

F-33 & F-33R

FEATURES AND OPTIONS



Standard Specifications

November 14, 2003

CONSTRUCTION

Hulls: PVC foam core sandwich construction used throughout, including all interior parts, with hand laid double bias or bi-axial glass fabrics. Carbon fiber or Kevlar are used selectively in many highly stressed areas.

Advanced Vacuum Bagging Techniques pressurize the laminate on both sides of the special perforated foam core simultaneously, wherever possible. An overlay of special breather and bleeder fabrics extract all air and excess resin, giving aerospace quality laminates.

Beams: Carbon/glass composite, with multiple layers of carbon fiber unidirectional, top and bottom. Then fully vacuum bagged to optimize structural properties.



Beam tops being vacuum bagged

Epoxy Resin - epoxy resin is used for all laminates, it being the toughest and most waterproof resin available. It is also not susceptible to blistering under the waterline, as are gelcoated polyester resins.

Reinforcement - All reinforcements, either glass or carbon, are a knitted fabric (not woven) with either double bias or bi-axial fiber orientation, or in unidirectional form.

Core - PVC or SAN (Corecell) foam core is used, with high density inserts where required for fittings. All exposed panel edges are de-cored and filled.

Seamless Float Construction - no ugly join flanges!

No Interior Liners - heavy and expensive gelcoated liners are avoided to minimize excess weight, and allow easy access to structure and all fittings for maintenance or repair.

Composite Lightweight Floors, inspection hatches where required. All bilges are ground smooth and epoxy flow-coated.

Carbon Fiber Bow Tube and Chainplates

Carbon Fiber Folding Strut Anchors - no brackets or bolts for a clean and maintenance free setup.

Daggerboard - carbon/glass/foam composite

Daggerboard Kickup Rudder - carbon/glass epoxy composite construction with carbon fiber transom brackets. Precision acetal/teflon bearings used to eliminate all slop.

Farrier Folding System™ - high tensile CNC machined aluminum struts, with over size Type 316 stainless steel pins and custom high strength plastic bushings.

Low Drag Beams - Beams are an innovative new shape to minimize drag, and to direct spray down and under the beams.

Twin Compression Pads - each beam has two independent compression pads for all inward compression loads. These are very accessible, easily adjustable, and eliminate the beam 'noise' or creaking that can sometimes occur with earlier designs (annoying but harmless).

Double Bolted Forward Beams - both forward beams have twin hold down bolts, an important safety feature and essential for true long term ocean going capability.

EXTERIOR FINISH

Two Pack Acrylic or Linear Polyurethane - The toughest and glossiest exterior finishes available, in many colors. Avoids the porosity problems that can be common with gelcoat, and are more durable. Dark colors cost extra.

Contrasting Color Non-Skid - Two Pack polyurethane with non-skid particles - the toughest and the most effective.

EXTERIOR FEATURES AND DECK GEAR

Self-Draining Anchor Well: incorporates two closeable interior hatches for dry interior ventilation even when raining.

Composite Bow Wing - increases bow net size, and provides anchor mounting area clear of headsails

Bow Nets : Heavy duty open mesh with UV protective coating

Wing Nets: Heavy duty compact PVC Ferrari mesh. Lashings are covered at ends for better safety. Tube mount is used on floats with composite supports, for a convenient hand hold. Std. color is white - other colors may be available.

Sliding Main Companionway Hatch - a new convex and fully integrated flush style hatch/cover is standard

Companionway Hatch Boards - in tinted polycarbonate

Main Cabin Side Windows - in tinted acrylic

Self-Draining Cockpit - With storage lockers both sides

Foredeck Hatch - min. 18 x 22" (460 x 560mm)

Two Float Deck Hatches - min. 15 x 20" (380 x 510mm)

One Emergency Access Hatch - in hull side under cockpit

Safety Gear Compartment - in hull side & always accessible

Aft Cabin Hatch - min. 18 x 22" (460 x 550) (aft cabin models)

Aft Cabin Stern Windows - in tinted acrylic (aft cabin models)

Stainless Steel Bow and Stern Pulpits

Four Large Through Bolted Mooring Cleats

Type 316 Stainless Steel fasteners - used on exterior fittings, to eliminate the rust staining common with Type 304 s.s.

