

FIRST 45

Preliminary Specifications

PROVISIONAL PRINCIPAL SPECIFICATIONS

- Design: P. Briand Yacht Design
- Length overall: 46'2".
- Hull length: 44'11".
- Waterline length: 38'7".
- Maximum beam: 13'9".
- Light displacement: 23,369 lbs.
- Mast height over DWL: 67'11".
- Draft - Shallow keel: 7'10" - cast iron - 8,543 lbs.
- Deep keel option: 9' - lead - 8,543 lbs.
- Engine power: 54 HP sail drive.
- Fuel tank capacity: 53 gal.
- Fresh water capacity: 140 gal.
- CE certification: A8 / B9 / C14 in progress

SAIL AREA – Racing

- Total sail area: 1,237 ft².
- Mainsail: 651 ft².
- Genoa maximum (104%): 581 ft².
- Spinnaker: 1,625 ft².

SAIL PLAN – Racing

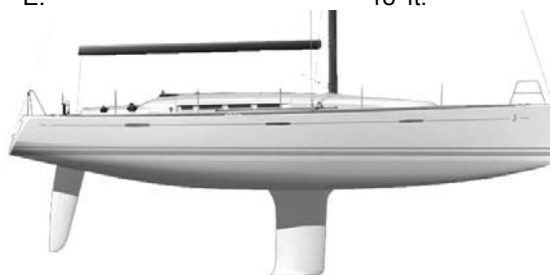
- I: 60'2" ft.
- J: 18'1" ft.
- P: 59' 1" ft.
- E: 18' ft.

SAIL AREA Standard

- Total sail area: 1,237 ft².
- Mainsail: 592 ft².
- Genoa maximum (135%): 646 ft².
- Spinnaker: 1,506 ft².

SAIL PLAN Standard

- I: 57'5" ft.
- J: 17'5" ft.
- P: 55' 9" ft.
- E: 18' ft.



DESIGN

Designed in accordance with European RCD requirements and CE Certification, these regulations in addition to the builder's requirements ensure that the FIRST 45 incorporates important safety requirements including:

- Safety and protection of persons on board.
- Durability of materials.
- Stability and safety.
- Safety when maneuvering.
- Fire protection.
- Protection of the environment and prevention of engine emissions.

- HULL -

The hull is single skinned GRP and fiberglass construction. Hull longitudinals and reinforced areas (keel, rudder, chain plates, hull/deck joint) to strengthen the structure. The hull is provided with optimal protection against osmosis by means of an initial protective layer of resin.

A structural single-skinned inner moulding, constructed with bi-axial and uni-directional cloth, is bonded and laminated to the hull at intervals. Its structural role is important as it takes and absorbs the stresses at pressure points (chain plate tie rods, keel, rudder etc) and spreads any loads, guaranteeing reduced strain on the hull. It also ensures a good finish to the bilges and makes cleaning and maintenance easier. The floors can take the mechanical components (engine etc), and water tanks. Marine plywood structural bulkheads are bonded to the hull for maximum stiffness. White or grey hull color with grey graphics.

- DECK -

The deck is constructed by infusion (fiberglass / balsa /synthetic resin sandwich) for optimal stiffness/strength ratio. Single-skinned reinforced areas are constructed beneath the deck fittings (winches, tracks, U-bolts, cleats). All areas of work and movement on deck have a non-slip surface. A built-in single-skinned inner moulding including structural beams is bonded to the deck to complete the finishing touches (built-in lighting, finish, access to screws fixing the deck fittings etc).

- HULL DECK JOINT -

The deck is attached mechanically to the hull with mechanical fasteners fixing the teak toerails and deck fittings (cleats, U-bolts, bow fitting etc)

- The deck is bonded to the hull (with polyurethane adhesive) to guarantee integrity and a joint that guarantees water-tightness.
- The hull/deck joint around the transom is reinforced by lamination.

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BENETEAU

- KEEL -

The construction of the keels is :

- Shallow keel (standard): cast iron – cast iron keel bulb and fin.
- Deep keel (option): lead.

The two keels offered are designed to optimize the weight / volume / centre of gravity / performance ratio.

They both give the boat the same righting moment. To improve their durability the keels are given an anti-corrosion treatment and improved finish in the factory before assembly using epoxy based coatings and paint. The keels are attached to the boat by a system of screws and stainless steel backing plates.

