

MWPHRF Simplified Measurement Procedures

Tools Required

It is recommended that the measurer have a good quality 100-foot tape measure with a loop fitting that can be connected to a halyard shackle. The tape should be either metal or fiberglass backed so that it does not stretch. A plumb bob and a level are also useful.

All measurements should be made to the nearest 0.1 foot.

Rig

The purpose of rig measurement is to help identify the boat model and, for production boats, to determine whether the rig has been modified. Therefore, the measurements do not need to be as precise as required in other measurement-based rules.

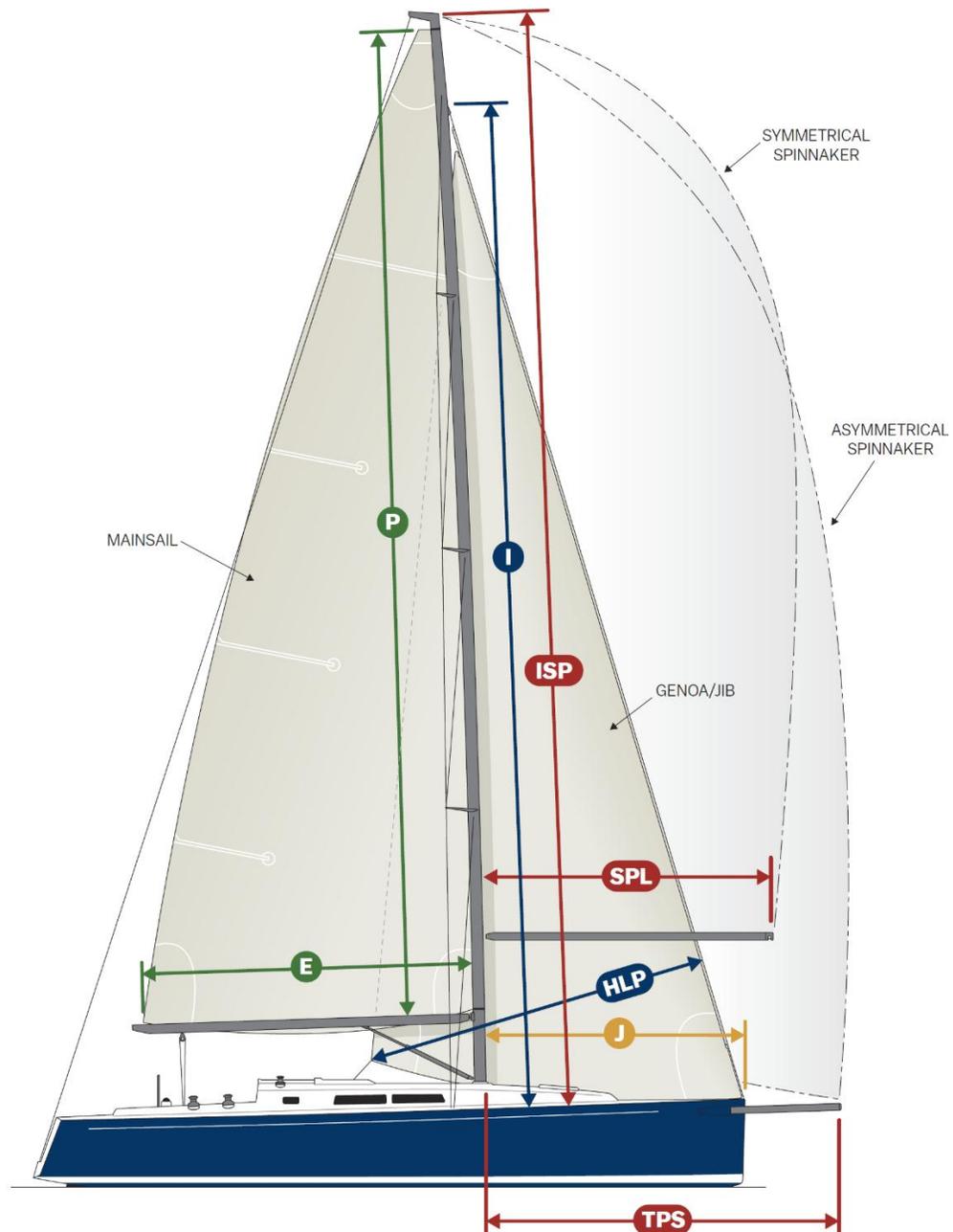


Table 1

Rig – Dimensions

Acronym	Definition	Measurement
I	Intersect (of Forestay and Mast)	Taken from the Sheer Line to the intersect of the Forestay and the forward edge of the Mast, i.e.: the highest point of jib/genoa hoist. Also called IG for Intersect Genoa.
ISP	Intersect Spinnaker (of Halyard and Mast)	Taken from the Sheer Line to the intersect of the Spinnaker Halyard and the forward edge of the Mast, i.e.: the highest point of spinnaker hoist.
J	Adjacent (side of Forward Triangle)	Taken from the forward edge of the Mast at Deck Level to the intersect of the Forestay (as a straight continuous line) and the Deck.
P	Perpendicular (to Sheer Line)	Taken from the top edge of the Boom (projected forward to the Mast) to the highest point of Hoist for the Mainsail. A permanent band of contrasting color must mark this height on the Mast.
