



Maverick 440 Design Brief (Designer : Phil Southwell)

The Maverick 440 is designed for comfort and safety without compromising performance; it is a cruising catamaran for long distance voyages and living aboard.

It combines high volume interior space with light weight construction techniques.

Attempting to enhance the architecture of a catamaran we looked at improving the space and flow of the interior of a cat. The first order of business was to remove the artificial barrier between the saloon and aft deck. Incorporating the largest possible sliding doors and windows in the aft bulkhead brought the outside in and made one sociable area out of the entire above-decks. Then extending the coach-roof forward of the mast bought an extra double berth in the saloon (day bed), perfect for gear stowage on shorter trips, a protected play area for kids and watch-keeping hot-bunk for night watches. In the galley we got a scullery area and stowage for large items.

The deck and saloon are spacious and sociable. We aimed to great every space of yacht as a comfortable living area by enhancing the comfort in the hulls. Having found that wider waterlines only impacted boat speed marginally in light airs, but improved heavy air sailing, surfing and load-carrying whilst reducing spray, bow-burying and tacking times; the next step was to study the impact of significantly wider hulls below and above the waterline.

Architecturally, wider hulls are a game-changer. More hull curvature increases panel stiffness and allows internal structures without dividing up the space leading to better-proportioned cabins. For a given overall beam the distance between hull centerlines is less, reducing torsional loads. Surface areas do not increase significantly, giving much greater living space for minimal extra structural weight.

The additional space in the hulls allows for:

- island berths aft - and the pleasure of not having to climb over one-another
- separate shower cubicles
- generous locker space
- generous engine rooms with exterior access aft
- lots of tankage

Fuel capacity:	800L / 212 Gallons
Fresh water capacity:	1,000L / 264 Gallons

Hull slamming is not an issue – the hulls are still very narrow; The wider shallower hulls allowed us to fit deeper keels for the same draft and by moving these back further we achieved easier tacking, very light helms and good downwind tracking - with autopilots hardly working. We fitted big rudders to assist the skipper against the effects of windage in strong and crosswinds at slow boat speeds.

As the Maverick 440 is light and airy, combining the features of a good apartment with go-anywhere credentials, it makes a good boat for less experienced sailors who want to experience the great sailing lifestyle in a boat of LWL of just under 44 feet.

We aimed to create a yacht that is very easy to maintain by using the highest quality equipment and also by designing it in such a way that servicing of all components are easy to access (e.g. large engine rooms accessible from aft).

We have created Comfort, Safety & Reliability through the use of high quality components, strong & durable hull structure and spacious ergonomic design.

Construction: CE European certified category A

The construction goal is to be light weight, strong and durable.

The Maverick 440 is constructed using Scott Bader Gel Coat, 489 and 406PA Resin. The glass used is firstly a very fine tissue to eliminate any print through, followed by CSM and then woven fabrics. The foam core is Diviny Cell, we have also used Airex, as well as Corecell. The foam core is bonded using a bonding paste during a vacuum process. Then followed with inner layers of glass. For main bulkheads we continue to use Marine Ply.

The Maverick has no visible mould joins anywhere due to high quality hand finish.

Interior modules and furniture constructed with Nidicore as well as foam core.

Sailing ability

The Maverick 440 sails goals were to sail early in light winds, points well, be easy to tack, light on the helm, tracks well and performs good in all wind conditions.

Short handed sailing (or single hand sailing with elec. winches & autopilot)

Highly stable (wide hulls prevent squatting, reduce hobby horse motion), extremely conformable and stable when under way and at Anchor.

Easy to tack (due to position of keels, sail & hull design)

- main sheet track has been eliminated by using wishbone system (reduces friction)
- ability for catamaran to tack using only the main sail.

Good visibility

- Helm station configurable to owners personal requirements
- when on auto pilot from salon, 300 degree views
- large sky light & hatches to view sails from various places on the yacht
- can see four corners of yacht from helm

Huge galley (*biggest in class*)

- *gallery up, 100% configurable to customers personal lay out*
- two sinks for cooking + optional extra sink in bar area (3 in total)
- Dishwasher option
- Washing machine / dryer option
- Lots of cupboard space
- upto 320 litres interior cold storage with option of additional cold storage in cockpit.

Personal décor

- 100 options on counter tops colours
- Numerous floor options
- Countless fabric & leather interior options
- Extensive exterior fabric options
- Large range of cupboard finishes

Ventilation

- 14 hatches
- many opening windows – 16 in total
- double sliding doors + double window to cockpit
- Air Conditioning & heating option

Comparison of Maverick 400 to Maverick 440

The Maverick 440 is based on the award winning Maverick 400. The Maverick 400 was the overall winner for Best Boat of the Year in all categories in South Africa for 2009 & 2010. The Maverick 400 won by been voted as best leisure craft by all categories by all exhibitors at the Cape Town Boat Show.

Maverick Yachts aimed further enhance and refine this design by bringing out the Maverick 440 with extended sugar scoops which provide good swimming platforms and enhanced performance & load carrying capabilities. The bowsprit is standard on the 440. In order to retain a yacht that is still IWC friendly we continue with the sail plan of the Maverick 440 and offer an option to upgrade to a more powerful sail plan and taller mast.

We raised Bimini and helm floor by 10 inches for improved visibility. The interior design and quality of internal fittings has been further refined, with the Maverick 440 having a higher interior décor budget to the Maverick 400.