

Thistle Class Association SPECIFICATIONS

Article I - GENERAL

1. Specifications, however complete, cannot anticipate every possible situation which may arise. If a point is not covered therein or governed by the dictates of common sense, a ruling must be obtained from the Chief Measurer. In interpreting wording of obscure meaning, the Chief Measurer shall consider the intended meaning rather than any technical misconception which may be derived from the wording, and shall bear in mind at all times the basic principle of the Specifications, namely, to maintain the Thistle as a standard one-design class.

The Association reserves the right to declare ineligible any yacht which does not conform, to the spirit as well as the letter of these rules and Specifications.

2. Measurements and weights in the Specifications are in feet, inches, and pounds, in accordance with the standards of the United States Bureau of Standards.
3. To be eligible for registration, the hull, spars, rigging and sails must conform strictly throughout in respect to design and dimensions to the current Official Plans and Specifications of the Thistle Class Association. Drawings are not official unless signed by the Chief Measurer. The Association's Certificate of Measurement and Registration, obtained through proper certification of measurement and payment of registration fee, entitles eligibility to the Thistle Class, although that eligibility is subject to the requirements and limitations noted elsewhere.
4. The Official Number of a Thistle must be permanently displayed in the keel aft of the centerboard trunk, with numbers at least two inches in height for future identification, before a Registration Certificate can be issued.
5. The woods used in Thistle Class sailboats shall be of any species in which the weight per cubic foot, measured at 12% moisture content, is greater than or equal to that of the mahogany or teak commonly used.

Article II - HULL CONSTRUCTION

1. All hulls shall be made by builders approved by the Governing Board of the Thistle Class Association and shall conform to the Official Plans and Specifications.
2. Hulls shall be of composite construction, such as laminated wood construction known as molded plywood construction; reinforced synthetic resin construction known as fiberglass or plastic construction; and combinations of plywood and plastic construction.
3. The minimum thickness of hulls of laminated wood construction shall be 5/16", and the minimum thickness of hulls of reinforced synthetic resin construction shall be 1/8".
4. (1) Keel and stem moldings (Part 23 and Part 84) shall be 1/2" half oval in shape and may be constructed of CRM, wood or fiberglass, or a combination thereof. These moldings may be molded into the hull at manufacture or attached subsequently.
(2) Keel and stem moldings (Part 23 and Part 84) may be faired to the hull by fillets which may not extend beyond 5/8" from the center line on either side.

Article III - HULL WEIGHT

1. Hulls shall weigh not less than 300 pounds, stripped of all removable gear such as spars, sails, rudders, centerboard blocks, movable jib fairlead blocks, buoyancy tanks, standing and running rigging, etc.

2. Permanent fittings, such as bow plate, molding, chain plates, etc. may be included in the weight.
3. Buoyancy Tanks, lazarettes or lockers, and the like, which, because of the type of construction used, are integral (not removable) parts of the hull, shall not be included in the weight. Allowance for these must be made by subtracting from the gross weight of the hull of such construction, the equivalent weight of the standard plywood buoyancy tanks, lazarettes or lockers, and the like. For this computation, the nominal weight of two buoyancy tanks shall be 15 pounds, and the nominal weight of two lazarettes shall be 9 pounds.

Article IV - ALL-UP WEIGHT

1. The all-up weight of the Thistle shall not be less than 515 pounds.
2. The all-up weight is defined as the total weight of the hull, flotation tanks, lockers (if any), centerboard, rudder, tiller, mast, boom, mainsheet, and attached hardware and rigging. Not included are the sails, spinnaker pole, paddle, life preservers, anchor and line, and similar readily-removable items.

