Quest Boat 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.

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	Mahog, Oak or SP	60 Random bd. ft. 1" material	
Keel	DF	1	2" x 4" x 20'*
Bulwark uprights	DF	2	2" x 4" x 2'*
Chine logs	Mahog, Oak or SP	2	1-1/4" x 2-1/2" x 23'

Bottom battens	Mahog, Oak or SP	2 2 2	1-1/4" x 3" x 20' 1-1/4" x 3" x 18' 1-1/4" x 3" x 16'	
Lower sheer clamp	Mahog, Oak or SP	4	5/8" net x 1-1/4" x 15'	
Upper sheer clamp	Mahog, Oak or SP	2	1-1/4" x 1-1/2" x 23'	
Solid harpin	Mahog, Oak or SP	8 Lineal ft. 1" x 6"		
Bulwark cleat-lower	Mahog, Oak or SP		26 Lineal ft. 1" x 4" 8 Lineal ft. 1" x 6"	
Cockpit sole beam at Frame #5	Mahog, Oak or SP	1	1" x 3" x 8'	
Cockpit sole strongback	Mahog, Oak or SP	1	1" x 2" x 7'	
Cabin sole strongback	Mahog, Oak or SP	1	1" x 2" x16'	
Guards	Mahog, Oak or Teak	2	1-1/4" x 2" x 6'	
Skeg	Mahog, Oak or Teak	1	1-1/4" x 4" x 12'	
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*Designates material that may be standard lumberyard material in both width and thickness.

PLYWOOD:

Transom, floor timbers	DF Ext AB	1	3/4" x 4' x 8'
Stem, breasthook	DF Ext AB	1	3/4" x 2' x 8'
Side planking & bulwark	MAR or DF Ext AA or AB	2 2	3/8" x 4' x 10'** 3/8" x 4' x 14'**
Forward bulwark, harpin	MAR or DF Ext or AA or AB	1	3/8" x 4' x 8'
Bottom planking	MAR or DF Ext AA or AB	4 2	1/4" x 4' x 12'** 1/2" x 4' x 12'**
Cockpit sole	DF Ext AB	2	1/2" x 4' x 8'
Frame Gussets	DF Ext AB	1	3/8" x 4' x 8'
Cabin sole	DF Ext AB	4	1/2" x 4' x 8'
Aft cabin bulkheads	DF Ext AB	2	3/8" 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

- 3/4" #8 1 gross
- 1" #8 3-1/2 gross
- 1-1/4" #8 3-1/2 gross
- 1-1/2" #8 1 gross
- 2" #10 1 gross
- 3" #14 2 dozen

Nails: Ring type boat nails, bronze, stainless steel or Monel

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

Carriage Bolts: Bronze or hot dipped galvanized complete with nuts and washers. Check all lengths to work.

- Keel to Stem 3/8" x 7" 2 required
- Skeg to Keel 5/16" x 7" 9 required

Glue: Epoxy - 4 gallons