

**1997**

**INTERNATIONAL DRAGON  
CLASS RULES**

**APPENDIX FOR CARVEL PLANKED  
CONSTRUCTION AND WOODEN  
SPARS**

Authority\*: International Sailing Federation

\* The International Sailing Federation (ISAF) is not a National Authority (NA)

## **APPENDIX TO THE INTERNATIONAL DRAGON CLASS RULES FOR CARVEL PLANKED CONSTRUCTION AND WOODEN SPARS**

### **2.20 Carvel Planked Yacht**

- 2.201 The yacht shall be constructed in accordance with the Construction Plan.
- 2.202 The sizes of timber shown on the Construction Plan are minimum finished sizes.
- 2.203 Where particular kinds of wood are mentioned, other kinds of wood may be used provided they have specific weights and durability not less than those specified.
- 2.204 Where the inboard edges of structural members are not fayed to other structural members, they may be rounded off. Such rounding shall not exceed 5mm radius.
- 2.205 The stem, wood keel, counter timber and stern post shall be of oak. The deadwood shall be of oak or pine.
- 2.206 The transom shall be of oak or mahogany not less than 20mm thick.
- 2.207 The planking shall not be less than 17mm thick. Any kind of wood may be used for the planking provided the weight of such wood is not less than 550kg/m<sup>3</sup>. The planks shall be fastened to the frames with copper nails (11 gauge) clenched on roves or turned over, or with 5mm dia. silicon bronze or stainless steel screws 32mm long.
- 2.208 The two frames abreast the mast and the frames at stations 4, 8 and 12 shall be of ash, oak or elm 30mm x 34mm. If of oak the frames may be grown or laminated. If of ash or elm they shall be laminated.
- 2.209 All other frames shall be of ash, oak or elm at 200mm centres. They shall be 25mm x 30mm between stations 3.5 and 11, and beyond those stations they shall be 22mm x 25mm. These frames may be hot bent or laminated except at stations 2 and 14 where they shall be laminated or grown.
- 2.210 Floor timbers shall be oak, sided 70mm, for the length of the ballast keel and 50mm beyond the keel. For one half of their length the siding may be tapered down to 46mm.
- 2.211 The mast step shall be of oak, 1350mm x 150mm x 60mm. The siding shall not be less than 150mm throughout although its moulding may be tapered as shown on the official plans.

- 2.212 The shelf shall be of Scandinavian pine or fir, larch or Oregon pine, 27mm x 100mm or 24mm x 115mm.
- 2.213 The round (camber) of beams shall not exceed 9.5mm per 305mm of its length (e.g. at station 6 where the yacht's beam is 1834mm the round shall not exceed 58mm).
- 2.214 Beams and the carling shall be of larch, Scandinavian pine or fir, or Oregon pine of the following dimensions:
- Mast beams and beams at the end of the cockpit and cabin top openings: 40mm x 60mm at the centreline reducing to 40mm x 40mm at the sides.
- Complete beams between stations 3 and 13: 30mm x 45mm at the centreline reducing to 30mm x 30mm at the sides.
- Half beams at the sides of the cockpit, etc.: 25mm x 38mm at the inboard ends reducing to 25mm x 25mm at the sides. Spacing shall not exceed 254mm centre to centre.
- The carlings shall be a minimum of 50mm x 40mm.
- 2.215 The deck shall be of larch, Scandinavian pine or fir, Oregon pine, spruce, or plywood, not less than 14mm thick and weighing not less than 432kg/m<sup>3</sup> and covered with canvas of not less than 236g/m<sup>2</sup> and painted, or covered with any other material of equivalent weight.
- 2.216 The deck may be of plywood, or plywood overlaid with teak, of not less than 15mm total thickness and weighing not less than 7.6kg/m<sup>2</sup>.
- 2.217 The covering and margin boards shall be of mahogany, not less than 14mm thick and not exceeding 95mm wide.
- 2.218 The cabin sides shall be of mahogany not less than 16mm thickness, and the cabin roof shall be of wood or plywood (type optional) not less than 10mm thick on wooden beams. The cabin roof may be covered with canvas or other material.
- 2.219 A covering board of optional width is permitted round the cabin top.
- 6.30 Wood Mast**
- 6.31 The mast shall be made of one kind of wood only except that a mainsail luff groove (if fitted) may be strengthened at the lower part with hardwood, which shall not extend more than 500mm along the mast.
- 6.32 The mast diameter shall not be less than those shown on the official plan, except at the heel in way of a metal heel fitting.

6.33 A luff groove may be formed in the mast and it shall not impinge upon the minimum permitted diameters. The groove shall be made of the same material as the mast.

6.34 The fore and aft dimension of the mast may be reduced by the depth of the luff groove below a point 400mm above the lower measurement band.

**6.60 Wood Boom**

6.61 A wood boom shall be solid.

6.62 The section of the boom shall be circular or oval and a groove not exceeding 22mm deep is permitted.

6.63 The transverse width of the boom shall not be less than 80mm.

