

Hercules 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), Douglas-fir, 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; DF = Douglas-fir; PW=plywood; Ext=exterior; MAR=marine.

ITEM	MATERIAL	NO. PCS.	SIZE
LUMBER:			
Frame members	Mahog or Oak	1-1/4" stock 130 random-random board feet with some widths to at least 10".	
Deck beams	Mahog or Oak	1-1/4" stock 20 random-random board feet with some widths to at least 7".	
Keel	Mahog or Oak	2	1" x 5" x 20'

Chine logs	Mahog or Oak	2	1-1/4" x 3" x 24'
Sheer clamps	Mahog or Oak	8	5/8" net x 2" x 26'
Side plankings battens	Mahog or Oak	4	1" x 2" x 25'
Bottom battens	Mahog or Oak	6	1-1/4" x 2" x 22'
Spray rails	Mahog, Oak or teak	2	1" x 1-1/2" x 24'
Rub rails	Mahog, Oak or teak	4	5/8" net x 1-1/2" x 26'
Toe rails	Mahog, Oak or teak	2	1/2" net x 2" x 26'
Deadwood	Mahog, Oak or DF	1" x 3" max. stock approximately 150 lin ft	
Deadwood end cap	Mahog, Oak or DF	1	2" x 4" x 2'
Carling	Mahog or Oak	2	1-1/4" x 12" x 20'
Deck battens	Mahog or Oak	2	1" x 2" x 4'
Cabin clamp	Mahog or Oak	2	1-1/4" x 10" x 16'
Forward cabin clamp	Mahog or Oak	2	1" x 6" x 5'
Motor stringers	Mahog, Oak or DF	2	2" x 6" x 6'
Blocking (for motor stringers and deck beams)	Mahog, Oak or DF	2" x 2" x 16 lin ft	
Transom uprights	Mahog or Oak	2	1-1/4" x 3" x 4'
Transom cap	Mahog, Oak or teak	1	1" x 4" x 7'
PLYWOOD			
Transom	DF Ext AB	1	3/4" x 4' x 8'
Stem, breasthooks, floor timber at Frame #7	DF Ext AB	2	3/4" x 4' x 8'
Gussets, floor timbers & bulkhead at Frame #6	DF Ext AB	3	3/8" x 4' x 8'
Aft cabin bulkhead	DF Ext AB	2	3/8" x 4' x 8'
Side planking	DF MAR AA	2 2	3/8" x 4' x 12'** 3/8" x 4' x 14'**
Bottom planking	DF MAR AA or Ext AB	12	1/4" x 4' x 8'
Decking	DF Ext AB	3	1/2" 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			
<ul style="list-style-type: none"> • 3/4" #8 - 1 gross • 1" #8 - 2 gross 			

- 1-1/4" #8 - 16-1/2 gross
- 1-1/2" #8 - 4-1/2 gross
- 2" #10 - 3-1/2 gross
- 3" #14 - 2 dozen

Nails: Ring type boat nails, bronze or Monel

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

Carriage Bolts: Bronze or hot dipped galvanized complete with nuts and washers. Check number required, size and exact lengths to work. Threaded rod may be used alternately.

Glue: Epoxy - 3 gallons