

# PowerYak Bill of Materials

DO NOT PURCHASE ANY MATERIAL UNTIL YOU READ THIS SECTION.

**LUMBER:** White oak, mahogany (Philippine or Honduras), spruce, or similar types of wood common to the area for boatbuilding can be used. Since the lumber required is minimal most good quality wood is acceptable. The wood should be knot free (small solid ones are permissible), properly dried, and free of splits. Lumber designated as 1" is "four quarters" lumberyard stock, usually finished to 3/4" net thickness. All widths are NET and the noted lengths allow for cutting to fit. The lumber dimensions are noted by the thickness followed by the width: eg. 1" X 3/4" would be ripped from 1" (3/4" net) material to a 3/4" width.

NOTE: The types of lumber listed are as used on the prototype; spruce for light weight and mahogany for appearance. As stated in the prologue, other species can be substituted. Although the sizes are noted individually, it is best to group the lumber, purchase "random/random" (varying widths and lengths) lumberyard stock, and rip and trim to the required sizes. CHECK ALL SIZES TO THE WORK PRIOR TO CUTTING.

LUMBER: Abbreviations : Mahog = mahogany; SP = spruce

ITEM	MATERIAL	NO. PCs.	SIZE
Breasthook	Mahog	1	1" X 6" X 7"
Sheer	Mahog	2	1"x5/8"x17' 6"
Deck beams #8 & #9	Sp or Mahog	makes both	1"x51/2"x 32"
Deck beams #10, #11, & #12	Mahog	makes all	1" x 5" x 32"
Carling	Mahog	2	1" x11/4"x 13'
Aft end of cockpit beam	Mahog	1	1" x 2" x 2'
Longi top cleat	Mahog	2	1" x 1" x 9'
Aft deck strongback	Sp	1	1"x 3/4"x 2'
Clamp at cockpit	Sp	2	1/2"x 2 1/2"x 8'
Clamp at hatch	Sp	2	1/2"x 2 1/2"x 4'
Clamp at #8 & #9	Sp	makes both	1/2"x 3" x 3'
Cockpit coaming #18	Mahog	makes both	1" x 6" x 8'
Spray shield	Mahog	makes both	1" x 5" x 30"
Hatch coaming/frame	Mahog	makes both	1"x 1 1/2"x 4'
Hatch beams	Mahog	makes both	

Hatch battens	Mahog	makes both	1" x 3/4" x 7'
Seat ledge S-2	Mahog	makes four	1" x 3" x 18"
Seat brackets #16 (B-2)	Mahog	makes eight	1" x 2" x 4'

**PLYWOOD:** All plywood must be intended for marine or exterior use. Interior grades are NOT acceptable. Marine plywood has higher grade inner plies, while the exterior grade cores may be of inferior material with inner voids not apparent to the eye. In most cases, the glues used in both marine and exterior panels are the same. A solid core marine grade is preferable, although an exterior grade can be used with the understanding that unseen interior voids can cause problems. Douglas-fir plywood is acceptable, but high quality Okoume, mahogany, or other veneers (usually imports) are preferable. The grade of the exterior veneer of plywood panels is identified by the letters A, B, and C with A being best, etc. The best face of all panels should be the one exposed. Any patches on lower grade veneers should be on the interior, especially on the forward bottom. Check the PLYWOOD LAYOUT on the Full Size Pattern sheet 1 of 2 for method of utilizing the listed plywood to obtain the various parts. DF = Douglas-fir; PW = plywood; Ext. = exterior; Mar. = marine.

ITEM	TYPE	NO.	SIZE
PANEL I, II,& III	Ext. DF AB or Mar. AA	3	1/4"x 4'x 8'
PANEL IV	^Ext. DF AB or AC	1	1/4"x 4'x 8'

*^Optional - 1 sheet 4 mm x 4. x 8' Ext or Mar.- AA or AB - mahog.*

**\*STITCHING WIRE:** Copper wire 12 or 14 ga. - 50 lineal feet

**\*MICROSPHERES:** (or equal) - 1 lb.

**\*SILICA:** - 1 lb.

**FIBERGLASS:** All fiberglass cloth is to be marine grade, Volan treated "E", 6-8 oz.;

**\*FIBERGLASS TAPE:** For interior junctions per the LAM SCHED.

Cut at 45 degree bias from cloth 38" wide - 1 1/3 yd (4')

**\*\*FIBERGLASS CLOTH:** For covering exterior, sides, bottom, and deck: 11 1/3 yds. (34') 38" wide cloth.

**"POXY-SHIELD" SLOW EPOXY RESIN:**

**\*For encapsulating, resin putty fillets, gluing, applying interior and exterior tape-** 1 gallon

**\*\*For EXTERIOR fiberglass covering** - 1 gallon

NOTE: Resin quantities assume minimal waste.

**\*FASTENINGS:**

**Screws** - Flat head, bronze wood screws:

3/4" #8...8 dozen	1" #8...8 doz.	1 1/2" #8...8 doz.	
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**Nails** - Annular type boat nails: 3/4" #14...500 each

*\* The GLEN-L POWERYAK Stitch and Glue Kit includes all of these items PLUS brushes, squeegees, and rollers for application.*

*\*\* The GLEN-L POWERYAK Fiberglass Covering Kit includes all of these items PLUS brushes, squeegees, and rollers for application.*