

# *Ideal 18 Class Association*

## *Class Rules*

### **1. Objectives of the Class**

**1.1** The IDEAL 18 is a one-design sailing class created to fulfill the needs of recreational sailors, such as fun one-design racing and performance day-sailing. These rules are intended to preserve important design characteristics; identical performance among boats, low cost of ownership, ease and simplicity of handling.

**1.2** Except where specific variations are permitted within these rules, class boats shall be alike in hull, deck, keel, rudder, spars, weight, weight distribution, sailplan and racing equipment.

**1.3** All boats shall comply with official building plans, building specifications and the class rules. No alterations or modifications to factory-installed equipment are permitted unless explicitly stated in these rules.

### **2. Administration**

**2.1** The class authority shall be the IDEAL 18 Class Association (hereafter named ICA), in accordance with rules and the prescriptions of US Sailing. The governing board of ICA, which may consult with licensed builders and the copyright holder, shall make interpretations of these rules.

**2.2** The official language of ICA shall be English. The words "must" and "shall" are mandatory; the word "may" is permissive.

**2.3** IDEAL 18s shall be built only by builders licensed to do so by IDEAL 18 Sailboats, a division of Ontario Properties, Inc. (40 Marina Drive, Rochester, NY, USA 14617) and shall conform to the building plans set forth by the copyright holder.

**2.4** A building fee shall be payable to IDEAL 18 Sailboats when the molding of the hull commences.

#### **2.5 Registration and Measurement**

**2.5.1** A boat shall be deemed to be an IDEAL 18 when it is completed with a building number assigned by IDEAL 18 Sailboats molded into the transom.

**2.5.2** A sequential sail number shall be assigned to each IDEAL 18 by the ICA authority of the owner's home country.

**2.5.3** Only boats built and certified by IDEAL 18 licensed builders may be sailed in ICA-sanctioned events. Licensed builders shall maintain a listing of all boats they build and certify.

**2.5.4** It is the sole responsibility of the owner to ensure that his/her IDEAL 18 conforms in every way to class rules.

## **2.6 Advertising**

**2.6.1** The ICA may authorize advertising in accordance with current prescriptions of US Sailing and the national governing authority.

## **2.7 Measurement**

**2.7.1** Only recognized ICA measurers and certified builders shall measure boats.

**2.7.2** A measurer shall not measure a boat, spars, sails or equipment owned by them, or in which they are an interested party.

**2.7.3** The builder's weight shall not be less than 1230 lbs., nor more than 1270 lbs., all up weight, less spars, running rigging and sails. Corrector weights installed by a builder shall not be removed or altered.

**2.7.4** Tolerances provided in these rules allow for minor building variation and age distortion.

**2.7.5** The measurer shall report anything considered a departure from the intended specification of the boat.

## **3. Construction**

**3.1** The hull, deck, rudder, keel, spars, running rigging, standing rigging, sails, and fitting types and positions shall conform to building specifications and class rules.

**3.2** Any alterations to a boat automatically invalidates its certification as an IDEAL 18 until official re-measurement is completed.

**3.3** When a change to factory building specification is made, all yachts built before the changed may upgrade to the current specification. The ICA shall notify all owners of such changes.

## **4. Hull**

- 4.1** The hull shall be molded fiberglass built to ICA approved lamination schedule.
- 4.2** Cockpit, seats, hull reinforcement, chainplates, mast position, bulkheads, rudder post, and keel sump shall conform to the building specifications.
- 4.3** Chainplates shall be positioned and affixed by the builder. No change to chainplate location is permitted for any reason.
- 4.4** Construction of the hull/deck flange shall not be modified.
- 4.5** Installation of an outboard motor bracket to the transom is permitted.
- 4.6** Bottom paint may be applied to the hull surface below the top waterline stripe.
- 4.7 Prohibitions:**
- a.** Grinding, drilling or fairing the hull surface.
  - b.** Alteration to the laminate schedule or core.
  - c.** Reshaping the hull profiles or contour.

## **5. Keel**

- 5.1** The keel shall be built of molded lead to ICA specifications.
- 5.2** Bottom paint may be applied to the keel.
- 5.3 Prohibitions:**
- a.** Any change or modification to the thickness of the epoxy keel encapsulation.
  - b.** Any change or modification to the keel shape, weight or location.
  - c.** Any change or modification to the shape of the leading or trailing edges of the keel.

