CONSTRUCTION SPECIFICTIONS

FOR THE

H.T. GOZZARD 41

AFT COCKPIT CUTTER

Design By: **H. Ted Gozzard**
Gozzard Yachts

Commissioned by: **Gozzard Yachts**

Date Written: **February 2008**

PRINCIPAL NUMBERS

LENGTH OVERALL	47’ – 0”
LENGTH ON DECK	41’ – 0”
LENGTH AT WATERLINE	35’ – 4”
BEAM	13’ – 0”
DRAFT	5’ – 3”
DISPLACEMENT	23500 Pounds (Half Load)
BALLAST	8600 Pounds
MAST HEIGHT ABOVE WATER (extrusion)	57’ – 4”
SAIL AREA MAINSAIL	390 Square Feet
SAIL AREA TOPSAIL	679 Square Feet
SAIL AREA STAYSAIL	272 Square Feet
SAIL AREA TOTAL 100% FORE TRIANGLE	956 Square Feet (Fore Triangle = 566 square feet)
SAIL AREA TOTAL	1341 Square Feet
FUEL CAPACITY (MAIN)	64 Gallons
FUEL CAPACITY (RESERVE)	38 Gallons
RANGE AT CRUISE	958 Nautical Miles
WATER CAPACITY	165 Gallons
WASTE CAPACITY	52 Gallons
BATTERY CAPACITY	600 to 900 Amp Hours
ENGINE	72 HP Diesel
BOW THRUSTER (OPTION)	6 HP – 12 Volt

EQUIPMENT SPECIFCATONS

TABLE OF CONTENTS:

Items shown in blue print are available optional equipment available at an extra charge.
Items shown in red print are available alternatives/deletions for standard equipment available with credit.

Presenting the GOZZARD 41

NOTE: These specifications are subject to change without notice unless contracted.

1. Concept and Design:

1.1 Design Data

1.2 Concept

The Gozzard 41 is a solidly constructed, extended range, blue water yacht design primarily for the live aboard cruising life style. Particular attention has been made towards the needs, comfort and safety of a cruising couple. The quality of the vessel is such that it will have an extended service life and maintain its value.

1.2.1 Hull

The initial design work for the Gozzard 41 began 1999 but was not completed until 2000 after the successful redesign of what was to become the Gozzard 37. The G41 design developed a finer entry and a flatter run aft than her sisters. This boat was design to sail well even if meant the marginal loss of some interior volume. By comparison the G41 has a much smaller block coefficient then the G44.

1.2.2 Deck and Cabin

Our decks are designed with ease of use in mind. They feature wide low cambered side decks with substantial bulwark for sure footing in heeled conditions. These bulwarks also build substantial strength into the Hull/Deck joint area. The cabin truck is low profile to reduce windage and increase visibility from the cockpit. The cabin sides are sloped to allow opened ports to be drip free. The multi leveled cockpit permits good access to the side decks, a sizable bridge deck and excellent draining characteristics. All sail controls are designed to be lead aft.

Available Options:

1.2.2.2 Pilot House

1.2.2.3 Motor Sailor

1.2.2.4 Raised saloon

1.2.3 Sail Plan

The Gozzard 41 utilizes an optimized traditional cutter rig. To eliminate having to manually tack both headsails or the need for a club footed staysail, we use a self-tending staysail on a curved traveler track forward of the mast. To simplify things further, the typical mainsail traveler has been eliminated; instead the mainsail leach control is maintained with the use of the solid boom vang with a cascade purchase system which is lead aft into the cockpit. With the extremely wide chain plate base, the slots can be more open reducing back winding and the need to centerline the boom while sailing upwind.

The sail plan for the G41 is designed to be generous in size and to take full advantage of the improvements made with the new hull form. Of note, the aspect ratio and overall size of the staysail has been increased over previous designs to help fill the gap at 15 to 18 knots when most crews tend to shorten the topsail by furling it completely away. The combination of the self tending staysail and mainsail makes the G41 very easy to sail in the higher wind ranges while being very powerful in the lighter air conditions when all sails can be utilized.

Available Option:

1.2.3.1 Solent Rig

1.2.4 Interior

Based in part to Ted's own life experiences, his interiors reflect an open concept. Having lived in the Caribbean coupled with a successful career in modular house design and three decades of yacht building, his interiors tend focus on function and the feeling of open space.

The true nature of a semi custom boat allows for the continuing evolution of interior design. Each new customer brings different ideas and needs to the design and we tend to incorporate the best of

these into our standard plans. Currently there are 3 main concepts including the “A”, “B” (with the master stateroom (island queen) forward) and the new “C” which has a more open feel as you come down the companionway similar to that of a G37B. The “C” has folding and sliding bulkheads and doors that allow the aft cabin to be open to the rest of the interior.

1.3 Standards of Construction

Since our inception in 1983, our company policy has been to build the finest boat possible within the constraints of our price range. Over time, our products have acquired an excellent reputation, based in no small part to the obvious quality. This goal is on going and we are constantly upgrading materials and techniques as the new technology becomes available. Today, we built one of the finest quality boats currently available not only in terms of workmanship but also in terms of the quality of the materials used.

Currently, the two major standards a manufacture could choose to build its product towards are the America Boating and Yachting Council (ABYC) and the International Marine Certification Institute (IMCI). While some manufacturers do build there boats specifically to a standard like ABYC, most loosely mirror the requirements as they are more like recommendations than actual standards. As the standards are written today, the CE certification for IMCI is more stringent than that of the ABYC. CE certification requirements include complex and elaborate stability and down flooding calculations that must be meet or exceeded. CE boats are inspected and rated for compliance and more over, CE certification allows boats to be sailed and sold in Europe were as ABYC does not.

In 2005 we built our first G44 to full CE certification for a client’s requirements. The spin off is that the 41 and 37 have now been upgraded to those same standards. Full certification is available as an option on both boats.

2. Structure

2.1 General

The builder’s workmanship is to be done at a level equal or superior to that exhibited by a current Gozzard 2007 vintage. All GRP laminate schedules are recommended and approved by the material suppliers and are based initially on existing technology and known successful examples of comparably sized vessels, then adapted and modified to suit our renowned level of construction and quality.

2.2 Hull Construction

The hull is molded from female production tooling. The laminate as with all Gozzard Yachts is a “sandwich” cored construction. The “SP Systems” Corecell foam core increases panel stiffness, strength, impact resistance and sound/thermal insulation while maintaining an excellent weight to strength ratio. Most of the weight saved by designing the cored laminate is then re-applied in extra skin thickness either side of the core, making the laminate schedule, in the words of the SP engineers, “robust in the Gozzard tradition”. Only marine grade Vinylester laminating resins are used in the hull laminate.

The gelcoat is an NPG/ISO Cook “Buffback”. It is backed with Hydrex-100 vinylester skinning resin. Only white gelcoat is used below the waterline for better quality control. The hull is constructed using both “hand lay-up” and “vacuum assisted resin infusion” techniques using Hydrex-100 vinylester laminating resin to eliminate osmotic blistering and provide superior strength numbers.

The hull laminate is constructed of knitted double bias E-glass RM (0-90) and XM (45-45) clothe and is built up to a thickness shown on the following chart. Additional reinforcing is utilized in the bow, trail-board, chain plate, mast step and transom areas.

