



# HARBOR 20 BOAT WEIGHT CERTIFICATE

Conformance to the Class Bylaws

Date 3/12/2016

Owner Nik Froehlich

Sail No. 109

## Boat Equipment Check List

- 3 lb. Anchor & 50' x 1/4" Anchor line
- 2 Gallon Bucket
- Paddle 36" min length
- 2 Life Jackets

	Date	Boat Weight	Bow Up
1	3/12/16	2082	.1°
2			
3			

## Attachments

Weight Location Diagram

Appendix A of Class Bylaws

Appendix B of Class Bylaws

Signature

Class Measurer or Fleet Measurer

3/12/2016

Date



# WEIGHT DISTRIBUTION DIAGRAM

3/12/2016

Date

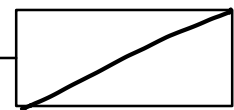
Nik Froehlich

Owner

109

Sail No.

Appendix B



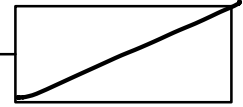
+0.2° - -0.9°



3.b 20%

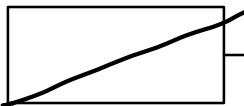


3.c 20%

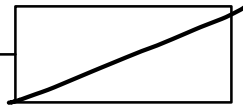


Bilge sump  
No lead

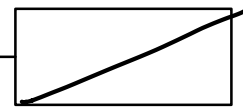
3.a 40%



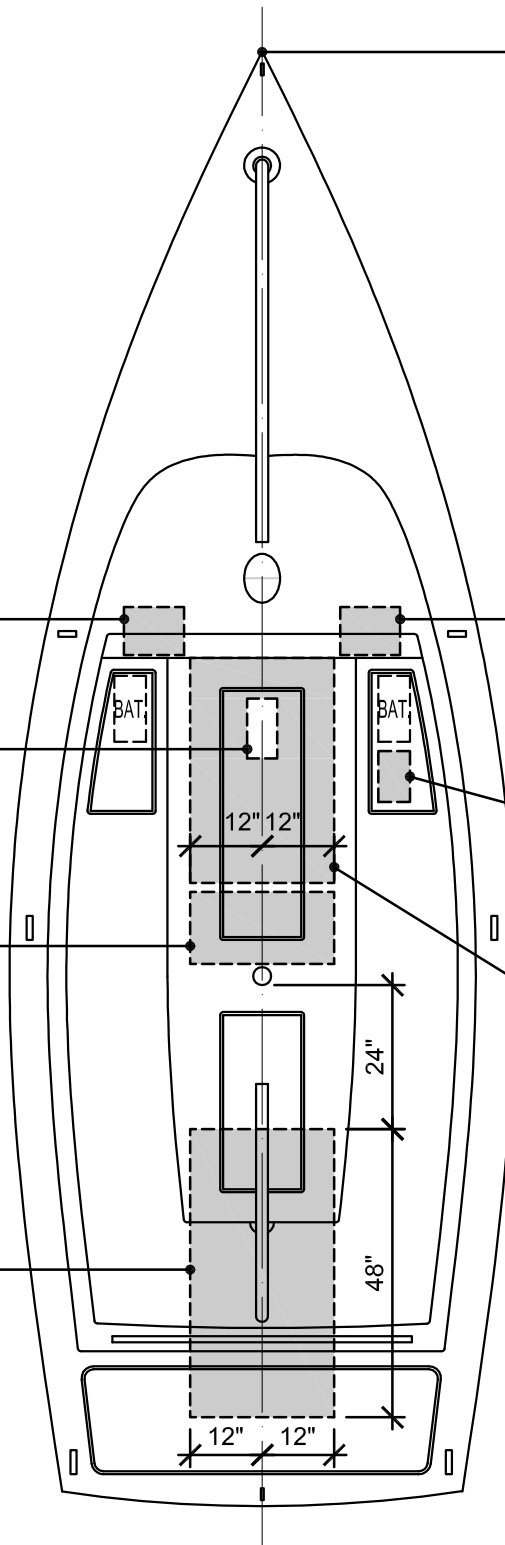
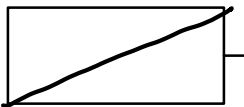
1 30 lbs.



2 max. 40 lbs.



3.d 20%



Signature Class Measurer  
or Fleet Measurer

3/12/2016

Date

## APPENDIX A

### Harbor 20 Corrector Weight Requirements

Weights must be added to any Class Yacht weighing under the class minimum of 1950 lbs. The weight shall be added as described herein and as shown on the diagram included in this Appendix. The weight added shall be of solid material such as lead, diver's weights, barbell plates or similar. The weights shall be permanently attached. **No corrector weight shall be placed in the bilge sump.** All corrector weights referred to below are plus or minus 1 pound, as long as the total corrector weight does not result in a total boat weight of less than 1,950 pounds.

**NOTE: Any compensation weight required per Class Bylaw III.E.3 must be in place prior to adding weight as prescribed in this Appendix.**

*Class Bylaw III.E.3. Added corrector weight of lead or other approved material will be substituted in the absence of electric propulsion devices. Such weight shall be permanently fastened with GRP or mechanical fasteners. For auxiliary motor and batteries, 70 pounds is to be permanently installed on each of the platforms under the seats and 20 pounds is to be permanently installed in the lazarette against the transom.*

1. If the boat has the lithium battery set-up with one lead acid battery, 30 pounds of corrector weight shall be attached in the seat compartment just aft of the lithium battery.
2. If after addressing item 1 additional weight is needed, up to a maximum of 40 pounds shall be attached under the cockpit sole aft of the forward seat bulkhead and at least 12 inches forward of the barney post, and within 12 inches of the centerline.
3. If after addressing items 1 and 2 additional weight is needed, it shall be distributed as follows:
  - a. 40% is to be attached under the cockpit sole forward, and within, 12 inches of the barney post and within 12 inches of the centerline.
  - b. 20% is to be attached to the port forward seat bulkhead, either front or aft, at least 12 inches from the centerline and at least 12 inches below the hull/deck joint, or in the location where a cooler would be (for boats without coolers).
  - c. 20% is to be attached to the starboard forward seat bulkhead, either front or aft, at least 12 inches from the centerline and at least 12 inches below the hull/deck joint, or in the location where a cooler would be (for boats without coolers).
  - d. 20% is to be attached in the area defined as being between 24 and 72 inches aft of the barney post within 12 inches from the hull centerline.

## **APPENDIX B**

### **Water Line Level Adjustment**

A Class Yacht, with all her equipment in sailing position, floats 0.9 degrees bow up, as measured by the cockpit sole, and is said to be “floating on her lines”. “Lines” are measured on the forward section of the cockpit sole using a 4-foot long digital construction level with an accuracy of 0.1 degree resting on identical spacer blocks. The measurement is to be performed by and at the discretion of the Class or Fleet Measurer.

Harbor 20 boats with lines exceeding 0.2 degrees plus or minus of 0.9 degrees bow up require adjustment to be considered a Class Yacht. Adjustment can be made by the addition of weights and/or the readjustment of weights added per Appendix A. Line adjustment and final measurement is to be observed and recorded by the Class or Fleet Measurer.

## Next Steps- Complying With Weight Standards

If your boat meets the Weight Standards of a minimum of 1950 lbs., you will receive a Weight Certificate that is signed by the Fleet Measurer. No further action is required. If your boat weighs less than 1950 lbs, your boat does not meet the Weight Standards. A Draft Weight Certificate will be provided which includes a diagram of your boat, how much lead must be added and where the lead needs to be permanently installed. There are three options for adding weight and having your boat certified which are listed below. Upon certification, you will receive your final Weight Certificate. Please be advised that "A" Division will need to be certified by April 1, 2016 "B" Division will need to be Certified by June 1, 2016 and "C" Division will need to be certified by September 15, 2016 to qualify for scoring in Harbor 20 racing events.

There are three options for final certification:

**1. Sign up for a Re-weigh on the Harbor20.org Website**

You purchase and install the lead weight as specified and permanently affix it to your boat. Sign up for a re-weigh date and time on the Harbor20 website.

*Phil Thompson is available for those who want assistance with purchasing lead and/or installation. He can be reached at 714-329-1995. This is a fee for service, agreed upon between the boat owner and Phil.*

**2. Verify Lead and Observe Installation- No Re-Weigh Required**

Phil Thompson is available to verify the weight of your lead and observe your installation. Upon Phil's verification of compliance, he will provide the necessary information to Michael Volk, who will issue your final Weight Certificate. If you choose this option, you do not have to re-weigh your boat.

**3. Lead Provided and Installed- No Re-Weigh Required**

Phil Thompson is available to purchase and install the lead as specified. He will provide the necessary information to Michael Volk, who will issue your final Weight Certificate. If you choose this option, you do not have to re-weigh your boat.

For questions, please contact Michael Volk  
Michael@mvaarc.com 949-463-5900