck and utilize the area in the hull for storage or work area. With our furniture kits it is possible to utilize some of the kit and we can leave

other areas blank if you wish to customise some areas.

Outside

The cockpit is roomy, well protected and has excellent access from dinghy or marina via steps directly into the cockpit on a wide comfortable walkway, entering the cockpit at bridgedeck height. The main sheet is set on the seat back well out of harm's way and is a 4:1 double ended system with both sheet and traveller controlled through clutches to winches on each end :- convenient and safe. A platform aft behind the back beam is handy. Davits lift and carry a decent sized dinghy and motor. This option has twin door access and a middle window that is located in front of the wheel. Steering choice is optional and this bulkhead can be customised with ease.

The cockpit has the option of a full shade top for the tropics with a large sliding hatch that can open when raising or reefing the main from the central winch station. The single line reefing system is excellent, making control very easy and safe from the cockpit. Docking is done from the best spot – standing on the seat, head and shoulders above the cabin top with a good balanced view of bows and sterns. The big wheel and motor control are right at hand. You still have a good view from seat height behind the wheel or if you're like me, the



auto-pilot steers all the time. I personally prefer this layout as it gives very good control when you need it but does not clutter the cockpit while sailing or socialising but many prefer twin helm stations one each side or prefer a single helm to one side. These options are easy enough to build as you go. There is a wet locker accessed from the cockpit set in the shower compartment. This drains straight out into the sea and wet gear can be accessed from either the shower or the cockpit. The double doors and fully opening windows really blend the cockpit and saloon in a nice gentle progressive way, from indoors to outdoors. Air flow is excellent from saloon hatches, it's surprising how hot and stuffy a cockpit can be without good air flow.

Outside, decks are wide and flat for easy and safe access forward. The outside curves are soft, reducing wind and wave drag by as much as 25%. Strength is increased. Driving the bows through green water creates huge drag on the bows, usually stopping a cat often in her own length. Pretty scary! The rounded bows and deck shape reduce this significantly allowing the bows to drive through maintaining speed and avoiding this dangerous situation. Reserve buoyancy is very good forward, this added to the long overhangs and central weight concentrations make her extremely safe and well mannered.

Rig

The rig is either a simple carbon composite rotating rig, or a standard aluminium mast can be used if preferred. We prefer the rotating rig because it is more efficient with less drag and is lighter. Carbon composite rig options are available from Allyacht Spars or Carbonworks. We no longer sell plans for carbon rig options for this design.

We're using lowers and an inner forestay to carry the staysail and storm jib. A good, safe combination. The Genoa is on a furler, as is the reacher at the end of the prodder. A spinnaker can also be carried if you're more competitive, most cruisers will find her competitive with the normal sail wardrobe. There are steps built in forward to access the cabin top, this mostly for putting the main sail cover on. The prodder is stored in a stor-

age tube built into the forward beam and catwalk, this allows the prodger to be slid inside for storage when space is an issue such as in a marina. We feature our new stop-less forward beam. This is a real breakthrough in engineering technology and saves windage, cost and weight up front and is a stronger, less stressed beam that is far simpler to build.

Safety Features

She has over 30 sealed buoyancy compartments spread through her structure. These are naturally built in so there is no extra weight. Under the sole we use a central web on centre-line which gives tremendous strength for pounding into waves and for carefree beaching. The core itself will have a flotation capacity close to the dry weight of the boat. We have escape hatches set under the companionway steps. These are accessed from inside or out. Daggerboards are used for excellent windward performance and increase safety when surviving storm conditions by pulling them up to minimise grip and allow side slip. This makes it almost impossible to flip with wave action. We also build heavy para-anchor bridle points on the forward beam ends as strong points to shackle lines to and to prevent chafe. Add to this, very high stability figures, long overhangs and excellent reserve buoyancy. ***This all makes her an exceptionally safe cat.***

Motors and Rudders

2 x 29 hp sail drives are set aft of the double cabins, so no smells or smoke. Access is via big deck lockers in the aft step. Rudders in this option are fixed and super strong to allow the boat to beach sitting on her belly and supported on the rudder.

