

# Class AB Bill of Materials

The following list of materials is intended to be a general guide only. Before ordering any materials, the text and plans should be checked for possible options. All lumber listed as 1" stock is to be standard "lumberyard four-quarter" material which when finished may vary to somewhat less or slightly more than 3/4" in thickness. All widths are NET and 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. All lumber used should be first grade free from shakes and knots. Although spruce (Sitka variety) and mahogany (dark red Philippine type) are called out in the listing, lumber typical to the locale and of similar types and weights may be substituted. All plywood (PW) is to be marine (MAR) or exterior (EXT) grade. The marine-type is preferable as the inner cores are solid and thus the panel has more structural integrity. Douglas-fir (DF) is satisfactory with the quality of the exposed faces of the veneer being designated by the letters "A" or "B". The "AA" grade panels are always preferable, however, "AB" grade is acceptable. All plywood should be a minimum of three plies. All fastenings should be bronze or hot dipped galvanized ferrous metal. Brass fastenings are not advised nor are the electroplated screws commonly sold in hardware stores. All screws are to be of the flat head type intended for wood. All nails are of the ring-type nail common to boat construction. Unless otherwise specified, all wood-to-wood joints are to be glued with a waterproof or highly water resistant glue such as plastic resin, resorcinol, epoxy, or other equivalent type used per the manufacturer's instructions regarding temperature, clamping requirements, curing time, and mixing method. A WORD OF CAUTION: Do not attempt to use inferior materials if you intend to race.

CHECK ALL SIZES TO THE WORK PRIOR TO CUTTING. Abbreviations used are: Mahog = mahogany; SP = spruce; DF = Douglas-fir; PW=plywood; Ext=exterior; MAR=marine.

ITEM	MATERIAL	NO. PCS.	SIZE
LUMBER:			

Frames	SP or Mahog	1	1" x 6" x 18'
Keel	SP or Mahog	1	1/2" x 2' x 7'
Battens	SP or Mahog	2	1/2" x 2" x 8'
Battens	SP or Mahog	2	1/2" x 2" x 6'
Chine	SP or Mahog	2	1" x 1-1/4" x 11'
"T" uprights	SP or Mahog	Approx. 28 Lin. Ft. - 1/2" x 2-1/2"	
Lower Sheer	SP or Mahog	2	1" x 1" x 12'
Upper Sheer	SP or Mahog	2	1" x 3/4" x 12'
Deck Battens	SP or Mahog	2	1/2" x 1-1/4" x 4'
Strongback	SP or Mahog	1	1/2" x 1-1/2" x 6'
Carling	SP or Mahog	2	1/2" x 2" x 5'
Misc. Blocking		Not listed	
PLYWOOD:			
Bottom Planking	DF MAR PW AA or AB	1	1/4" x 4' x 10'*

Side Planking	DF MAR PW AA or AB	1	1/4" x 4' x 8'
Transom, Stem, Knees, Motorboards, Coamings & Breasthook	DF Ext PW AB	1	3/8" x 4' x 8'
Gussets	DF Ext PW AB	1	1/4" x 4' x 8'
Side Deck	DF Ext PW AB	1	1/8" x 4' x 8'
Deck	DF Ext PW AB	1	1/8" x 4' x 8'

\*4' x 8' sheets can be substituted for longer sheets in all cases. Adjust quantities accordingly.

**FASTENINGS: Screws:** Flathead wood type, bronze or hot dipped galvanized. *Note: We strongly advocate high strength bronze fastenings on a race boat of this type.*

- 3/4" #8 - 4 gross
- 1" #8 - 1 gross, 4 dozen
- 1-1/4" #8 - 5 dozen
- 1-1/2" #8 - 2 gross
- 2" #10 - 10 only

**Nails:** Ring Type Boat Nails in Bronze or Monel (Weights are approximate).

- 3/4" - 1-1/2 pounds
- 1" - 1/2 pound
- 1-1/4" - 1/2 pound

**Glue:** Epoxy - 1 quart