The core material measures ¾"in thickness, has a density of 6 pounds per cubic foot. The core is installed using both vacuum bagging and full resin infusion techniques. The core runs from the cove stripe to approximately 10"from the centerline. The coring material is eliminated and replaced with a solid glass laminate in the areas of the sheer line, centerline, keel, rudderpost, and thru-hulls.

The solid and cored laminate areas are built up to approximately the following thickness:

AREA	TOTAL THICKNESS
Centerline – forward of keel	1.125"
Centerline – aft of keel	1.000"
Keel	1.25"
Sheer – above core	0.75"
Hull Flange	0.5"
Thru-hull platforms	0.75"
Hull below waterline at main bulkhead	1.3125"
Hull below water	1.25"
Hull above waterline	1.125"

Finish above the waterline is Off White gelcoat with the standard broad stripe "Traditional" configuration in any normal color. The stripes are painted in Awlgrip not gelcoat to extend the service life of the colored finish. Below the waterline is finished with 2.5 mils (dry) of Interprotect 2000 barrier coat to create a "primed" surface for the (optional) bottom anti-fouling paint of your choice.

Available Alternatives/Deletion with Credit:

2.2.1 *Gelcoat Stripes – molded in instead of Awlgrip colored*

Available Options:

2.2.2 *Awlgrip Hull – complete with stripes available in the "traditional" or "Limited Edition" (dark colored hull) configuration – 2 color*

2.2.3 *Anti-fouling Paint (Micron CSC)*

2.2.4 *365 Extended Bottom Coat – 12 mil of Interprotect 2000/3000. This option is intended for vessels that will be in the water continuously without a haul out period.*

2.3 Deck Construction

The deck, like the hull is finished with Cook "Buffback" Off White gelcoat and is a molded FRP sandwich construction with ½", ¾"and 1" SPS Corecell. In areas where equipment is to be installed, the coring material is eliminated created a solid laminate. The outer and inner skins are built up to a thickness of approximately 1/4". The deck flange is solid and built up to ½" in thickness. Extra reinforcing is added to cleat, mast step and winch attachment areas as well as high stress areas and corners.

The hull deck joint is bedded in 3M 5200 and bolted on 6" centers with 5/16" Stainless Steel machine screws with ny-lock (aircraft) nuts.

2.4 Rudder

The rudder shaft is 1.5" diameter 316 stainless steel. The rudder is built from two molded ¼" thick FRP half foils (skins). A stainless steel web is welded to the shaft forming a stiff back that is heavily glassed to one of the foils. The foils are then cored and assembled together. 3M 5200 is used around the stainless shaft where it exits from the rudder to help prevent water from migrating into the rudder along the shaft. The cosmetic joint between the two halves is glassed over and faired. The entire rudder is coated with Interprotect 3000 barrier coat. Once completed, the rudder is essentially a solid structure with no voids. (However it should be noted that because of the different materials used in the construction, confusing readings might occur on some moisture meters.)

The lower bearing surface is bronze and secured to the skeg. The shaft seal is made of bronze by Edson and is integrally mated to the filament wound glass stern tube. The tube is then heavily glassed with gussets to the hull. The shaft seal is positioned above the static waterline so that it can not leak when the boat is stationary. The upper self-aligning bearing is secured to the underside of the deck immediately below the emergency tiller access plate.

The emergency steering handle is conveniently stored in a specially designed holder located under the aft cockpit locker lid where you can find it if you need it. Assembly and deployment instructions are contained in the Owner's manual.

2.5 Skeg

The FRP skeg is made in much the same way as the rudder except that it is considerably heavier in structure. It is designed to protect and support the rudder in the event of grounding. Although the skeg is not part of the hull, it has a stainless bolt spider (like the lead keel) that is permanently bolted using epoxy to the hull.

2.6 Bulkhead, Floors and Stringers

While our hull is strong enough to be placed into a standard 6 pad storage cradle immediately after de-molding (unlike most boats which require a full "nest" so the hull will not flex out of shape before it can be stiffened) we do add considerably more structure. All main or structural bulkheads are constructed using cored FRP laminates for superior strength, low relative weight and total rot resistance. All bulkheads are glassed to the hull and later the deck before the interior trim work is installed.

While some manufacturer install grid like structure with the cabin sole screwed down onto the tops, we prefer to use a closed grid structure by combining the floor and the stringer surfaces into assemblies. This not only makes the floor nice and solid under foot it also compartmentalizes the areas you can not easily access normally. The center section is accessed with removable bilge panels to provide access to tanks and pumps.

Where possible all wooden furnishings, shelves, seat tops, dividers, etc., are glassed to the hull or deck to minimize unsupported panel size.

2.7 Rub Rails

Full-length FRP rub rails are installed approximately 18" below the cap rail with a 316 Stainless Steel cap. The rails are secured to the hull with self-tapping screws into an area of the hull that has been specially prepared for that purpose. The rails are intended to be replaceable should they be damaged protecting the hull. The corner of the hull forward of amidships is also protected with a Stainless Steel strip.

Available Alternative/Deletion with Credit:

2.7.1 Delete Stainless Steel strip protecting the corner of the hull forward of amidships.

2.8 Keel

The extended fin keel is constructed using an extremely heavy duty solid laminate that makes up the top three quarter of the keel's profile. The lead ballast is fitted to the bottom of this structure in the form of an externally mounted extension which covers the entire length of the bottom of the keel. This provides extreme abrasion and puncture protection against accidental grounding while maximizing the righting arm and creating a very large lightning ground plain. This is our standard and preferred arrangement.

However, because of the ever increasing costs of lead molding we now offer a conventional encapsulated lead ballast arrangement where the ballast is placed within a full size entirely GRP structure. The internal lead is bedded in a resin slurry and then glassed over with an integral floor. This alternate arrangement significantly reduces cost and is offered as an alternative with credit.

Available Alternative/Deletion with Credit:

2.8.1 Encapsulated ballast system

3. Deck

3.1 General

The deck, like the hull is finished with Cook "Buffback" Off White gelcoat. All horizontal surfaces (walkways) have a molded sand type non-skid. The cockpit sole is finished with teak decking for improved durability, excellent wear and dirt resistance. The teak decking is glued together and to the deck under a full vacuum bag with Sika-Flex 290 Deck Caulk keeping external fasteners to a minimum.

Available Alternative/Deletion with Credit:

3.1.1 Delete teak cockpit sole

Available Options:

3.1.2 Teak decks (not including cabin top)

3.1.3 Two Tone deck – nonskid areas in gray or beige

3.1.4 Awlgrip deck exterior paint finish

3.2 Exterior Details

Only genuine Asian Teak is used for the exterior woodwork including the coach roof "Eyebrow", the bow sprit platform, cap rail, dorade boxes, cockpit sole and other trims.

The hull-deck joint is cover with a solid teak cap rail. In addition to being visually attractive, it provides a second and completely independent seal for the hull to deck joint. The teak cap rail itself is made up of smaller sections and where visible, the sections are joined using a "Murphy" scarf joint. All other joints are made utilizing a flexible caulking (Sikaflex 290DC) and covered with chocks so that the rail can be repaired in sections instead of in it's entirety if damaged.

Our signature stylized bronze dolphins, which are clear coated to protect the polished finish, are installed over the break in the rail known as the "hansing". Although stainless fasteners are used throughout the boat, all exterior SS fasteners are 316L (where possible) and are additionally hand polished for better corrosion resistance.