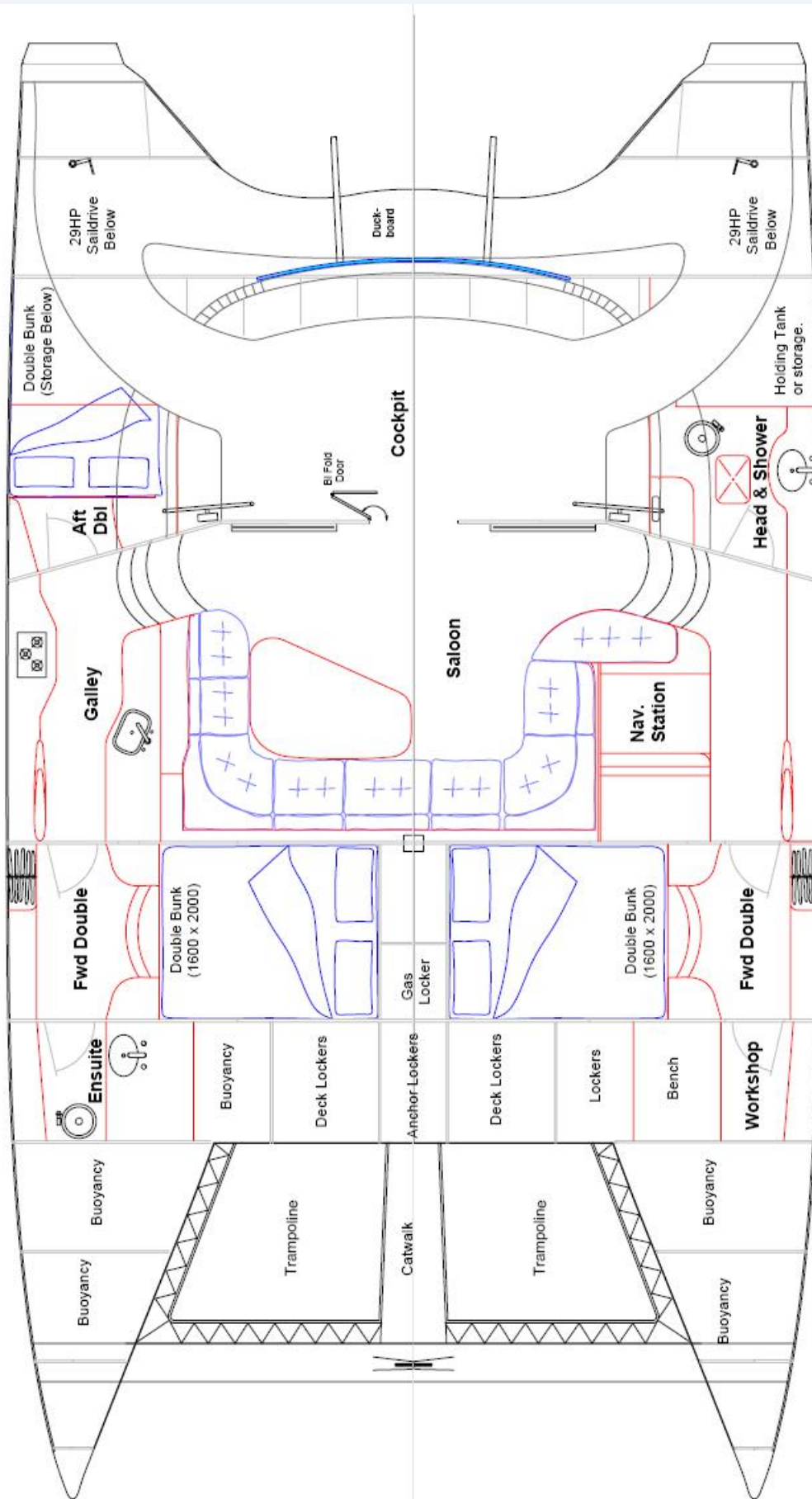
Further Options

The main door can be a single door, set anywhere in the bulkhead. Remember, the main shell and bulkheads are not changeable, but most internal furniture and smaller bulkheads can be moved to customise your personal choices. *Absolutely* don't buy a cat because of the layout, you can with our help add any sensible layout to this existing shell.

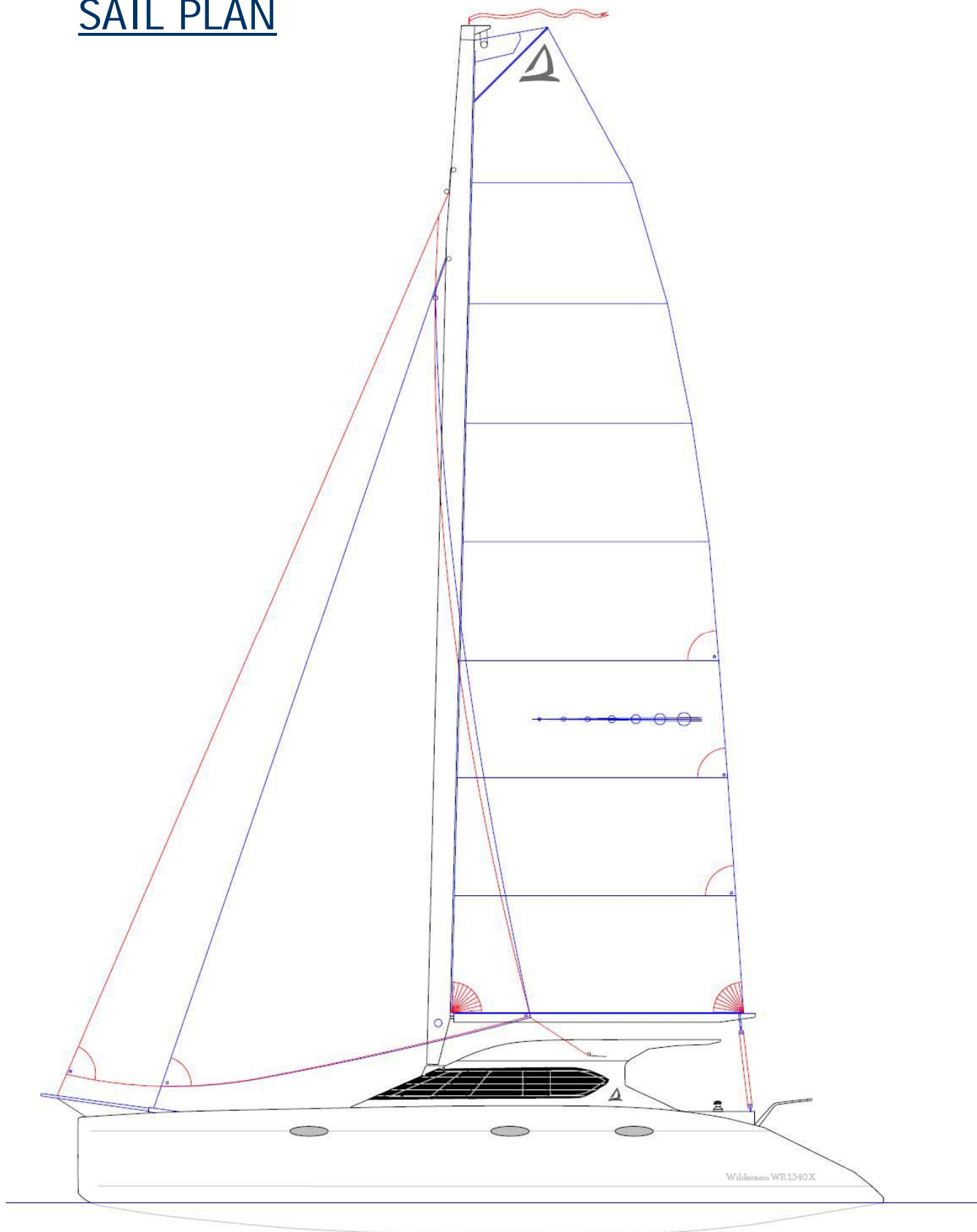




LAYOUT PLAN



SAIL PLAN



CONSTRUCTION OVERVIEW

THE KIT

The Wilderness "kit" consists of 2400 x 1200 mm sheets of balsa or foam DuFlex™ which are supplied with factory cut scarf joints which create a full strength flush join, no taping required. Once joined (in sheet form) and set, the holding tags keeping the cutout pieces in sheet form are cut to release full length panels and bulkheads.

THE CONSTRUCTION PROCESS

The hull shoe parts of the DuFlex™ and temporary bulkheads are stood on the strong-back and the full length shoe panels are fitted over these bulkheads and glued in position. With this method a hull shoe can be created in a matter of days. The shoe is then sheathed with full width fiberglass cloth which eliminates the need for tapes on the joins and gives smooth unbroken surfaces easily faired with sanding machines.

Copper epoxy type anti-fouling is applied at this convenient stage and the shoe being small and light is turned by hand. Once the two shoes are complete they are leveled diagonally and fore-aft then the top parts of the individual and full width Bulkheads are attached followed by the rest of the precut hull panels. The bridge deck floor follows this step. It is precut and has its underside stiffeners and all associated fairing and sanding completed right way up before being flipped, slid under the bulkheads and glued in place.