## **6. Deck**

- 6.1** The deck shall be molded fiberglass built to the approved ICA lamination schedule and specification.
- 6.2** Fittings placed by the factory shall not be altered or removed. Replacement of factory-placed fittings with identical components in original locations is permitted. Drilling of holes and placement of additional fittings on the deck are prohibited with the exception of additional hardware for mooring purposes.

### **6.3 Prohibitions:**

- a. Grinding, drilling or fairing the deck surface.
- b. Alteration to the laminate schedule or core.
- c. Reshaping the deck profiles or contour.

**6.4** Through-deck inspection hatches are permitted. Inspection hatches shall be self-sealing type of commercial manufacture. Inspection hatches shall be tightly closed at all times while racing.

## **7. Rudder and Tiller**

**7.1** The rudder shall be built to ICA building specification by a licensed builder.

**7.2** External dimensions and planform of the rudder at each station shall comply with ICA specification. Rudders built after 8/92 shall conform to the updated planform approved by ICA. Building tolerances of +/- .125 inches in any dimension are permitted.

**7.3** Bottom paint may be applied to the rudder.

**7.4** Weight of the rudder shall be 21 lbs., +/- 1.0 lbs.

**7.5** The rudderpost shall not be moved, reinforced or modified. Rudder parts may be replaced with identical components in the original locations.

**7.6** The tiller shall be made of wood. Dimensions and materials shall be the same as factory-supplied original components.

**7.7** A tiller extension of any type and material may be fitted.

## **8. Spars, Rigging and Sail Controls**

Spars shall be built of aluminum extrusion, conforming to class building specification, and shall be supplied by an ICA approved builder. No alterations to mast and boom extrusion are permitted.

### **8.1 Mast**

**8.1.1** Mast fittings shall be factory-supplied length.

**8.1.2** Fittings may be replaced with fittings of original type and size, in original locations. Any variation in mast fittings from factory specification is prohibited.

**8.1.3** Mast position at the butt and partners shall be fixed in factory supplied locations. Temporary or permanent changes to mast or butt or partners location is prohibited.

**8.1.4** No shaving, etching, or laminating to the mast section is permitted.

**8.1.5** Holes may be drilled: at the masthead to accept one wind direction indicator, below the gooseneck to accept a compass mount and at the partners to attach a mast collar. Any hole drilled in the mast shall be filled with a fastener.

**8.1.6** The mast shall not be blocked or chocked at deck level in a fore and aft direction.

**8.1.7** The mast may be supported athwartship at deck level by two chocks of 1/8th inch material fitted either side of the mast between the mast gate and the mast.

**8.1.8** A replacement Vang fitting may be bolted to the foot of the mast.

## **8.2 Boom**

**8.2.1** The boom shall be factory supplied length.

**8.2.2** The boom shall not be permanently bent.

**8.2.3** The boom may have the following fittings as supplied by the builder: outhaul, boom vang, cunningham, mainsheet blocks, reefing gear, gooseneck. Fittings shall be of the same type, sizes and mechanical advantage as original.

**8.2.4** The outhaul shall have 2-to-1 purchase.

**8.2.5** The boom vang shall have a 6-to-1 purchase and shall be made entirely from rope.

**8.2.6** The cunningham shall have 2-to-1 purchase.

**8.2.7** Any style of shackle may be used to attach the outhaul and boom vang.

**8.2.8** The mainsheet may be retied to reduce its mechanical advantage.

**8.2.9** Holes may be drilled in the boom to accommodate mainsheet preventer fasteners and spinnaker pole holders. Any hole drilled in the boom must be filled with a fastener.

## **8.3 Standing Rigging**

**8.3.1** The mast shall be supported by upper shrouds, spreaders, lower shrouds and jib luff wire only, in original locations with fittings of factory-supplied type and size.

**8.3.2** The jib luff wire shall be 20.8 ft., +/- .25 inches in length, measured at the pin bearing surfaces. Jib wire length shall remain fixed while racing.

**8.3.3** Spreader shall be 27.75 inches from the mounting pin centerline to the outer end of the extrusion.

**8.3.4** Upper and lower shroud turnbuckles shall be the same type and size as factory supplied. Any style of cotter pin may be used to secure upper and lower shrouds.

**8.3.5** A mainsheet attachment bridle shall be fitted between the attachment points at the stern of the boat and the mainsheet; the bridle shall have loops in each end and at the center. The overall length of each side between the bearing points shall be 27". +/- .50 inches.

