

# Aqua Cat 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.

CHECK ALL SIZES TO THE WORK PRIOR TO CUTTING. Abbreviations used are: Mahog = mahogany; SP = spruce; DF = Douglas-fir; PW=plywood; Ext=exterior; MAR=marine.

ITEM	MATERIAL	NO. PCS.	SIZE
<b>LUMBER:</b>			
Frame and transom lumber	Mahog, Oak or SP	60 random bd. ft. of 1" stock	

Sheer clamps	Mahog, Oak or SP	2	1" x 1-1/4" x 18'
Chine logs	Mahog, Oak or SP	2	1" x 2" x 18'
Anti trip chines	Mahog, Oak or SP	2	1" x 2" x 11'
Inner anti trip chines	Mahog, Oak or SP	2	1" x 2" x 19'*
Runner keels	Mahog, Oak or SP	2	1-1/4" x 3" x 14'
Tunnel keel	Mahog, Oak or SP	1	1" x 3" x 19'*
Deck battens	Mahog, Oak or SP	2	1" x 2" x 6'
Strongback	Mahog, Oak or SP	1	1" x 2" x 6'
Carlings	Mahog, Oak or SP	2	1" x 5" x 14'
Intermediate deck beams	Mahog, Oak or SP	1	1" x 6" x 8'
* If full length long members are not available, shorter pieces can be used. Make joints between frames backing up with scab or butt block or same material between adjacent frames.			
<b>PLYWOOD:</b>			
Frame bulkheads	DF Ext AB	3	1/4" x 4' x 8'

Transom & motor boards	DF Ext AB	1	3/4" x 4' x 8'
Stems, bow pieces, knees	DF Ext AB	1	3/4" x 4' x 6'
Tunnel Planking	MAR AA or AB	2	3/8" x 4' x 10'**
Side & anti-trip planking	MAR AA or AB	2	1/4" x 3' x 18'**
Bottom Runner Planking	MAR AA or AB	1	3/8" x 4' x 16'**
Inner anti-trip planking	MAR AA or AB	1	3/8" x 4' x 18'**
Fore deck	Mahog, PW, Ext.	2	3/8" x 4' x 8'

Side deck - Use scraps from planking

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

#### **FASTENINGS:**

**Screws:** Flathead wood type, bronze or hot dipped galvanized

- 3/4" #8 - 4 gross
- 1" #8 - 6 gross
- 1-1/4" #8 - 1 gross
- 1-1/2" #8 - 1 gross
- 2" #10 - 1 gross
- 3" #14 - 6 only

**Nails:** Ring type boat nails, bronze or Monel

- 1" - 3 pounds

**Carriage Bolts:** Bronze or hot dipped galvanized complete with nuts and washers.

- 1/4" x 5" - 4 required
- 3/8" x 4" - 4 required
- 3/8" x 5" - 4 required
- 1/4" x 6" - 8 required

**Glue:** Epoxy - 1 gallon