

Fold Up Bill of Materials

DO NOT PURCHASE ANY MATERIAL UNTIL YOU READ THIS SECTION.
LUMBER: Under the "Material" heading in the following chart, the kind of wood listed is as used on the prototype. The amount of solid wood required is minimal and almost any clear properly dried stock is acceptable; spruce would be advantageous to save weight. The wood should be knot free (small solid ones are permissible), properly dried, and free of splits. Lumber noted 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. 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. Lumber listed as 1/2" thick is net and can be ripped from 1" stock. **CHECK ALL SIZES TO THE WORK PRIOR TO CUTTING.**

MATERIAL ABBREVIATIONS: Ext = exterior; Mar = marine; Mah = mahogany

LUMBER:			
ITEM	MATERIAL	NO. PCS	SIZE
Sheer	Mahog	2	1/2" x 1-1/4" x 10' 6"
Cleats on #2	Mahog	2	1" x 1 1/4" x 5"
Aft cleat on #3	Mahog	1	1" x 1 1/4" x 18"
Upright #5 cleats	Mahog	2	1" x 3/4" x 18"
Oarlock brace	Mahog	2	1/2" x 1 1/4" x 12"
Painter cleat	Mahog	1	1" x 1 1/4" x 12"

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, particularly for planking, although an exterior grade can be used with the understanding that unseen interior voids can cause problems. Douglas fir plywood is acceptable, but those made with okoume, mahogany, or other higher quality 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. Check the PLYWOOD LAYOUTS heading in these instructions for how to use the listed plywood to obtain the various parts. Abbreviations used are: DF = Douglas Fir - PW = plywood - Ext = exterior - Mar = marine.

ITEM	DESCRIPTION	NO. PCS	SIZE
Layout I	Ext DF, AA or AB	1	3/4" x 4' x 4'
Layout II	Ext DF or Mar DF AB	2	1/4" x 4' x 8'
Layout III	Ext DF or Mar AB	1	1/4" x 4' x 8'

HARDWARE: The following lists the hardware items and sources for the parts used on the prototype. Similar products can be substituted at the builder's discretion. Stainless steel or brass is preferable in all cases but may not be locally available. Hinges and barrel bolts on the prototype were brass and included fasteners. The strap hinges ("A") and hanger bolts ("D") were plated steel and did not include fasteners.

KEY-WHERE USED	DESCRIPTION	NO. RQD	SOURCE
A-For #1 to #2	Strap hinge 4" per leg	13 §	Any hardware store
B-For Seat #7	Butt hinge 2 1/2" x 1 9/16"	2	*I/S # C9051B3
C-For #3 to #5	Butt hinge 2" x 1"	2 pair	*I/S # C9040B3
D-Per plans	Barrel bolt 1 5/8" x 1 5/8" **(with striker plates)	6 rqd	*I/S # C86B3

E-For #2 to #8	Hanger bolt 1/4" x 2" with washer and wing nut	2 rqd
<p>Note: Fasteners accompanied all hinges except the Strap hinges "A". SS FH-MS-10-24 x 1/2", with nuts, 4 ea hinge, two per leg, were used to through bolt these to the plywood; two per hinge on "C".</p> <p>*I/S = Ives/Schlage, nationally available</p> <p>** Barrel bolts have two types of receptacles accompanying the bolt. The one with a "striker" plate, a flat metal plate with hole for the sliding bolt is the type required.</p> <p>§ Per Instruction option, only 12 may be required.</p>		
<ul style="list-style-type: none"> • ¥ SCREWS: Flat head wood bronze or stainless steel <ul style="list-style-type: none"> • 3/4" #8 Screws - 3 gross • ¥ FIBERGLASS TAPE: For butt joining plywood; 7 oz. treated "E" glass or equal. <ul style="list-style-type: none"> • 4" tape = 5' • 6" tape = 5' • ¥ ADHESIVE, CLOTH APPLICATION & ENCAPSULATION: "POXY-SHIELD" epoxy resin with slow hardener. - 1/2 gal. • ¥ FILLER: Silica, to thicken resin for gluing or to fill screw holes. #1 silica - sampler package • SEAM MATERIAL Source: NRS, 2009 S. Main St., Moscow, ID 83842: <ul style="list-style-type: none"> ○ #1962 - "Hypalon" - 57" wide x 4' ○ #1904 - Adhesive for above - 4 oz. • ¥ #10-167 - Sealant for seam strips - 2 tubes. <p>¥ Items included in FASTENING KIT PLUS for "FOLD UP".</p>		