Insulated Fasteners - All stainless steel fasteners insulated from aluminum by plastic washers to prevent corrosion

Andersen 46 Two Speed Primary Jib Sheet Winches (2)

Andersen 40ST Two Speed Self-tailing Halyard Winch (1)

One Winch Handle

Spinlock XCS Rope Clutches for main and jib

Harken 'Big Boat' Roller Bearing Traveler System

Harken Windward Sheeting Traveler Car

Harken two speed 6 : 1 & 24 : 1 Mainsheet System

Pull up Daggerboard With Flush control lines
Daggerboard is removable without unbolting mast step



Deck recess with flush cover for mast electric/VHF plugs, to keep them below deck and away from feet/damage.

Jib Sheet Tracks and Leads

Water Tank Fill and Vent

Compass

Aft Mast Support - Supports mast while trailering. Mast rests on a roller for easy single-handed moving when raising.

MAST AND RIGGING

Rotating Aluminum Mast - 44.7' long and anodized

Boom - anodized aluminum with internal clew outhaul and slab reefing.

Custom Mast Step - a new and improved system for easy and fast single-handed mast raising.

Mast Raising Pole

Mast Raising wires - lead to 'lift up' deck anchors

Synthetic Side Stays with Precourt Deadeyes

Stainless Steel Forestay

Internal Main and Jib Halyards
Synthetic line with all halyards led aft to cockpit

Steaming and Deck lights - deck plug fits into flush recess in deck

Required Sheets and Lines - for main and jib

Alum. Traveler Bridge - for aft cabin versions. Fits over aft cabin, above tiller, with an 8' wide traveler. Carbon fiber bridge is optional.



INTERIOR STANDARD FEATURES

Several Interior layouts are possible as per separate layout drawings. All interiors include:

Stainless Steel Galley Sink - with hand pump and 26 US gals. (100L) water tank

Two burner Origo Alcohol Stove (gas optional)

Storage Behind Seat Backs

Head Compartment With Privacy Curtain

Head Mounting Area - ready for Porta Potti or marine head

Side Ventilation Hatch in Head Area - 11 x 11 (280 x 280) fitted in hull side below wingnets to maintain privacy

Multi-position Dinette Table - Can also be used in cockpit

Frontrunner Fabric Lined Interior with easy to clean high

gloss two pack urethane in head and galley areas as required.
Fully painted interior (gloss or textured finish) is optional.

Interior Cushions

Choice of fabrics with a large range of colors

ELECTRICAL

Sealed Deep Cycle 12V Marine Battery and battery box

Master Battery Switch

Circuit Breaker Switch Panel

Battery Test Meter

12v Accessory Outlet

Cabin Lighting - (min 3 lights) depending on layout

Bi-color Bow Nav. Light

White Stern Nav. Light

GENERAL

Beam Bolt Speed Wrench

Tool Kit - set of tools plus a selection of spare parts

Sailing Manual - written by Ian Farrier

F-33R SPECIFICATIONS

The F-33R is a high performance version of the F-33, with an upgraded lighter structure, taller carbon fiber mast, and simple basic interior. Main differences are as follows:

Beam Bulkheads - selected glass reinforcing layers replaced by carbon fiber

Beams - all double bias glass reinforcing layers replaced by double bias carbon fiber

Daggerboard - all carbon construction

Mast - taller 47.2' (14.38m) Marstom carbon wing mast replaces 45' aluminum mast

Boom - Marstom carbon boom replaces aluminum boom

Forestay - stainless or synthetic line (with Facnor or Harken furler)

Traveller - Carbon fiber bridge on aft cabin version

Interior - arrangement simpler as per F-33R layout drawing, with no stove, and no dinette table.

OPTIONS

The following Options may be added or substituted for an additional cost, as detailed on the Separate Price list

EXTERIOR OPTIONS

F-33 to F-33R Upgrade: Main hull and beams built to F-33R specifications (more carbon) for a lighter boat with F-33 rig.

Carbon Wing Mast: Marstom wing mast and optimized for the standard F-33 mast height (44.7')

Stock Sails: (All sails are computer generated and specifically tailored to match F-33 requirements).

Fully Battened Mainsail and Jib - slides or bolt rope luff

Screacher - roller furling headsail

Asymmetric Spinnaker: Available in a number of colors

Carbon Bow Pole - with carbon fiber integrated fittings. Required for use of either screacher or spinnaker

Spinnaker Control kit: halyard, tack line, two Spinlock XTS clutches, sheets, cleats, and blocks.

Screacher Control kit: 2 : 1 halyard, Spinlock XTS clutch, furler (Harken), cleats, sheets, and sheet blocks.