Unlike a lot of "multi-chine" designs, the Wilderness have a small section of strip planking on the hull/deck curve, this roll over gives great advantages in stiffening, softening the appearance, seriously reducing windage and quickly shedding green water. Strip planking has received some very biased and inaccurate press recently, most of our amateur builders report it being an enjoyable and unexpectedly simple process. The strip planked decks are done on the boat using the bulkheads and a couple of added temporary moulds. Taping of the internal panel and bulkhead joins would commence at this open shell stage, taping time and effort can be greatly reduced with the use of a 'Wombat Jnr' wet out machine, (an option available with the kit) the time saved more than

pays for the machine. At the same time, away from the shell you could be making your strip planked cabin roof, forward beam, dagger-boards and cases, rudders and targa bar (if applicable). Once taping of the internal structural joins is finished and the shell is still open the precut furniture and cockpit components can be assembled and installed. If desired the large outer hull panels can be left off which makes easier access to engine rooms, locker areas and easier access from the shed into the boat. The rest of the decks are installed, followed by the cabin roof, then the precut cabin front and side panels. The Cabin roof moulds are supplied pre-cut in some of the Kits (or full size paper plots in plans) and this and the forward beam are the only other strip planked parts of the boat.

Easy to follow sheets on composite fittings are supplied in the plans; these save money and give the finished product a very classy, modern look. Composite chainplates are extremely strong, look good (integrated & painted) easy D.I.Y. and no leaks which are inevitable with bolt-ons!

FURNITURE

The furniture fit-out is made easy with the stiff, light and easy to work with Phenolic paper honeycomb panels. Tips are included in the plans on how to form complex attractive curves quite easily. Precut furniture gives significant time savings in labour and planning to both amateur and professionals alike, far outweighing the cutting costs which are passed on directly from the manufacturer without mark-up. Most of the furniture can be pre-assembled on the workshop floor and then installed in the boat – an easy way to work!

SHED SPACE REQUIRED

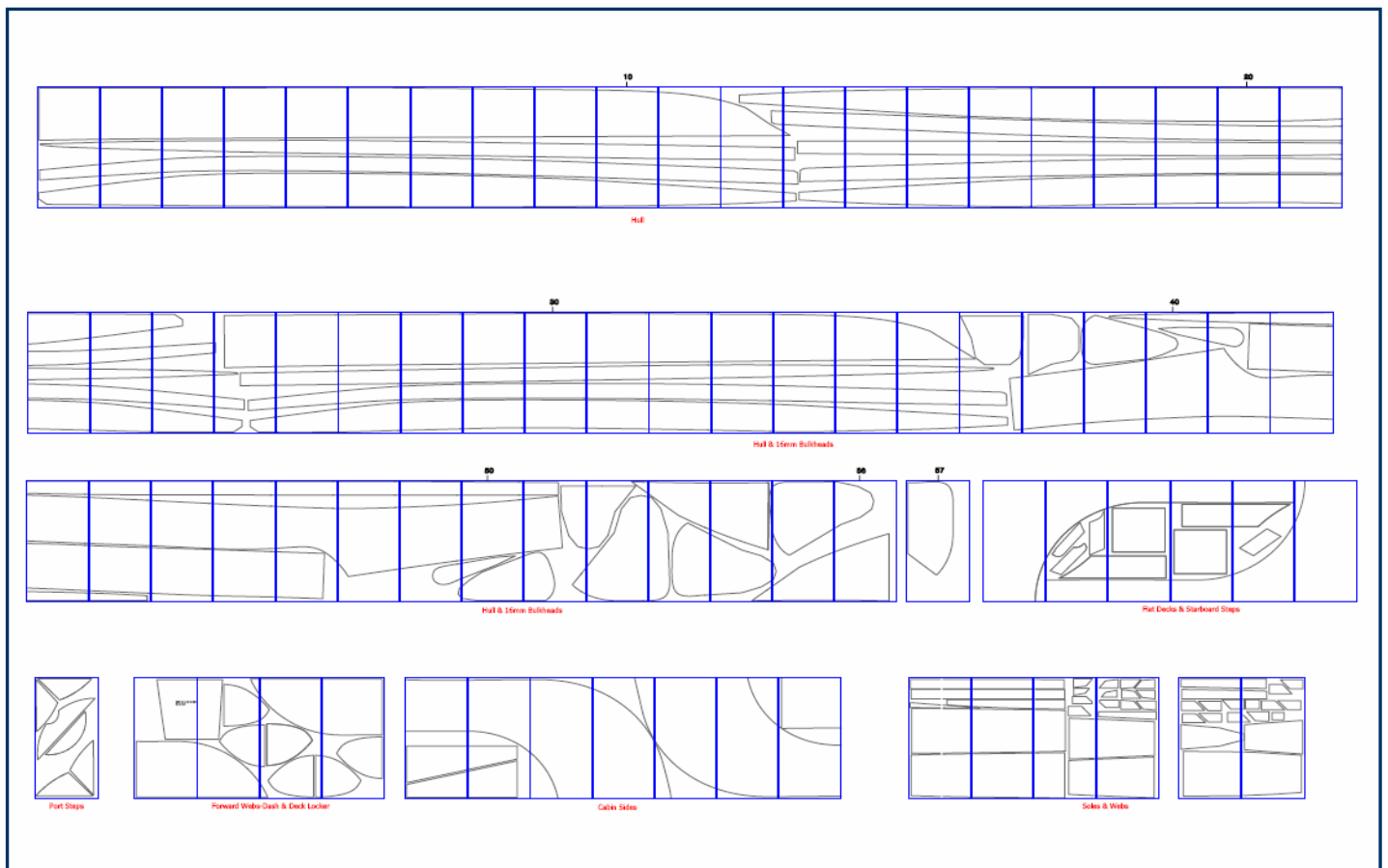
If space is an issue the Wilderness construction process allows a large proportion of the project time to be spent in a smaller work space than the finished size of the boat. This allows you to build at many of the parts and components in the carport or shed at home then assemble and finish near the water, saving money on rent and time travelling. The "ideal" shed size needs to be 2-3 metres wider than the boat, 4 metres longer and ideally, the height should be total boat height plus 1.5 - 2.5 metres. The boat height can be quickly estimated by adding "Draft" to "bridgedeck clearance", then headroom (normally 1.8-2 metres) plus any cockpit bimini's etc you might be adding. In reality, many boats are built in temporary structures or in tight spaces, so just do the best you can!



