

Specifications:		
LOA:	28' (28' 4" with rounded transom)	8,54 m
Max. Beam:	8' 2"	2,49 m
Hull draft at DWL:	14.5"	37 cm
Displacement at DWL:	5,000 lbs	2267 liters
PPI at DWL:	727 lbs/in	130 kg/cm
Fuel:	85 to 120 gallons	340 to 480 liters
Recommended. HP	125 to 300 HP	93 to 225 Kw
Material:	Plywood cored epoxy composite	or foam sandwich

Dimensions are nominal and will vary slightly with accessories like rubrail etc.

The GulfStream 28 X is a variation of the standard GS28. We kept the standard GS28 plans as simple as possible: one hull material, simple hull shape, one layout and one type of motorization. We present a number of options as a separate plan under the name GS28X.

In addition to all the features present in the standard GS28, the X version offers the following options:

- hull material: plywood cored epoxy or foam sandwich
- hull shape variations: flared bow, closed transom for bracket, rounded transom for stern-drive, optional skeg keel for the stern-drive version
- propulsion: outboards with or without bracket, stern-drive inboard gas or diesel.

- layouts: open cockpit or forward cabin ("jump cabin").

The builder can combine most of those options. See the layouts and options paragraphs for details.

Besides those options and the small changes in hull shape above the waterline, the GS28X is the same boat than the GS28: a moderate vee, relatively narrow boat (beam/length ratio of 3.4) designed to satisfy a program in which economy and seaworthiness were top priorities.

See the GS28 for details about the concept: [GS28 study plans](#).

Layout:

The layout will vary in function of the selected options: open cockpit or jump cabin, stern-drive, outboards in a motor well or on a bracket.

See the pictures in the options paragraph.

Building method:

The hull material is our well proven epoxy-fiberglass-plywood composite, easy to build and stronger than single skin fiberglass or foam sandwich: boat building foam between two skins of fiberglass in epoxy.

Required Skills:

Any of our builders who has successfully completed a boat built on a jig like the FS12, is able to build the GS28 if he devotes sufficient time and materials to the project.

The hull is built upside down on a jig made of the transom, some of the frames and MDF molds.

There is nothing complicated about the construction, we worked hard to design an easy to build boat.

All cabin and deck surfaces are 100% developable once a few slits are cut. The panels are easy to cut to shape and bend.

The foam sandwich version requires a slat mold. See our HowTo file about foam sandwich construction.

The plans show dimensions for all the parts.

Options:

The plans can be customized as long as the builder does not compromise the structure but do not go overboard with options. Do not try to add cabins. This boat is designed to perform well at the designed weight and must be kept reasonably light.

The builder has complete freedom in cockpit layout as long as he keeps the frames where we show them. The same applies to the inside of the jump cabin. The plans show the level of the proposed vee berth and leave room for a head between the vee berth. The cabin is too small to accommodate a separate head and headroom is limited to 40" (1 meter).

A light pilothouse based on the tower style and dimensions is possible.

The options available for the GS28 standard can be used on the GS28X: enlarged console with a head, motor well for twin outboards, different outboard shaft lengths (25 or 30"), strakes, spray rail, dodger, tee top or tower and increased fuel tank size.

Options specific to the GS28X:

- **Inboard stern-drive** gas or diesel.



Stern-drive only. A vee drive or straight shaft would require a shaft tunnel protruding through the sole.



The size of the engine compartment and engine cover will depend on the engine. The picture above shows that the engine (V8 gas) box still allows good access to the transom. In some cases, the box will be longer and seats can be

built on each side of the engine cover.

The stringers spacing takes in account the installation of an inboard engine. Most engines will fit on engine beds made from widened stringers as shown on the plans.

- **A rounded transom** is compatible with the stern-drive version but the radius is moderate and the builder could combine it with a motor well. It will not work with a bracket unless the bracket is custom built to fit. Round or straight transoms can be fitted with a swim platform.
- **Skeg-keel**: this is a recommended option for the stern-drive motorization.



It will improve tracking in following seas.

- **Closed transom for bracket**, single or twin outboards.

Included in the plans.

- **Jump cabin**



The jump cabin is 72" (182 cm) long (74 along the berth) and 92" wide at the deck (235 cm) and 78" (198 cm) at the head of the berth. The sitting headroom is 40" in the middle (100 cm+). It is a very roomy storage place, a convenient location for a head and can be used for occasional overnight.

