

Bravado 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, unless specified as NET. 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 oak (white oak), spruce (Sitka), 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	50 random-random bd ft varying lengths and widths, some to 8" wide.	

Keel	Mahog, Oak or SP	2	1" x 4" x 11'
Chine logs	Mahog, Oak or SP	2	1-1/4" x 2" x 17'
Bottom battens	Mahog, Oak or SP	2 2 2	1" x 3" x 13'-6" 1" x 3" x 11'-6" 1" x 2" x 9'
Stringers	Mahog or DF	2	2" x 4" x 8'*
Stringer uprights	Mahog or DF	1	2" x 2" x 8'* (makes 4)
Lower sheer clamp	Mahog, Oak or SP	4 4	5/8" net x 1-1/4" x 19' 5/8" net x 1-1/4" x 15'
Upper sheer clamp	Mahog, Oak or SP	4	5/8" net x 1-1/4" x 14'
Sheer backing piece	Mahog, Oak or SP	2	5/8" net x 1-1/4" x 7'
Lift strakes	Mahog, Oak or SP	2 2	1-1/4" x 3" x 14' 1-1/4" x 3" x 12'
Carling	Mahog, Oak or SP	2	1" x 3" x 9'
Foredeck framing	Mahog, Oak or SP	14 lin ft. 20 lin ft.	1" x 3" material 1" x 2" material

Guards	Mahog or Oak	2	1-1/2" x 3" x 5'
Rub rail	Mahog or Oak	2 1	1" x 1-1/4" x 19' 1" x 1-1/4" x 8'
*Width may be lumberyard size or slightly less than noted.			
PLYWOOD:			
Transom, floor timbers, breasthooks	DF Ext AB	1	3/4" x 4' x 8'
Bulkheads at frame #1 & #3	DF Ext AB	1	1/4" x 4' x 8'
Stem, motorboard	DF Ext AB	1	3/4" x 4' x 6'
Gussets, cabin door	DF Ext AB	1	1/4" x 4' x 4'
Side planking, raised deck side planking	DF Ext AB	2	3/8" x 4' x 18'**
Bottom planking	DF Ext AB	2	3/8" x 4' x 16'**
Decking	DF Ext AB	2	3/8" x 4' x 8'
Berth tops, coamings	DF Ext AB	2	3/8" x 4' x 8'

****See text for options; 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
- 1" #8 - 9 gross
- 1-1/4" #8 - 9 dozen
- 1-1/2" #8 - 2 gross
- 2" #10 - 1-1/4 gross
- 3" #14 - 2 dozen
- Nails: Ring type boat nails, bronze or Monel
- 1" - 1 pound
- 1-1/4" - 1/2 pound
- Carriage Bolts: Bronze or hot dipped galvanized complete with nuts and washers. Check lengths to work.
- 1/4" x 7" - 2 required
- 1/4" x 3" - 8 required
- 1/4" x 5" - 8 required

Glue: Epoxy - 1 gallon