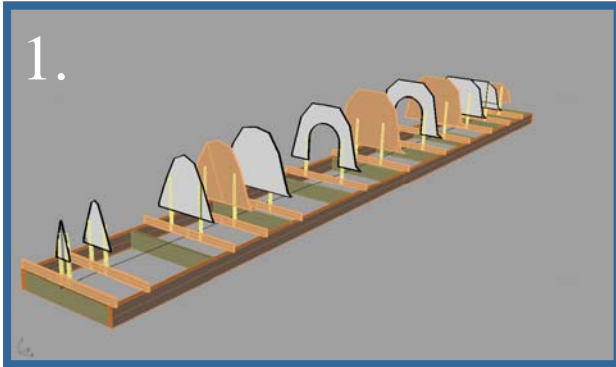
Wilderness pre-cut kit panels are joined to generate full size hull panels. Pic courtesy Paul Tyler Wilderness 1250

BELOW: Wilderness 1340X Kit Panel Layout

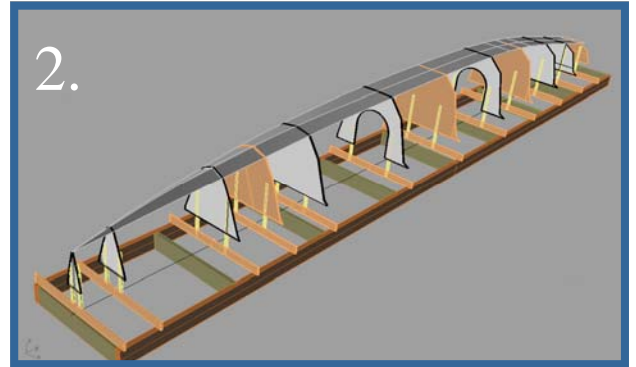
Each rectangle represents a DuFlex panel.



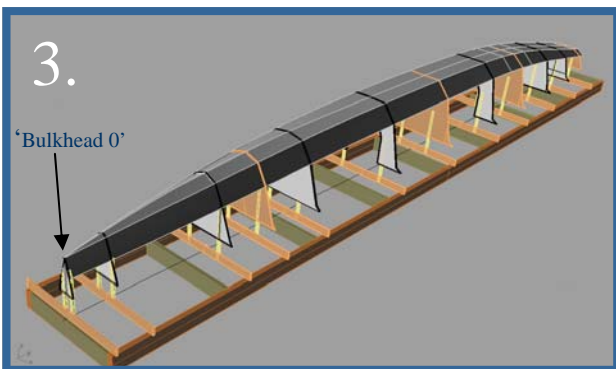
Wilderness X Series Construction Sequence



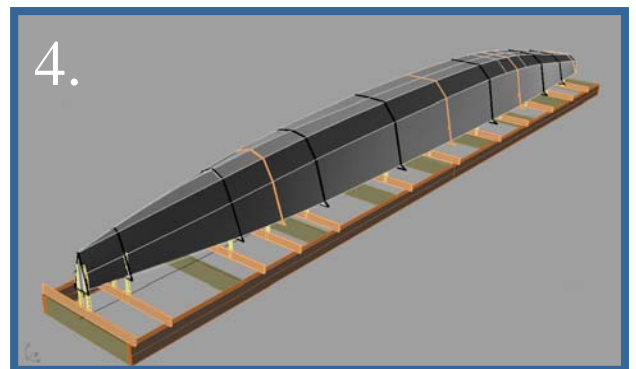
1. Permanent and MDF bulkheads are stood on a typical strongback. All bulkheads are split at waterline plus 400mm for ease of setup and connection to bulkhead upper parts later.



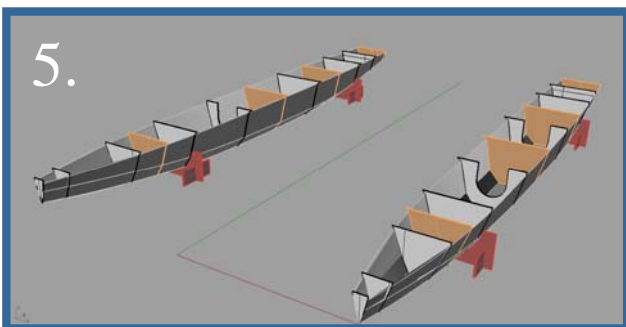
2. Large flat pre-cut hull panels mean a very quick and simple shoe takes shape. Expensive pre-moulded shoes are not required for a fast build, and being flat panels the core is not riddled with air voids which are well known in compounding-type core products.



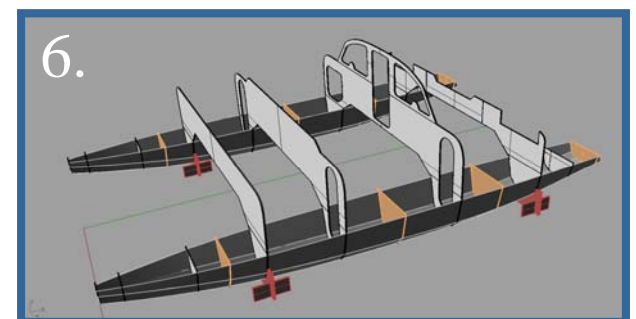
3. The flat surfaces on the pre-cut bulkheads guide and locate the panels. Finishing flush with 'Bulkhead 0' means the panels are located for length as well. The bulkheads can be set up higher or lower to suit the builder's preference.



4. The six panels in place, two full layers of fiberglass are applied at this point for extra reinforcing, no further taping is required. Panels are flat and smooth without the bumps of extra tapes, making for easy machine fairing, no torture boarding required. Work level is mid chest height at highest for comfort and safety during glassing and

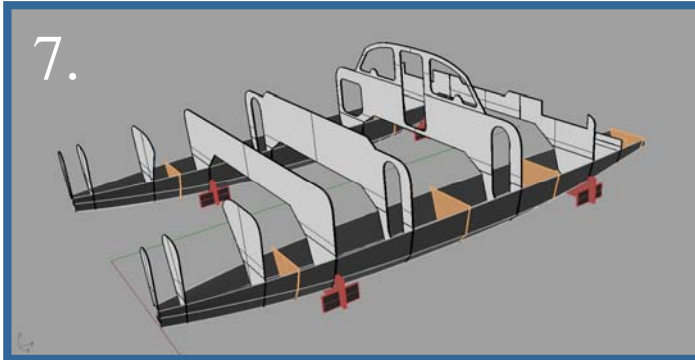


5. Shoes are light and easy to handle, the permanent bulkheads being glued in means they are very tough and stable. Pre-cut cradles are now available. At this stage they are either coated with copper epoxy bottom paint or sanded ready for anti-foul paint. Shoes are leveled and aligned diagonally ready for bulkhead tops.