Article V - BUOYANCY

1. For hulls of laminated wood construction, securely fastened buoyancy of at least 700 pounds is required. Solid unicellular foam is required to provide buoyancy of not less than 400 pounds. Part of such apparatus giving positive buoyancy of not less than 150 pounds shall be within five feet of the bow, and a like part shall be within five feet of the stern. Inflated air bags may be used to supplement the positive flotation.
2. Hulls of reinforced synthetic resin construction must use one bow and two side seat air tanks as integral parts of the hull. Required stern buoyancy may be a solid unicellular foam block or a structural air tank typical of bow and side tank construction. Buoyancy of at least 750 pounds is required with 200 lbs. of buoyancy within 5 feet of the bow and a like amount within 5 feet of the stern. Of the total 750 lbs., a minimum of 500 lbs. positive buoyancy must be provided. This positive buoyancy if enclosed in the air tanks shall be unicellular foam or an approved equivalent. If positive buoyancy is installed outside the confines of the air tanks, only securely-fastened unicellular foam may be used. Inflated air tanks shall not be permitted.

Article VI - SPARS

1. Masts shall be made of either wood or aluminum alloy.
2. The cross section of the wood mast shall be essentially a pear shape 2-1/2"X3-3/4" as shown on the Official Plans.
3. The cross section of the two allowable aluminum masts shall be essentially as follows:
 - a. Pear shape 2-1/2"X3-3/4" typical of section shown in Official Plans;
 - b. Pear shape 2-1/2"X3-1/8" typical of section shown in Official Plans.
4. Mast rigging and dimensions shall conform to the Official Plans and Specifications.
5. Masts shall not weigh less than 30 pounds completely rigged with halyards, shrouds, stays, and spreaders.
6. Masts shall not have a center of gravity lower than 10'-0" from base (horizontal plane of sheer at mast position) of the mast.
7. Aluminum masts shall be fitted with positive flotation to provide self-buoyancy of the mast. Parts and materials list to be amended to make part #61 Halyard Winch optional in wood and 3-3/4" aluminum masts; not allowed in 3-1/8" aluminum masts.

8. Spreader tubing produced and sold to the Class shall be made from a corrosion-resistant metal with a nominal diameter of 0.375" and a minimum wall thickness of 0.060". It shall have a minimum yield strength of 125,000 PSI. Spreader tube length shall have a tolerance of +1" -1/2".
9. Bolts on mast step are not allowed as a means of changing mast bend, rake, etc.
10. The boom shall have a minimum weight of ten pounds with end fittings only. The top, bottom and side walls of aluminum extrusions shall not vary by more than 0.005" between the minimum and the maximum thickness. The nominal wall thickness shall be 0.075".

Article VII - DECKS

Thistles may not have permanent decking intended or designed to shed water. Detachable canvas spray hoods may not be used while racing.

Article VIII - RIGGING AND EQUIPMENT

1. The spinnaker pole must be used and connected to the mast when the spinnaker is set and must be used on the side opposite to that on which the boom is carried. The length of the pole shall be limited to six feet over all, including the fittings.
2. Rigging shall be essentially as shown on the Official Plans. No freak rigs shall be permitted. Permanently-bent masts, rotating masts, mast or boom bending devices, (except mast butt shims up to 3/16" and boom vang) and other contrivances will not be tolerated. Changing of mast butt shims while racing is not permitted.
3. Hiking straps are permitted. (See Measurer's Ruling No. 42.)

Article IX - FITTINGS

Some of the items of official hardware, as shown in Plans and Specifications, are required and some are optional. See Parts and Materials List for options.

No rigid device may be attached to the bow of a Thistle which projects forward of the stem molding (Part #84) more than 3/4". No rigid device which projects beyond the stem molding (Part #84) may be mounted more than 15" below the top of the stem.

Article X - REEFING

The capability of reefing a Thistle shall be optional. The luff and leach must be reefed approximately proportionally. Lowering of the head of the sail and positioning of the new tack and clew near the boom may be accomplished by any means.

Article XI - SAILS

1. Thistles may carry mainsail, jib, and spinnaker, as shown in the current Official Sail Plan. No other sails shall be permitted.
2. Each sail used must have sewn to it an official "Royalty Paid" label. Labels for sails now in use can be purchased from the Secretary-Treasurer. Labels for new sails should be furnished with sails by the sail-maker. In either event, the cost to Association members is ten dollars each.