

BALANCE 486 CAT		
For: Balance Catamarans		
PRINCIPAL DIMENSIONS		
LOA (486)	14.78 m	48.50 ft
LWL	14.42 m	47.31 ft
BEAM OVERALL	8.26 m	27.10 ft
HULL BEAM	2.16 m	7.09 ft
FREEBOARD (BOW)	1.95 m	6.38 ft
FREEBOARD (STERN)	1.66 m	5.45 ft
HULL DRAFT	0.45 m	1.48 ft
DRAFT	2.10 m	6.89 ft
AIR DRAFT	22.66 m	74.35 ft
BRIDGEDECK CLEARANCE	0.93 m	3.03 ft
DISP (DWL)	9000 kgs	19845 lbs
SAIL AREA TOTAL (100% Foretriangle)	143.3 m2	1542 ft2
I	17.57 m	57.65 ft
J	5.20 m	17.06 ft
P	18.74 m	61.49 ft
E	7.30 m	23.95 ft
SINKAGE	342 kgs/cm	1915 lbs/in
YANMAR 4JH45 x SD60	2 x 34 kW	2 x 45 HP
FUEL CAPACITY	2 x 500 litres	2 x 132 gals
FRESH WATER CAPACITY	2 x 390 litres	2 x 103 gals
BLACK WATER CAPACITY	2 x 61 litres	2 x 16 gals

CONSTRUCTION:

Manufacturing materials

Hulls, decks and coach roofs are constructed from SP Systems Ampreg epoxy resin and high performance E-Glass laminate cored with "Corecell" SAN foam. Use is made of carbon fibre reinforcement in high load areas of hulls and decks (mast beam, aft beam, chain plates and capping for structural members). Interior joinery work and floorboards are all cored panels to provide stiffness at low weight. A boot stripe in a contrasting colour is included. All exterior surfaces are sprayed & painted.

Appendages

Dagger boards: Two cored epoxy/glass with high-lift laminar flow foil section dagger boards in epoxy/glass laminate trunks.

Collision Bulkheads

- Bhd A in each hull is the water-tight collision bulkhead forward.
- Stem has built-in crash box 300mm (1') aft of the stem.

Exterior Finish

- The entire above water line exterior of the boat is spray-painted, boot strip included.
- Walking areas to be non-skid finished.
- The bottom of the boat will be painted with anti-fouling paint, owner's choice of colour.
- Vessel name and hailing port, approximate 205mm (8") and 130mm (5") letter size respectively, will be installed.

Spars & Rigging:

Spars

- Mast: Sparcraft NG105 (Stiffened).
- Mast Step: Custom.
- Spreaders: Sparcraft.
- Boom: Sparcraft F740.
- Fwd Crossbeam: Sparcraft F385.
- Spreaders/Seagull Striker: Sparcraft.
- Main Longitudinal Compression Post: Sparcraft F3360.

Rigging

- Forestay: Dyform \varnothing 12mm.
- Lower Cap Shroud: Dyform \varnothing 12mm.
- Main Cap Shroud: Dyform \varnothing 14mm.
- Inside Diamond: Rod – 15.
- Outside Diamond: Rod – 15.
- Striker Stay: Rod – 48.

Sailing Hardware:

Jib Furler

- Jib furling unit - manual
- Harken Padeye on Fwd Crossbeam.

Main

- Battcar Track Harken System C.
- Battcar Headboard Car Harken System C.
- Battcar Batten Car Harken System C.
- Battcar Intermediate Car Harken System C.

Mast Base

- Deflection Blocks at Mast Base (Main, Jib, Spin, Code 0, Topping Lift, Stb and Port Lazy Jacks , Stb and Port Reef 1,2,3 , Stb and Port Main sheet & Jib sheet), Southern Spars Custom Integral with Mast Base.

Under deck Line Boxes

- 4 x Custom organisers (Harken sheaves with custom composite cheeks capable of deflecting 10 lines.)

