

Glass Bottom Bill of Materials

LUMBER: Do NOT purchase any lumber until you read this section. Do NOT purchase any NET SIZED material. All lumber thickness specified should be purchased as standard lumberyard stock finished as full as possible. As an example, 1" stock is NOT to be a net thickness of 1". Stock 1" thick refers to lumber purchased as "four quarters" material that will finish from 3/4" to 7/8" in net or actual thickness. Widths, however, are noted as "net" unless specified otherwise. (Exception: All 2" thick stock is lumberyard size in both thickness and width.) Stock listed as 1" x 1/2" is to be ripped from standard 1" material. Purchasing random-random material to re-saw to the required size will result in considerable savings. Some suitable boatbuilding woods include mahogany (dark red Philippine, Honduras, or African) clear vertical grain Douglas-fir, Sitka spruce, white oak or longleaf yellow pine. Similar woods, available in the building locale and common to boatbuilding, may be substituted at the discretion of the builder. The prototype was built primarily from dark red Philippine mahogany. Check all listings to the work prior to purchasing materials.

MATERIAL ABBREVIATIONS: DF = Douglas-fir; PW = plywood; Ext = exterior; Mar = marine; Mahog = mahogany

LUMBER:			
ITEM	MATERIAL	NO. PCS	SIZE
Sheer, aft	Mahog	2	1" x 1-1/4" x 8'
Battens	Mahog	2	1" x 1" x 8'
Skeg	Mahog	1	1" x 2 1/2" x 3'
Between batten cleats	Mahog	1	1" x 1 1/4" x 24"-makes 2
Window stops	Mahog	1	1" x 1 1/4" x 5' 6"-makes 4
At junction of seat tops	Mahog	1	1" x 1 1/4" x 12"
Cleat @ fwd end of window	Mahog	1	1" x 1 1/4" x 12"

Seat perimeter cleats	Mahog	1	1" x 1/2" x 8'-makes all
Knee, motorboard upright	DF	1	2" x 2" x 3'-makes 2
Knee cleat	Mahog	1	1" x 2" x 30"-makes 2
Seat cleats on transom	Mahog	1	1" x 2" x 3'-makes 2
Athwartship seat front cleats	Mahog	1	1" x 2" x 3'-makes 2
Aft longi sheer cap	Mahog	2	1" x 6" x 7'
Transom cap	Mahog	1	1" x 2" x 3' 6"
Bow cap	Mahog	1	1" x 6" x 12'
Aft seat slats (or to suit)	Mahog	2 1	1" x 3" x 7' 1" x 5" x 3' 6"
Gusset	Mahog	scrap from above	
Aft seat slats (or to suit)	Mahog	2 1	1" x 3" x 7' 1" x 5" x 3' 6"
Bow CL upright cleat	Mahog	1	1" x 1 1/4" x 16"

PLYWOOD: All plywood must be intended for marine or exterior use. Interior grades are NOT acceptable. Marine plywood has higher grade inner ply cores, while the exterior grade cores may be of inferior material and have inner voids not apparent to the eye. In most cases, the glues used in both marine and exterior panels are the same, however, the decision to use exterior in lieu of marine panels for planking must lie with the builder. Most exterior plywood is not 1/4" thick; it is classed as "scant" and is a fraction less than full thickness. Take care if mixing marine and exterior panels that must butt join. Marine plywood is recommended, especially for the bottom. Douglas-fir plywood is acceptable in all cases although other species of suitable grade may be used alternately. The grade of the exterior veneer of plywood panels is identified by the letters A, B, and C. For planking the A-A (best) grade is desirable. The best face of all panels should be the one exposed. Check the PLYWOOD LAYOUT in these instructions and the text for method of utilizing the listed plywood to obtain the various parts.

PANEL NO.	DESCRIPTION	NO. PCS	SIZE
Layout I	DF Ext or Mar AA or AB	1	3/8" x 4' x 8'

Layout II	DF Ext or Mar AA or AB	1	1/4" x 4' x 8'
Layout III	Ext DF AB	1	1/4" x 4' x 8'
Layout IV	Ext DF AB	1	1/4" x 4' x 4'
Layout V (see instr)	Mar or Ext AB or AB	1	1/8" x 4' x 8'

FASTENINGS: All permanent fastenings should be of a non-corrosive type. Screws as noted are of the flat head wood type preferably silicon bronze. Electroplated steel and brass fasteners are NOT advised.

*SCREWS: Wood type, flat head, bronze or galvanized

- 3/4" #8 - 1 gross
- 1" #8 - 3 dozen
- 1 1/4" #8 - 1 gross
- 1 1/2" #8 - 5 dozen

* STITCHING WIRE: Copper wire 12 or 14 ga. - 25 lineal feet

* FIBERGLASS TAPE: Although fiberglass tape can be used, it is preferable to use fiberglass cloth cut at a 45 degree angle so the strands of fiberglass cross the seam being reinforced rather than parallel them.

- 50" cloth 2 yds.
- Approx. 3 yds. of 3" wide and 4 yds. of 5" wide

GLUE: All permanent joints should be glued with epoxy adhesives intended for wooden boat use. This may be epoxy resin with additives or epoxy glue. EPOXY RESIN: For gluing, laminate application, epoxy encapsulation & resin putty.

- * INTERIOR - 1gal.- EPOXY SHIELD #2 Slow
- ** EXTERIOR - (Includes fiberglassing) 2 gallons EPOXY SHIELD #2 Slow

* MICROSPHERES (or equal) - 1 lbs.

* SILICA - 1 lbs.

**FIBERGLASS CLOTH: For exterior sheathing, 7-8 oz. treated boat type.

- 9' - 50" width (covers bottom in full width and laps over perimeter)
- 11' - 50" width (split to 25" to cover both sides)
- 2' - 50" width (covers transom)
- Total = 7 1/3 yds. 50" width cloth

* These items are contained in the GLEN-L STITCH-n-GLUE KIT plus application tools, squeegees, brushes, and rollers.

** These items are contained in the GLEN-L FIBERGLASS COVERING KIT plus application tools, squeegees, brushes, and rollers.