

Torpedo Bill of Materials

MATERIAL - LUMBER & PLYWOOD: All plywood must be intended for marine or exterior use; interior grades are not acceptable. The marine grade panel features higher grade inner ply cores, while the exterior grade cores may have voids not apparent to the eye, use cores made from woods not as suitable for marine applications, and be less than the specified thickness. 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 plywood is acceptable for all plywood, although mahogany or other attractive veneers are preferable in many instances as described in these instructions.

All lumber used should be first grade, free from knots, shakes, checks, or other defects. Grouping lumber and purchasing "random-random" material to resaw 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 white oak, mahogany (Mahog.- Philippine dark red, American, or African types commonly used in boats), Sitka spruce, Port Orford cedar, or Douglas-fir (DF).

HULL MATERIAL LISTING: The following material listing is an estimate of the materials required to build the basic hull. The listing is intended to serve as a general guide only and should not be used to purchase materials until the various options and alternatives have been checked 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 vary due to the amount of waste and other variables that cannot be controlled. Lumber listed as 1" is to be "four quarters" stock milled; this usually results in a 3/4" thickness. DO NOT BUY 1" NET LUMBER. Lumber listed as 5/8" in thickness may be ripped from 1" stock. All widths are net and lengths allow for fitting. All 2" lumber is to be "lumberyard size" in both thickness and width. Thus a 2" x 6" will probably net 1-1/2" x 5-1/2".

ITEM	MATERIAL	NO. of PIECES	SIZE
LUMBER COMPONENTS			
Transom #0:			
Uprights	Mahog.	1	1" x 4" x 18" (makes two)
Floor Timber	DF or Mahog.	1	2" x 4" x 26"
Bottom	Mahog.	4	1" x 4" x 32"
Horizontal Shelf	Mahog.	1	1" x 4" x 68"
Side Frame	Mahog.	1	1" x 4" x 18" (makes both)
Frame #1:			
Sides	Mahog.	1	1" x 3" x 6" (makes two)
Bottom	Mahog.	2	1" x 3" x 32"
Frame #2:			
Sides	Mahog.	2	1" x 3" x 33"
Bottom	Mahog.	2	1" x 5" x 25"
Frame #3:			
Sides	Mahog.	2	1" x 3" x 26"
Bottom	Mahog.	1	1" x 3" x 60" (makes two)
Deck Beam	Mahog.	1	1" x 8" x 7" (makes #3 & #6)
Frame #4:			
Sides	Mahog.	1	1" x 3" x 54" (makes two)
Bottom	Mahog.	2	1" x 4" x 38" (makes two)

Deck Beam	Mahog.	1	1" x 7" x 6' 8"
Frame #5:			
Sides	Mahog.	2	1" x 4½" x 28"
Bottom	Mahog.	2	1" x 5" x 34"
Deck Beam	Mahog.	1	1" x 6" x 6'
Frame #6:			
Sides	Mahog.	2	1" x 4" x 30"
Bottom	Mahog.	2	1" x 5" x 30"
Deck Beam	Mahog.	1	1" x 9" x 7'
Frame #7:			
Sides & Bottom	Mahog.	2	1" x 4" x 51"
Deck Beam	Mahog.	1	1" x 7" x 6'3"
Frame #8:			
Sides & Bottom	Mahog.	2	1" x 5" x 38"
Deck Beam	Mahog.	1	1" x 6" x 51"
Foredeck:			
Strongback	Mahog.	1	1" x 2" x 9'
Battens	Mahog.	4	5/8" x 1¼" x 7'
Battens	Mahog.	2	5/8" x 1¼" x 6'
Aft Deck:			
Battens	Mahog.	2	5/8" x 1¼" x 7'
Battens	Mahog.	2	5/8" x 1¼" x 8'
Other Lumber Components:			
Keel	Mahog.	2	1" x 4" x 17'
Chine	Mahog.	4	1" x 2" x 20'
Sheer	Mahog.	2	1" x 1¼" x 8'
Bottom Battens	Mahog.	2 2 2	1" x 1¼" x 18' 1" x 1½" x 17' 1" x 1¼" x 17'
Side Battens	Mahog.	2 4	5/8" x 1¼" x 20' 5/8" x 1¼" x 16'
Motor Stringers	DF	2	2" x 6" x 14'
Motor Stringer Extension	DF	2	2" x 4" x 3'
Motor Stringer Clips	DF or Mahog.	1	2" x 2" x 10' (makes 12)
Hatch (Vertical Members)	Mahog.	4	1" x 3" x 4' 6"
Carlings	Mahog.	1	1" x 4" x 6'