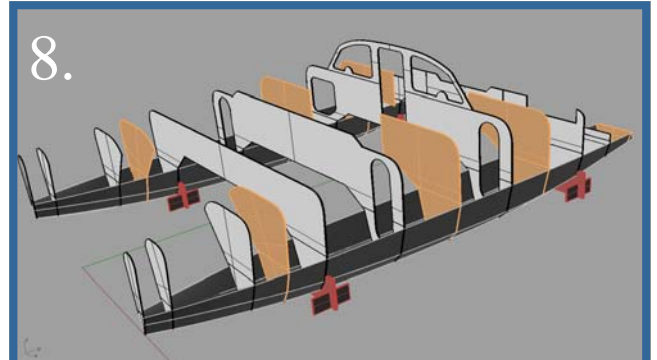


6. The cross bulkheads are assembled on a flat surface then lifted on for a simple butt join and tape. Hull internal is easily accessed for taping of hull joins and bulkhead joins.

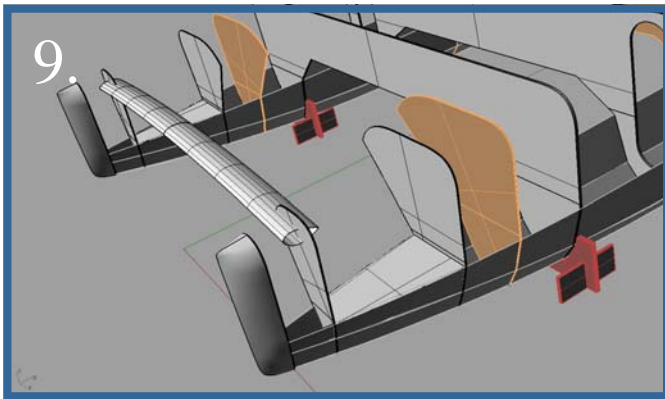
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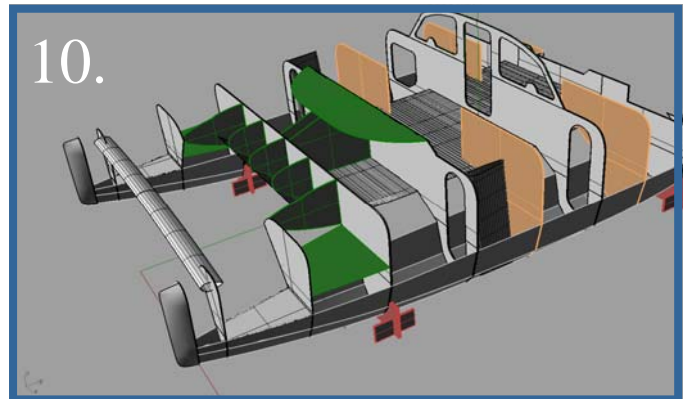
Top parts of the individual bulkheads are butt joined and taped.



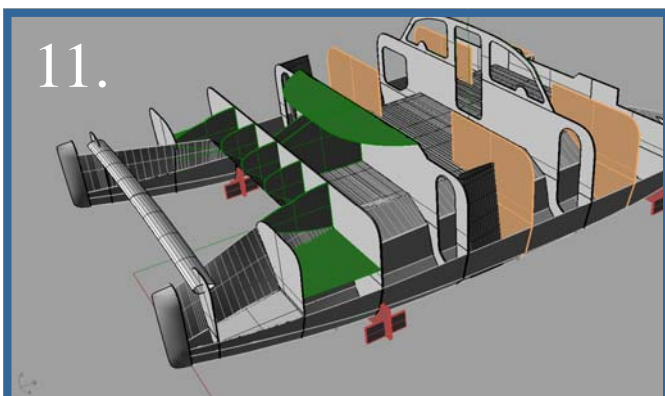
Top parts of the MDF bulkheads are attached in preparation for the chamfer panel installation.



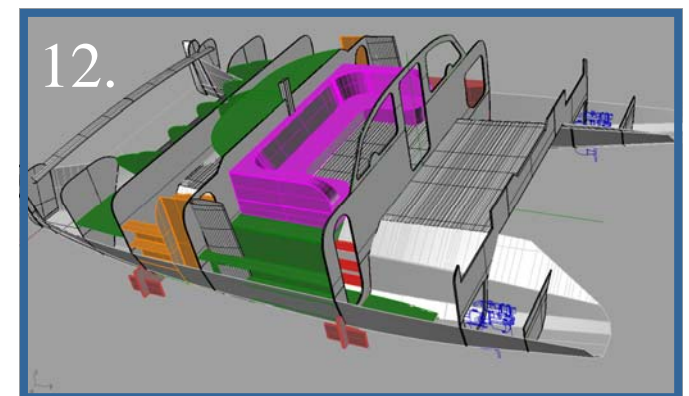
The composite forebeam is installed to provide stability to the bows, horizontal collision webs provide extra safety if the bows are holed.



Forward webs are required to support the bridgedeck panel, shown installed here and the sail locker floors stabilize bulkheads 1 and 2 for chamfer panel installation.

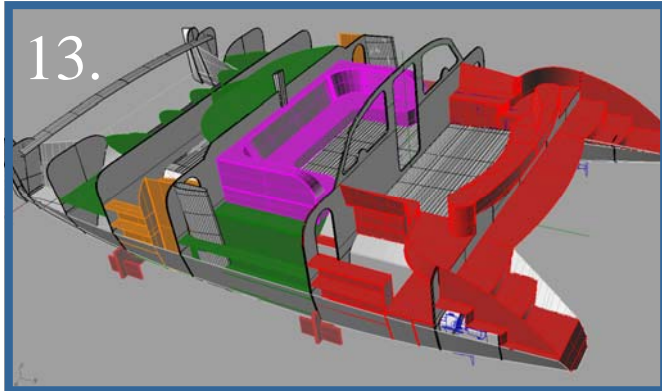


Chamfer panels installed, many of the internal structures can now follow.

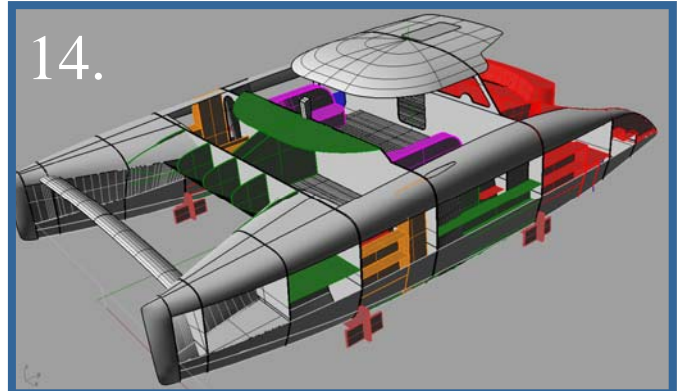


Hull floors and webs create a multi-chambered buoyancy area isolated for the accommodation. 29 hp to 40 hp sail drives are easily installed with open side and top. Install pre-cut furniture with plenty of light and air.