E	Extension (from Mast for Mainsail)	Taken from the aft edge of the Mast to the furthest aft extension of the largest Mainsail. A permanent band of contrasting color must mark this location on the Boom.
SPL	Spinnaker Pole Length (for Symmetrical Spinnaker)	Taken from the forward edge of the Mast to the out-board edge of the Spinnaker Pole, *not* the tack point.
TPS	Tack Point Spinnaker (for Asymmetrical Spinnaker)	Taken from the forward edge of the Mast to the furthest forward *connection* point on the bow sprit or prod for a Spinnaker Tack.
	Sheer Line (for I / IG and ISP)	A horizontal line at the intersection of the Mast and the Deck, excluding cabin tops or deck equipment.
	Deck Level (for J)	The Deck surface at the point of measurement, e.g.: for J, where the surface and the Forestay intersect on the boat.

Sails

Sail measurements are normally provided by a sail maker.

MWPHRF requires measurements for:

- the **Mainsail**,
- the largest **Headsail**
- the largest **Symmetric Spinnaker**
- the largest **Asymmetric Spinnaker**

If a sail maker certificate is not available, these sails may be owner measured.

If a Large Roach Headsail is carried, it must be measured both as a headsail and as an asymmetrical spinnaker.

When measuring sails, sufficient tension should be applied to remove all wrinkles but not to stretch the cloth.

Diagrams follow explaining the measurements required.

