



INSTALLATION GUIDE

Congratulations on the purchase of your Alado Roller Furler!

For over three decades, sailors around the world have relied on Alado Systems in all sailing conditions.

Your new Alado Roller Furler was engineered to offer you trouble free performance for many years to follow.

Installation is simple and requires no special tools or training.

Please take a few minutes to read this Installation Guide to ensure that your installation will go safely and smoothly.

And if you do have questions or need assistance your Alado USA team is here to help you.

Lifetime Warranty – Alado will replace any part that is defective due to workmanship or material. Shipping charges will apply 12 months after initial Alado unit purchase.

Contact us:

orders@aladofurler.com

aladofurler.com

Tel. 443-810-8366



TABLE OF CONTENTS

<u>FOIL AND BUSHINGS CHECK LIST</u>	<u>4</u>
<u>COMPONENTS CHECK LIST</u>	<u>5</u>
<u>MATERIALS REQUIRED CHECK LIST</u>	<u>6</u>
<u>TOOLS CHECK LIST</u>	<u>6</u>
<u>INSTALLATION</u>	<u>7 TO 14</u>
<u>HALYARD MANAGEMENT</u>	<u>15 & 16</u>
<u>RAISING THE GENOA</u>	<u>16</u>
<u>INSTALLING THE ROLLER FURLING</u>	<u>16 & 17</u>
<u>USING THE ROLLER FURLING</u>	<u>18</u>



ADD USER NOTES HERE



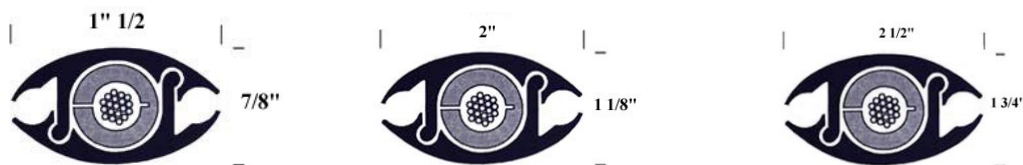
FOILS & BUSHINGS CHECK LIST



Use this guide to select your Alado System

Model	A0	A1	A2	A3	A4	B1	B2	B3	B4
5' Foils	5	6	7	9	10	10	12	14	16
2.5' Foils	2	2	2	2	2	2	2	2	2
Total Foils	7	8	9	11	12	12	14	16	18
Total	13	15	17	21	23	23	27	31	35
Bushings									
Foil Diameter	1.5"	1.5"	1.5"	2.0"	2.0"	2.5"	2.5"	2.5"	2.5"

Definition of Foil Diameter



Note:

There is always a quantity of 2 (two) 2.5 Foot Foils with every System.

2 (two) Bushings for every foil section.



COMPONENTS CHECK LIST



Drawing #	Item	Qty
4	Furling Drum and Housing	1
5	Furling Drum Centralizer 4-inch (Polypropylene)	1
6	Stay Clamp (Polypropylene)	1
7	Top Foil Terminal 2 halves with sheaves	1
8	Bottom Foil Terminal 2 halves	1
9	Aluminum Luff Feeds	2





MATERIALS REQUIRED CHECK LIST

Halyard Specifications
Diameter - Models A0 to A2 Use 1/4" A3 to B Series 5/16"
Note: Double the length of forestay and add 5 feet
Furling Line Specifications
Diameter – Models A0 to A2 Use 5/16" A3 to B Series 3/8"
1.5 x Boat Length or 2.5 x Sail Foot Length or greater
Furling Blocks/Fair Leads – Drum to Cockpit

TOOLS CHECK LIST


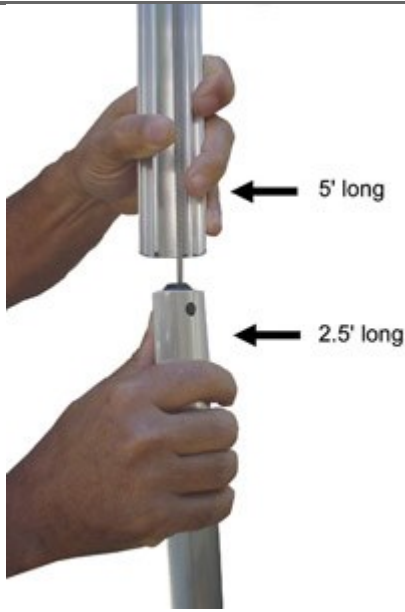
Tools Required	Qty
7/16" Wrenches or	2
Heavy Duty Vice Grips	2
Hacksaw (steel)	1
File (For Deburring)	1
Tools to detach Forestay	
WD-40, Silicone Spray or Vaseline for sliding foils	
Additional Messenger Line for Spare Halyard	



