## **Honker Bill of Materials**

HULL MATERIAL LISTING: The following listing is an estimate of the materials required and is intended to serve as a general guide only. Check the various options and alternatives to the plans, to the work, and to the materials which may be available in the area in which the hull will be built. The listing may also vary due to the amount of waste and other variables that cannot be controlled.

**LUMBER:** All lumber used should be first grade, free from knots, shakes, checks, or other defects. Grouping lumber and purchasing "random-random" material and re-sawing to the required size will result in considerable savings. All lumber sizes should be checked to the work before purchasing wherever possible. Lumber typical to the locale and proven in use in boats of similar type can be used as long as the weight, strengths, and characteristics are similar. Suitable boatbuilding woods include Douglas-fir (D.F.), white oak, mahogany (Mahog), Philippine dark red, American, or African types commonly used in boats), Sitka spruce, Alaskan or Port Orford cedar, and yellow pine. The listing calls out the preferable material but substituting lumbers as noted in the foregoing is optional. All 1" lumber is standard "four guarters" lumberyard stock, usually finished to <sup>3</sup>/<sub>4</sub>" thickness, while all widths are net. All 2" thick material is standard lumberyard stock in both width and thickness. Widths of 2" x 2" stock may be a split 2" x 4" that will provide a width slightly greater than  $1 \frac{1}{2}$ ". Construction grade 2" lumber is generally unacceptable as it is seldom properly dried. All lengths listed allow for cutting to fit.

LUMBER:					
ITEM	MATERIAL	NO. PCS.	SIZE		
*Harpins #8 & #9 plus #0 cleats	Mahog	2	1" x 8" x 7'* Nest #8 & #9 together, use remainder for #0 bottom cleats.		
FRAMES:					
*Bottom #1,#2,#3 & #4	Mahog	1	$1$ "x 5 $\frac{1}{2}$ " x 14' Alternate top of frame from one edge of the stock to the other.		
*Bottom #0 & #5	Mahog	1	1" x 5 1/2" x 8'		
*Sides #0 thru #4	Mahog	1	1" x 6" x 7' Arrange side by side.		

*All deck beams	Mahog	1	1" x 6" x 5' Place thicker ends and narrow ones side by side.
Keel	DF	2	1" x 3 ½" x 12'
Chine	Mahog	2	1" x 2" x 16'
Sheer	Mahog	2	1" x 2" x 7'
Carling	Mahog	2	1" x 1" x 12'
Carling doubler	Mahog	2	1" x 1" x 4'
Coaming cleat	Mahog	2	1" x 1" x 12'
Strongback	Mahog	1	1" x 1 ½" x 4'
#10 & cleat atop #6	DF	1	2" x 4" x 4'
Transom vertical cleat	DF	1	2" x 4" x 4'
End of motor well beam	Mahog	1	1"x 8" x 3' 6"**
Motor well 2" cleats	DF	1	2" x 2" x 6'
Coaming cap (optional)	Mahog	2	1" x 1 ¼" x 12'
Cockpit beam	Mahog	1	1" x 9" x 2' 6" *
Skeg	Mahog	1	1" x 2 ¼" x 7'

\* Not rqd. with Frame Kit.

\*\*DF <sup>3</sup>/<sub>4</sub>" PW optional

**PLYWOOD:** All plywood must be intended for marine (Mar.) or exterior (Ext.) use; interior grades are not acceptable. The marine grade panel features higher grade inner ply cores, while the exterior plywood grade cores may have voids not apparent to the eye, and may also use those made from woods not as suitable for marine applications. Exterior panels may also be "scant" or slightly less than the full noted dimension. In most cases, the glues

used in both the marine and exterior panels are the same waterproof type, however, the decision to use exterior panels in lieu of marine panels must lie with the builder, considering the particular use of the panel in the boat and the expected service. The letters A, B and C designate the grade of the exterior veneers with A grade the best, etc. Douglas-fir (DF) is acceptable for all plywood, although mahogany or other attractive veneers are optional. The plywood planking, bottom and sides, are preferably marine grade.

PLYWOOD				
*Frame gussets & harpins	D.F. Ext. AB	1	1/4" x 4' x 8' Cut harpins from one edge; gussets from the balance.	
Sides, both fwd & one aft	Mar. AA or AB	1	1/4" x 4' x 8' Place pointed ends of fwd. sides at opposite ends of the plywood; remainder for aft side & butt blocks	
One aft side, two aft decks	Mar. AA or AB	1	1/4"x 4' x 8' Keep to long edge, space closely; save scrap for butt blocks	
Fwd decks & foredeck	DF Ext. AB	2	1/4" x 4' x 8' Place pointed ends of both side deck ends facing the same way and close together; obtain foredeck and butt blocks from remainder.	
*Knee, stem, transom & breasthook	DF EXT. AB	1	$\frac{3}{4}$ " x 4' x 8' With care these members can be obtained from a 6' panel if available.	
Bottom, inner & outer	Mar. AA or AB	4	3/8" x 4' x 8' Obtain an aft bottom & aft inner bottom from a sheet saving the end scrap for butt blocks and motor well bottom, use another sheet for the inner & outer forward bottom. Two of each required.	
Coamings & coaming butt blocks	DF Ext. AB	1	3/8" x 4' x 8' Cut both fwd coaming from one edge; align the two aft coaming to the long edge of the panel end to end and obtain the long butt blocks from the remainder.	
Sole	DF Ext. AC	1	5/8" x 4' x 8'	

\*- Not required with Frame Kit purchase

## FASTENINGS

- NAILS: Bronze ring type boat nails.
  - $\frac{3}{4}$ " #14 =  $\frac{3}{4}$  lb.
  - 1"  $\#12 = \frac{1}{2}$  lb.
  - 1-1/4" #12 = 1/4 lb.
- SCREWS: Flat head wood screws, hot dipped galvanized or bronze. (Gross = 144)
  - $\frac{3}{4}$ " #8 = 2 gross
  - 7/8" #8 = 3 gross
  - 1" #8 = 1 gross
  - $1 \frac{1}{4} #8 = 1$  gross
  - $1 \frac{1}{2}$ " #8 = 1 gross
  - 2'' # 10 = 18 only
  - 3'' #14 = 24 only

## **MISCELANEOUS:**

- CARRIAGE BOLTS: Hot dipped galvanized or bronze with nut and washer (Can be counterbored in knee and stem.)
  - 5/16" x 6" = 6 required
- GLUE: Hard setting glue for marine application. "EPOXY SHIELD" with thickeners is advised.
  - 2 gallons epoxy resin with hardener.
  - 1 lb. microspheres
  - 1 lb. silica