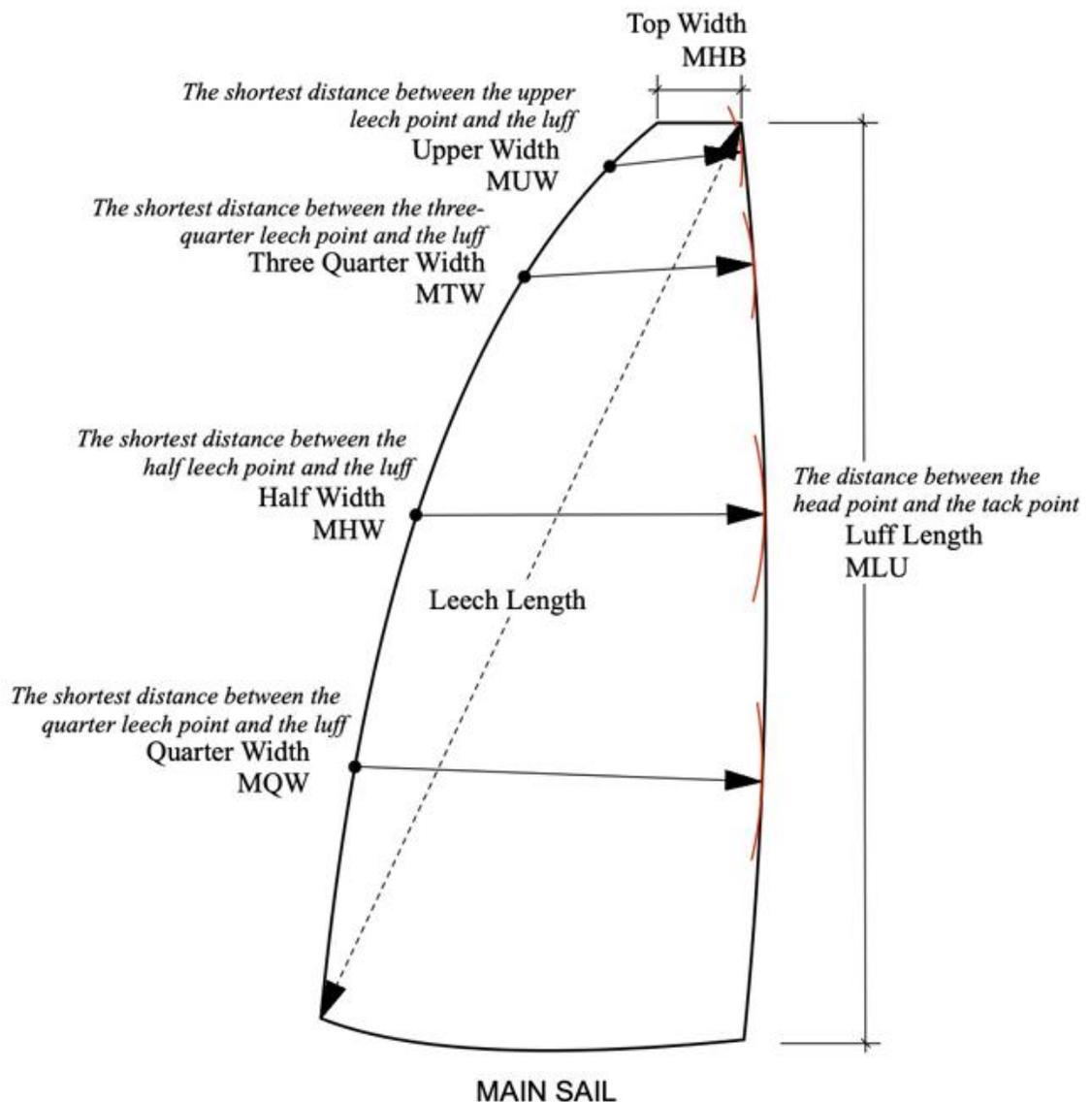
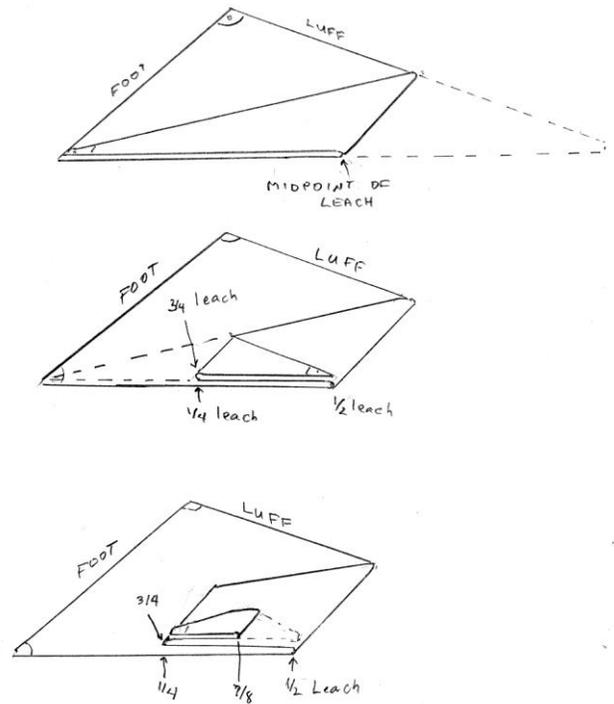
Further information may be found at:

