

Lodestar Bill of Materials

The following is a general listing of the primary steel members required to build the vessel, including their description, sizes, lengths, and/or square footage. This listing is to serve as a general guide only, and is not meant to be all-inclusive. Hence, the builder should not use this listing to purchase materials without checking to the plans first to verify sizes and options. In all cases, the builder should check local sources in order to determine stock sizes of materials that may be available. How the members are obtained from the stock and the manner in which the material is utilized will vary to suit stock sizes of materials available in the locale where the boat will be built. This is why many members are listed by square footage. In other cases, members may be obtainable from flat bar, plate, or sheet material; it makes little difference in steel construction. Also, square footage or lineal footage may be given for contoured members which are cut to shape from plate or sheet stock, or could optionally be formed or bent from flat bar stock. Sizes and areas of materials generally include a factor for overage so that minor members not specifically noted can be obtained from scrap material.

ITEM	SIZE	AMOUNT RQD.
Keel base	1" plate	13 sq. ft.
Keel leading edge	2-1/2" O.D. 1/4" wall tube	8 lin. ft.
Keel stiffeners	1/4" x 1-1/2" flat bar	100 lin. ft.
Keel plating	1/4" plate	135 sq. ft.
Frames & floors	1/4" plate	390 sq. ft.
Stem	5/8" x 4" plate	10 sq. ft.

W.T. bulkheads	3/16" plate	50 sq. ft.
W.T. bulkhead stiffeners	3/16" x 1-1/2" flat bar	40 lin. ft.
Mast step webs	3/8" plate plate or bar	17 sq. ft.
Mast step base	3/8" x 6"	16 lin. ft.
Engine girders	3/8" plate	18 sq. ft.
Engine mounting flanges	1/2" x 3" plate or bar	18 lin. ft.
Chine bars	3/4" rd. bar	350 lin. ft.
Hull stiffeners	1/4" x 1-1/2" flat bar	600 lin. ft.
Hull plating	3/16" plate 10 ga.	715 sq. ft. 590 sq. ft.
Rudder shaft & skeg tube	2-3/4" O.D. 1/4" wall tube	14 lin. ft.
Rudder/skeg plating	10 ga.	56 sq. ft.
Rudder web	3/16" plate	7 sq. ft.
Carling	3/16" x 5" plate or bar	56 lin. ft.

Bulwark rail base	1/4" x 3" plate or bar	76 lin. ft.
Intermediate deck beams	3/16" x 3" plate or bar	90 lin. ft.
Deck stiffeners	3/16" x 1-1/4" flat bar	285 lin. ft.
Deck & cockpit plating	10 ga.	460 sq. ft.
Cabin beams (angles)	2-1/2" x 1-1/2" x 3/16"	380 lin. ft.
Cabin plating	11 ga.	450 sq. ft.
Hatch coamings	3/16" x 4-1/2" plate or bar	20 lin. ft.
Tanks	10 ga.	300 sq. ft.
Shaft tube	3" O.D. 5/16" wall	8 lin. ft.
Bowsprit (square tube)	2-1/2" x 2-1/2" x 0.20 sq.	22 lin. ft.
Stern tube	3" O.D. 5/16" wall	8 lin. ft.