

# Bolero 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 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
<b>LUMBER:</b>			
Frame members	Mahog, Oak or SP		150 bd. ft. random-random five quarters (1-1/4") stock, some widths to 8"

Deck beams	Mahog, Oak or SP	40 Random-random bd. ft 1" stock with some widths to 9"	
Keel	Mahog, Oak or SP	2	1" x 6" x 16'
Chine logs	Mahog, Oak or SP	2	1-1/4" x 3" x 25'
Bottom battens	Mahog, Oak or SP	4 2 2	1-1/4" x 2-1/2" x 22' 1-1/4" x 2-1/2" x 20' 1-1/4" x 2-1/2" x 16'
Sheer clamps	Mahog, Oak or SP	4	1" x 1-1/2" x 26'
Sheer clamps backing piece	Mahog, Oak or SP	2	1" x 1-1/2" x 7'
Carling	Mahog, Oak or SP	2	1-1/4" x 1-1/4" x 24'
Clamp	Mahog, Oak or SP	2	1" x 2-1/2" x 25'
Coaming (before shaping)	Mahog, Oak or SP	2	1" x 9" x 25'
Deck strongback	Mahog, Oak or SP	1	1" x 2" x 12'
Deck battens	Mahog, Oak or SP	2 2	1" x 2" x 9' 1" x 2" x 11'
Fore & aft hatch deck beams	Mahog, Oak or SP	2	1" x 2-1/2" x 4'

Cabin bulkhead top frame	Mahog, Oak or SP	4	1" x 2-1/2" x 1'
Transom stringer uprights	DF	2-4**	2" x 4" x 3'
Motor stringers (optional)	DF	2-4**	2" x 6" x 8'
Motor stringer uprights (opt)	DF	6-12**	2" x 2" x 1'
Lift strakes	Mahog, Oak or SP	2 2 2	1" x 2" x 15' 1" x 2" x 16' 1-1/4" x 2-1/2" x 18'

\*\*Will vary with motor installation.

**PLYWOOD:**

Transom, stem, breasthook & floor timbers for frames #6, #7 & #8	DF Ext AB	2	3/4" x 4' x 8'
Motor comp. bulkhead & bulkhead at frame #3	DF Ext AB	1	3/8" x 4' x 8'
Gussets & floor timbers	DF Ext AB	1	3/8" x 4' x 8'

Cabin bulkheads	DF Ext AB	1	3/8" x 4' x 8'
Aft/side decking & forward portion of cabin top	DF Ext or MAR AB	1	3/8" x 4' x 8'
Side decking, butt blocks & laminated deck beam	DF Ext or MAR AB	2	3/8" x 4' x 8'
Aft portion of cabin top	DF Ext or MAR AB	2	3/8" x 4' x 8'
Side planking and butt blocks	DF MAR AA	2 2	3/8" x 4' x 14'*** 3/8" x 4' x 12'***
Bottom planking (see note below)	DF MAR AA	12	1/4" x 4' x 8'

Important Note: Based on experience with double diagonally planked boats of this size, the amount of plywood will approximate the listing. But, because layout and cutting methods will vary somewhat with builders as well as between boats, we recommend that quantities of plywood for the bottom be purchased as the construction proceeds if possible. This could create a cost savings if the amount listed is not required as no 1/4" plywood is required in any other part of the structure.

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

#### **FASTENINGS:**

- Screws: Flathead wood type, bronze or hot dipped galvanized
- 3/4" #8 - 2 gross
- 1-1/4" #8 - 20 gross
- 1-1/2" #8 - 4 gross
- 2" #10 - 1 gross, 5 dozen

- 3" #14 - 7 dozen
- Nails: Ring type boat nails, bronze or Monel
- 1" - 3 1/2 pounds
- Carriage Bolts: Bronze or hot dipped galvanized complete with nuts and washers. Check lengths to work.
- 5/16" - per fastening schedule

**Glue:** Epoxy - 2 gallons