River Rat-Aluminum Bill of Materials

DO NOT PURCHASE ANY MATERIAL UNTIL YOU READ THIS SECTION. The following is a listing of the primary aluminum members required to build the RIVER RAT including their sizes, lengths, and/or square footage. The listing will require some modifications depending on the version being built and is to serve as a general guide only for cost estimating purposes and is not meant to be all inclusive. Do not use this list to purchase materials without first checking to the plans, Manual, and Instructions for options. In all cases, the builder should check local sources for availability of stock sizes as well as possible substitutes. How the members are obtained from the stock and the manner in which the material is utilized can vary to suit sizes of materials available where the boat will be built. This is why many members are listed by square footage. In other cases, members may be made from flat bar, plate, or sheet material. Also, square footage or linear footage may be given for contoured members which can be cut to shape from plate or sheet stock, or could optionally be formed or bent from flat bar stock. Sizes and areas include an overage factor so that minor members not specifically noted can be obtained from scrap material. CHECK ALL SIZES TO THE WORK PRIOR TO CUTTING.

ITEM	SIZE & TYPE	AMOUNT RQD & VERSION
Stem & Bow Piece	3/8" plate	8 sq. ft.
Keel	3/8" x 3" flat bar	11 lin. ft.
Transom & bottom plating	3/16" sheet	154 sq. ft.
Transom area-outboard	3/16" sheet	43 sq. ft.
Frames	1/4" x 3-1/2" flat bar	78 lin. ft.

Bottom frame CL cleat	1/4" x 2" flat bar	7 lin. ft.
Forward deck beam	1/4" plate	6" x 6'
Transom reinforcement	1/2" plate	4 sq. ft verify
Transom upright-inboard	1/4" x 3" flat bar	9 lin. ft verify
Bulkhead at Frame #5	1/8" sheet	7 sq. ft.
Side plating	1/8" sheet	3' x 42 lin. ft.
Deck plating	1/8" sheet (pattern opt)	90 sq. ft.
Coaming	1/8" sheet	20 sq. ft. "OPEN"
Bottom & side stiffeners	1-1/2" x 1" x 3/16" tee	280 lin. ft.
Deck stiffeners	2" x 1" x 3/16" tee	53 lin. ft. "DECKED"
Sister frame @deck	1/4" x 1-1/2" flat bar	14 lin. ft. "DECKED"
Sole margin plate	1/4" x 1-1/2" flat bar	50 lin. ft.
Sole framing - outboards	2" x 2" x 1/4" struct. tee 1-1/2" x 1-1/2" x 1/8" angle	12 lin. ft. 28 lin. ft.

Sole framing - inboards	1-1/2" x 1-1/2" x 1/8" angle	20 lin. ft.
Sole framing - inboards girders	3/16" plate	28 sq. ft.
Sole framing - inboards girder flange	1/4" x 3" flat bar	28 lin. ft.
Sole framing - inboards girder brackets	3/16" plate	4 sq. ft.
Coaming lower cap	3/4" Sched. 40 pipe	38 lin. ft. "OPEN"
Coaming upper cap	1" Sched. 40 pipe	38 lin. ft. "OPEN"
Sheer & bow pc. bumper	1-1/2" Sched. 40 pipe	27 lin. ft. split "OPEN"
Guards (opt.)	1-1/2" Sched. 40 pipe	21 lin. ft. split
Sole	5/8" PW AB or AC Ext. or 1/8" pattern plate	4 sheets 4' x 8' 112 sq. ft.