Available Options:

3.2.1 Cetol Finish on exterior teak

3.2.2 Epifanes Varnish Finish on exterior teak

3.3 Stainless Weldments

All pulpits, stanchions, etc. are manufactured (welded) using hand polished 316 Stainless Steel. All assemblies are designed to be removable.

- The bow pulpit is fitted on the sprit platform with the aft most legs secured to the bulwarks of the deck. The LED bow navigation lights are mounted on recessed mounting.
- The stanchion bases are mounted to the side of the bulwark (not on the teak) for improved rigidity with SS backing plate. Where access to the standard backing plates is difficult due to interior confines, such as behind the icebox, the backing plate is permanently installed with threaded holes so the bases can be removed from outside.
- The large diameter upper portion of the double lifeline is located 31" above the deck.
- Port and starboard board gates with adjustable pelican hooks.
- Chain plates are bolted through hull with SS backing plates complete with dedicated lightning ground attachment point.
- 2 - 3 Loop and 2 - 5 Loop SS handrails are positioned near the side decks on the coach roof.

Available Options:

3.3.1 Aft boarding – pelican hooks on aft life lines

3.3.2 Wooden Handrails in lieu of SS Handrails

3.4 Dinghy and Davits

To avoid having to deflate/stow or tow your tender, standard dinghy davits are incorporated into the stern rails. Designed to hold up to 300 pounds, it will allow the storage of most rigid bottom

inflatable dinghies with the OB motor still mounted. It is recommended that the OB motor be removed when the vessel is in a seaway.

The dinghy hoist is a 4:1 tackle with snap shackle attachments that is lead forward to a Harken jam cleat mounted to the davit within easy reach from the cockpit. Cleats are also installed for securing the dinghy to the davit to prevent movement in a seaway. A bar is secured across the ends of the davits to provide a handhold while boarding the dinghy from the opening transom. The davits also are used as a base for the flagpole and the GPS antenna.

Available Alternative/Deletion with Credit:

3.4.1 *Delete davits – replace with SS stern rails.*

Available Options:

3.4.2 *Outboard Motor*
3.4.3 *Outboard Motor Crane (FORESPAR "NOVA LIFT" customized with custom SS base plate.)*
3.4.4 *Outboard Motor Bracket – high density plastic*
3.4.5 *Deck Tie Downs (removable when not in use) custom fit to allow the dinghy to be stored on deck during open water passages.*
3.4.6 *Life Raft storage on spray shield with anchor point*
3.4.7 *Dinghy – custom fitted to the davits with seaway restraints*

3.5 Deck Hardware

- Ritchie compass - SP5C
- 6 Gozzard bronze Chock/Cleats are capable of handling 2 – ¾" dock lines each while keeping the deck clear. The cleats are strategically located for correct mooring at the bow, mid forward, mid aft and stern.

Available Options:

3.5.1 2 – Safety harness pad eyes in cockpit.
3.5.2 *Jack Lines c/w shackles and deck mounted pad eyes*
3.5.3 *Chrome bronze cleats*
3.5.4 *Chrome anchor roller assembly*

3.6 Anchoring System

The G41is equipped to handle 2 bow anchors in a custom bronze roller assembly located at the end of the sprit (not through the sprit). This position allows the anchors to be deployed without fouling or chafing on the sprit stays when a bridal is not necessary. The primary anchor is self-launching so it can be launched from the cockpit in an emergency. The rode locker, which is located in the front half of the sail locker is divided and can handle 300' of 5/16" HT chain on the primary and 150' on the secondary. Provision can be made for up to a total 450' chain on the primary. Dead end attachment points are provided for the anchor rode.

Butterfly fore deck hatches provides access to sail and equipment locker. The entire anchor/sail locker is drained aft through the side of the hull and is considered part of the exterior not the interior of the boat.

A Maxwell VWC 1500 vertical electric windlass with foot controls forward and remote switch at helm station is used for anchor handling. A safety switch is conveniently located on the DC panel to disable the foot controls. Storage for the clutch handle is provided. Recommend maximum primary anchor size is a 60 CQR if permanently carried on the sprit.

Available Alternative/Deletion with Credit:

3.6.1 *Delete custom bronze bow roller assembly and replace with a single SS Windline Anchor roller*

Available Options:

3.6.2 *Primary anchor chain packages - 5/16 HT chain in 50' increments up to 300'*
3.6.3 *Primary anchor complete with swivel*
3.6.4 *Secondary anchor complete with swivel*
3.6.5 *Secondary anchor rope rode package – 250' of ¾" twist with 20' 5/16" HT chain*
3.6.6 *Anchor mooring bridals with Devils Claw*

3.6.7 *Fresh water wash down (part of pressure water system) located in bow*
3.6.8 *Sea water wash down*
3.6.9 *Stern anchor with rode and stern deck pipe.*

3.7 Ventilation

- 2 –Stainless Steel Hood 24"x24"opening deck hatches complete with hinged interior screens.
- 2 – Stainless Steel Hood 8"x14" opening vent hatches complete with hinged interior screens.
- 8 – Stainless Steel Opening Ports 5"x12" with screens.
- 7 - Stainless Steel Opening Ports 7"x14" with screens.
- 2 -Teak dorade boxes with access door including 4" SS removable cowl vent. Storm covers for thru-deck opening and cowl are included.
- 2 - SS 3" solar day/night ventilators
- 1 – SS 4" solar/12 volt power shower vent

Available Alternative/Deletion with Credit:

3.7.1 *Delete "Teak" dorade boxes and replace with GRP (white) dorade boxes*

Available Options:

3.7.2 *Wooden Butterfly Hatch with Sunbrella cover*

3.8 Companionway Doors

- Teak hinged companionway doors with louvers and built-in keyed lock set (not a pad lock). Interior locking bolts allow the doors to be secured from inside whilst on board.
- Built-in storm panel tracks allow for drop panels to be mounted inside the companionway doors.
- Overhead sliding screen and screened companionway doors allows for maximum ventilation while keeping insects out.

Available Alternative/Deletion with Credit:

3.8.1 *Delete teak companionway doors and replace with louvered 3 piece Lexan drop panels.*
3.8.2 *Delete overhead sliding insect screen.*

Available Options:

3.8.3 *3 piece storm drop panels with secure storage near the companionway.*
3.8.4 *Stained Glass inserts in lieu of louvers*

3.9 Swim Platform

- Fold down walk-thru transom with SS swim boarding ladder make man-over-board recovery and boarding the dinghy easy (especially with a dog or supplies)
- Built in hot and cold fresh water cockpit shower
- 8"x18" spring loaded storm drain (blast gate) is built into the transom. This drain has over 8 times the capacity of the more traditional 2" scupper drains normally found in modern cockpits. The transom maximizes emergency draining should the cockpit ever be swamped.

***Available Options*:**

3.9.1 *Swim Ladder extension*

4. Mechanical

4.1 Main Engine

- Westerbeke 71C4 – 4 cylinder marine diesel rated at 71HP at 3600 RPM and 118 LBS/FT of torque at 1950 RPM
- Pre-cup combustion system for quieter operation.
- Glow plugs to aid cold weather starting.
- Fresh water enclosed cooling system with raw water heat exchanger.
- Self-priming fuel system with electric pump.
- 3"wet exhaust to custom-made oversized water lock with drain.
- Engine exhaust is discharged through the side for a cleaner transom.

