

UMS Measurement Trim Condition

The same measurement trim condition/equipment loading is used for IRC, ORC and ORR for afloat measurement (incline test, freeboards, overhangs) and weighing.

The below details the items included/excluded per IRC Rule para 17.1, ORC International Measurement System para B4 and ORR Rule Book para 5.02.

Note: Afloat measurement is to be done with the boat in the final racing configuration. Any and all modifications, equipment addition/removal, mast/boom/rigging changes MUST be completed BEFORE afloat measurement.

Measurement Trim - Equipment/gear included:

1. Internal ballast/corrector weights, if any, securely installed.
2. Batteries securely installed.
3. Fixed and/or essentially permanent interior accommodation, hatch covers, floor boards installed.
4. Fixed and/or essentially permanent machinery, electrical and plumbing systems installed.
5. Outboard motor, only if used for yacht propulsion (i.e., the yacht does not have an inboard engine), when it is stowed aboard in appropriate stowage installed with center of gravity abaft the mast.
6. Mast, boom, spinnaker pole and/or sprit, if any, fully rigged as for racing.
 - Masts raked aft to the limit of their adjustment.
 - Spinnaker pole not on board if not used for inclining.
7. Boom running rigging and any vang, fitted complete as for racing.
 - Booms secured at the low points of P and PY.
 - Booms horizontal and on the centerline.
8. Standing rigging / fittings, fitted complete as for racing, attached in their normal positions.
9. Running rigging and fittings, fitted complete as for racing.
 - All halyards as for racing.
 - Running rigging, halyards, lifts forward of mast taken to mast foot and hauled tight.
 - Running rigging abaft the mast taken to their aftermost position and hauled tight.
 - All halyard tails taken to their normal working positions.
 - If halyard weight varies significantly along its length, the tail shall be on the cabin floor during inclining, with the halyard fully hoisted and attached to a light messenger line.
10. Rudder, wheel/tiller and steering gear, fitted complete as for racing.
11. Keel and any bulb, fitted complete as for racing.
12. Centerboard(s) and drop keels fitted and fully raised.
 - If locked when racing, it shall be so locked and the locking device shall be in place.
13. Fixed electronics, instruments, compasses, lights, antennas, masthead devices installed.
14. Pulpits, stanchions and lifelines fitted.
15. Hydraulic systems, including hydraulic tanks, **FULL**.
16. Mattresses / cushions (**DRY**) and permanently installed table, doors in their normal position.
17. Permanently installed stoves, heaters or other electrical devices fitted.
18. DSS appendage completely retracted with no part outside the hull.
19. Bilgeboards fully raised.

Measurement Trim - Additional items to be checked:

1. **ALL** toilets, bowls, sinks, etc. **DRY**.
2. **ALL** bilges, sumps and other possible areas where liquid may collect **DRY**.
3. **ALL** lockers, drawers, cabinets, refrigerator/freezers, storage areas, shelves, etc. **EMPTY**.

Measurement Trim - Equipment/gear excluded:

1. **NO** crew or personnel on board.
2. **NO** liquid in any tank (except hydraulic systems as above) or in any voids in the keel or any other appendage.
 - Fuel tank to be as **EMPTY** as possible (recommended) or **FULL**.
3. **NO** sails, including storm and emergency sails.
4. **NO** spare/extra sheets, guys or other running rigging, except as listed above.
4. **NO** blocks, winch handles, etc. or other portable deck, rig or sail handling equipment.
5. **NO** portable safety or emergency gear of any type or category, including fire extinguishers, life raft(s), emergency tiller, jack lines, etc.
6. **NO** decorative throw or sleeping pillows or any other bedding, towels, etc.
7. **NO** cooking or eating utensils: pots, pans, plates, glasses, cutlery, etc.
8. **NO** compressed gas bottles: propane/LPG. CNG, etc.
9. **NO** portable heaters or dehumidifiers.
10. **NO** food or stores.
11. **NO** tools, spares or stores.
12. **NO** clothing or personal effects.
13. **NO** miscellaneous portable equipment or gear, books, navigation tools, etc.
14. **NO** anchors, chains or rodes, of any type.
15. **NO** fenders, dock lines, mooring lines or any other cordage.
16. **NO** outboard engines unless used as the sole means of yacht propulsion as above.
17. **NO** portable fuel containers.
18. **NO** dodger and/or bimini canvas or frame or any other canvas items.

Additional Requirements for the Measurement

Anticipate the need to provide the following items. Specifics may vary depending upon location and other factors:

1. At least one able-bodied individual/boat rep to be responsible for boat movement, if necessary, and assist with incline set-up.
2. A dinghy or work boat with low freeboard.
3. 4 sheets and a winch handle.

The boat must be in a well protected location for the measurement.

Dry, calm conditions are required without wave action or current.