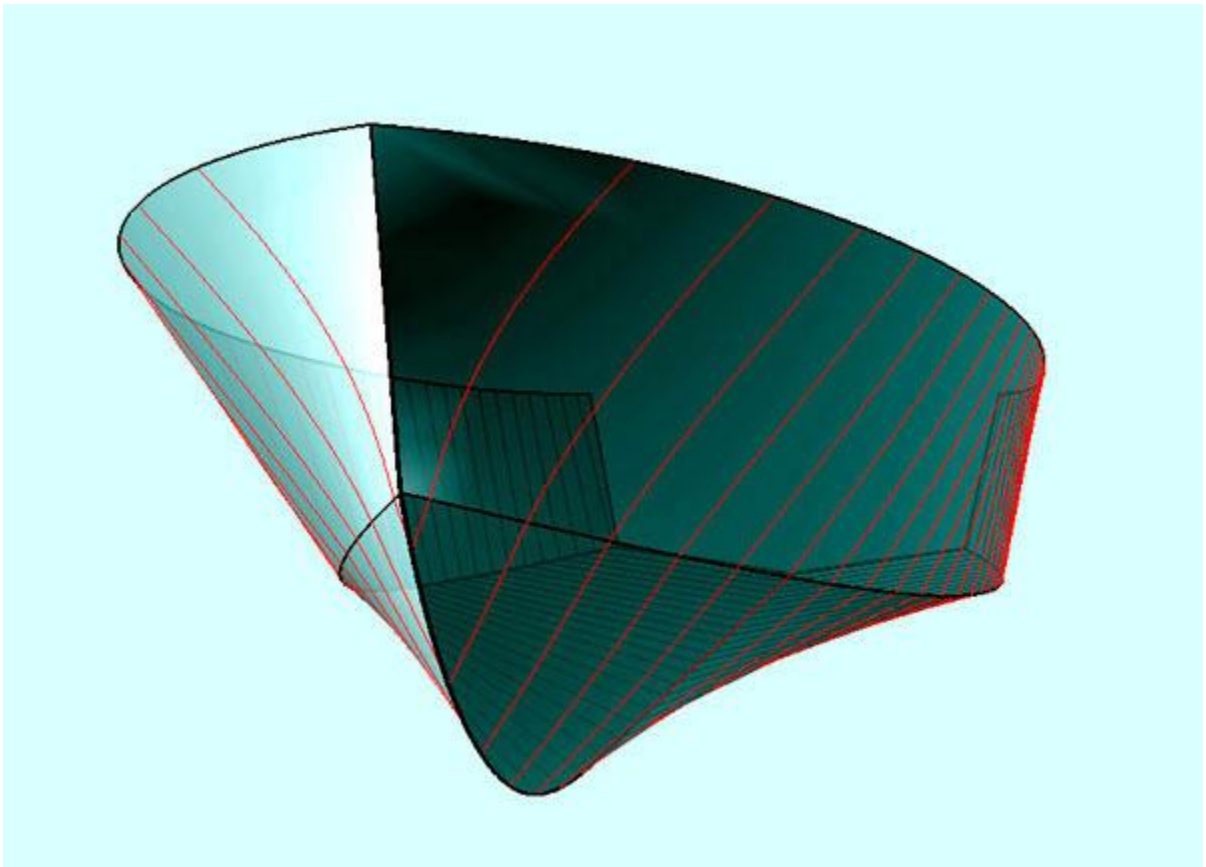
The jump cabin can easily be made longer, up to 30" (76 cm) extra, by moving the upper part of frame A. This reduces the size of the normally very large anchor locker.

The plans for the jump cabin include a bench that is used as a step to access the foredeck but that bench can be omitted and smaller steps can be fitted to the cabin bulkhead.

- **Hull with flared bow**



The flare in the bow is easy to create with a few slits in the side panels.



The plans show the location and size of the slits. This technique has been used on many boats and is only possible with our material.

- **Foam sandwich specifications.**

The plans include specifications to build the boat and superstructure in foam sandwich.

Bill Of Materials:

(Excerpts from our BOM)

The BOM list materials for the complete boat as designed, epoxy-plywood version.