- STEERING SYSTEM -

- The underhung balanced rudder is of fiberglass and polyurethane foam construction. The single-skin stock is constructed by injection from bi-axial and uni-directional cloth. The rudder stock turns on self-aligning swivel bearings, equipped with ball-bearings and rollers, for maximum sensitivity and precision on the helm.
- Twin helm positions in the cockpit
- 2 steering wheels (900 diameter)
- 2 sets of steering gear
- Chain and metal cable steering controls connected to the quadrant.
- 1 emergency tiller

ON DECK

- BOW - MOORING - ANCHORING -

- 1 stainless steel bow fitting with tack position for asymmetric spinnaker (cruising version).
- 1 stainless steel removable bow roller.
- Self-draining chain locker with eyebolt for bitter end.
- Vertical electric windlass (1000W), circuit breaker, 12V relay and 1 remote control with wire.

- 6 x 14" aluminum mooring cleats (2 forward, 2 amidships and 2 aft) with stainless steel protection bolted to the hull/deck joint.

- PULPITS AND GUARDRAILS -

- 2 stainless steel pulpits (24" high) with navigation light holder.
- 2 stainless steel pushpits aft (24" high) with a central rail, connected with two safety rails with snap shackle opening.
- Ensign staff holder, lifebuoy holder and stern light holder on central rail.
- 2 rows of lifelines with turnbuckle adjustment supported by 4 double stanchions and 8 single stanchions fitted to wide stainless steel bases.
- Side openings to port and starboard lifelines.
- Solid untreated wood toerails surround the deck.
- 2 handholds near side ports eyebrows

- COCKPIT -

5 lockers for cockpit stowage:

- 3 cockpit lockers
- 1 lockable locker aft of port helm position.
- 1 gas locker aft of port helm position.
- 1 liferaft locker in cockpit sole with lockable lid and gas strut.
- Teak slatted cockpit benches and helm seats.
- Self-draining cockpit.
- 2 aluminum, leather-covered steering wheels fitted to two lacquered aluminum designer consoles.
- 2 steering compasses.
- Engine control panel located at end of starboard cockpit bench.
- Positions for navigation electronics (option) on cut-off corners at aft end of port and starboard cockpit benches.
- 1 articulated eyebolt near the companionway for clipping on safety harnesses.

- BATHING PLATFORM AND TRANSOM -

- Stainless steel bathing ladder.
- 1 cold water shower on port side.

- MAST AND BOOM -

- Keel-stepped 9/10 tapered anodized aluminum mast
- Triple 20° aft swept spreaders..
- Mast hole fitting with 2 partner tie rods.
- Halyards and sheets taken back by 10 blocks around the mast hole.
- 3 foldaway steps on mast.
- Sheathed electrical supply to navigation and anchor lights.
- Anodized aluminum boom.
- 1 rigid mechanical boom downhaul.
- Grounded rigging.

- STANDING RIGGING -

- Stainless steel 9/10 fractional discontinuous wire rigging. Rod forestay.
- 2 stainless steel chain plate tie rods moulded into side decks with tie rods taken back to the hull structure.
- Backstay attached by means of a chain plate to the transom, with hydraulic adjustment.
- Forestay attached by means of a chain plate in anchor well.
- Genoa furling gear on deck.

- RUNNING RIGGING -

Dyneema® halyards:

- 1 genoa halyard.
- 1 genoa furling line.
- 2 genoa sheets.
- 2 genoa car purchase systems.
- 1 main halyard.
- 1 mainsail foot outhaul.
- 1 mainsheet in cockpit.
- 3 reefing lines.

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All lines are led back to the cockpit to:

- 6 clutches to port: genoa furling line, genoa halyard, main halyard, No.2 spinnaker halyard, No.2 reefing line and mainsail foot outhaul.
- 6 clutches to starboard: No.1 reefing line, No.3 reefing line, mainsail Cunningham, No.1 spinnaker halyard, spinnaker pole uphaul, spinnaker pole downhaul.
- 2 x 5-sheave flat deck blocks taking lines from the mast back to the cockpit under a GRP cover near the mast.
- 2 winch return sheaves on coachroof to take lines to the opposite winch.