Clutches

- Halyards Clutches - Spinlock XX 0812L.
- Topping Lift Clutches - Spinlock XAS 0612/1.
- Lazy Jacks Clutches - at Mast Base Spinlock XAS 0612/1.

Mainsheet

- 2 x Harken Blocks with Becketts on Boom.
- 2 x Harken Blocks on Aft Beam.
- 2 x Harken Padeye on Aft Crossbeam.

Jib Sheet

- Harken Block with Becket.
- Harken Car.
- Harken Curved Track (Simple).
- Lead Blocks Aft and Down Southern Spars custom.
- Clutches Spinlock XX 0812L.

Dagger boards

- Upper Trunk Blocks Harken.
- Lower Trunk Block (Downhaul) custom.
- 2 x Clutches Spinlock XTS0814/1.

Winches

- 2 x 46.2STA manual
- 1 x 50.2STA manual
- 1 x 50.2STEA 24H electric

Running rigging

Dyneema halyards and control lines. Low stretch Dacron sheets.

- Mainsail halyard (2:1)
- Jib halyard (to rack at bottom of mast)
- Topping Lift
- Stb and Port Lazy Jacks
- Reef 1,2,3
- Reef Tack 1,2,3
- Main sheet
- Jib sheet
- Jib furler line
- Dagger board control lines

Anchor Handling

Mast foot:

- Anchor windlass; Maxwell, part no. VWCLP 1500; with foot switches.
- Custom self-launching bow roller on stb side of longeron immediately behind fwd cross-beam fabricated by spar maker.
- Self-bailing lockers for self stowing chain and rope.
- 1 Ø24 mm Nylon bridle with two eyes to fix it on the bows with 2 padeyes.

Front beam:

- Auxiliary Roller for secondary anchor on port side of forestay.

Ground Tackle:

- Two anchors and ropes are supplied.
- Primary anchor to be Rocna 33 (73lbs) on 50m (164') of 10mm (3/8") G4 medium tensile chain.
- The secondary anchor to be Fortress FX-47, 9.5kg (21lbs) with 3m (10') of 12mm (1/2") chain and 90m (300') of Ø19mm (3/4") nylon rope.

Deck Equipment - General

- Built-in hand holds on coach roof edge.
- Trampoline - Supertramp
- 2 Seats on fwd pulpits.
- 4 Composite handrails on transom coaming i.e. 1 for each coaming.
- 5 Stainless steel stanchions 70cm high, on outer bulwark.
- Double guard lines in Dyneema; Ø5mm for top rail and Ø4mm for lower rail.
- 7 Aluminium cleats; Goyot 10"- 2 bow, 2 stern, 2 mid-ships and 1 at anchor locker.
- 1 Telescopic Swim-ladder on port transom.
- Safety jack lines running from the pad-eye on the side deck next to the transom steps all along side deck up to pad-eye at bow.

Hull and Deck Ventilation

- Portlights and hatches for light and ventilation (standard layout)
- 27 Hatches and ports; Accommodation hatches are equipped with roller/shade screens. Side windows and ports are equipped with roller shades Oceanair or equal.

<u>HULL HATCHES</u>			
<u>Make</u>	<u>Model</u>	<u>Amount</u>	<u>Position</u>
Lewmar-Flush Mitred Portlight	3933329800	6	Port Hull Sides
Lewmar-Flush Mitred Portlight	3933329800	6	Starboard Hull Sides
Lewmar-Flush Mitred Portlight	3933329800	1	Port Aft Cabin BHD/Stair Face
Lewmar-Flush Mitred Portlight	3933329800	1	Port Aft Cabin BHD/Stair Face
Lewmar-Flush Mitred Portlight	3933329800	2	Under Eyebrow on either side of Centre line Panel
<u>DECK HATCHES</u>			
Lewmar-Low Profile-S40	399100303	3	Coach roof-One over Galley one over mid saloon area, one over Coach Roof on fwd side settee
Lewmar-Low Profile-S54	399400303	2	Deck-Over Fwd Bunks-One over each P & S bunks
Lewmar-Low Profile-S60	399600303	2	Coach roof- One over Anchor Locker & -One Fwd of Mast.
Lewmar-Low Profile-S60	399600303	2	Port & Stb Fwd -Forepeak
<u>ESCAPE HATCHES</u>			
Goyot	104917	1	Port Inboard Hull sides Behind Stairs
Goyot	104917	1	Stb Inboard Hull sides Behind Stairs
Goyot (optional)	104917	1	Stb Inboard Hull sides -In aft Owners Shower

