

# Rogue Runner - Aluminum Bill of Materials

The ALUMINUM version includes all the materials for the PLYWOOD version, plus an additional plans sheet showing those aspects of the design when built using welded aluminum construction. This ADDENDUM supplements the previous instructions which should still be read by those building the boat in aluminum as a means of familiarization with the design, and of which some aspects are applicable to both, such as methods for varying boat length, foredeck options, and comments regarding the skegs. The same full size patterns are used for both the PLYWOOD and ALUMINUM versions, and in much the same fashion. The hull is built upside down with members spaced and located as per the building form for the PLYWOOD version. The building form can be made from wood as shown for the PLYWOOD version, or of metal members. The configurations of the various framing members are shown on the plans sheet for the ALUMINUM version. It is assumed that the builder is a qualified aluminum welder familiar with appropriate weld types, sizes, and sequence so as to form a strong and true vessel. Only marine alloy of the 5000- or 6000-series should be used. Common acceptable alloy designations include 5052, 5083, 5086, 5454, 5456, and 6061. For saltwater use, the 5086 is recommended except that extruded shapes can be 6000-series. All hull plating junctions must be fully welded. However, such welding should be done sequentially to prevent heat build-up and potential distortion. All welding should be by the TIG or MIG processes. Weld filler materials must be for marine use and compatible with the alloy being welded. Weld bead size should not exceed the thickness of the parent metal being joined.

**ALUMINUM HULL MATERIAL LISTING:** The listing is to serve as a general guide only for cost estimating purposes and should not be used to purchase materials until checked to the various options (such as differences due to changes in overall boat length and powering methods which will vary each boat). Thus the listing will vary and not all members are necessarily included - check the plans. Also check sources as to standard sizes of materials that may be available and alter the listing to suit. Use as long of members as possible to eliminate joints, especially in the hull plating. Note that if tee's are not available, comparable sized angles can be used instead, or the builder can build up comparable members from flat bar.

Does not include variations required between inboard and outboard versions - see plans for options.

<b>MEMBERS</b>	<b>SIZE/TYPE</b>	<b>AMT RQD</b>
Chine bars	1/2"	36'
Stiffener tee's	1-1/2" x 1-1/4" x 1/8"	160'
Flat bars	3/16" x 1-1/2" 3/16" x 2" 1/4" x 2"	100' 30' 50'
Pipe	1-1/4" Sch. 80	120'
Plating	1/8" 3/16" 1/4"	260 sq.ft. 210 sq.ft. 50 sq.ft.