

Scrambler - Aluminum

Bill of Materials

ALUMINUM HULL MATERIAL LISTING: The following listing is for the basic hull only, and does not consider options in length, etc. The listing is to serve as a general guide only for hull cost estimating purposes; do not use for buying materials without first checking the instructions and plans for various options and to local suppliers for what material sizes may be available. In other words, each builder must make decisions as to how he will build the boat and use materials, and then take off a listing to suit. Thus the listing will vary and not all members are necessarily included - check the plans. Only marine alloy of the 5000- or 6000-series should be used. Common acceptable alloy designations include 5052, 5083, 5086, 5454, 5456, and 6061. While full-length hull plating panels can be formed by welding, single long panels are preferable to performing this procedure. In any case, the builder should check for plate or sheet size availability and plan the material utilization for minimum waste. While shorter members can always be butt welded to form long members, a doubler plate is usually advisable behind or on top of all such joints, lapping a considerable distance, and being welded all around. However, weight should be kept to a minimum and major weight concentrations should not be located forward of amidships. Any structures added should be securely fastened or welded to the boat's structural members to prevent movement. Floorboards are optional. Use 1" wood of widths to suit, bearing on the bottom frames. Plywood is optional, and if used, should be covered with fiberglass and non-skid finish.

MEMBERS	SIZE/TYPE	AMT RQD
Frames	3" x 1-1/2" x 3/16" angle 3/16" plate	25' 20 sq. ft.
Deck beam	2" x 1-1/2" x 3/16" angle	6'
Bow & transom	3/16" plate	3' x 10'
Transom channel	5" x 1.75" x .19"	6'

Chine bars	1/2" round	30'
Bottom & bow channel stiffeners	2" x 1" x .125"	72'
Side rails	1" Sch. 40 pipe	48'
Carling	3/16" x 2"	30'
Misc stiffeners	3/16" x 1-1/2"	25'
Bottom plating	3/16" x 5' x 16'	1
Side plating	1/8" x 5' x 16'	1
Decking	1/8" plate	30 sq. ft.
Motor well	1/8" plate	26 sq. ft.