ADD USER NOTES HERE



INSTALLATION

<p>Step 1 Stack all Bushings on the Forestay</p> <p>Attach each bushing and stack on top of each one on the Forestay.</p>	
<p>Step 2</p> <p>Lubricate the Foils Select 1 5' and 2.5' foil</p> <p>Point Holes to the Top</p> <p>Place the 5' foil against the stay and fit the top bushing pin into the hole of the 2.5' foil.</p>	



Step 2 ...continued

With one hand securing the bushing, align the grooves and slide upwards until the tops of the foils are aligned.



Step 3

Attaching a retrieval line to the forestay halyard and tie a rolling hitch around the foil.

If the halyard is wire attach nylon line to grip the foil to avoid scratches on the foil. Secure the retrieval line so the halyard doesn't get away on you.



Step 4

Attach the Top Terminal (7) by placing both halves over the top end of the Top Terminal and secure with bolts provided.





Holding the top end, feed the halyard(s) through the sheave(s).

To prevent the halyards from falling out of the sheaves, fasten or join the bitter ends to something secure within reach.

Step 5

Adjust the rolling hitch to the two foils that form a complete foil.

Tension the halyard to raise the foil so the half hitch is near 7' above the deck.

Cleat off the halyard.





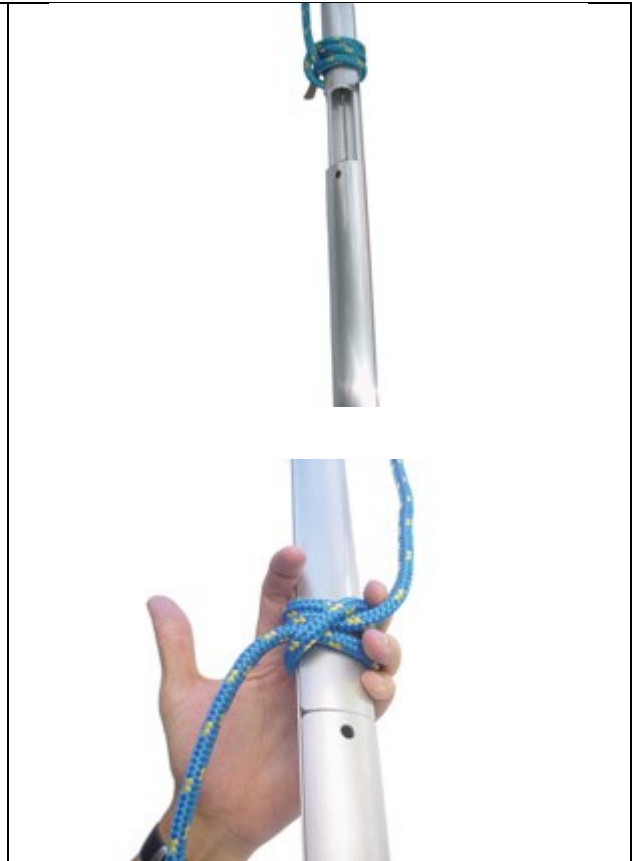
Step 6

Add another bushing to the stay at the top and insert the pin in the hole.

Step 7

Holding the bushing in place with one hand, interlock another 5-foot foil and slide upwards.

NOTE: hold the foil halves by their ends.



Step 8

Push the foil upward to release the halyard tension in order to allow the foil to be slid upward through the rolling hitch.

Continue to rise it up to the point where the halves that form a complete foil are just above the knot.





--	--

STEP 9

Repeat Steps 6 through 8 until no more foils can be fitted on the stay without detaching the stay from the deck fitting.