Custom Composite hatches:

- 4 Cockpit settee hatches.
- 1 Hatch over each engine room; 700 x 700, gas stays.

Cockpit equipment

- Aluminium sliding door, sliding to stb.
- The cockpit and the saloon sole on the same level with 100mm (4") sill separating the two areas.
- A Winch Plinth & sun-bed on the aft beam with storage underneath for the life raft.
- Cockpit settee area with composite seating for 7 around the cockpit table.
- Pair of composite davits on the aft cross-beam with stoppers, lifting lines, stainless steel shackle hardware.
- 50mm (2") thick foam cockpit cushions covered.

Helm stations and steering

- 1 Helm Station with console on stb side cockpit fwd.
- Helm pedestal to swing from lower position, which will be steered standing and then swing to the upper position for steering standing with head over hard-top.
- A 4" flush mount Ritchie SS-2000 compass, engine instrument panels, gear shift/throttle control and sailing instruments (depth, wind, speed) located within easy reach of the wheel.
- Cut-out in hard-top for standing steering position to be covered with a sliding or scissor-hinged cover/top to allow for an up and down position so as to allow for shade when steering in this position.
- 1 Composite seat/bench with flip-down seat to facilitate sitting and standing.
- The composite console to be fixed and will be in the lower steering position.
- 1 Stainless steel leather covered steering wheel; Edson Destroyer Type, 91cm (36").
- 2 Balanced spade rudders in fibre-glass composite using high-lift laminar flow foil section mounted with solid 2205 stainless-steel shafts running in JP3 bearings.
- 1 Emergency tiller.
- Helm system with chain and vectran cables using Edson sprockets, sheaves on roller bearings.

Transoms

- Swim Ladder (See Deck Hardware).
- Port side transom; shower with pressurized fresh water; hot/cold.
- Port side transom pressurised raw water outlet.
- Handrails (See Deck Hardware).
- Access to the emergency tiller (Port & Stb).

TECHNICAL EQUIPMENT:

The mechanical and systems hardware is distributed in the boat so as to concentrate weight amidships and allow for easy access to hardware for inspection and maintenance. The main engines are in their own dedicated compartment aft between the aftermost bulkhead and the transom. There are another three compartments forward of this amidships. On the port side on the inboard side of the hull and immediately forward of the companionway there is a locker for the genset, calorifier and freshwater pump; aft of the companionway is another locker for the watermaker maker system and other auxiliary systems; on the starboard side on the inboard side of the hull and immediately forward of the companionway there is a locker with the batteries, auxiliary switch/breaker panel, chargers/inverters, second freshwater pump etc. On the aft panel of this locker between the salon settee and companionway is the primary ship electric panel, optionally this electric panel could be located at the chart table if there is sufficient space available.

- 2 Yanmar 3JH5E x SD60 (39hp) diesel engines and standard B20 engine control panels at helm console and 125 amp alternator
- Morse cable controls mounted on starboard helm station.
- Folding propeller; Gori 3 blade 22".
- Dual Racor Fuel filters for each motor.
- Fireport in each engine room.
- 1 Ceiling light.
- Grey paint finish below waterline.
- Sound seal for both engine compartments.
- 2 x 500L custom composite Fuel tanks with deck fill, shut-off and gauge display. (Under Sole fwd of BHD F- P&S)
- Main Engine ventilation system: Air in and air out through transom steps using 2 x Jabsco Heavy Duty Flangemount Blower; 24 Volt dc Flangemount, fuse 10 amps mod. 35760-0094. One in each engine room.