- MAINSAIL SYSTEM -

- 1 mainsheet traveller track fitted to cockpit sole, mainsheet led to winches fitted to cockpit coamings on both sides.

- GENOA SYSTEM -

- 1 genoa furler.
- 2 genoa sheet tracks (11.10ft) on side decks with:
- Ball bearing cars adjustable under tension.
- 2 track ends with sheaves for leading purchase tackle.
- 2 genoa lead blocks.
- 2 clutches on deck for purchase tackle with eyebolts and blocks.
- 3 blocks for genoa furling line with fairlead and clutch on coachroof to port.

-WINCHES -

Aluminum self-tailing Harken winches:

- 2 mainsheet/spinnaker winches on cockpit coamings (44.2 STA).
- 2 winches on coachroof either side of companionway (44.2 STA).
- 2 genoa sheet winches on cockpit coamings (53.2 STA).
- 2 winch handles.

- PRE-FITTED SPINNAKER DECK GEAR -

- 2 eyebolts for spinnaker sheets.
- 2 eyebolts for spinnaker guys.
- 2 eyebolts for pole downhaul.

PORTS, HATCHES AND COVERS

For excellent light and maximum ventilation, the First 45 has a minimum of one access point in each space for air and light.

- 4 built-in opening deck hatches.
- 10 opening ports.
- 6 hull ports.
- 1 sliding companionway hatch.

ENGINE

- YANMAR 4JH4 CE 54 HP diesel engine – Sail Drive .
- Engine mounting built into the inner moulding.
- Engine compartment insulated with sound-proofing foam.
- Ventilation by means of 2 forced air intakes and 1 outlet on transom.
- Engine access: 1 opening built into the companionway and 2 side access hatches in the aft cabins.
- Three-blade folding propeller.
- 1 rotomoulded diesel tank beneath port aft berth (53 gal capacity) fitted with 1 electric gauge, 1 primary filter, 1 stopcock.
- 1 stainless steel deck filler with key on starboard aft cockpit side.
- 1 seawater filter.
- Engine control and starter panel located on the aft face of the starboard cockpit bench.
- Engine control lever located on the side of the cockpit near the starboard helm position.
- 1 engine battery - 12V - 110 Amp.

ELECTRICAL CIRCUIT

- SUPPLY -

- 12V electrical circuit.
- 2 service batteries (2 x 110 Amp).
- 1 engine battery (110 Amp).
- Battery switches (+/-) protecting the circuit (below the companionway in a unit beneath the chart table extension).
- Conduits with messengers for installation of options.

- BATTERY CHARGING -

- 1 engine alternator (80 Amp).
- 110V supply (shore supply, breaker and 15m extension cable).
- 1 battery charger (40 Amp).
- 1 power distributor.

- ELECTRICAL PANEL -

Brushed stainless steel, back-lit electrical panel above chart table centralizing all the boat's electrical functions (12V-110V).

Functions are protected by circuit breakers.

- 1 x 12V socket.
- 1 x 110V voltmeter.
- 1 x 12V voltmeter.
- 1 ammeter.
- Water and fuel gauge with digital display.
- Alarm for low battery, fuel and water levels.
- 1 x 110V socket at chart table.

- LIGHTING AND SOCKETS -

- Square halogen overhead lights distributed throughout the various spaces.
- 7 x 110V sockets distributed throughout the cabins, saloon and at the chart table.

Navigation lights: :

- Navigation lights and anchor light on mast.
- Port and starboard navigation lights on pulpit.
- Stern light on pushpit.

GAS SYSTEM

- SUPPLY -

- 1 gas locker for 1 bottle.
- Gas supply circuit to NMMA Specification.

WATER SYSTEM

- Bronze through-hull seacocks fitted with a ¼ turn valve.

- DRAINING -

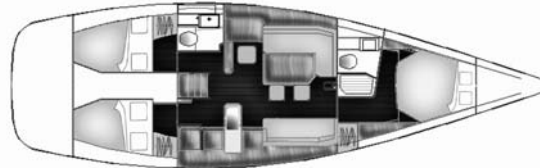
- 2 bilge pumps (1 manual and 1 electric) in a sump in the hull bilge.
- 2 electric shower pumps with automatic switching.