**8.3.6** Cleats, blocks and fairleads may be replaced with equipment of the same type, size and mechanical advantage as original.

**8.3.7** One wedge may be placed under each jibsheet cleat. All other cam cleats on the console shall remain as originally installed.

## **9. Sails**

**9.1.** Sails shall be built by ICA approved manufacturers.

**9.2.** Sails must be measured and certified before they are used for racing.

**9.3.** Each sail shall have an ICA royalty emblem permanently installed near the tack, on the starboard side. Removal of a royalty emblem invalidates that sail for racing.

**9.4.** The following sails may be used in ICA regattas: mainsail, jib, and spinnaker.

### **9.5 Mainsail**

**9.5.1** A class insignia, of contrasting color, shall be fitted to each side of the sail, starboard side higher. The insignia shall be minimum 40 inches. Both insignias shall be placed between the upper two battens.

**9.5.2** A sequential sail number, corresponding to the national registration of the boat, shall be fitted to each side of the mainsail.

**9.5.3** The mainsail shall be made of woven polyester not lighter than 5 oz. per sailmakers yard.

**9.5.4** The mainsail shall fit within the dimensions defined by the black bands on the mast and boom:

$$P = 23.42'$$

$$E = 9.25'$$

**9.5.5** The luff of the mainsail shall be attached to the mast with slugs. The foot of the mainsail may be attached to the boom with slugs, a bolt rope or the sail may be loose footed.

**9.5.6** The mainsail shall have four battens evenly spaced along the leech. The top two battens shall be full length, the bottom two battens shall not exceed 3.0 feet in length.

**9.5.7** The maximum length of the leech shall be 25.0 feet measured from the upper forward corner of the headboard to the intersection of the foot and leech at the clew (projected if necessary). If a slug is used to attach the clew to the boom, it shall not be included in this measurement.

**9.5.8** Maximum mainsail girths (including the bolt rope) shall be as follows;

Upper quarter 3.50'

Mid-girth 5.95'

Lower quarter 7.80'

The measurement points on the leech shall be located by locating the mid point of the leech (when the head is folded to the clew) and then when the head and clew are folded to the mid point of the leech.

**9.5.9** The headboard shall not exceed 4.5" in width excluding the bolt rope..

**9.5.10** The mainsail shall have at least one functional reef. The minimum reef depth shall be 3.0 feet above the tack.

**9.5.11** If the mainsail is loose footed, the foot roach shall not exceed 8".

**9.5.12** Permitted features - The mainsail may have the following features;

a. A leech line.

b. A foot line.

c. Draft stripes

d. A visibility window (max area 3 sq. ft.)

## **9.6 Jib**

**9.6.1** A. The jib shall be made of woven polyester not lighter than 5 oz. per sailmakers yard.

**9.6.2** The maximum jib dimensions shall be as follows:

Luff 20.67'

Foot 5.83'

Leech 19.50'

**9.6.3** The foot roach shall not exceed 6".

**9.6.4** The jib may have its own luff wire or be attached to a wire connecting the furling unit with a zipper or other such means.

**9.6.5** Permitted Features - The jib may have the following features:

a. A leech line.

b. A foot line.

c. Draft stripes.

- d. A visibility window (max area 3 sq. ft.)
- e. A clewboard.

