



SAIL POLE END FITTING COLLARS

Proper attachment of Ultra style end fittings to carbon & aluminum tubes. Forespar® Ultra Series composite ends requires careful attention to fasteners style and placement. The Ultra material is extremely strong and durable at half the weight of their aluminum counterparts but it requires the use of pan head machine screws for proper attachment to carbon or aluminum tubing, do not use rivets or glue.

Drill and tap the holes. Placement of the fasteners is also critical to the strength of the attachment to the pole, especially when an adapting collar (i.e., 2' ends on 2.5" tube) is used. The SS PHMS (pan-head machine screws) must be placed so they engage the adapting collar and the core of the end fitting to the tube. The fasteners for the end fittings should be placed back from the end of the tube onto the (flange) collar on 2.5" and 3.5" sizes and the basic ends without collars on 2" and 3" sizes. Use a minimum of (4) 10-24 PHMS on ends 2.5" and 3", and (5) on 3.5" to 4". (6) or more -20 PHMS may be needed on larger diameter tubes.

On carbon tubes, place fasteners back from the end of the tubes. Be careful not to drill into the spring/piston housing on either style end (UTR & UXP) and not to hit the "set screws" on the sides (left and right side of the core) of the UTR style ends. Be sure to offset your holes pattern to clear these components and double check before you drill and tap!

On carbon tubes, be sure not to over tighten, stress, or crack the fiber laminate. If the carbon tube does not fit to the end fittings tightly, wrap 2" masking tape around the core until you achieve a snug fit.

Forespar®

22322 Gilberto Rancho Santa Margarita, CA. 92688

Ph: 949-858-8820 Fax: 949-858-0505

www.forespar.com sales@forespar.com

www.facebook.com/foresparsailing www.twitter.com/foresparsailing