

## Mast Rake (January 02) - 25/06/2004

Setting up for 1° and 2°

There have been a number of questions in the Forum regarding mast rake. I did write about this February 02, but it may be helpful to have it in this Stop Press section as well. I have consulted Atlantic Spars who are expert mast makers and riggers based here in Dartmouth and we have concluded that all Sadlers should be set up at about 1° rake. Starlights have always had more rake than this and were originally set up at about 2°.

There is a simple formula to work out rake, being "I" (working height of mast above sheer line, approx. to top of genoa sheave) , 60 = rake for 1°. For Starlights, you should double this dimension to give 2°. Having suspended a weight on the end of the main halyard, measure the distance from the aft face of mast to the halyard, just above deck level.

Results are as follows:

- Sadler 26: I = 9.45 m, 1° rake = 16 cm
- Sadler 29: I = 11.43 m, 1° rake = 19 cm
- Sadler 32: I = 12.11 m, 1° rake = 20 cm
- Sadler 34: I = 13.05, 1° rake = 22 cm
  
- Starlight 35: I = 13.7 m, 2° rake = 46 cm
- Starlight 39: I = 15.2 m, 2° rake = 50 cm

The above figures assume mast set up for windward sailing with a small amount of pre-bend if required. Do check this with your sailmaker and as a general guide, pre-bend would be 1" to 2" on a Sadler 32 and 3" to 4" on a Starlight 39.