

Sorrento 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 (r-r) 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), Sitka spruce, and mahogany (African, Honduras, or Phillipine-dark red varieties) are called out in the listing, lumber typical to the locale and of similar types and weights may be substituted. Long-leaf yellow pine is a good substitute for oak. 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 = Sitka spruce; DF = Douglas-fir; PW=plywood; Ext=exterior; MAR=marine.

ITEM	MATERIAL	NO. PCS.	SIZE
LUMBER:			
Frames	Mahog or Oak	140 Random-Random Bd. Ft. 1-1/4" stock 8" or more wide 100 Bd. Ft. 1-1/4" stock 5" or more wide	
Floor timbers	Mahog, Oak or DF	2	2" x 10" x 18'
Keel	Oak or DF	1	3" x 6" x 26'
Chine log	Mahog or Oak	2	2" x 4" x 36'

Sheer clamp	Mahog or Oak	4	1" x 3" x 40'*
Breasthook	Oak or DF	1	3" x 12" x 2'-6"
Bottom battens	Mahog or Oak	8	2" x 3" x 34'*
Seam batten	Mahog or Oak	2	1-1/4" x 3" x 38'*
Frame clamp	Mahog or Oak	2	1-1/4" x 3" x 30'*
Guards	Mahog or Oak	2	2" x 4" x 13'
Skeg	Oak or DF	1	2" x 4" x 20'
Spray Rails	Mahog or Oak	2	1-1/4" x 2" x 36 Lin. ft.
Side deck beams	Mahog or Oak	20 Random-Random bd. ft. 1-1/4" stock 5" or more wide	
Forward deck beams	Mahog or Oak	26 Random-Random bd. ft. 1-1/4" stock 6" or more wide	
Carling	Mahog, Oak or DF	2	2" x 4" x 30'*
Lower cap rail	Mahog or Oak	2	1-1/4"x1-1/2" x 50 Lin. ft
Upper cap rail	Mahog or Oak	2	1-1/4" x 3" x 50 Lin. Ft.
Inboard motor stringers	DF	2	2" x 8" x 16'
Outboard motor stringers	DF	2	2" x 6" x 16'
Motor beds	DF	4	2" x 8" material as rqd.
Motor stringer uprights	DF	8	2" x 4" x 3'
Blocking	DF	2" x 2" material as rqd.	

PLYWOOD:

Side planking	DF MAR AA	8	1/2" x 3' x 20'***
Bottom planking	DF MAR AA	28	3/8" x 4' x 8'
Stem	DF Ext AB	1	3/4" x 4' x 14'***
Transom	DF Ext AB	1	3/4" x 4' x 12'***
		2	3/4" x 4' x 14'***
Gussets, floor timber at frame #1, & Misc. butt blocks	DF Ext AB	2	1/2" x 4' x 8'
Decking & decking butt blocks	DF Ext AB	4	5/8" x 4' x 12'***
		1	5/8" x 4' x 8'

*In most instances, full length material will not be available. Use shorter lengths to total that noted in this case, and add 3' lengths of the same size material for butt blocks for each piece (see instructions).
 **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 - 6 gross
- 1-1/4" #8 - 5 gross

- 1-1/2" #8 - 22 gross
- 2" #10 - 6 gross
- 3" #14 - 1 gross
- 3-1/2" #18 - 1-1/4 gross

Nails: Ring type boat nails, bronze or Monel

- 1-1/4" - 7 pounds

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

- 5/16" x varies - 28 required
- 5/16" x 3" - 36 required
- 3/8" x 3" - 134 required
- 3/8" x 3-1/2" - 80 required
- 3/8" x varies - 10 required
- 3/8" x 15" - 1 required
- 3/8" x 7" - 2 required
- 3/8" x 5" - 64 required
- 3/8" x 9" - 4 required
- 1/2" x 11" - 8 required
- 1/2" x 10" - 4 required
- 1/2" x 5" - 80 required
- 1/2" x 10" - 1 required

Glue: Epoxy - 5 gallons