Generator Room Provision

- In inboard locker immediately fwd of port companionway.
- Heavy duty platform at same level as wet deck to be provided.
- Shelf for genset start battery to be provided.
- Calorifier: Isotemp "Standard" 50L (13gal). 110V/220V water heater connected to port engine's cooling circuit.

Plumbing

- 2 x 390L Vetus Rigid water tanks model WTANK390 with deck fill, vent and display gauge on electric panel. Tanks to be mounted mid-ships on wet deck immediately behind mast bulkhead.
- 2 Jabsco Senson Max 17 VSD fresh water pumps (31755-0000)
- Plumbing piping and fittings to be John Guss.
- 2 x 61L Vetus holding tank model BTANK61 in locker fwd of guest shower on port side and located in inboard locker stb aft shower, with gauge, buzzer and visual alarm. Gravity drain for at sea or by deck drain for shore side pumping; breathers to have coal filters.
- Electric toilets in each head.
- Provision for 2 x 9kg (20lb) gas bottles with security regulator.
- Raw water outlet for anchor/deck wash down is located in the hull forward locker
- 4 x Rule 2000, 24V (or equal) automatic bilge pumps; one for each engine bilge and one for each main bilge located amidships.
- Jabsco Amazon Universal manual bilge pump; located in cockpit settee/module for pumping primary amidships/engine room bilge.

Electric System

Service voltages: 24 VDC and **220V 50Hz (or 110V 60Hz Optional)**.

Service Batteries – 500a/h capacity, 12 x 2 Volt 500a/h, **Sonnenschein Gel Cell 500Ah**

- Engine Start Batteries – 85a/h capacity, 2 x 12 Volt 85a/h, AGM 12/85.
- Charger/Inverter for the house batteries, Mastervolt Mass Combi 24/2500-60.
- Digital battery monitoring system.
- 2 Auxiliary Mastervolt alternators on motors 150Ah @ 24v for service batteries with smart-charge regulators, Mastervolt.
- Main electrical distribution panels at stb fwd companionway, 24V and 230V.
- One semi-custom made electrical control and display panel
- 12V Outlet at the chart table.
- Saloon LED Lighting: above each located service area – switch from the companionway
- Cabins: 1 Hella warm white DuraLED, switched at the light and 2 reading lamps
- All service areas: fluorescent trilights , switched at light

AC System:

The AC Systems consist of a 230V Systems @ 50Hz (Optional a110V @ 60Hz).

Wiring Systems complies with CE and ABYC standard and wiring codes and colours where applicable.

- AC outlets are installed in the following places. 1 In each head, 2 in the galley, 2 at the nav. station, 1 on the stb side saloon settee and 1 above/near to the fridges at the aft stb side of the saloon.
- Shore power cable; 20m 16amp Marinco with easy lock system or equivalent.
- 230V plug in each cabin, 1 at nav table and 2 in galley

Navigation Electronics

Installation included as standard for the following equipment:

- 8" plotter
- 2Kw 24NM Radome
- Wind/speed/depth instruments
- Autopilot
- GPS
- VHF radio
- Stereo, AM/FM/CD player with 2 inside speakers and 2 waterproof speakers in the cockpit.
- **Navigation Lights**
- All Nav lights to be LED

- Tri-colour with anchor light;
- Mast mounted steaming light with deck flood light.
- Port side light LED
- Stb side light LED
- Stern light LED

Miscellaneous

- Fenders, (8) DH6 Inflatable fenders.
- Mooring lines – 4 x springers (15m), 2 x aft mooring lines (8m) and 2 additional mooring lines (10m).