STEP 10

Haul on the halyard supporting the foils until the top terminal touches the masthead stay terminal.



STEP 11 - Luff Feeds and Final Foils

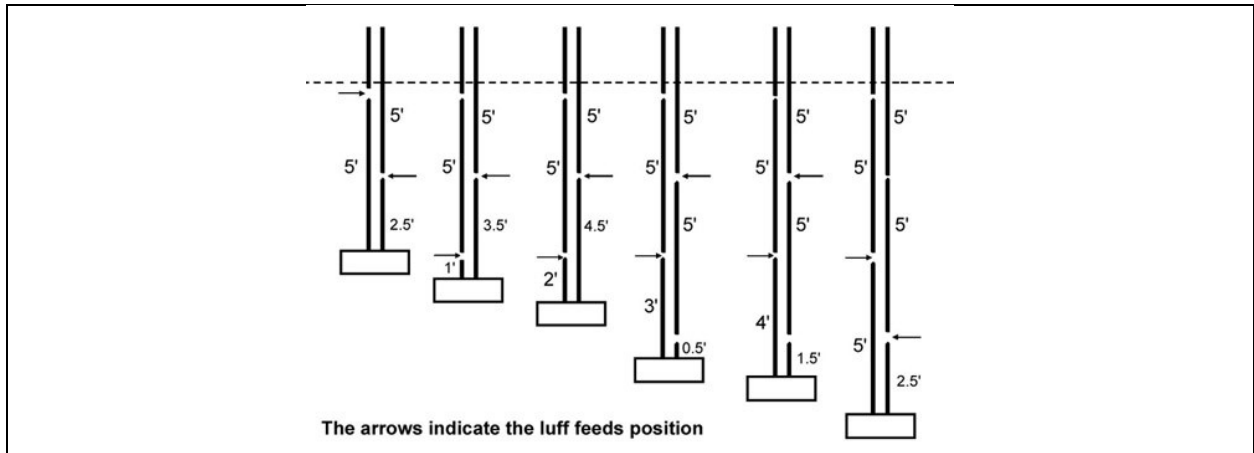
The objective now is to install the opposing luff feeds and trim the bottom foil sections so that the drum will be at the desired height on the stay and the bottom ends of the foil-halves will coincide. To do this you will have to cut one or more sections of foil-half.

Joints between foil-halves should be at least 1' apart to maintain torsional strength of the foil. The height of the luff feeds above the drum is not critical. They should normally be between 1' and 5.5' above the lower stay terminal (see the diagram). For most boats, this nicely accommodates handling of two sails.

A general rule of thumb is:

With the foil terminal tensioned against the top stay terminal, leave about 10" between the bottom of the foil and the top of the lower stay terminal.

Whenever possible, take advantage of the existing overlap in foil-halves when fitting the luff feeds.



LUFF FEED SPACING EXAMPLES

STEP 12

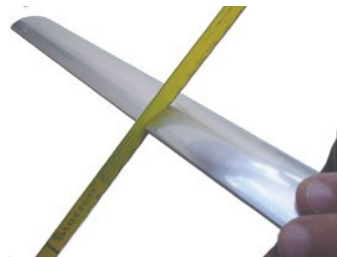
Preparing the Final Foils

Place a vice grip on the stay below and against the foil before turning away to do the cutting.



STEP 13

Cut the desired lengths of foil-halves and dress them with a file.





STEP 14

Secure the foil in position with a line from the bow pulpit. The best place to tie to the foil is around the hitch in the mast halyard.

Use other boat halyards to secure the mast if necessary. Only then, loosen and remove the forestay from the deck stay fitting.



STEP 15

Slide the luff feed and short section of already cut foil-halves, with their respective bushings, up against the vice grip.

Leave the vice grip clamped to the stay.

STEP 16

Slide the forestay through the DRUM center hole.





STEP 17
Place a second Vice-Grip
below the DRUM to support
it.



STEP 17...Continued
Re-attach the stay to the
deck fitting and re-tension it.

Remove the vice-grip
between the DRUM and the
FOIL and install the DRUM
CENTRALIZER. (5)





STEP 18

Assemble the polypropylene clamp on the stay below the drum and tighten it.