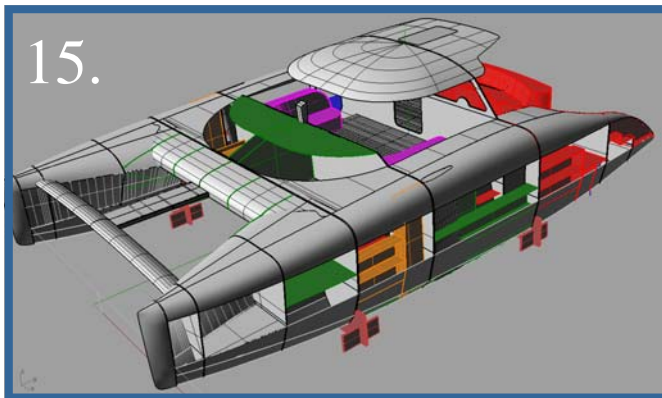
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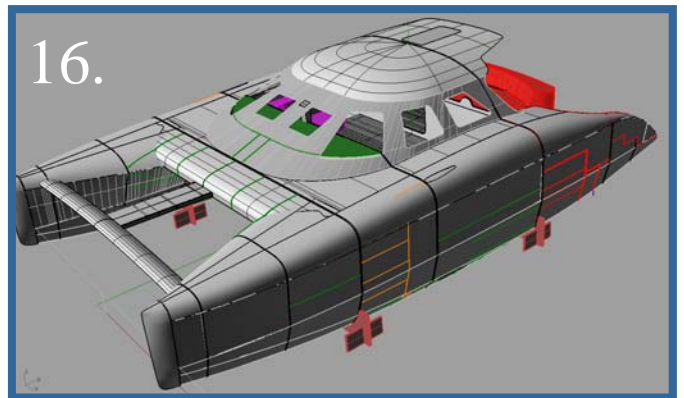
13. Furniture almost finished, dagger cases are easily accessible from either side.



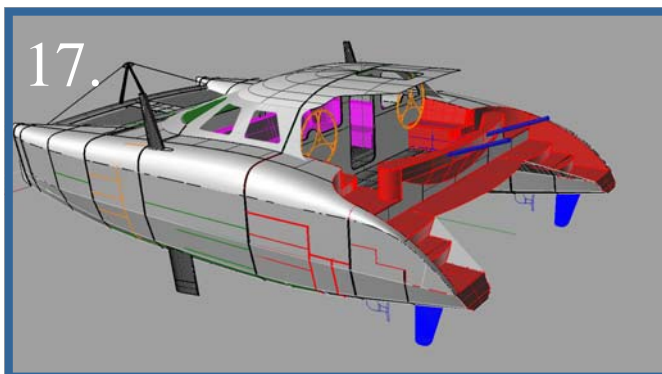
14. The only strip planked parts in place. Saloon top can be planked with 300mm wide panels. Round side decks give low wind resistance, shed green water quickly and look great too. For those daunted by the claimed 'difficulty' of strip planking we can supply these parts pre-made by a Schionning Pro Builder.



15. Precut flat decks and catwalk in place.



16. The pre-cut saloon sides and front installed. The large hull side panel is put in place once all lockers are finished internally and any taping completed.



17. Steering, striker and stop, davits and final placement of deck equipment takes place, followed by final finishing and painting.





Pre-cut, pre-glassed Duflex balsa panels joined form boat pieces



Durakore planks form cabin roof—pic courtesy Ray Ulyates, NZ



Wilderness 1480 hulls formed. NOTE this photo shows OLD build sequence we now built the hull shoe separately as shown in build sequence CAD images.



Western Red Cedar strip planked half forward beam.



The Wilderness hull bottoms are very stiff and strong with loads of sealed buoyancy making them extremely safe.



This strip planked deck shell is removed for inside glassing. These components can be supplied in your kit (optional).

CONSTRUCTION

Construction photo's are from various Wilderness Designs.



KIT & MATERIALS

WHAT'S IN THE KIT ?

KIT OPTION 1:

Your Wilderness kit (option 1) will include all the materials to build the shell, including your daggerboards and cases forward beam and catwalk, rudders, (exc s/s) and targa bar if the design has one. This includes, pre-cut Duflex panels, durakore planking for strip planked sections, fiberglass cloth and tapes, epoxy glues and filler, foam, timber and plywood. This stage can be split into 3 smaller stages making it more affordable.

KIT OPTION 2:

Your Wilderness kit (option 2) will be supplied as above PLUS the interior furniture kit. All Wilderness designs have at least one pre-cut interior kit option. You may prefer to buy option 1 and custom fit the interior yourself.

OPTIONAL COMPONENTS: (contact us for current price)

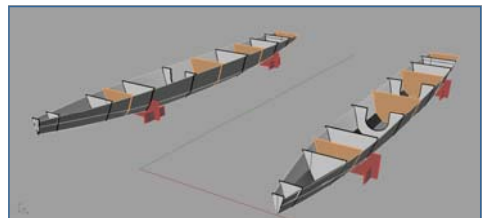
If you want to short cut the construction process, we can supply many components pre-made, faired and with high build undercoat with your kit making this option one of the most comprehensive KIT options available on the market.

Components available are:

- Hull shoes so you start construction right way up
- All the strip planked components, deck sides, cabin roof, forward beam.
- Daggerboards with cases
- Rudders
- Using these components will reduce the overall construction time by around 1500 hours.

CONSTRUCTION PLANS ARE NOT INCLUDED IN THE KIT AS THE PRICE VARIES DEPENDING ON THE OPTIONS. SEE PRICE AND PLAN INFORMATION ON PAGE 25.

WILDERNESS—THE ORIGINAL AND STILL THE BEST KIT!



Some of the optional components you can have included in your Wilderness KIT

KIT & MATERIALS *CONTINUED...*

PRICE!

Choose a plan to suit your budget, stage your kit purchase to suit your budget. Option 1, Option 2 OR the full component package. Various other options are available for part kits as well.

FLEXIBILITY!

Choose from a range of designs, interior layout options and kit options.

STRUCTURAL INTEGRITY!

Well proven structural engineering, no suspect joining systems, one piece composite integrated design. 20 year history with no failures.

SUPPORT!

The best support you'll get anywhere, we are builders, designers and sailors. Our service extends to product and equipment recommendation and supply. We're with you until the end.