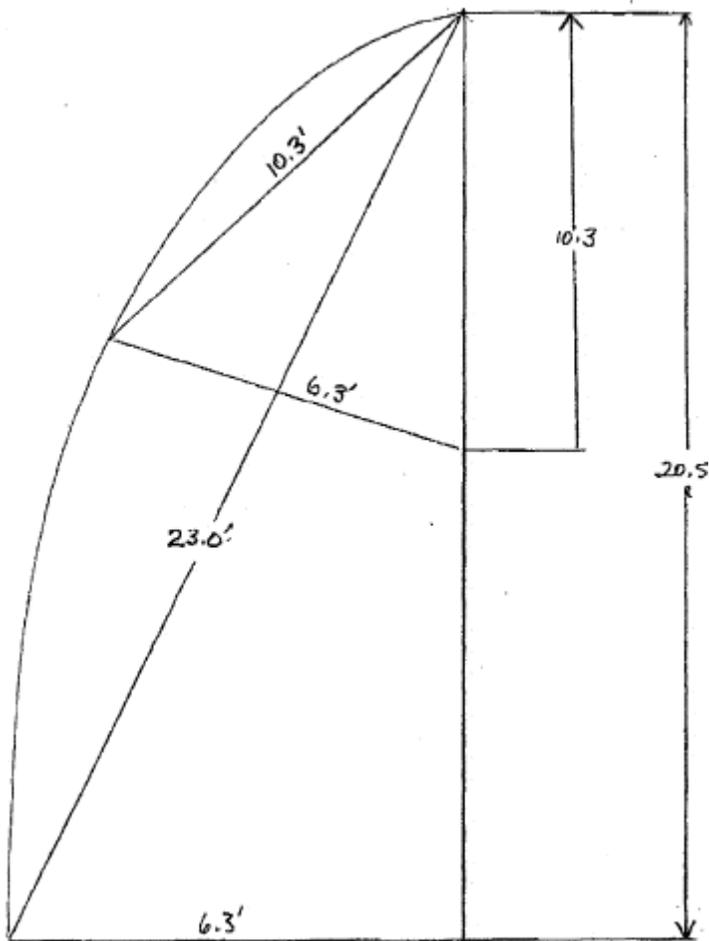
9.6.6 Jib battens are prohibited

### 9.7 Spinnaker

9.7.1 The spinnaker shall be made of woven nylon not lighter than .9 per sailmakers yard.

9.7.2 The spinnaker shall be a symmetrical sail.

9.7.3 Spinnakers will be measured in accordance with the following diagram. Dimensions shown are maximums.



9.7.4 The Luff, Mid-Girth and Foot measurements shall be taken with enough tension to eliminate wrinkles.

## 10. Required Equipment While Racing

**10.1** The following are required to be required to be carried while racing: one gallon bucket, bilge pump, paddle, USCG Approved wearable lifejacket for each person aboard, a USCG approved throwable flotation device with whistle attached , three pound anchor, and 50 ft. of minimum 1/4" line anchor line which shall not be used as a sail control line.

**10.2** All factory-placed fittings and equipment shall be onboard while Racing.

## **11. Permitted Equipment**

**11.1** Two permanently mounted compasses.

**11.2** Whisker pole or spinnaker pole shall be factory supplied. Overall length shall not exceed 6 Ft. 3 inches. Pole outside diameter shall be minimum 1.25 inches

**11.3** Two spinnaker turning blocks of the same type, size and mechanical advantage as originally specified, may be installed, one on each of the aft mooring eyes mounted on the deck.

**11.4** A spinnaker halyard, spinnaker sheets, twings and turning blocks, topping lift and foreguy are permitted for ICA regattas.

**11.5** One mechanical masthead wind indicator.

**11.6** Radios and timing devices.

**11.7** Safety devices and equipment to owner's requirement or to comply with local regulations, or fleet rules.

**11.8** Spinnaker storage bag(s), mainsheet restrainer, spinnaker pole storage loops and mainsheet bridle restrainer of any materials.

**11.9** A boom topping lift may be fitted. If fitted, the topping lift must be permanently attached at the masthead and to existing fittings near the end of the boom; and may not be tensioned while racing.

## **12. Prohibitions**

**12.1** Any equipment not specifically required or permitted in these rules and not provided on factory equipped standard yachts.

**12.2** Devices for altering the position of the mast at the mast butt or partners.

**12.3** Increase in mechanical advantage to sail control lines.

**12.4** Hiking straps.

## **13. Restrictions While Racing**

The following practices are prohibited while racing:

**13.1** The use of more than one mainsail, jib or spinnaker, or the alteration thereof, during the regatta. Damaged sails may be repaired or replaced with written permission from the race committee or jury.

**13.2** Notwithstanding the provisions of US Sailing Rules, the following actions are prohibited while racing:

- a. Sudden body movement forward or aft (ooching).
- b. Sudden repeated body movement athwartship (rocking).
- c. Repeated pumping of the mainsail, jib or spinnaker sheets to promote acceleration of the yacht.
- d. While tacking or gybing:
  - i., leaving the cockpit.
  - ii. crossing in front of the mast.
  - iii. standing on the rail or seat to induce “roll”.

**13.3** Hiking. Crews shall be seated with legs inboard of the rail, but upper body may lean outboard. When hiking in the sitting position, no part of the crew’s body lower than the middle of the thigh shall be outboard of the sheerline.

**13.4** Number of crew. The boat shall be raced with two or three people.