

Spirit 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	13 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	114 lin. ft.
Hull shell plating	3/16" plate	780 sq. ft.
Hull stiffeners	3/16" x 2" flat bar	460 lin. ft.
Chine bars	1/2" rd. bar	248 lin. ft.

Bulwark rail base	1/4" x 2" plate or bar	96 lin. ft.
Stern tube	2-1/8" O.D. 1/4" wall tube	4 lin. ft.
Mast step & engine girders	1/4" plate	20 sq. ft.
Frames, floors, stem & deck beams	1/4" plate	120 sq. ft.
Intermediate floors, deck beams & collision bulkhead	3/16" plate	32 sq. ft.
Tanks	11 ga.	98 sq. ft.
Decking	10 ga.	156 sq. ft.
Deck stiffeners	3/16" x 1-3/4" flat bar	120 lin. ft.
Carling	3/16" x 5" plate or bar	80 lin. ft.
Rudder stock	2" O.D. 1/4" wall tube	7 lin. ft.
Rudder plating	10 ga.	18 sq. ft.