INTERIOR:

Bridge Deck & Accommodation

Saloon

- Saloon settee to be composite/custom made with storage bin lockers underneath with upholstery
- Saloon table to have folding out leaves.
- LED lights with dimmer (see Electrics above)

Galley

- U-shaped galley situated on the aft port corner of saloon deck.
- Storage lockers and drawers.
- Double stainless steel sink
- Max on Top Corian counter top. (Colour to be decided)
- Fridge & Freezer: Vitrifrigo DW210 RFX drawer fridge and Vitrifrigo DW210 BTX drawer freezer.
- Mixer Tap for hot and cold water. (Make to be decided)
- Gas oven with 3 burner plates; Dometic SMEV CU433 Moonlight. (Or equal)
- LED lights with dimmer (see Electrics above).

Chart Table

- Storage compartment with lift up lid.
- An electronics locker would be situated underneath the chart table at the fwd end.
- Console/dash for navigation instruments and communication.
- Movable enclosed bench-seat with storage underneath.
- White/red chart table light.

Starboard Hull Accommodation

Starboard Hull Owner's Cabin

- Cabin situated in Stb hull.

Fwd Stb Area:

- Fwd of bulkhead B: Storage linen locker with shelves.

Bunk:

- Bunk to be a wooden finish furniture module with 2 top drawers and one locker underneath, at the end of the bunk running athwartships to bridge-deck.
- 75mm (3") Bunk fiddle around foot end of bunk which runs into side lockers.
- Mattresses to be a queen size 2035 x 1525 mm (80" x 60"). 150mm (6").
- Angled upholstered headboard behind the head of the bunk.
- Storage shelves on either sides of the bunk.
- Access to either side of the bunk via side-step.
- Marine fans situated on either side of head-bunk panel.

Storage Lockers:

- Situated on outboard side of hull.
- Dressing area with hanging lockers and vanity shelf with storage under.
- Wet locker aft of locker area.
- 2 Lower drawer shelves on either side of dagger-board trunk housing.
- Inboard mid-ships battery storage locker with additional storage above.
- Locker storage aft of the companionway underneath saloon fridge panel.

Heads:

- Outboard swinging access door into heads in bhd panel.
- Counter unit on outboard side with Max on Top Corian counter top with a moulded-in basin.
- Storage lockers underneath basin.
- Mixer tap (make still to be decided)
- Mirror on Outboard side of Hull
- Electric toilet.
- Storage locker situated behind head.
- Handrail or towel-hook on bhd panel.
- Lewmar Flush Mitred portlight S3 to be situated in clear Lexan panel in hull side above basin unit.
- Optional portlight above head in helm-station hull to deck panel.

Shower:

- Shower compartment faired and painted composite module.
- Shower area separated by a partial clear Lexan partition panel with and outboard aft opening clear Lexan door.
- Shower drainage pan in sole.
- Hand-held mixer tap for cold and hot fresh water situated on the inboard locker angled face.
- Aft against BHD G is a seat running athwartships
- Inboard locker with angled face runs from hull bottom to underside of deck for black water tank housing.
- Optional inboard escape hatch; Giot 104917, for ventilation above shower seat.
- LED lights.

General:

- Stb companionway to have a forward sliding door and removable stair panels for access to escape hatch in hull; Giot 104917.
- Optional fwd opening Lewmar Low Profile S54 hatch/skylight situated above bunk.
- 2 x Hull portlights; Lewmar Flush Mitred portlight S3 to be situated in clear Lexan panel in hull side.
- 2 x Hull portlights on either side of dagger board trunk housing.
- LED lighting and reading lights above berth.

Port Hull Accommodation

Fwd Guest Cabin

- Cabin situated in fwd port hull.

Fwd Stb Area:

- Fwd of bulkhead B: Storage linen locker with shelves.

Bunk:

- Bunk to be a wooden finish furniture module with 2 top drawers and one locker underneath, at the end of the bunk running athwartships to bridge-deck.
- 75mm (3") Bunk fiddle around foot end of bunk which runs into side lockers.
- Mattresses to be a queen size 2035 x 1525 mm (80" x 60"). 150mm (6") thick fire-retardant foam.
- Angled upholstered headboard behind the head of the bunk.
- Storage shelves on either sides of the bunk.
- Access to either side of the bunk via side-step.
- Hella Marine fans situated on either side of head-bunk panel.