- Instrument panel includes gauges for tachometer, hour meter, oil pressure, voltmeter and water temperature with an audible alarm for low oil pressure and high water temperature.
- Automatic shut down system is included for low oil pressure and hi water temperature.
- 12 Volt 190 Amp Series 27 large case alternator with twin drive belts and multi-stage voltage regulator.
- Water connection for domestic water heating.
- Perko clear glass bowl type intake strainers
- Forespar engine flush-out valve. This specially designed valve allows you to easily run fresh water through the engine for storage or winterizing and it can be used to turn your engine intake into an emergency bilge pump.
- Engine Room Blower (3") activates with ignition or bypass switch on pod.

Available Options:

4.1.1 *Remote Racor re-usable oil filter that uses a screen that can be cleaned eliminating the need to carry spare cartridge filters. It is equipped with a by-pass indicator light.*

4.1.2 Spare filter element for above.

4.1.3 Oil change pump

4.1.4 Stand-by extra multi stage voltage regulator

4.1.5 Custom starter solenoid relay system upgrade

4.2 Drive Train

- The transmission is a Hurth marine gear with 2.7:1 reduction ratio.
- Vetus Bull-Flex is used to reduce engine noise, vibration and the need to align the engine mounts.
- 316 SS 1.25" drive shaft
- PSS No-Drip shaft seal system with vent.
- 19"x 12" RH 3 Bladed bronze MP Michigan Wheel propeller.

Available Options:

4.2.1 Spare shaft zinc installed 1/8" forward of PSS collar to confirm collar position and prevent major leaking should the shaft seal accidentally come undone.

4.2.2 Shaft line cutters

4.2.3 Feather prop

4.3 Engine Room and Equipment Room.

All efforts are made to provide a maintainable and easy to clean area. The engine room is heavily sound insulated. The sodium filled sound deadening foam is Mylar covered and trimmed with aluminum. The hinged side access panels have custom FRP trims with no exposed foam edges. All removable panels have neoprene gaskets to further reduce noise levels.

Large access panels (including the stairs (front) and berth tops (aft)) to the engine are hinged with stays and are closed with a positive latch system. These access panels allow instant access without having to remove furniture or panels and then find a place to put them while you work on the engine. The engine installation is designed so that it can be completely removed in less than 6 hours without damaging the boat.

Available Options:

4.3.1 Automatic fire suppression system

4.4 Steering System and Controls

- The engine is controlled using a Kobelt single lever shifter. This control has no moving steel parts that can affect compass accuracy unlike most other controls.
- Steering system is an Edson Pull-Pull type with 3 turns lock to lock with center a friction brake. This system utilizes conduits with in-line grease cups (not unlike a shifter cable) to lead and protect the wire from the steering axle to the quadrant. Special pulleys are used to re-direct the cable over tighter bends, further reducing the friction and to allow inspection of the

steering cable. Cable tension becomes a non-issue with this type of steering system because the cables are completely captive.

- 16" Edson quadrant with autopilot linear drive mount. This allows the autopilot to steer the boat should the steering system fail.
- 36" Wood rim Stazo traditional type steering wheel is provided with Sunbrella cover.
- The emergency tiller is a 3 part assembly easily accessible and stored under an adjacent cockpit locker lid.

Available Alternative/Deletion with Credit:

4.4.1 Delete wood wheel and replace with SS destroyer style

4.4.2 Delete Koblet shifter and replace with Morse single lever control

4.5 Thru-Hulls and Seacocks

All Thru-hulls below the waterline have Forespar ball type sea cocks that are made from glass re-enforced Marelon and exceeding both ABYC and CE standards. These valves are totally impervious to corrosion and electrolysis. Installed with ease of access in mind each valve has an independent function and is clearly identifiable (tagged). All hoses are manufactured by Shields and are USCG/ABYC/CE approved for their particular application. All connections are double clamped with 300 series SS Hose Clamps. All discharge lines are equipped with anti-siphon protection where required.

4.6 Refrigeration

The G41 is equipped with both a refrigerator and a freezer. Depending on the interior this may utilizes an upper and lower box arrangement or a side by side set up. Typical capacity of the freezer is 4.21 cubic feet and 6.56 cubic feet for the refrigerator.

With both the over/under box and the side by side box, the refrigerator is cooled using excess cold created by the freezer to "spill-over" and cool the fridge. The freezer is controlled with a thermostat while adjusting the vent holes controls the fridge. The refrigeration unit is an air-cooled 12-volt Nova Kool. A 12-volt /solar fan is used to keep fresh air moving through the compressor locker.

The FRP boxes are heavily insulated (freezers - 8", frig - 6", tops – 4") using closed cell foam with no voids for condensation to be formed. The box does not drained into the bilge and can be evacuated by the galley hand pump via a manifold located under the sink. The access doors have twin gaskets that mate on a wide seal plate to prevent cold loss. The doors are lockable with adjustable cam action handles. A gas ram supports the counter top access lid when open.

The standard configuration works extremely well for most applications and there are a number of optional upgrades that can further enhance the usability and function of the fridge and freezer. For full time use moving the freezer section into the lower unit of the over/under style will further decrease the cold loss. In both styles, two independent cooling systems can provide total redundancy. Cold holding plates also have some advantages. The system can be tailored to your intended use. A separate freezer box option is also available depending on the configuration of the interior.

Available Options:

4.6.1 *Upgrade the freezer to a Technautics cold holding freezer plate and install the standard Nova Kool in the refrigerator.*

4.6.2 *Install a second Nova Cool in the refrigerator so both boxes can be controlled independently with redundancy.*

4.7 Pumps

Located at the aft end of a heavily raked deep keel are the main bilge water pickups. A Whale Gusher 10 manual pump is installed so it can be accessed from the helm position. The bilge pump handle is mounted under an adjacent cockpit locker lid for easy access. The main electric bilge

pump is a Rule 1100GPH with built in float switch and has a manual and automatic switch with an indicator light. The pump is installed on a removable arm that can be released so that the entire assembly can be removed from the bilge for servicing.

Independent shower sump pump(s) are supplied for each shower and icebox. (See 6.4) By removing (or smashing) the lid, these pumps can be brought "on line" as emergency pumps. In addition the engine is equipped with a custom flush out valve that can be used as a bilge pump for emergencies at 11GPM.

Available Options:

4.7.1 *Cycle counter tracks pump operation*
4.7.2 *Extra Electric Bilge Pump (3700 GPH) mounted forward for redundancy.*
4.7.3 *High water alarm*
4.7.4 *Float switch upgrade to Ultra Safety Systems*

4.8 Air Conditioning Installations

Although the units themselves are optional, the boat is designed, engineered and pre-wired for the installation at a later date if required.

***Available Options*:**

4.8.1 *Primary air conditioner/heat pump unit - 16000 BTU services the main cabin. Outlets are louvered with the cold air return at floor level.*
4.8.2 *Secondary air conditioners/heat pump unit – 6500 BTU services the sleeping cabin. Outlets are louvered with the cold air return located near the foot of the berth.*

All units are reverse cycle and can heat as well as cool and have separate temperature digital temperature control and available from a number of different manufactures. Most units operate from a single water pump centrally located for ease of servicing. Drains from the condensation tray are run to an enclosed sump pump where possible (see 6.4). Smaller unit can be installed for use with inverted AC power in lieu of the standard selection. We currently offer a selection of different AC manufactures

4.9 Stove and Propane System.

The Force 10 stainless steel 3-burner propane stove with oven is gimbaled (with lock) mounted in the galley. A counter extension covers the cook-top when not in use and bi-folds back out of the way protecting the cherry doors if a flame over should occur. The stove is equipped with a thermal couple on each burner that automatically shuts the propane supply off if the flame is extinguished for any reason. Lighting the burner is simply achieved by the push of an ignition button.