RESALE VALUE!

Our strong family business will continue to look after your investment into the future. 20 year history of great design has established the highly sought after Schionning brand. Resulting high re-sale value is very desirable.

JOIN HUNDREDS OF OTHER SCHIONNING BUILDERS!



Kit arrives in Townsville
pic courtesy George and Cory Brink



Picture Courtesy Ray Ulyates



"Cheetah" - Wilderness 1320

MATERIAL LIST—Wilderness 1340X

Durakore Planks - 2400 x 300mm		Powder Modifiers	
46	16mm	11	20lt Microspheres (411)
36	19mm	7	20lt Microfibres (403)
Duflex Balsa - 1 x 600gm Biax each side 2400x1200mm		1	170lt Microlight (410)
15	13mm	4	20lt Microlight (410)
	13mm includes 1 non routed	Fibreglass Cloth (Colan Products)	
64	16mm	141	450 g Double Bias (47 kg roll) kg
	16mm includes 0 non routed	90	450g Uni directional (45 kg roll) kg
20	19mm	50	195 g Plain Weave 50 lm x 1000 mm
	19mm includes 0 non routed	Fibreglass Cut Strips (Colan Products)	
17	25mm	126	450 g D/bias 155 mm (6.00 kg tape) kg
	25mm includes 0 non routed	40	450 g D/bias 105 mm (4.00 kg tape) kg
38	Featherlite Interior H/Comb 1 x 600gm...	36	450 g D/bias 315 mm (12.00 kg tape) kg
	16 mm 2400x1200mm	32	450 g D/bias 210 mm (8.00 kg tape) kg
	Featherlite includes 0 non routed	2	200mm x 75 mm Clear Oregon (per L/M)
	If having twin cockpit doors, reduce to 38 Featherlite	WRC	
West R105/206 Resin & Hardener		15	50mm x 150mm R.S. (lm)
3	200 litre West System Resin	160	12mm x 40mm F.S. (lm)
6	20 litre West System Hardener fast or slow	Plywood - Gaboon 2440 x 1220mm	
1	20 litre West System Resin	2	6mm
1	4 litre West System Hardener fast or slow	4	9mm
Kinetix Laminating Resin & Hardener		1	12mm
4	18kg 246TX Laminating Resin	Klegecell Foam 80 kg 2175 x 1220mm...	
4	4.5kg H160 Laminating Hardener Medium	15.9	40mm sheet - per m2 pricing
		1	Precutting and scarfing of kit - 1320 not furn.
		1	Precutting and scarfing of furniture 1320

NOTES FROM THE DESIGNER....

The success of our designs I feel, stems from the practical commonsense approach of a boat builder, coupled with many years of live aboard experience and 50 - 60,000 sea miles in some of the worst conditions in the world. This experience makes one aware of the power of the sea and the need for a boat to be able to survive these conditions, protect her crew physically and psychologically as well as being a fast comfortable vehicle for all the good times. I am sure you will find our designs reflect our sailing and live-aboard experience and will give you the offshore confidence to sail safely anywhere in the world. Multihulls are '*beautiful, safe, cruising boats*'. We hope you find them as exciting as we do.

CHOOSING A DESIGN...

Choosing a design can be difficult so we hope that this introduction helps clear the way a little. We've taken particular care with the balance of construction methods in our designs, making them light and strong yet easy to build in small sections, most of which are manageable by a group of friends when they need turning over and moving. The blend of strip planking and light flat panels kept in single plane form, makes building easy and quick and produces a finished catamaran of classic good looks which will not date quickly, giving you very good investment security.

One of the first steps in changing this dream into reality is figuring out whether you can afford the boat (or more likely, how much money you 'don't' have!). Two realities here are, firstly, two similar sized boats with similar displacement, built of similar materials will cost the same to build overall. Designers' estimates

This is definitely not the case, ***similar boat, similar price!*** Your choice should therefore be towards the boat that suits you best and offers you good backup and is a good investment. Secondly, we know a lot of people who could not afford their boat at the onset so don't be discouraged. Once you start building it is surprising how you focus your interest, spare time and money into your new project. With our new owner-builders we suggest they start with the



smaller items which can be built in the garage, carport, (lounge?) etc. These initial items use very little material and money but use a lot of time, so at the early stages you can get a lot done while you wait for your old boat or car or house etc. to sell. These items are; dagger-boards and cases, motor pod, forward beam and catwalk, cabin roof, rudders, dinghy etc. The experience and confidence gained building these bits speeds up the second stage of larger items and gets the whole project finished much sooner.

WHAT MAKES A GOOD MULTIHULL?

Cat design is not just a matter of two hulls floating a cabin above the water. Only in fairly recent years have the basic elements of design and an understanding of their effect on the use and performance of the finished boat been understood. The basic principles of good design should all be present in the boat you're considering building or buying. These will blend together to produce an excellent Multihull.

THE BASICS ELEMENTS OF A GOOD DESIGN:

- GOOD ENGINEERING is obviously essential.
- FLAT DECKS. The flatter deck lines have a number of advantages. Secure footing while reefing, anchoring etc. in rough conditions, life lines are at a sensible protective height instead of set down a level. A flat deck is great for socializing, sunbathing or as a kids playground.
- BUOYANCY. Buoyancy distribution is the placement of buoyancy in the hulls. Our designs have between 50 and

"Sailing ability is important. We feel that good performance in a sailing cat is a real safety feature."

60 separate buoyancy tanks built into every shell so they are almost unsinkable. Most old designs hobbyhorse a lot making them uncomfortable and inefficient. Modern designs have the buoyancy pushed towards the hull ends damping down the hobby-horsing tendencies and giving a lot more safety downwind where the buoyant hulls stop nose-diving. Coupled with a lot of reserve buoyancy high up and forward in the hulls, this adds an enormous amount of safety and gives you confidence off the wind.

- A soft 'V'd entry, quickly picking up reserve buoyancy with lots of reserve

higher up is and ideal combination.