Additional Winches: Andersen 40 winches as required for spinnaker or screacher (primary winches can be used instead)

Roller Furling Boom - the well known F-27 system. Can also be used for infinite reefing or in conjunction with slab reefing.

Headsail Roller Furling - Harken Unit 1 or similar

Performance Package - For more efficient controls. Includes Cunningham eye tackle, barber haulers, masthead Windex, tiller extension, and winch handle pocket.

Stainless Steel Rigging - optional for those who still prefer wire and turnbuckles.

Rub Rail - for float exterior sides if required (eg. pile moorings)

Lifting Eyes - For crane lift where a ramp is not available.

Trailer - Either Aluminum or galvanized dual axle, with surge brakes, separate lights, side guide rail, and brake flush system.

Trailer Spare wheel - A good idea for long trips.

Outboard - Electric start Honda 20 HP with extra long 25" shaft and alternator for battery charging. It is fully installed on transom bracket, with power tilt and a remote control unit including key start on cockpit side.

Inboard - Saildrive 280 - Gas twin cylinder 12 HP Honda engine with saildrive. More details at:
<http://www.saildrive280.com/>

Instruments - depends on type and priced on request. Note that most windspeed instruments will not work on a rotating mast, but some solutions are now available.

VHF Radio: including masthead antenna.

VHF Antenna: If you prefer to fit your own radio, then we can install just the antenna and matching deck plug.

11W Solar Panel - Flexible. Keeps battery fully charged if loads are light.

Self-tailing Primary winches: Useful for solo sailing. Not recommended for spinnaker winches for safety reasons.

Aft Deck Solar Vent: Mounted on aft deck and incorporates a solar powered fan, with ni-cad battery for night time running. This, and standard vents incorporated in anchor well give excellent continuous through ventilation, even when raining.

Aft Cabin Ventilation hatches: (2) fitted in the vertical transom area, just above aft step.

Cabin Roof Ventilation hatch: 11 x 11 (280 x 280) fitted on starboard side over forward galley area.

Cockpit Cushions: Waterproof and tailor made for cockpit.

Boarding Ladder: transom mounted

Pushpit Pilot Seats: additional seating incorporated in Pushpit

Hull Stripes: multi-colored stripes along hull sides

Bottom Paint: For boats that must stay in the water.

INTERIOR OPTIONS

Interior Finish Option A: All exposed hull interior surfaces faired with epoxy-based fairing compound and then painted in a single color two-pack high gloss polyurethane paint, in owners choice of color. Gives the same standard of high gloss finish as interior liners but without the excess weight.

Interior Finish Option B: All exposed hull interior surfaces faired with epoxy-based fairing compounds and highbuild primers and then painted in single color two-pack textured or speckled polyurethane semi gloss paint.

Two Burner SMEV Gas Stove
details at <http://www.smev.com/Type 8002>

Marine Head: A Lavac vacuum head installed in the head compartment. Installation includes a Y valve to divert waste either overboard or to 14 US gal. (52L) holding tank. Includes Holding Tank pump-out fitting and vent. Manual or electric pump available.

Head Compartment Upgrade Package: This is a vanity unit with wash basin, water pump, counter, and mirror.

Pressure Water System - with hot and cold water

Shower - fitted in head compartment with a pump-out sump.

Computerized Construction System: A computer generated procedure is being developed whereby every operation is specified, in a step by step sequence, with each step then being signed off as completed.

Construction begins with over 70 colorized lamination guides, detailing each individually colored reinforcement, to ensure nothing can be overlooked.

Detailed construction checklists will then guide subsequent assembly procedures, specifying each task, and when and how it should be accomplished. Quality is checked at every step, and again with a final 128 item Checklist. Even the shipping procedure on trailer or cradle is guided by Checklist to avoid any problems in transit. The quality and engineering standards of every F-33 that leaves the factory will be unsurpassed by any other craft.

Requires hot and cold pressure water system.

SAFETY GEAR OPTIONS

Stanchions with Single Lifelines: Three stanchions per float plus cross/bracing wires. Can be quickly removed for trailering.

Medium Duty Anchor Package: Fortress FX16 anchor, with chain and min. 200' (60m) of nylon line

Dockline Package: Includes four 33' (10m) docklines and three fenders.



Warranty: *The advanced construction techniques and very high safety margins allow a 5 year structural warranty for the hulls, beams, and folding system, and a ten year warranty against blistering. All other items have a 1 year limited warranty.*