

Bull's Eye Bill of Materials

LUMBER: Do NOT purchase any lumber until you read this section. Do NOT purchase any NET SIZED material unless specifically noted as "net". 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 which will finish from 3/4" to 7/8" in net or actual thickness. All widths, however, are noted as "net" unless specified otherwise. All lengths allow for cutting to fit. Grouping lumber and purchasing random-random material to resaw 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.

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. Marine is recommended, especially for the forward sides and bottom. Douglas-fir plywood is acceptable in all cases, although other species of suitable quality may be used. The outer veneers of fir plywood panels are graded by the letters A, B and C. For planking, A-A (best) grade is preferable, although for seats, bulkheads, etc. less costly outer veneers are satisfactory. The best face of all panels should be the one exposed. Check the PLYWOOD LAYOUT on the Full Size Patterns for method of utilizing the listed plywood to obtain the various parts.

FASTENINGS: All permanent fastenings should be of a noncorrosive type. Screws are to be flat head wood type, while nails are annular ring-shank type commonly used in boatbuilding. Screws should be hot-dipped galvanized or preferably silicon bronze, while nails can be bronze or Monel. Electroplated steel and brass fasteners are NOT advised.

GLUE: All permanent joints should be glued with epoxy adhesives intended for wooden boat use. These may be epoxy resin with additives or epoxy glue.

MATERIAL ABBREVIATIONS: DF = Douglas-fir; PW = plywood; Mahog = mahogany; SP = spruce.

| ITEM | MATERIAL | NO. PCS | SIZE |
|---|-------------|------------|---|
| LUMBER: | | | |
| #10 Corner knees | Mahog | 1 | 1" x 5" x 18" makes two |
| #9 Breasthook | Mahog | 1 | 1-1/4" x 9" x 10" (1" opt) |
| Seat side & end cleats | Mahog | 1 | 1" x 1" x 12' |
| Inner sheer | SP or Mahog | 2 | 1" x 1" x 12' |
| Outer sheer | Mahog | 2 | 1" x 1-1/4" x 12' |
| Bulkhead cleat | DF or Mahog | 1 | 1" x 2" x 33" |
| *Trunk Top #16 | Mahog | 1 | 1" x 6" x 1'-3" |
| *Daggerboard #15, Rudder #18 & Thwart #20 (Optional) | | | 1" Mahog laminates for approx. 16 sq. ft. |
| *Mast Support #21 | Mahog | 1 | 1" x 5" x 2'-6" |
| *Tiller #19 | Mahog | 1 | 1" x 3" x 3' makes two sides |
| **Motorboard #7B | Mahog | 1 | 1" x 9" x 13" |

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|----------|-------|---|--------------|
| Skeg #22 | Mahog | 1 | 1" x 3" x 3' |
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* Sailing versions only
** For outboard motor

PLYWOOD: See "Plywood Layout" Pattern Sheet 1 of 1

| | | | |
|-------------------|-----------------|---|---|
| As shown #1, etc. | DF Mar AA or AB | 2 | 1/4" x 4' x 8' |
| As shown #11, 12 | DF Ext AB or AC | 1 | 1/4" x 4' x 8' |
| Transom #7, etc. | DF Ext AB | 1 | 3/8" x 2' x 4' OR Optional Per Plywood Layout 3/8" x 4' x 8' |

FASTENINGS:

SCREWS: Flat head wood type, bronze or hot dipped galvanized iron.

- 3/4" #8 Screws - 8 dozen
- 1" #8 Screws - 1 dozen
- 1-1/4" #8 Screws - 6 dozen
- 1-1/2" #8 Screws - 18 only
- 2" #10 Screws - 3 only

NAILS: Ring type, Bronze or Monel

- 3/4" #14= 1/2 lb.

CARRIAGE BOLTS: FOR SPRIT AND CAT SAILING RIGS ONLY. Bronze or galvanized with nuts and washers.

- 1/4" x 3" - 2 only
- 5/16" x 6" - 2 only (with wing nuts)
- 1/4" x 5" - 2 only

STITCHING WIRE: Copper wire 12 or 14 gauge - 50 lineal feet

EPOXY RESIN: For gluing, epoxy encapsulation & resin putty

- INTERIOR - Approx. 3 gallons
- EXTERIOR - Approx. 1-1/4 gallons (includes fiberglassing)

MICROSPHERES (or equal) - 3 lbs.

SILICA: 1-1/2 lbs.

FIBERGLASS TAPE: For interior seams, 8-10 oz. treated boat type.

- 4" tape = 35 yds.
- 6" tape = 30 yds.

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

- Keel and stem - 6" tape = 4 yds.
- Bottom - 44" cloth = 3-1/3 yds.
- Transom - 50" cloth = 1/2 yd.
- Sides 38" wide - 4 yds (split to 19" widths)
- Trunk laminates - 38" wide = 2 yds. (divide in 12-1/2" widths)

MISC. SUPPLIES: Brushes, squeegees, rollers, etc. as required