The foam sandwich version uses about 60% more glass and resin and around 45 sheets of Divynicell foam 5/8" thick.

Plywood standard sheets 4x8' (122x244cm)		
6 mm (1/4")	4	
9 mm (3/8")	8	
12 mm (1/2")	29	
Fiberglass fabric 50" wide (125 cm) or tape 6" wide (15 cm) (totals)		
Biaxial tape 45/45 12 oz. (400 gr)	580 yards	525 m
Biaxial tape 45/45 6 oz. (200 gr)	50 yards	45 m.
Biaxial fabric 12 oz. 45/45 (400 gr)	120 yards	108 m.
Woven fabric 6 oz. (200 gr)	25 yards	22 m.
Resin		
Epoxy, total	40 gal.	160 Kg.

This BOM covers all the supplies for the standard boat as designed except for paint, hardware and some small framing wood cleats.

Usage of materials will vary. An experienced builder will use less resin. Our resin usage calculations are based on a 40% glass content.

Options, customization and variations in glass fabric width and cutting preferences will affect the Bill Of Materials. Our figures show an estimated average.

Small variations in fiberglass specifications are acceptable, consult us for substitutions.

Labor:

The plywood hull shell can be build in 180 hours but a finished boat will require 400 to 600 hours depending on the level of detail and the skills of the builder.

The foam sandwich hull shell will take around 300 hours (slat mold included) and about the same time to finish.

More:

Visit our message board, help pages, tutorial pages and read our FAQ: most questions are answered there.

License:

As with all our plans, you have the right to build one boat from those plans. The designer holds the copyright to the design and you purchase a license to build one boat. If you plan to build more than one boat, please contact us about licensing fees.

Building standards:

These plans were drafted according to the ABYC rules. The ABYC (American Boat and Yacht Council) defines the boat building standards in collaboration with the USCG.

Professional builders may be subject to more requirements. Consult the designer.

The ABYC standards are very close to the ISO norms and CEE requirements but no European certification was applied for since this is not required for amateur boat building in Europe. CEE/ISO certification is available to professional builders for a fee.

Plans Packing List:

Plans are available in metric or US units, 52 plan sheets total.

- B287_20 Plan and profile
- D287_27: Nesting of all parts on standard plywood sheets
- B287_21: Construction drawing with sections in plan and profile.
- A287/1 to A 287/10: All stations (frames and transom) and molds, 9 drawings
- A 287/11 to A287/19 : Frames and bulkheads, 8 drawings
- B287_22: Soles and decks panels
- B287_23: Bottom and side panels, stringers
- B287_25: Lamination schedule
- B287_24: Optional profiles: Tee-Top, bow rail
- B287_26: Hardware mounting and assembly details
- B287_28: Standard center console
- B287_29: Tee Top dimensions (option)
- B287_30: Tower with dimensions (option)
- B287_31: Bow rail (option)
- B287_32: Plan and profile for closed transom with bracket.
- B287_33: Plan and profile construction sections for closed transom.
- B287_34: Closed transom version, additional bulkhead, sole, aft deck, transom.
- B287_35: Twin outboard option, plan and profile
- B287_36: Twin outboard option, motor well, aft deck dimensions
- B287_37: Jump cabin version, plan and profile
- B287_38: Plan and profile construction sections for jump cabin version.
- B287_39: Jump cabin berth and deck.
- A287_40, 41 and 42: Stations for jump cabin version.
- A287_43, 44 and 45: Frames and bulkheads for jump cabin version.
- B287_47: Plan and profile construction sections for stern-drive version.
- B287_48: Stern-Drive, round transom, plan and profile
- B287_49: Stern-drive engine with engine beds, mounts and Bravo II dimensions.
- B287_50: Stern-drive details, skeg keel construction.
- B287_51: Flared bow, hull plates and stringers.
- B287_52: Round transom bulkheads, expanded plates and building jig
- B287_53: Flared bow and round transom: sole, casting deck, foredeck, gunwales, aft deck.
- B221 Typical Small Boat Electrical diagram.
- Specific building notes for this boat including foam sandwich scantlings
- "Building a Plywood Cored Composite Boat", boat building manual.
- "Building a Foam Sandwich Composite Boat", boat building manual.
- Bill Of Materials included in the building notes.
- Help files reference list and more.