

# Tunnel King 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>			
Runner Keel	Mahog or SP	2	1" x 1-1/4" x 12'

Tunnel Side Cleat	Mahog or SP	2	1" x 1-1/4" x 16'
Bottom Battens	Mahog or SP	4	1" x 2" x 16'
Sheer Clamp	Mahog or SP	2	1" x 1-1/4" x 16'
Chine Log	Mahog or SP	2	1" x 1-1/2" x 16'
Carling	Mahog or SP	2	1" x 1" x 16'
Deck Batten	Mahog or SP	2	1" x 1" x 16'
Strong Back	Mahog or SP	1	1" x 1-1/2" x 6'
Transom Cleats	Mahog or SP	1	1" x 1-1/4" x 12'
Transom Brace	Mahog or DF	1	2" x 6" x 3'
Transom Brace	Mahog or SP	1	1" x 6" x 3'
Coaming Cap	Mahog	2	1" x 1" x 11'
Seats and Cleats	Mahog or SP	To suit as required	
Spray Rail	Mahog or SP	2	1" x 1-1/4" x 9'
Frame, Transom and Runner Stem listed on Patterns - not required when Frame Kit is purchased.			

**PLYWOOD:**

Transom and Frame Gussets	DF Ext AB	2	1/4" x 4' x 8'
Tunnel Side - Coaming and Side Planking	DF MAR AA	2	1/4" x 4' x 16'**
Runner Planking	DF MAR AA	1	3/8" x 4' x 16'**
Tunnel Planking	DF MAR AA	1	3/8" x 3' x 16'**
Decking	DF Ext AB	2	4mm or 1/4" x 4' x 16'**
Cowl Covering	DF Ext AB	1	4mm or 1/4" x 4' x 8'
Coaming Lamination and Aft Floorboard	DF Ext AB	1	3/8" x 4' x 8'
Seats, Seat Backs, and Forward Floorboard	DF Ext AC	1	3/8" x 4' x 8'
Motorboard, Bow Pieces & Dashboard	DF Ext AB	1	3/4" x 4' x 6'

\*\*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
- 1" #8 - 7 gross

- 1-1/4" #8 - 1 gross
- 1-1/2" #8 - 2 gross
- 2" #10 - 8 dozen
- Nails: Ring type boat nails, bronze or Monel
- 3/4" - 1-1/2 pound
- 1" - 3 pounds
- Carriage Bolts: Bronze or hot dipped galvanized complete with nuts and washers.
- 5/16" x \*2-1/2" - 4 required
- 5/16" x \*7-1/2" - 8 required
- \*Check all lengths to work

**Glue:** Epoxy - 1 gallon