- FRESHWATER -

- Pressurized fresh water system (electric pump with filter).
- 2 rotomoulded fresh water tanks located under forecabin berth (87 gal) and port aft berth (53 gal).
- 1 stainless steel deck filler per tank. Selection for separate use by means of ¼ turn valves.
- 10.5 gal water heater (with mixed mode function: by electrical resistor supplied by the 12V circuit or by heat exchanger connected to the engine circuit).
- Plumbing board located beneath the port saloon settee (easy maintenance of pumps, water system, filter, expansion bottle and header).

LAYOUT

- Woodwork in light oak stained Alpi.
- Parquet type laminated soles.
- Solid wood door frames, fiddles and mouldings.
- Wide connecting doors, without threshold (except heads), fitted with mortice locks and a retaining system.
- Push-button locks on locker doors.



1 Forecabin - 2 Aft cabins - 2 Heads

- FORECABIN -

- Headroom 6' 4".
- Central Island type double berth (6' 7" x 4' 11") with double-density marine mattress and anti-mite, anti-fungal and anti-bacterial treatment, Victory bed cover.
- Padded headboard.
- Access step on each side of berth.
- 2 drawers underneath berth.
- 1 hanging locker to starboard.
- 1 storage unit to port with stainless steel fiddles.
- 1 dressing table unit to starboard with stainless steel fiddle
- 2 open shelves on hull.
- Hull lining.
- 1 deck hatch with mosquito screen (1 step below head lining for emergency exit).
- 2 hull ports.
- 5 halogen overhead lights.

- FORWARD HEAD -

- Headroom: 6' 4".
- Large bowl marine WC with lid.
- 1 rigid black water tank (21 gal).
- Worktop with square synthetic resin washbasin, mixer tap and stainless steel fiddle.
- Unit beneath washbasin: 1 drawer, 1 wood door giving access to valves and bathroom accessories.
- Shelving with door and mirror.
- 1 access door to holding tank with mirror.

- Separate shower with GRP tray, laminated bulkheads, grating, shower head with mixer tap and fixed PMMA shower screen.
- 1 opening deck hatch with blind.
- 3 halogen overhead lights

- SALOON -

- Headroom: 6' 4".

Saloon port:

- L-shaped saloon with 1 settee and 1 rectangular table on stainless steel legs with solid wood frame and hand holds.
- 2 removable seats on stainless steel feet with upholstery to match settee.
- 4 high units along the hull with compartmented, closed-in stowage.
- Lockers for stowage beneath settee.
- Stainless steel fiddle along the hull behind the settee.
- Hull lining.
- 1 leather-covered stainless steel handrail along coaming.
- 1 hull port.
- 3 halogen overhead lights.

Saloon starboard:

- Saloon corner with sofa (L 6').
- 4 high units along the hull with compartmented, closed-in stowage.
- Lockers for stowage beneath settee and sole.
- Stainless steel fiddle along hull behind settee.
- Hull lining.
- 1 leather-covered stainless steel handrail along coaming.
- 1 hull port.
- 2 halogen overhead lights.
- 2 opening deck hatches with blinds/mosquito screens.
- 1 permanent ventilation system.
- Mast is keel stepped.

- GALLEY STARBOARD -

- Headroom: 6' 6".
- T-shaped layout.
- Along the hull aft:
- Worktop in laminated Alpi with wooden fiddle.
- 1 gimbaled stove with oven. 2 burners with pan holders, protected by a wooden cover (with flame shield).
- Closed-in shelving beneath oven.
- 1 deep drawer for stowage and giving access to a 2nd drawer for stowing flat dishes.
- 1 cutlery drawer.
- 1 plate stowage with access from above.
- 1 chopping board built into the worktop.

Central work station:

- Synthetic resin worktop with wooden fiddle.
- Single stainless steel sink with mixer tap.
- 1 draining board.
- 1 low unit with waste bin, access to sink valves and stowage for cleaning products.

Along the hull forward:

- Worktop in laminated Alpi with wooden fiddle.
- 1 front-opening refrigerator (26 gal) – with 12V evaporator and storage baskets.
- 1 top-opening ice box (16 gal).
- 4 high closed-in shelves.
- 4 opening ports in coaming with blinds.
- 5 halogen overhead lights.

