

A-Lure 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 A-LURE 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
Frames	1/4" plate	50 sq. ft.
Bottom plating, girders, tanks & sheer harpin	3/16" sheet	325 sq. ft.
Side plating, transom, foredeck, bulkheads, coaming, cabin & lift strakes	1/8" sheet	485 sq. ft.
Stem/keel	3/8" sheet	8 sq. ft.
Hull & deck stiffener tee's	2" x 1" x 3/16"	380 lin. ft.

Structural tee's	2" x 2" x 1/4"	5 lin. ft.
Flat bars	1/8" x 1"	14 lin. ft.
Flat bars	1/8" x 2"	10 lin. ft.
Flat bars	1/8" x 4"	7 lin. ft.
Flat bars	3/16" x 1-1/2"	250 lin. ft.
Flat bars	3/16" x 2"	14 lin. ft.
Flat bars	1/4" x 2"	15 lin. ft.
Flat bars	1/4" x 3"	8 lin. ft.
Angles	1-1/2" x 1-1/2" x 1/8"	40 lin. ft.
Angles	2" x 2" x 3/16"	70 lin. ft.
Angles	3" x 2" x 1/4"	18 lin. ft.
Pipe	1-1/2" Schedule 40	26 lin. ft.
Pipe	1-1/2" Schedule 80	30 lin. ft.

A-Lure – Plywood 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 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), spruce (Sitka), 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.

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Abbreviations used are: Mahog = mahogany; SP = Spruce; DF = Douglas-fir; PW=plywood; Ext=exterior; MAR=marine.

ITEM	MATERIAL	NO. PCS.	SIZE
LUMBER:			
Frame members/deck beams/sheer harpins	Mahog, Oak or DF	140 bd. ft. random-random	"five quarters" (1-1/4") stock, some widths to 8"

Keel	Mahog, Oak or DF	2 OR 1	1" x 6" x 17' 2" x 6" x 17' (*)
Chine logs	Mahog, Oak or DF	2	1" net x 3" x 24'
Sheer clamps	Mahog, Oak or DF	2	1-1/2" net x 1-1/2" x 16'
Foredeck clamps	Mahog, Oak or DF	4	1" x 1-1/4" x 13'
Bottom battens	Mahog, Oak or DF	2 2 2 2	1-1/4" x 2" x 20' 1-1/4" x 3" x 16' 1-1/4" x 3" x 20' 1-1/4" x 3" x 22'
Carlings	Mahog, Oak or DF	2	1" x 3" x 7'
Cabin clamps	Mahog, Oak or DF	2	1" x 4" x 6'
Deck battens	Mahog, Oak or DF	2 2 2	1" x 2" x 2' 1" x 2" x 3' 1" x 2" x 4'
Strongback	Mahog, Oak or DF	1	1" x 3" x 4'
Transom uprights	Mahog, Oak or DF	2	2" x 4" x 2'-6" (*)
Motor stringers	Mahog, Oak or DF	2	2" x 6" x 14' (*)
Lift strakes	Mahog, Oak or DF	1 1 1	1-1/4"x3"x15' (Makes 2) 1-1/4"x3"x19' (Makes 2) 2" x 4" x 19' (Makes 2)

Spray rail	Mahog, Oak or DF	2	1" x 2" x 7'
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(*)Refers to standard lumberyard size sstock in both width and thickness.

PLYWOOD:

Bottom planking	DF MAR AA or AB	8	1/4" x 4' x 12'***
Side planking	DF MAR AA or AB	2 4	3/8" x 4' x 8' 3/8" x 4' x 10'***
Floor timbers/frame gussets	DF Ext AB	2	1/2" x 4' x 8'
Stem & floor timbers	DF Ext AB	2	3/4" x 4' x 8'
Sheer harpin	DF Ext AB	1	3/8" x 4' x 8'
Transom	DF Ext AB	1	3/4" x 4' x 8'
Motor stringer lamination	DF Ext AB	1	3/8" x 4' x 8'
Foredeck	DF Ext AB	2	3/8" x 4' x 8'

** 4' x 8' sheets can be substituted in all cases. Adjust quantities accordingly.

FASTENINGS:

- Screws: Flathead wood type, bronze or hot dipped galvanized
- 3/4" #8 - 2 gross
- 1" #8 - 4 gross
- 1-1/4" #8 - 9 gross
- 1-1/2" #8 - 2 gross
- 2" #10 - 2 gross
- 3" #14 - 1 gross
- Nails: Ring type boat nails, bronze or Monel
- 1" - 4 pounds
- 1-1/4" - 2 pounds
- 1-1/2" - 2 pounds

Carriage Bolts: Bronze or hot dipped galvanized complete with nuts and washers. Optionally, threaded rod can be used with nuts jammed on ends. Take lengths directly from work since they will vary. Use bolts sized, spaced, and located per the instructions and Fastening Schedule.

Glue: Epoxy - 2 gallons