ORC How to Measure
Spinnakers -
<https://www.youtube.com/watch?v=GL6UHyQHW0M>

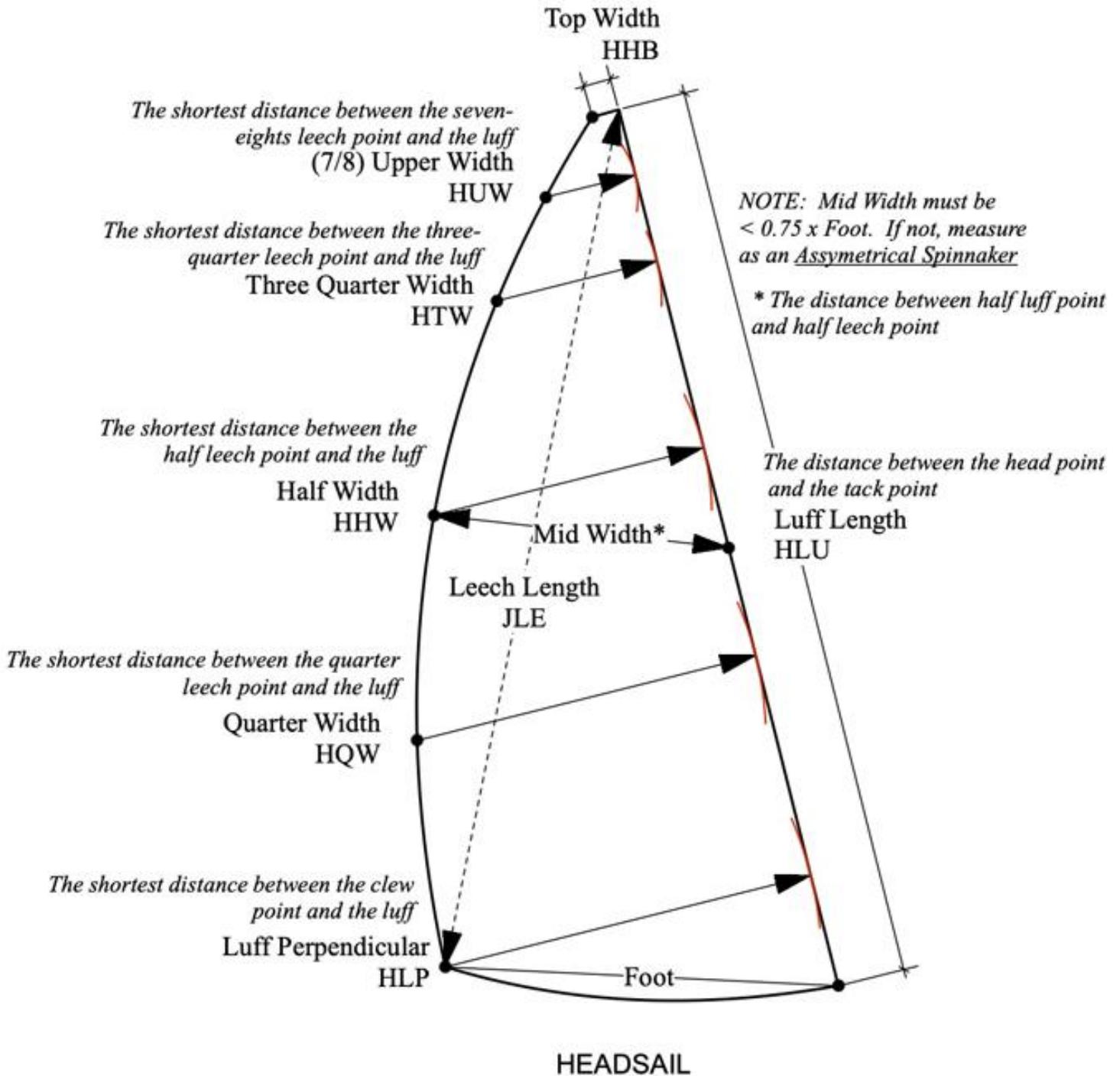
ORC How to Measure
Headsails -
https://www.youtube.com/watch?v=A49sk_OpCoQ