- BRIDGEDECK CLEARANCE. High Bridgedeck Clearance is essential. A short cabin length with long hull overhangs is a good safety feature. Good clearance on a cruising cat is 600mm – 800mm, a Performance cat 700mm – 900mm and a Racing cat 800mm – 1000mm. Chamfer panels add high reserve buoyancy and need less clearance than a similar cat without them.
- SAILING ABILITY AND PERFORMANCE. Power to weight ratios show how well a cat will sail in light conditions. As wind strength increases, one reefs the power to stay at safe acceptable speeds (this is different for different people). The Bruce Number is a commonly used value and very useful in comparing cats, displacement is not always reliable and will vary with load. A Bruce Number = 1 is very slow, 1.3 – 1.4 is a good cruising value, 1.5 – 1.9 reflects a very fast cat. Boats like the French 60' Tri's and "Club Med" are running to extremes like 2.3. A light and efficient cat can often sail out of trouble and outrun severe weather patterns, shorten passage times and avoid bad weather by getting there in the existing weather window. Most good designs will tack through 90 degrees at a speed of 8 - 10 knots while reaching at 10 - 13 knots comfortably with Main and No. 1 in 15 knots of wind. Daggerboards are efficient and allow very shallow draft for beaching. With a strong reinforced bottom as per our designs, it's easy to run the cats up on any old beach. Should you want shallow keels to protect inboard motors, then a combination of shallow keels and fixed rudders are a good

- **LOW DRAG.** This is a good characteristic. Slim hulls reduce drag and are efficient.

A good cruising cat would have a Waterline beam to length ratio of 11.5 to 12.5:1. A performance cruising cat 12.5 to 14:1 and a racing cat 14 to 20:1. It is important to note that **ALL** these elements must be present in a design to make any of them valid. For example, a design can be really good looking, have high bridge-deck clearance, a powerful rig and sail plan and be built reasonably light and show a fair displacement, but then have an 8:1 Beam to Length ratio. She'll be a good looking, powerful boat but it will be impossible to go forward, except slowly!

There is no reason why a good modern design does not have all of these features. If you find some of these lacking it is usually for the wrong reasons. A lot of cats have very little bridge-deck clearance because the designer is concentrating on a low profile cat which looks good or being dictated by interior accommodation and ignoring the fact that the boat will pound badly at sea. This is not only noisy and uncomfortable but can well be the cause of structural problems.

Our designs have been developed around these practical elements of good design then we accommodate personal comforts and lifestyle choices.

Good luck with your research and project, don't hesitate to contact us should you need further information or a chat about our designs. *Jeff*



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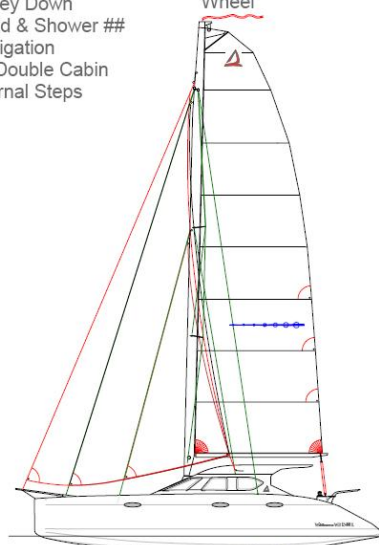
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WHAT YOU GET WITH PLAN PURCHASE:

The Wilderness 1340X has a comprehensive set of CAD drawn plans showing construction detail. Brett Schionning has produced a CD-ROM that shows the assembly and building techniques as well as loads of tips on the easiest way to do things with plenty of photographs for reference. It includes basic information such as what tools you require and product information and use. Plans are suitable for Amateur construction.

PLANS INCLUDE:

- Full size, colour coded plots for bulkheads
- A3 Booklet of plans (see index this page)
- CD-Rom building manual
- Backup support throughout your project

COST OF PLANS:

Wilderness 1340X plans cost AUD \$12,100.00.

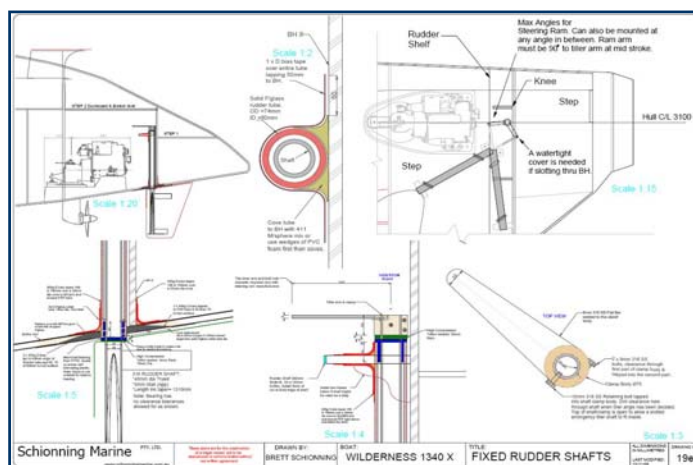
Price valid until 31st Oct 2009.

Includes GST in Australia

Includes shipping to any destination.

UNLIMITED BACK UP SERVICE:

Our back-up service is unlimited, our professional boat builder (Brett Schionning) will be here to guide you through any problems throughout your entire project. Email and phone support is available during business hours Monday to Friday.



AN EXAMPLE SHEET FROM WILDERNESS 1340X CONSTRUCTION

HOW TO ORDER

HOW TO ORDER PLANS:

We require a signed and faxed or mailed PLAN ORDER FORM with every plan purchase. The Plan Purchase Order form explains our terms and conditions and plans will not be mailed until a signed order form is received. (See form included in study plans)

PAYMENT:

WE ACCEPT: Bank cheques or direct deposit into our bank account. Our account details are on the order form. Credit cards are not accepted for plan purchases.

SHIPPING:

Plans are sent by express mail within Australia and by courier to other countries at no extra charge to you.

HOW TO ORDER PLANS:

- Complete the attached PLAN PURCHASE ORDER form and mail or fax it back to us on (02) 4982 4722.
- Deposit payment to Schionning Design's Account, (details on order form).
- When payment and your order are received your construction plans will be assembled, checked and mailed within 7–10 days to your nominated address.

KIT ORDERS:

Construction plans must be ordered before (or at the same time) as your kit.

- Contact Schionning Marine for a KIT quote when you are ready to order your kit.
- We will invoice you for the kit, 50% of this invoice value is required upon order, deposit to the account as shown on the invoice.
- You will also be asked to complete a second order form for the kit and on this form you will nominate whether you would like

us to insure the kit during transit (cost is 0.75% of the invoice value) and you'll need to provide us the delivery address.

- We will notify you of the lead time (date) once the order is logged into the manufacturing schedule and we will contact you again about two weeks before your kit is ready for dispatch.
- You will then need to deposit the balance of the kit value, including freight and insurance if you nominated to use our services, into our account. Once this is received, the kit will be shipped to you.

ANY PROBLEMS, CONTACT US:
+61 (02) 4982 4858

Building a boat is definitely a challenge but with good plans, our helpful friendly support and the modern materials available, it's never been easier. The investment of time and money is very worthwhile, offering a rich life experience, fun reward when you launch her and financially you can certainly stand to gain substantially. We look forward to hearing from you again and wish you the very best with your project.



Milski family on launch day.