Storage is provided for 2-20 pound propane tanks in a custom isolated and drained container located in the sail locker forward. Installation includes one 20 LBS. aluminum propane tank, a pressure regulator, gauge and electric shut-off valve controlled by a propane leak detector. The pressure gauge allows you to confirm if the tank if hooked in correctly and monitor the system for leaks.

A Xantec propane detector is included with the system. With a sensor located behind the stove and another in the bilge, the boat can be constantly monitored for propane gas leaks. If a leak is detected an alarm is set off and the propane supply is automatically shut off by the solenoid. Should the detector or a sensor become defective, the system can be manual by-passed.

An 800-watt 110-volt microwave oven is built into the galley. This oven can be used both at dock using the shore power or underway using the inverter.

Available Options:

4.9.1 *Force 10 BBQ (or similar) mounted on davits.*
4.9.2 *Force 10 Cozy Cabin Heater (or similar) with tile surround*
4.9.3 *Propane locker moved aft into custom cockpit locker*

4.10 Bow Thruster Installations

Used for extra maneuverability while docking in difficult or short handed situations. The pre-installation for this option is standard with the modification of the hull laminate, including the removal of the core in the area of the thruster tube. This will allow the addition of this option much easier and less expensive at a later date.

Available Option:

4.10.1 Side Power 6 HP twin prop bow thruster installed. This thruster is sized to allow you to control the bow against a 2-knot current or a 15-knot breeze. The push button control is located on the opposite side to the shifter within easy reach of the helm station. The hull opening is faired for improved performance. The unit is powered by it own 12 VDC Optima AGM battery which is echo charged from the main house bank. It is also equipped with a main disconnect switch and emergency by-pass wiring directly to the house bank.

4.11 Generator Installations

This option is typically chosen when the vessel is equipped with high load 120VAC equipment that needs to be run away from the shore grid such as air conditioners. Since the boat is equipped with the standard co-generation type inverter – the generator output can be supplemented up to 2.5kW by the inverter for momentary peak loads.

Available Options:

4.11.1 4kW Panda (4200 Plus) generator c/w sound box

4.11.2 8kW Panda generator c/w sound box

4.11.3 5kW Onan generator c/w sound box

The diesel generator can be installed in its own sound box inside a sound insulated section of the interior, usually outboard of the shower or in a dedicated locker or in the cockpit pod. Instrumentation includes oil pressure, water temperature, hour meter and remote start/stop is mounted in the navigation station. The generator is equipped with an automatic shut down system. The exhaust is routed through a water lock and muffler with a shut valve above the waterline.

The engine has an independent fuel filter; pickup and return to the main fuel tank only, fuel shut-off, seawater intake and strainer. A primary and secondary AC disconnect is installed.

5. Electrical

5.1 General

All ship's wiring is marine grade tinned copper including primary battery runs and is installed in accordance with CE and ABYC full specifications. All wires are coded and colored for easy identification. Schematics and a legend are supplied for each system for servicing. All connections are crimped using tinned fittings with colored heat shrink covers for stress relief and easy identification. All circuits are fused except the main engine starter in accordance with manufacturer's specifications.

5.2 DC Electrical System

The ship's main DC Voltage system is 12 Volt. There are 2 separate battery groups – one for the deep cycle house consumption and the other dedicated to starting the engine. The house bank consists of 12 industrial quality lead acid 2-Volt cells grouped into 2 banks. These batteries combine for a total of 900 amp hours. This type of battery is not commonly used on smaller vessels because of size and weight constraints. We have designed our battery installations to be close to the center of buoyancy and as low as possible actually increasing the vessels overall stability. If it becomes necessary to replace a cell, they are available in almost any part of the world where industrial cells are used (example - electric forklifts). This type of battery has an expected life span in this application of at least 7 to 10 years and possibly upwards to 15 years when properly maintained and conditioned.

For maintenance, the house battery bank is equipped with a custom semi-automatic re-hydration system that allows topping off without even looking at the batteries. Each cell has a special hydrogen cap with a low electrolyte indicator and an access port for a dedicated hydrometer for

measurement without removing the cap. The engine has a dedicated Optima Red Top maintenance free AGM diesel starting battery.

The primary system is wired for total redundancy. The house bank can be divided in half if a single cell goes bad. Each battery bank is equipped with a main disconnect switch and each of these switches can be linked in parallel or in isolation to the other battery banks for emergency access. For example - emergency starting the main engine can be done from the house batteries or the VHF can be powered from the starting battery…total flexibility

To charge the batteries, the engine is fitted with a 190 amp 12-volt alternator that charges the house battery bank directly. Alternatively, when the vessel has access to a 120 volt AC shore power source, the batteries may be charged from the Victron Energy Phoenix Inverter Charger at up to 120 amps. The engine battery is charged with a battery combiner that allows the engine battery to see the house batteries charging source. This devise automatically charges (combines) the engine battery whenever charging voltage is present. If the engine battery should ever need to be bulk charged, it can be accomplished by selecting the correct position on the battery switches allowing it to be manually combined.

The DC system is monitored by the Victron Energy Battery Monitor, (a power consumption meter for your main battery bank). Both the inverter/charger and the alternator are controlled by multi stage voltage regulators.

For redundancy a full function multi stage standby voltage regulator can be mounted beside the primary regulator that uses the same plug. If the primary regulator goes down, simply plug the standby in. Additionally, the original 55 amp internally voltage regulated alternator that was supplied with the engine is mounted as a spare with all brackets, wiring and belts. This gives you a completely spare engine charging system that bypasses all the high tech equipment should all else fail.

Available Alternative/Deletion with Credit:

5.2.1 *Delete 900 amp hour lead acid main bank replace with 3 8D AGMs*

5.2.2 *Delete 190 amp alternator and replace with 150 amp (recommended with 5.2.1)*

5.3 AC Electrical System

The ship's AC system is 120-volt single-phase 60 cycle. AC power is supplied by ship to shore connection, the optional on board generator, or from the 12 volt DC system via the Phoenix Inverter. Duplex outlets with SS covers are located in convenient locations throughout the cabin. All circuits are GFI protected. The system also incorporates a galvanic isolator to control stray electrolysis.

The ship to shore connection is made through a 50'- 30 Amp 120-volt shore cord. The connection is normally located at the stern with optional additional bow connection available with a transfer switch to isolate the connection not being used. There is a primary disconnect switch within 6' of the deck connection and a secondary disconnect at the distribution panel.

The Phoenix Inverter can generated up to 3000-watt @120 volts AC using the ships DC system which will easily power the 700 Watt microwave located in the galley, a laptop computer, re-charge a handheld VHF or cell phone battery.

To operate the entire AC system at away from the dock a diesel generator (see 4.11) can be installed. It can be sized to support the owner's full AC requirements.

