## **River Rat-Plywood Bill of Materials**

DO NOT PURCHASE ANY MATERIAL UNTIL YOU READ THIS SECTION. 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), 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.

ITEM	MATERIAL	NO. PCS.	SIZE
Frames	Oak, Mahog or DF	76 lin. ft. 1-1/4" x 3-1/2"	
Transom frame	Oak, Mahog or DF	19 lin. ft. 1-1/4" x 3-1/2"	

Deck beam frame #5	Oak, Mahog or DF	1	1-1/4" x 8" x 8'
Deck beam frame #6	Oak, Mahog or DF	1	1-1/4" x 8" x 7'
Transom at top edge	DF	1	2" x 4" x 8'
Bow pc. cleat	Oak, Mahog or DF	1 (makes 2)	1" x 3" x 3'-6"
Keel lams	Oak, Mahog or DF	4	1" x 3-1/2" x 14'
Sheer	Oak, Mahog or DF	2	1" x 1-1/2" x 20'
Sawn chine ( in two pcs)	Oak, Mahog or DF	1 2	1" x 4" x 4' for 2 1" x 5" x 5'
Aft chine	Oak, Mahog or DF	2	1" x 2-3/4" x 13'
Aft bottom battens	Oak, Mahog or DF	4	1" x 3" x 13'
Carling - "Decked" ver.	Oak, Mahog or DF	2	1" x 3" x 14'
Stringers	DF	2	2" x 6" x 14'

Upright 2" x 2" blocking	DF	6 lin. ft.	2" x 2"
Deck battens	Oak, Mahog or DF	2	1" x 2-1/2" x 8'
Strongback	Oak, Mahog or DF	1	1-1/4" x 3-1/2" x 8'

NOTE: Sole and motorwell framework and misc. blocking not listed.

## PLYWOOD:

Gussets, bulkheads, butt blocks & side planking	DF Ext or MAR AA or AB	6	3/8" x 4' x 8'
Aft bottom planking & butt block	DF Ext or MAR AA or AB	2	1/2" x 4' x 10'*
Forward bottom planking	DF Ext or MAR AA or AB	5	1/4" x 4' x 8'
Transom, Bow pc, & Knee	DF Ext AB	1	3/4" x 4' x 8'
Foredeck & butt blocks	DF Ext or MAR AA or AB	2	3/8" x 4' x 8'
Side deck	DF Ext or MAR AA or AB	1	3/8" x 4' x 8'

\*NOTE: If 10' panels are NOT available and 8' long plywood is used, an additional joint will be

required.

## **FASTENINGS:** Bronze or Hot dipped galvanized

- SCREWS: Flat head wood type
- 3/4" #8 2 gross
- 1" #8 8 gross
- 1-1/4" #8 3-1/2 gross
- 1-1/2" #8 7 gross
- 2" #10 8 dozen
- 3" #14 1 dozen
- Nails: Ring type boat nails, bronze or Monel
- 1-1/4" 2 pounds
- Carriage Bolts: Bronze or hot dipped galvanized complete with nuts and washers.
- 1/4" x 5" 32 required
- 3/8" x 6" 6 required

Glue: Epoxy - 1-1/2 gallon