ORC How to Measure Mainsails -
<https://www.youtube.com/watch?v=8dH0AXixNfU>

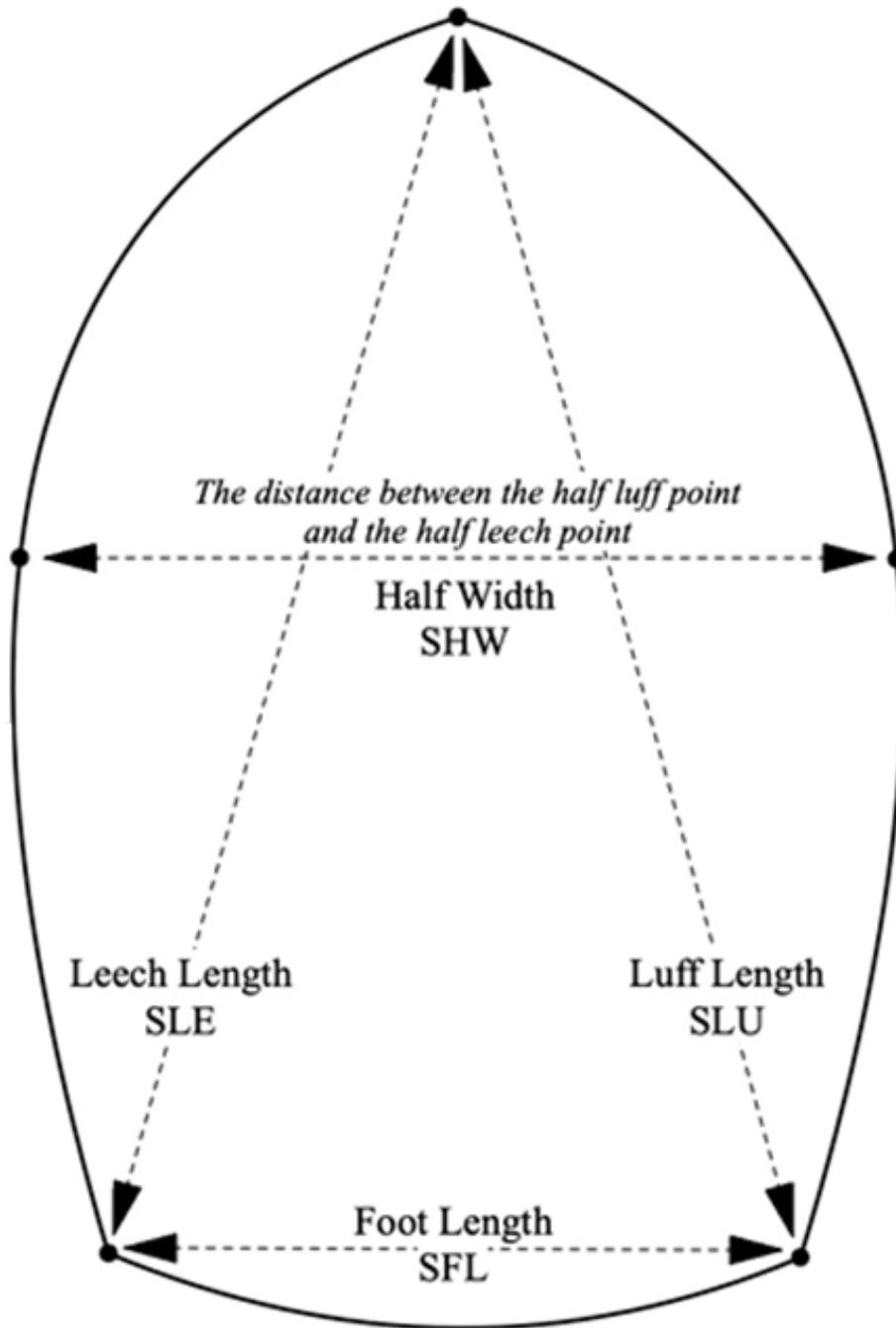
Mainsail: Measure the Main Headboard (**MHB**), Upper (**MUB**), Top (**MTB**), Half (**MHB**), and Quarter Widths (**MQB**). To find the measurement points, fold the head to the clew (using the corner where the leach intersects the headboard) to locate the half leech point, then fold the head to the half leech point to locate both the one-quarter and three-quarter leech points. Mark these points on the leech. Then fold the head back to the one-quarter leech point to locate the seven-eighth leech point. Measure the widths by measuring from the leech point to the nearest point on the luff of the sail including the bolt rope.



Headsail: The Headsail Luff Perpendicular (**HLP**) is measured from the clew to outside edge of the sail including any luff tape. The perpendicular line can be found by holding the end of the tape at the clew, then determining the minimum distance to the luff by swinging the tape in a small arch. The Headsail Half Width (**HHW**) is only required for a Large Roach Headsail.