Available Alternative/Deletion with Credit:

5.3.1 *Delete 3000 watt invertor and replace with 1600 watt (recommended with 5.2.1)*

Available Options:

5.3.2 *Re-locate shore connection(s) to bow area.*

5.3.3 *Dual (second) shore connection(s) forward and aft with transfer switch*

5.3.4 *Upgrade to 50 amp service*

5.3.5 *Second load group complete with cord, connection, and panel modifications. (Needed when the total AC loads exceed 30 amp)*

5.4 Distribution panel

The main 12VDC and 120VAC distribution panels are located in the navigation station. The Bass distribution panels are custom made using magnetic circuit breakers with indicators and back lighting. 33 DC and 13 AC breakers are supplied. An analog voltmeter is integrated into the DC panel allowing you to test the voltage at the house bank, main engine starting battery. An analog DC amp meter measures amp draw at the panel. Similar meters are installed for the AC side. A reverse polarity light is included.

Available Option:

5.4.1 *DC sub panel – used to group equipment or if equipment exceed panel capacity*

5.5 Bonding system

The vessel is fully bonded and is equipped with a Canada Metal ZC-5 external zinc anode located aft. The optional thruster is equipped separate zinc. The propeller shaft is isolated and protected by a clamp-on shaft zinc.

5.6 Lightning protection

The lightning protection system has all pulpits, lifelines and antenna arch grounded with 4 gauge tinned copper braid to a large Dyna-Plate (approximately 64 square feet) and the externally mounted lead keel.

5.7 Single side band radio equipment installations

Approximately 100 square feet of copper sheeting can be installed under the cabin sole with connecting strips (3") to the keel and to the Dynaplate in the forward bilge area. Terminations are also run aft to the nav station for the possible connection to the radio and to the transom for connection to the tuner. 8 AWG wiring is run from the main fuse bus to the location of the unit a dedicated correctly sized reset-able master disconnect.

Available Options:

5.7.1 *Ground Plane with approximately 100 square feet of horizontal surface.*

5.7.2 *Insulated Sta-lok backstay*

6. Plumbing

6.1 General

All hoses are premium quality marine grade and are UL and CG approved for specific application. The fresh water system uses the Whale 2000 tubing system. Made of hard plastic and colored blue for cold and red for hot, this system does not use hose barbs and clamps, rather quick disconnect fittings that are much easier to service.

As the interior of the boat is semi custom, the location, number and size of the tanks can be adjusted to suit the owner's needs. The following is the standard configuration.

6.2 Fresh water system

Two separate water tanks (third tank is optional) supply fresh water, each with its own fill, vent and draw tube. In addition to the vents being carefully routed to prevent seawater from contaminating the system, each vent is equipped with a shut-off valve all but eliminating any potential problems. Custom made to maximize the available space, the FRP tanks are lined with FDA approved Epoxy resin to ensure no taste transfer and have removable access panels for easy maintenance or service. A manifold is used to control water draw from each tank, thus allowing you to control the boats trim as the water is consumed or isolate a contaminated tank. The level of water in each tank can be measured using electric monitoring gauges located in the nav station.

Water capacity:

Tank Location:	Capacity

Bow Tank	47 Gallons
Starboard Mechanics Locker (optional)	50 Gallons
Port Quarter Berth	68 Gallons

The 3 US GPM Jabsco Sensor Max VSD pump offers variable water flow lowering amp draw and sound levels. It is installed with pre-filter and supplies water pressure at 35 PSI. Hot and cold water is run to the head vanity, galley sink, shower and cockpit shower. A chromed bronze Fynspray hand water pump is installed for manual backup and is connected to both the fresh water system and seawater via a check valve and manifold located under the sink.

An 11-gallon Force 10 SS hot water heater supplies hot water. This heater can make hot water using a 120-volt electric heating element or a built-in heat exchanger using the closed loop engine coolant system. A thermostatic mixer valve is installed at the hot water heater to regulate the water temperature at the desired maximum temperature to prevent the 190-degree engine coolant in the heat exchanger from overheating the potable water supply.

Available Options:

6.2.1 Starboard mechanics locker tank – 50 US gallons
6.2.2 Seagull water filtration system can be plumbed into the galley to provide clean, taste free, drinking water from a tap.
6.2.3 Second water pump with manifold for total redundancy
6.2.4 Pressure regulated shore water inlet, by-passing the onboard system if dock water is available.
6.2.5 Water Maker pre-install
6.2.6 Water Maker (complete installation).
6.2.7 Fresh water outlet for water transfer or deck wash located at the stern

6.3 Waste management system

The standard interior is designed to incorporate a single Raritan PH2 marine head. The discharge is pumped via a vented loop to a Forespar combination thru-hull/Y-Valve that directs the flow either directly overboard or to the on-board holding tank. Premium quality Sealand sanitation hose is use throughout and is double clamped.

The FRP holding tank has the lid permanently glassed on so the tank can withstand the pressure of being overfilled. Clean out panels are provided. The tank can be emptied using a deck fitting and shore pump out station or the onboard macerator system. Fluid levels are measured using the electric fluid monitoring system. The holding tank utilizes a cross ventilation system by incorporating port and starboard vents. The advantage of this is that air is always moving through the tank lessening the odor and providing a redundant vent. Standard waste capacity is set at 52 US gallons.

Available Alternative/Deletion with Credit:

6.3.1 Delete overboard discharge system
6.3.2 Delete macerator discharge system
6.3.3 Delete fluid measuring system
6.3.4 Delete cross ventilation system

Available Options:

6.3.5 Fresh/sea water flush – to extend pump rebuild intervals
6.3.6 Toilet upgrade
6.3.7 Letrisan waste treatment system

6.4 Grey water system

All sinks drain directly overboard through a seacock installed in close proximity and within easy reach. The galley has a single 18”- 16”- 7” standard stainless steel sink that will easily hold a frying pan or large pot. Different arrangements are available including double, sink and a half, and the more traditional deep and narrow marine sinks depending on the galley design and space constraints. The head has an oval shaped 13”– 10”- 6” stainless vanity sink.

A self-contained sump pump is supplied for the shower and icebox drain that discharges overboard. This unit is automatic and has a strainer built-in.

6.5 Diesel Fuel system

Diesel fuel is stored in 2 baffled vinylester FRP fuel cells. These tanks are manufactured specifically for the boat by Gozzard Yachts and are totally corrosion resistance. Typically located in the keel and very close to the Center of Gravity, the boat's trim and performance is not affected by the fuel level. The larger of the tanks is intended as the primary tank while the second is held as a reserve tank. The reserve tank can give the boat a range of 110 nautical miles on a guarantied emergency fuel supply for "piece of mind" redundancy.

Connected by a manifold system, fuel can be returned and picked up in any combination allowing you to maintain trim or to "polish" your fuel supply. A unique feature to the Westerbeke engine is the use of an electric fuel pump that moves approximately 3 times as much as fuel as can be burned by operating the diesel. This extra fuel is cycled through the system cooling the injection pump and re-filtering or "polishing" the fuel.

Large clean outs are built in to the tank tops for easy servicing. A dedicated clean out tube is installed to the very lowest section of each tank so you can check the condition of the fuel and if necessary pump it out without having to open the tank. Capacity is set at 64US Gallons in the primary and 18 US Gallons in the reserve. Note: Fuel capacities are approximate and will be finalized and maximized when constructed.

Fuel filtering is achieved with a Racor 500 primary and a finer micron on-engine secondary filter. Fluid levels are measured electronically with the fuel gauges located near the helm stations.