Storage Lockers:

- Dressing area on outboard side with hanging locker, vanity shelf with storage under.

General:

- Fwd opening outboard door in bulkhead for cabin access.
- Optional fwd opening Lewmar Low Profile S54 hatch/skylight situated above bunk.
- 2 x Hull portlight; Lewmar Flush Mitred portlight S3 to be situated in clear Lexan panel in hull side.
- LED lighting and reading lights above berth.

Amidships

Outboard:

- *Heads (Separate Shower):*
 - Shower compartment fwd of dagger board trunk housing with fwd opening outboard door.
 - Counter unit on outboard side with Max on Top Corian counter top with a moulded-in basin.
 - Storage lockers underneath basin.
 - Mixer tap (make still to be decided)
 - Outboard faired and painted composite module seat.
 - Shower drainage pan in sole.
 - Hand-held mixer tap for cold and hot fresh water situated on the dagger board trunk partition panel face.
 - Towel hook
 - 1 x Hull portlight; Lewmar Flush Mitred portlight S3 to be situated in clear Lexan panel in hull side.
 - LED lights.
- *Dagger board trunk* housing on outboard side of hull with shallow pull-out drawers/shelves inboard of housing.

Heads:

- Situated aft of dagger board trunk housing with fwd outboard opening door in partition panel.
- Electric toilet on fwd side of heads with a shelf running at counter height behind the head.
- Counter unit on outboard side with Max on Top Corian counter top with basin.
- Storage lockers underneath basin.
- Mixer tap (make still to be decided)
- Handrail or towel-hook on bhd panel.
- Mirror on Outboard side of Hull
- Lewmar Flush Mitred portlight S3 to be situated in clear Lexan panel in hull side above basin unit.
- LED lights.

Inboard:

- Fwd inboard locker which will provide for the Generator (if option taken up) housing and which will be at the level of the wet deck with the Isotemp 50L water heater situated below.
- Fwd of the generator will be the generator start battery.
- Storage locker below.
- Port companionway to have removable stair panels for access to escape hatch in hull; Goiot 104917.
- Washer-Dryer combo aft of companionway stairs in inboard locker. (Optional)
- Water maker and various components situated in the aft end of inboard lockers on the wet deck level. (Optional)

Aft Guest Cabin:

- Cabin situated in aft port hull.

Bunk:

- Bunk to be a wooden finish furniture module with 2 drawers underneath the end of the bunk.
- 75mm (3") Bunk fiddle around foot end of bunk which runs into side lockers.
- Mattresses to be a queen size 2035 x 1525 mm (80" x 60"). 150mm (6") thick.
- Angled upholstered headboard behind the head of the bunk.
- Shelves on either sides of the bunk with a recess for storage.
- Access to bunk via side-step of both sides.

Storage Lockers:

- Locker situated on outboard side of hull aft of head with Vetus Black water Tank. Lkr above
- 4 Locker bins situated on inboard hull side underneath cockpit seat.

General:

- Hella Marine fans situated on either side of head-bunk panel.
- Storage Bins access via a top of bunk panel. Close-off panel behind drawer box.
- 2 x Hull portlights; Lewmar Flush Mitred portlight S3 to be situated in clear Lexan panel in hull side.
- LED lights.
- Safety equipment **NOT** provided

Optional Extras

- External rub-rail
- Electric Profurl furling unit NDEC 430 24V
- Asymmetrical Spinnaker
- Code 0
- Generator
- Watermaker
- Aircon
- Washer / Dryer combo
- Icemaker
- Solar panels
- Lithium ion batteries
- Weather awnings in cockpit area
- Dive compressor
- Saloon blinds
- Boom Gantry
- 110v, 60Hz electric system
- Owners side, Fwd of bunk area a Head & Basin
- Four cabin option , starboard hull will mirror port hull

*** SPECIFICATIONS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE**