

# **Storm Surge Anchor System Guidelines**

#33060 Monohull, #33060S Monohull-Safety System #33070 Multihull, #33070S Multihull-Safety System

Please follow these installation guidelines to ensure the Storm Surge Anchor System will function safely and properly.

### Recommendations

1. The Storm Surge Anchoring System is designed for 3 anchors. We do not recommend using any less or more than 3 anchors. Size the anchors appropriately for your boat. Size the chain appropriately for your boat. It is always best to error to the heavy side when selecting anchors.

2. We recommend using all chain from the anchors to the triple bridle plate (with 3 shackles), connecting the chain directly to the shackles. In a storm, the anchors may move and may not maintain a sufficient angle between the other anchors, allowing the chains to rub together. If rode was used from the anchors, chafe could result with potential rode separation.

3. Use at least a 7/1 scope on your anchor chain/rode. Scope is the ratio of the total distance from each anchor (including the rode) to the boat, in relation to the height of the bow above the bottom of the body of water. If the boat will experience large waves, a scope greater than 7/1 is recommended; a larger scope means better holding power. Attach each chain to a shackle on the bridle plate using at least a 3/8 inch shackle, which is large enough to go around the body of the 5/8 inch shackle on your system.

4. Use varying lengths of chain to each anchor. This is in case the anchors drag and align together. The varying lengths of chain will help to keep the anchors independent and untangled.

5. On the boat side of the system, we recommend using nylon rope. Nylon rope has superior stretch characteristics which will minimize impact loading on your boat and the anchor gear. Double braided nylon is the best choice because the outer layer can act as a layer of chafe protection while the inner core provides the majority of strength. The bridle plate is designed to maintain separation of the lines to the boat at the plate, minimizing chafe on the lines.

6. Use properly sized mooring lines to attach your boat to the system. See your local chandlery for suggestions based on local conditions. The Storm Surge Anchor System is designed to accept up to 1 inch lines.

7. Use cleats sized correctly to your line size. We do not recommend placing an eye-loop over the cleat because the eye-loop relies on the quality of the splice to hold your boat. Always use a cleating hitch on a cleat.

8. Use Taylor Made Perimeter® or Taylor Made Rubber chafe guard on your boat at all potential line chafe areas. Chafe at the lines on a boat is a common reason for boat loss from moorings during storm conditions.



9. Use a Taylor Made Sur-Moor<sup>TM</sup> traditional or T $3C^{TM}$  style mooring buoy for setup only. The intent of the Storm Surge Anchor system is to maintain the boat safely at anchor during storm conditions so it is best to remove the mooring ball once the system is in place (diagram A). Additional hardware means more variables and increases the chance of fouling equipment. Do not add any other hardware to the system other than is listed in this guideline.

10. All shackle pins must be tightened securely. Tighten all shackles with proper sized wrenches.

11. Seizing (mousing) the shackle pins is a good secondary precaution against pin separation. Seize all pins securely with monel, (nickel-copper alloy) corrosion resistant seizing wire. When seizing check for potential rub points that will cut or crush the seizing wire. Make sure the seizing wire is wrapped around the shackle or swivel in an area that will not cut or crush the wire.

12. If you have purchased the safety shackle version make sure the nuts are tightened with the proper size wrenches. Insert the cotter pins and bend both sides of the pin ends.

13. Greasing the pivot pin on the swivel will help insure longer life of the swivel.

14. Perform a trial setup of your Storm Surge Anchor System before a storm to work out all of the variables.

#### <u>Setup</u>

Conditions in anchorages vary tremendously. Wind speed, wind direction, wave height, wave direction, are all variables that need to be taken into account before setting up your Storm Surge Anchor System.

If the wind direction is known and predicted to be constant then set the anchors at the 9 O'clock, 12 O'clock, and 3 O'clock positions with the boat at 6 O'clock. Your longest anchor chain and largest anchor should be at the 12 O'Clock position.

If the wind direction is not known, then position the anchors at 10 O'Clock, 2 O'clock, and 6 O'Clock.

In either case, set the anchor system so that it is about 5 feet above the seafloor. If the system is too low it gives more opportunity for chain to line interference problems. Too high leaves little nylon line length to absorb the impact loads of wind and waves. Adjust according to local conditions, to the type/size of your anchors, and length of chains.

Set up your system well before the storm arrives.



# **Installation Diagrams**

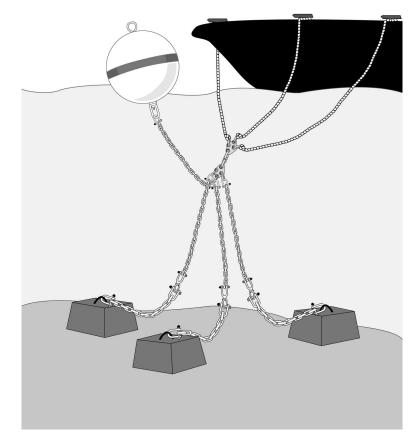


Diagram A - Multihull system shown. The mooring buoy should be removed after setup is complete.

## Safe Working Loads

Swivel	8,000 lbs
Shackles	6,500 lbs
Galvanized Bridle Plate	12,000 lbs

### \*\*Never exceed the safe working load of the system components!

The information in this document is meant as a guideline only. The function of the Storm Surge Anchor System is highly dependant on the methods of installation and Taylor Made Products cannot be responsible for an improperly installed system.. Conditions in anchorages vary tremendously and Taylor Made Products cannot be responsible for load conditions that exceed the safe working load limits of the system shown above. The Safe Working Load of the system must never be exceeded for proper function of the Storm Surge Anchor System.



# **Warranty Information**

### LIMITED WARRANTY

This product is warranted to be free from defects in material and workmanship for thirty (30) days from the date of original purchase of the product provided it was not subject to accident, abuse, or improper use.

THE USER SHOULD CHECK THE ANCHOR SYSTEM BEFORE EACH USE TO BE SURE THAT IT IS SECURE AND HAS NOT DETERIORATED TO A LEVEL WHERE IT MAY FAIL UNDER STRESS.

A copy of the original sales receipt, documenting the date of purchase, must accompany all warranty claims. Obligation under this warranty is limited to repair, replacement, or credit for the defective product at our discretion. Taylor Made Products reserves the right to request return of the product for inspection. No return merchandise will be accepted without prior authorization. Taylor Made Products shall not be liable for indirect, special, incidental, or consequential damage or penalties and does not assume liability of purchaser or others for injury to persons or property.

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