Available Alternative/Deletion with Credit:

6.5.1 Delete reserve tank and manifold management system

Available Options:

6.5.2 Dual Racor 500 filter system with manifold.

6.5.3 Vacuum gauge that measures the condition or restriction in the filter.

6.5.4 Spare OEM Westerbeke electric fuel pump.

7. Interior

7.1 General

All usable space is made accessible for storage or machinery. Where necessary, overhead panels, hull lining and nut covers are made removable for easy access to wiring and deck hardware.

The overall style and the level of fit and finish are to Gozzard 2008 standards as set by boats displayed at the 2007-2008 Boat Show circuit. The cabin sole is finished to a full closed grain high gloss surface that is easily repairable if damaged. All joinery work is finished to a warm rubbed effect semi gloss finish.

Available Alternative/Deletion with Credit:

7.1.1 Delete closed grain high gloss floor finish and replace with satin rubbed effect finish

7.2 Joinery work

The standard interior wood is American cherry. The louvered cabinet doors feature a 4-way adjustable hinge to allow easy adjustment for compensate for wood movement. All drawers are dove tailed and are installed on sliders.

All plywood is made with marine grade cores and waterproof glues. All main bulkheads are FRP cored structures with cherry veneer faces. All trims, fiddles, face frames, kicks and doors are solid cherry and have the backside and end grain cuts sealed. All furniture and cabinets constructed with plywood have the end cuts finished with solid stock so they can not absorb water The owner has the option to select the use of Formica upper laminates or other veneers for a lighter effect. All end grains are sealed

Cabin soles are teak and basswood (tongue and groove) and are made from solid stock not veneer. The sole is glued to a structural FRP structure and access panels are provided where required. All bilge panels have locks or are fastened securely.

Available Alternative/Deletion with Credit:

7.2.1 *Delete solid core teak floor and replace with marine teak and holly plywood panel floor.*

7.3 Counters

All counters are made of cultured marble. All sinks are recessed under the counter for total drainage and have back splashes. Color is the owner's choice.

7.4 Upholstery and cushions

The owner may choose from a large in house selection of fabrics or purchase them independently with a credit equal to the cost of the standard material. Cabins can be done in different materials bearing in mind that some materials are only available in minimum length orders. The style and look of the cushions can be tailor to suit the owner's tastes. Curtains are included for all ports.

Available Options:

7.4.1 *Ultra Leather Upgrade*
7.4.2 *Ultra Suede Upgrade*
7.4.3 *Closed cell cockpit seat cushions (3pc.)*
7.4.4 *Forward Cockpit Cushion Sections*
7.4.5 *Replace standard drapes with blinds*

7.5 Canvas

All canvas is made with Sunbrella fabric for long life and resistance to sun fading.
The following covers and canvas include as standard:

- Pod - covering cockpit table, instruments and wheel
- Dorade boxes
- Mainsheet Bag
- Port and Starboard Halyard Bags
- Navy Top complete with heavy weather dodger panels. The fixed hard windshield serves as the base for an extreme heavy weather dodger and navy top. In the dodger mode, clear vinyl panels are zipped in the front and sides in a low profile position allowing low windage and excellent visibility both through and over. In the navy top position, the vinyl panels are removed and remaining the bimini portion slides up and forward on a track mounted on the hard windshield to increase head room and move the bimini directly over the companionway for sun and rain (drizzle) protection.
- Helm Bimini
- Mid Section – Covers between Bimini and Navy Top creating a complete rain cover for the cockpit.

Available Alternative/Deletion with Credit:

7.5.1 *Delete hard windshield and navy top canvas*
7.5.2 *Delete Bimini*

Available Options:

7.5.3 *Full Cockpit Enclosure (Only available with option 8.6.1 Mainsheet Arch)*
7.5.4 *Lee clothes*
7.5.5 *GRP Hard top in lieu of canvas Navy Top*
7.5.6 *GRP Hard top in lieu of canvas Bimini*

7.6 Lighting

Lighting types and location are specific to each project and tailor to suit the lighting needs of the owners. Careful consideration is given to light intensity and power consumption. A typical boat includes:

- Under counter florescent lights located in the galley
- Red/white overhead in the aft cabin, forward cabin, galley and nav station.
- Hella high intensity florescent lights in head and main cabin
- Nicro LED courtesy lights are located on the companionway stairs, main walk way and galley kick with the switch at the companionway.
- ABI Halogen reading lights are mounted where required.

Available Options:

7.6.1 Extra lights above the standard compliment
7.6.2 Lighting fixture upgrades
*7.6.3 Al*penglow red/white LED/Halogen overhead upgrade in the aft cabin, forward cabin, galley and nav station.

7.7 Accessories and other equipment

- Built-in customer provided TV/DVD
- Wiring for fan circuits

Available Options:

7.7.1 Fan Package (3)
7.7.2 Fan Extra
7.7.3 CO detector
7.7.4 TV installations including ship to shore and/or antenna systems
7.7.5 Telephone Installations including ship to shore and/or antenna systems

8. Rig and Sailing Hardware

8.1 Spar

- Selden gray anodized aluminum Mast and Boom
- Deck stepped with rated 96,000 pound GRP compression post
- Double spreaders
- Masthead anchor light
- Steaming and fore deck light
- Burgee halyard to starboard and flag and reflector halyard to port.

Available Alternative/Deletion with Credit:

8.1.1 Delete deck step and replace with keel step

Available Options:

8.1.2 Masthead tri-light with strobe
8.1.3 LED Masthead tri-light and strobe
8.1.4 Windex

8.2 Sails

The Quantum (Toronto) sails are designed and built to fit the boat's intended operating parameters. With the G41 having a moderate displacement and being relative stiff, the sails are built to withstand the higher wind ranges the boat is capable of being used in. Careful detail has been giving to correctly position reinforcing and chafe patches to increase the sail life span.

- Fully Battened Dacron Mainsail with two reefs
- Furling Cross-cut Dacron Topsail with White UV strip
- Furling Cross-cut Dacron Staysail with adjustable clew board with White UV strip

Available Options:

8.2.1 Mainsail Upgrade to Premium Off Shore Series
8.2.2 Topsail Upgrade to Radial Cut Premium Off Shore Series
8.2.3 Cruising Asymmetrical Spinnaker with snuffer
8.2.4 Storm tri-sail package

8.3 Standing rigging

All wire is 1x19 316 SS. All upper terminals are swaged except for the fore stays and sprit shrouds. All other terminations are Stalok. Open bronze body Stalok turnbuckles are used.

- Forward and Lowers 3/8”
- Aft Lowers – 3/8”
- Upper shrouds – 3/8”
- Intermediate shrouds – ¼”
- Intermediate Backstays – 5/16”
- Staysail Stay – 5/16”
- Forestay – 3/8”
- Backstays (2) – 5/16”

8.4 Running rigging

All running rigging is color coded for easy identification. All lines are sized for load, ease of use and storage.