Remove the remove the remaining vice-grip.

STEP 19

Put the foil terminal base on the drum without tightening it.

Carefully loosen the rolling hitch securing the foil and guide it slowly into the foil base.

Tighten the bolts on the base so they are just snug.

DO NOT OVERTIGHTEN bolts or you risk breaking the clamps.





**STEP 20
Congratulations!**

**Your Alado Roller
Furling is Assembled!**

**Don't forget to remove
and stow any halyards**



Roller Furling Systems

BEFORE RAISING THE GENOA/JIB

Since the Alado uses its own halyard line, it is important to now consider your sail and halyard line management plan.

Unlike attaching a mast halyard to a sail top, the halyard line must never be allowed to come out of the sheave(s) or you will need to disassemble the foils, re-feed the sheave and refit the foils.

During the life of the Alado System, a correctly managed sail and halyard plan will prevent ever having to lower the system for maintenance since there are no swivels or bearings

On the next page, see several alternate ways to rig the furler halyard.



Endless Loop

Secure both bitter ends of the furler halyard to the top of the sail allowing the halyard to act as a downhaul and uphaul.

Use a block and/or one of the eyes on the Drum as a tensioner and secure the excess line at the base of the Drum.

Lowering the sail is just a matter of releasing the endless loop.

Cutting off the Halyard

Secure one end of the halyard to the top of the sail and after raising the sail leaving a foot or two of excess line before cutting and saving it.

Use one of the eyes on the Drum as a tensioner and secure the excess line at the base of the Drum.

NOTE: Use one of the following methods below with the Cut Off Method.

Lowering the sail using the Cutting off method

Option 1 - Bring the bitter end of the furling line forward through its lead blocks and tie it to the bitter end of the furler halyard.

Option 2 – Use the sheet to do this role.

Option 3 – Use the spare line that was cut off and reconnect the bitter ends.



Option 4 - Make the mast halyard "endless" by tying its bitter end to the end that normally attaches to the sail top. Tie the bitter end of the furler halyard to the mast halyard so that when the genoa is lowered, and the furler halyard is carried aloft, it can be pulled down again with the mast halyard.

RAISING THE GENOA

Tie one end of the halyard to the top of the genoa, feed the luff rope (or luff tape) into the luff feed and tension the halyard.

Haul on the halyard, guiding the luff rope into the luff feed, until the tack of the genoa is at the appropriate height to attach it to the drum.

Make the tack fast to one of the eyes in the foil base with a short rope or shackle.

Tension the halyard and tie it off to the other eye in the foil base.

Installing the Furler Line

Using a short rope, tie the drum housing to a stanchion base, forestay deck fitting, cleat or a dead eye so the drum will not rotate. Do not make a final choice of this location until you have installed the furling line. There is little torque generated when the drum rotates.

Attach the sheets to the clew of the genoa and rotate the drum manually until the sail is completely furled. Then rotate it 6 more turns so that the sheets are partially wound around the sail. If UV protection is sewn on the leach and



foot of the sail, turn the drum so that this cloth will be on the outside when the sail is furled.

Pass one end of the furling line through a window of the drum housing and then through the hole in the top of the drum. Tie a figure 8 knot in the end of this line to secure it.

Installing the Furling Line ...Continued

Lead the furling line to the cockpit through one or more blocks. In positioning these blocks it is important to locate the first block so that it is in the plane of the base of the furling drum and does not chafe on the window of the drum housing. It may be necessary to reorient the drum housing to avoid this chafe. Now choose where you want to permanently tie off the drum housing.

The Alado Roller Furling System Is Ready

USING THE ROLLER FURLING SYSTEM

To unfurl the genoa, un-cleat the furling line and pull on the leeward sheet. It is very important to hold some tension on the furling line.

To furl the genoa, release the sheets and pull on the furling line. Holding some tension on the leeward sheet will result in a smoother furl.

You should never forget to cleat the furling line after furling the sail. Especially, if you are leaving the boat. This will prevent the sail from unfurling during a strong blow. There are holes in the bottom of the drum and housing where you can also pass a rope or padlock as an additional security measure.



Fair Winds, The Alado Team