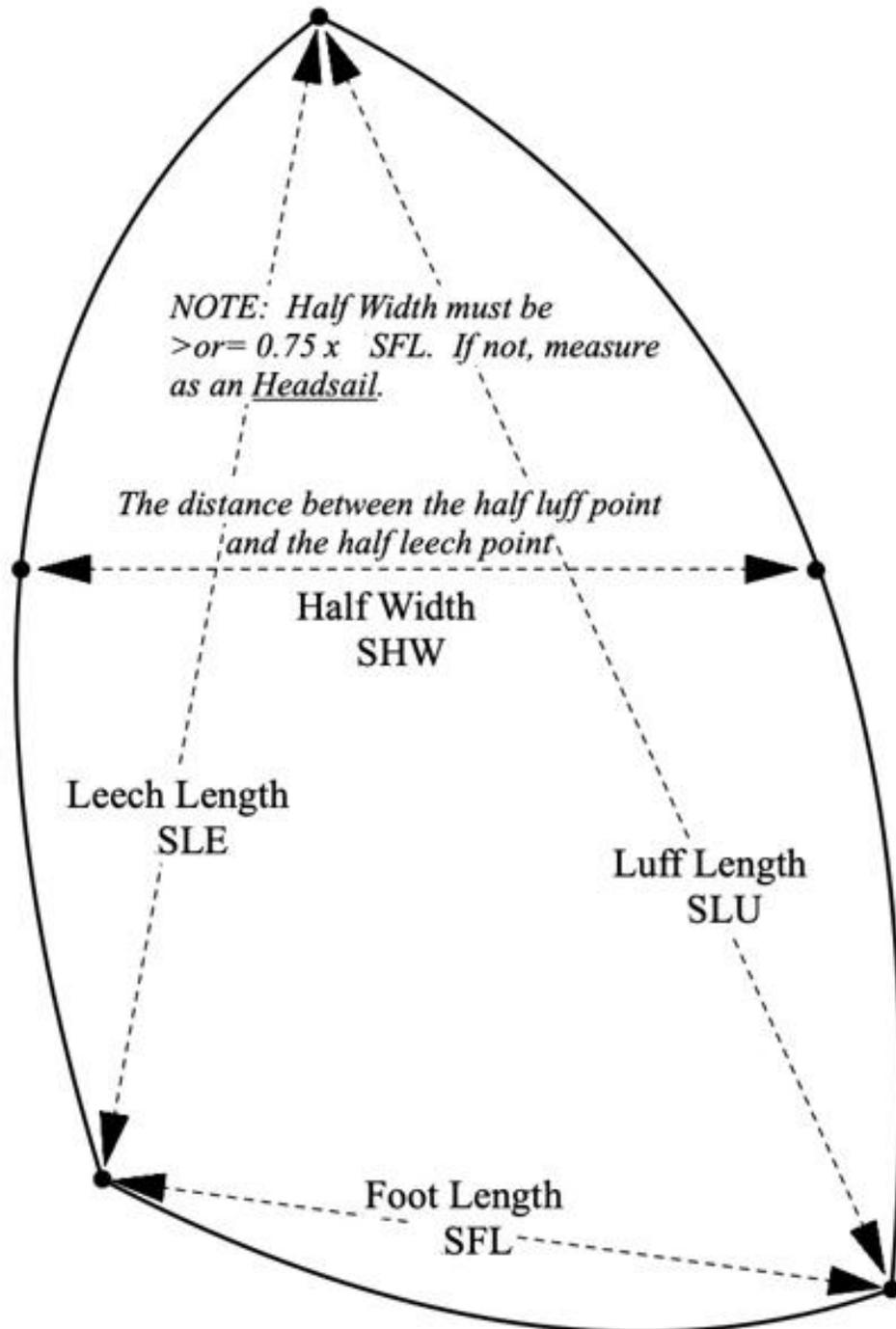


Symmetrical Spinnaker: The Spinnaker Luff (**SLU**) is measured along the edges of the sail from the head to the foot. The Spinnaker Leach (**SLE**) for a Symmetrical Spinnaker should be equal to SLU. The Spinnaker Half Width (**SHW**) equidistant from the head. The Spinnaker Foot (**SFL**) is the shortest path on the surface of the sail connecting the tack and clew.



**SYMMETRIC
SPINNAKER SAIL**

Asymmetrical Spinnaker: Both the Spinnaker Luff and Leech (**SLU** and **SLE**) are measured from head to foot. The SLU is measured from Head to **Tack**, the SLE is measured from Head to **Clew**. The Asymmetric Half Width (**SHW**) is measured by determining the mid points of the luff and leech and the width is the shortest path connecting those two points. The Spinnaker Foot (**SFL**) is measured in the same fashion – that is, the shortest path connecting the Tack and Clew.



**ASYMMETRIC - CODE ZERO
SPINNAKER SAIL**