

SECTION 6

SIDE STRUCTURE

1 General

1.1 Application

1.1.1 The requirements of this Section apply to longitudinally or transversally framed side structures.

1.2 General

1.2.1 Structures of sides with transverse framing system are made of transverse frames, possibly supported by horizontal stringers.

1.2.2 Structures of sides with longitudinal framing system are made of ordinary longitudinal stiffeners supported by vertical primary supporting members.

2 Structure arrangement

2.1 Stiffeners

2.1.1 The ordinary stiffeners are normally to be continuous through the primary supporting members.

Otherwise, the detail of the connection is examined by the Society on a case by case basis.

2.1.2 In general, the section modulus of 'tween deck frames is to be not less than that required for frames located immediately above.

2.1.3 Web frames and ordinary side frames are to be attached to floors by brackets, or any other equivalent structure.

2.2 Openings in the shell plating

2.2.1 Openings in the yacht sides are to be well rounded at the corners, located well clear of superstructure ends and protected as mentioned in Ch 9, Sec 4, [1.4].

2.2.2 Openings for stabiliser fins are considered by the Society on a case by case basis. The laminate of sea chests is generally to be that of the local shell plating.

2.2.3 Openings of considerable size are to be adequately compensated by means of increased lamination. Such compensation is to be partial or total depending on the stresses occurring in the area of the openings.

2.2.4 Ordinary stiffeners cut in way of openings are to be attached to local structural member supported by continuous adjacent ordinary stiffeners.

2.3 Side shell laminate plating in way of chain plates of sailing yachts

2.3.1 As a general rule, chainplates cannot be directly bonded on sandwich laminate plate (side shell, bulkhead...). The local bonding between chainplate and hull structure should be carried out on a monolithic hull element structure.

2.3.2 Local reinforcements may be requested on the side shell, to distribute adequately the secondary loads induced by the chain plate. These local reinforcements are to be connected to the stiffening system of the side shell.

2.3.3 Chain plates scantlings are to be according to Ch 10, Sec 6.

2.4 Upper brackets of frames

2.4.1 The scantling of upper brackets connecting frames to deck beams is to be examined by direct calculation taking into account the flexural moment and shear force as defined in Ch 9, Sec 4, [2].

2.4.2 The principle for connections of perpendicular stiffeners located in the same plane or connections of stiffeners located in perpendicular planes are to be equivalent to:

- for stiffeners in the same plane: as defined in Ch 9, Sec 4, Fig 3,
- for stiffeners in the perpendicular plane: as defined in Fig 1, hereafter.

2.5 Lower brackets of frames

2.5.1 In general, frames are to be continuous or to be bracketed to the bottom floors.

2.5.2 The scantling of lower brackets connecting frames to bottom floor is to be examined by direct calculation as indicated for upper brackets in [2.4].

Figure 1 : Connections of stiffeners located in perpendicular planes