- Main Halyard – ½” – White Redpoint RLS
- Topsail Halyard – ½”- Red trace Redpoint RLS
- Staysail Halyard – ½” – Blue trace Redpoint RLS
- Topsail Sheet – 5/8” – Red trace Redpoint Yacht Braid
- Staysail Sheet – ½” – Blue trace Redpoint Yacht Braid
- Vang/preventor – ½” – Green trace Redpoint Yacht Braid
- Main Sheet – ½” – White Redpoint Yacht Braid
- Staysail track control – ¼” – Blue trace Redpoint Yacht Braid
- Topsail Furling – 3/8” – Red Trace Redpoint Yacht Braid
- Staysail Furling – 5/16” - Blue trace Redpoint Yacht Braid
- Mainsail Out-haul – ½” - White Redpoint Yacht Braid

8.5 Components and hardware

- All controls are lead aft through Spinlock sheet stoppers to a Lewmar 46 chrome self tailing winch on the port and starboard side of the companionway.
- Lewmar 40 Chrome Self-Tailing main sheet winch located on steering console. The main sheet has a 3:1 purchase Schaefer block system and is designed to be at the end of the boom where the moment arm is greatest. This is the best, safest and by far the strongest way to attach the main sheet to the boom being over 4 times stronger than typical mid boom sheeting arrangements.
- 2 – 8” and 1 – 10” Lewmar Alloy locking winch handles are conveniently stored in custom holders under a cockpit locker lid.
- Custom built curved self-tending athwartships staysail traveler with SS supports. The track is curved to the same radius as the sail, allowing the staysail to be tacked without adjusting the sheet. The staysail sheet, which has a purchase of 2:1, is lead aft to a sheet stopper (starboard side). The traveler control is used to adjust the traveler car to induce twist or park the car in the center of the track when furled. This control is also lead aft to a Harken jam cleat.
- Selden Rigid Boom Vang with a cascade 4:1 purchase system leads aft to a sheet stopper. A unique feature of this vang arrangement is the live end. Instead of the rope simply being tied to the block, it is lead through an extra block on the boom with a snap shackle. When the vang is being used normally the snap shackle is pulled hard into the block, essentially being dead-ended. If you release the vang, you can move the snap shackle down to a pad eye on the port or starboard bulwark and set up a preventor, all still being lead aft to the cockpit. It also allows for movement of the boom to windward if required.
- Lewmar 54 Chrome Self-Tailing primary winches. The topsail sheets to an inboard 1.25” T-track mount with Schaefer genoa fairlead cars.

Available Options:

8.5.1 Primary winch - upgrade to 58CST

8.5.2 *Halyard Winch Upgrade to 48CST*
8.5.3 *Electric Primary Winches - 54ECST*
8.5.4 *Electric Port Halyard Winch - 46ECST*
8.5.5 *Spare Halyard lead aft*

8.6 Mainsail furling and reefing

- Reefing is achieved with a single line that secures both the luff and the leech of the sail that allows this operation to be completed by a single person without leaving the cockpit.
- If the furling option is selected the furling controls replace the reefing controls lead aft to port halyard winch area. Controls can be operated facing the sail with a minimum amount of friction and can be tailed directly to a winch if necessary.

Available Options:

8.6.1 *In-mast furling by Selden*
8.6.2 *Vertical battens allowing a positive roach and increase sail area*
8.6.3 *Mainsheet Arch – Originally designed to allow the hinging of the pod (center consol) top for generator installations, the arch moves the mainsheet attachment from the pod top to above the canvas work. There are a couple of advantages to this arrangement including being able to sail with the mid section of the canvas in place but also the mainsheet purchase became much shorter and more positive – At dock the boom does not waggle back and forth on the mainsheet and the boom can be sheeted hard virtually on center without a traveler.*

8.7 Headsail furling

The headsail furling lines are lead aft internally under the fore deck and then exit externally onto the cabin top before continuing aft to a forward facing sheet stopper near the port halyard winch. Controls can be operated facing the sail with a minimum amount of friction and can be tailed to a winch if necessary. We offer two brands of furling including Selden 300S and 200S or Schaefer 3100 and 2100 units.

9. Electronics, Instrumentation and Equipment

9.1 Basic instruments – standard equipment

Helm Station

- Raymarine ST 60 Tri-data – Speed and depth
- Raymarine ST 60 Wind
- Fuel Gauges
- 12 Volt outlet
- Windlass controls

Nav Station

- RAY 54 VHF
- Vectron Energy BMP 501 battery monitor
- Wema Liquid Level Monitor System
- Bilge Pump Auto/Manual switch
- Map light

Available Alternative/Deletion with Credit:

9.1.1 *Delete fluid monitor*

9.2 Advanced Electronic Installations

Available Options:

Helm Station

9.2.1 Raymarine E80 graphics display mounted in the pod with a 2kW *Radome with custom SS spreader mount.*

Nav Station

9.2.2 *Raymarine E80 graphics display- full function repeater*
9.2.3 *R125 WAAS GPS mounted on the davit*

9.3 Auto pilot

- Autohelm S3 Corepack
- 7002+ Auto pilot control
- Fluxgate Digital Compass
- Rudder angle indicator
- Type 1 OCTUPUS hydraulic linear drive unit.

Available Alternative/Deletion with Credit:

9.3.1 Delete autopilot

Available Options:

9.3.2 "G" series Autohelm computer needed for radar/chart overlay feature on the E80

9.3.3 Hand held remote

9.4 Stereo

Pioneer AM/FM Stereo with CD player mounted in nav area. Two interior speakers are mounted in forward cabin and two exterior speakers in cockpit. AM/FM antenna is split off the VHF antenna using a Shakespeare antenna splitter.

Available Options:

9.4.1 Stereo upgrade

9.4.2 CD Changer

9.4.3 Sub woofer

9.5 Communications

The standard Ray54E VHF radio is installed in the navigation station. The Shakespeare antenna is mounted at the mast head for maximum range and is wired with low loss RG8U cable.

Available Options:

9.5.1 VHF upgrade to Ray240E with repeater handset in cockpit.

9.5.2 SSB Radio

9.5.3 Satellite telephone system

10. Other Equipment

10.1 Gear

- 2 – 50' ¾" Nylon Dock Lines
- 2 – 30' ¾" Nylon Dock Lines
- 4 – 8" x 20" Fenders
- Boat Pole with deck storage
- 8 USCG Life Jacket in storage bags
- Odin Flare Gun Kit
- 4 Fire Extinguishers
- Flag Poles with stern sockets

10.2 Available Spares

10.2.1 Spare primary, thruster and shaft zinc anodes

10.2.2 Main Engine Cruise Kit

10.2.3 Generator Cruise Kit

10.2.4 Spare alternator belts

10.2.5 Ship's fuse kit

10.2.6 Ship's spare bulb kit

10.3 Manuals

- Owners manual complete with users guide, specification and equipment literature

- As-built schematics for the electrical and plumbing systems
- Electrical legend and color code
- Manuals for main engine and generator

11. Commissioning

11.1 Delivery Dates

Gozzard Yachts makes every effort to complete projects in a timely fashion. However, considering the complexity of these projects, we are only prepared to estimate the delivery date. We will, via email, be able to send digital photographs of the weekly progress and through full disclosure keep the owner in the loop in regards to the timing of the project progress. Our past experience indicates we are never more than a 4 weeks behind (or ahead) of schedule.

11.2 Testing and sea trials

The boat will be launched, rigged and tested fully by Gozzard Yachts. The owner is encouraged to make a thorough inspection of the vessel, either by surveyor or personally, at this time as this will represent the end of construction and related work. The final payment will be due the owner's acceptance of the boat.
All electronic systems will be tested and rough calibrated to within 3%.

11.3 Delivery

The boat will be launched and commissioned in Goderich unless otherwise determined. The cost of the transportation of the boat from the factory will be the responsibility of the owner.

11.4 System Inspection

All major systems will be inspected and have the installation approved (signed off for warranty) by their manufacturers or authorized representatives either during construction or at time of sea trials.