

Steelway 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	3/4" plate	12 sq. ft.
Keel leading edge	3" O.D. 1/4" wall tube	6 lin. ft.
Keel & transom stiffeners	3/16" x 1-1/2" flat bar	105 lin. ft.
Keel shell plating	3/16" plate	120 sq. ft.
Bottom shell plating	3/16" plate	200 sq. ft.
Side & transom plating	10 ga.	380 sq. ft.

Hull stiffeners	3/16" x 1-3/4" flat bar	350 lin. ft.
Chine bars	1/2" rd. bar	220 lin. ft.
Bulwark rail base	3/16" x 2" plate or bar	84 lin. ft.
Stern tube	2-1/4" O.D. 1/4" wall tube	6 lin. ft.
Mast step girder	1/4" plate	10 sq. ft.
Engine girders	1/4" plate	6 sq. ft.
Engine beds	1/4" x 2" flat bar	20 lin. ft.
Frames, floors & deck beams	3/16" plate	110 sq. ft.
Stem	1/4" x 2-1/2" flat bar	9 lin. ft.
Collision bulkhead	3/16" plate	10 sq. ft.
Tanks	11 ga.	100 sq. ft.
Cockpit & decking	10 ga.	200 sq. ft.
Deck stiffeners	3/16" x 1-1/2" flat bar	144 lin. ft.
Cockpit stiffeners	1/8" x 1-1/4" flat bar	22 lin. ft.

Carling	3/16" x 5" plate or bar	54 lin. ft.
Rudder stock	2" O.D. 1/4" wall tube	7 lin. ft.
Rudder plating	10 ga.	18 sq. ft.
Bowsprit (square tube)	3" x 3" x 0.18" wall	8 lin. ft.