- CHART TABLE TO PORT -

- Headroom: 6' 5".
- Large L-shaped chart table desk.
- Along the hull: stowage space for charts and reading navigation instruments.
- 3 high closed-in units for electrical panel, position for navigation instruments (instruments available as options) and radio/CD/MP3 player (2 speakers in saloon).
- 1 110V socket.

- 1 unit beneath chart table for access to electrical connections, with oddments locker.
- 1 closed-in unit beneath desk corner.
- Extension facing aft: desk space.
- 1 shelf.
- 1 hand hold.
- 1 unit fitted with shelving with battery switch position.
- 1 adjustable swivelling seat for use at the chart table and in the saloon.
- 2 opening ports in coaming with blinds.
- 1 halogen overhead light.
- 1 articulated lamp.

- COMPANIONWAY -

- Headroom: 6' 5".
- Sliding companionway hatch and 2-part entrance door in PMMA.
- Moulded wood steps with non-slip surface.
- 2 stainless steel handrails fixed on each side of companionway.
- 2 switches for saloon lighting.

- PORT AFT HEAD COMPARTMENT -

- Headroom: 6' 5".
- Worktop with square synthetic resin washbasin, mixer tap and 1 stainless steel fiddle.
- Unit beneath washbasin: 1 drawer, 1 wooden door giving access to valves and bathroom accessories.
- 1 shelf unit with door and mirror.
- Separate shower with GRP tray, laminated bulkheads, grating and 1 showerhead with mixer tap.
- 2 opening ports in coaming with blinds.
- 4 halogen overhead lights.

- AFT CABINS-

In each cabin:

- Headroom: 6' 4".
- 1 double berth (port 6' 7" x 4' 7"/3' 11" – starboard 6' 7" x 4' 3"/3' 7") with double density marine mattress with anti-mite, anti-fungal and anti-bacterial treatment.
- PVC hanging locker on stainless steel rods
- 1 luggage stowage in upper part.
- Oddments locker and stowage along central bulkhead.
- Hull lining.
- 1 access hatch to engine compartment.
- 1 opening port in coaming with blind.
- 1 opening port in cockpit with blind.
- 1 hull port.
- 3 halogen overhead lights.

OPTIONS

EQUIPMENT SPECIFIC TO THE 'S' VERSION -

- 2 composite steering wheels.
- Teak cockpit sole.
- Reading lamps in saloon and forecabin.
- Grating beneath saloon table surface.
- Leather-covered stainless steel handrail on head compartment bulkhead.
- Chart table seat and desk pad in 'Camel First' leather.
- Holding tank in aft head compartment (21gal).

EQUIPMENT SPECIFIC TO THE Racing VERSION -

- Aluminum Racing mast (triple spreaders, Rod rigging, PBO backstay).
- 2 H60.2 STA/H53.2 STA genoa sheet winches.
- 2 H48.2 STA/H44.2 STA winches.
- 2 H48.2 STA/H44.2 STA main sheet/spinnaker winches
- Spinnaker gear (guys, sheets, barber, pole uphaul, pole downhaul).



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- Black carbon spinnaker pole.

- EQUIPMENT SPECIFIC TO THE Carbon Racing VERSION -

- Carbon Racing mast (two spreaders, rod rigging, PBO backstay).
- 2 H60.2 STA/H53.2 STA genoa sheet winches.
- 2 H48.2 STA/H44.2 STA winches.
- 2 H48.2 STA/H44.2 STA main sheet/spinnaker winches.
- Spinnaker gear.
- Black carbon spinnaker pole.

- R2 ELECTRONICS PACK -

Cockpit port:

- ST290 analogue wind vane anemometer.
- ST290 offset digital keypad for mast foot multifunction.

Cockpit starboard:

- Control keypad for ST290 autopilot + LS50.
- ST290 close hauled analogue wind display.

Port aft helm seat:

- E80 multi-function 8.4" color display for Navionics Gold or Platinum cartography (supplied without charts).

Mast foot:

- 3 ST290 graphic displays.

- ELECTRONICS NOT INCLUDED IN PACK -

- Wireless Smartcontroller autopilot remote control and instrument repeater.
- AIS Easy Pack.
- RAY 240E VHF.
- Offset keypad for Series E display and TV connection.
- Radar (radome only – on mast in aluminum mast version/on post for carbon mast version).
- Gyro compass transducer.
- PC interface.

- OPTIONS -

- Consult your dealer for all available options.

