



CODE FOILS PRODUCT BROCHURE



CODE FOILS

Founded by Marcus and Ben Tardrew, an esteemed designer behind Sunova and an industry-leading board shaper and foil designer, alongside Daniel Juengling, a renowned architect and builder with extensive CAD and manufacturing expertise, and James Casey, multiple M20 champion and an accomplished waterman and foiler.

Australian-owned and designed since 2022. Our team share the same passion for flying above the water and are out there testing gear daily so we can produce the best hydrofoils in the world

CHOOSING FOILS...

The following pages highlight our product range. This guide is based on our extensive testing across multiple disciplines and locations around the globe. Be sure to consult with your shop and demonstrate the gear where possible, as there are always exceptions depending on the user's ability, weight, and wind and water conditions.

Our model numbers relate to area, though many factors influence lift, glide, and speed. Therefore, comparing our products to other brands based on area is not always an accurate measure.



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WING FOIL

One of the most accessible foiling disciplines is wing foiling, and Code Foils' range of foils is incredibly well-suited for it. We recommend the S series front wings. They are stable and very forgiving, yet still provide great top-end speed, glide, and performance. These wings are known for their ability to remain stable even when the tips come out during turns.

Intermediate to advanced riders will be blown away by the responsiveness and maneuverability of the 850S, 720S, and 615S models.

Longer mast lengths (the 80cm and 85cm) are recommended for blasting back through the waves and mitigating surface chop

Starting out...				
WEIGHT	FRONT WING	TAIL WING	FUSELAGE	MAST
>95KG	1300S, 1130S	188AR,175AR	LARGE	85CM
70-96KG	980S	980S	MEDIUM,LARGE	85CM
<70KG	850S	850S	MEDIUM, LARGE	85CM

DO RESEARCH PRIOR TO PURCHASE AS THIS IS ONLY A GUIDE
Light riders should select smaller sizes, larger riders should select the bigger wings in our range. If you're starting out select larger foils. More advanced riders should go smaller!



There is a huge variance in the appropriate setup for prone foil, largely dependent on wave conditions. Even the most advanced riders would consider different foils for the intense reef breaks at Margaret River in Western Australia compared to the more mellow sand-bottom breaks in Northern New South Wales.

The 'S' series front wing was designed to excel in prone foil, offering incredible glide to link between waves while still providing plenty of progression and performance on the wave face. Our advanced foilers opt for the 720S coupled with the medium fuse and the 142AR tail. For even tighter and more aggressive turns it's worth bolting on the small fuse.

The 'R' series front wing is known for its low drag and incredible glide, making it a great option if extended time on the foil is the goal. It offers a completely different surf experience, akin to a longboard rather than a progressive shortboard.

Regarding mast length, we suggest the 75cm or 80cm mast. The 80cm mast provides a bit more room to turn aggressively and bank harder without breaching your tips early. However, be cautious with longer masts in shallow locations!

Starting out...				
WEIGHT	FRONT WING	TAIL WING	FUSELAGE	MAST
>95KG	1130S	188AR, 175AR, 166AR	MEDIUM	80CM
70-96KG	980S,850S	166AR,158AR,150AR	MEDIUM	80CM
<70KG	850S	150AR,142AR	MEDIUM	80CM

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SUP FOIL

Just like prone foiling, SUP foiling setups can vary greatly based on wave power and intensity.

The 'S' series front wing is tailored for SUP foil, mirroring its effectiveness in prone foiling. It offers exceptional glide to seamlessly connect waves while maintaining excellent performance on the wave face. Advanced foilers prefer the 720S, combined with a medium fuse and the 142AR tail. For even sharper and more aggressive turns, the small fuse is recommended.

If maximizing time on the foil is your goal, the 'R' series front wing is ideal, known for its low drag and superb glide. It provides a distinct surfing experience, similar to riding a longboard SUP rather than a performance-oriented shorter SUP.

When it comes to mast length, we recommend either a 75cm or 80cm mast. The 80cm option allows for more aggressive turns and deeper banking without the risk of breaching your tips too early. However, be mindful of using longer masts in shallow waters!

Starting out...				
WEIGHT	FRONT WING	TAIL WING	FUSELAGE	MAST
>95KG	1300S, 1130S	188AR, 175AR, 166AR	MEDIUM	80CM
70-96KG	980S,850S	166AR,158AR,150AR	MEDIUM	80CM
<70KG	850S	150AR,142AR	MEDIUM	80CM

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DOWNWIND FOIL

The feeling of downwind foiling is unparalleled, allowing you to harmonize with the ocean's energy and surf effortlessly across open water. This sport involves harnessing wind and ocean swells to achieve continuous, smooth movement, maximizing the ocean's natural energy.

At Code Foils, our products are designed to excel in this dynamic and evolving environment. They continue to lead the way in downwind foiling competitions. The R Wings, in particular, are optimized for open ocean conditions, offering unrivaled efficiency and glide. Moving between energy feels intuitive and secure. The S Series shines in shorter-period, wind-dominated arenas, with the larger S Wings being the preferred choice for large lakes and inland bodies of water with slower-moving energy. The S Series allows for a different, more progressive downwind experience, enabling the rider to carve turns akin to surfing a wave at your local spot.

Both ranges of foils provide the stability and control needed to navigate varying ocean conditions, ensuring a smooth ride across vast stretches of water. It's best to consult with your local shop or retailer to determine which wing is suitable for your local conditions and which size you need. It's definitely worth including both an R and S in your personal quiver. Code Foils offers a wide range of sizes, ensuring there's one that's perfect for you.

Starting out...				
WEIGHT	FRONT WING	TAIL WING	FUSELAGE	MAST
>95KG	1075R,1300S	151R, 166AR	MEDIUM	80CM
70-96KG	1075R,960R	151R, 166AR	MEDIUM	80CM
<70KG	960R, 1130S	135R,158AR	MEDIUM	80CM

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PUMP FOIL

Dock Starts or Pump Foiling is a discipline where you generate your own glide using your own energy by pushing down on your board and then unweighting to allow the foil to lift and glide.

Code has some perfect foils for this at the upper end of the S and R range. We've had a lot of success with the 1300S, and most recently, the 1075R.

From our testing, we've found that with these large foils, pairing them with a small fuselage and small tails, such as the 142AR and 135R, gives you more control over the larger surface area of the front foil.

The goal is not only to be able to launch from a jetty or beach but also to pump out to a wave or a passing boat and ride the energy.

Code's wings are better suited to a launch site where the user can get a small run-up to generate a little speed. This technique allows the user to use a slightly smaller foil than other brands, and when they reach a wake or wave zone, they have the added ability to turn and maneuver.

Always foil safely and take care. It's the user's responsibility to ensure their own safety and the safety of those around them.



Starting out...				
WEIGHT	FRONT WING	TAIL WING	FUSELAGE	MAST
>95KG	1540S	142AR, 135R, 151R	SMALL	80CM
70-96KG	1540,1300S	142AR, 135R	SMALL	80CM
<70KG	1130S, 1300S	142AR, 135R	SMALL	80CM

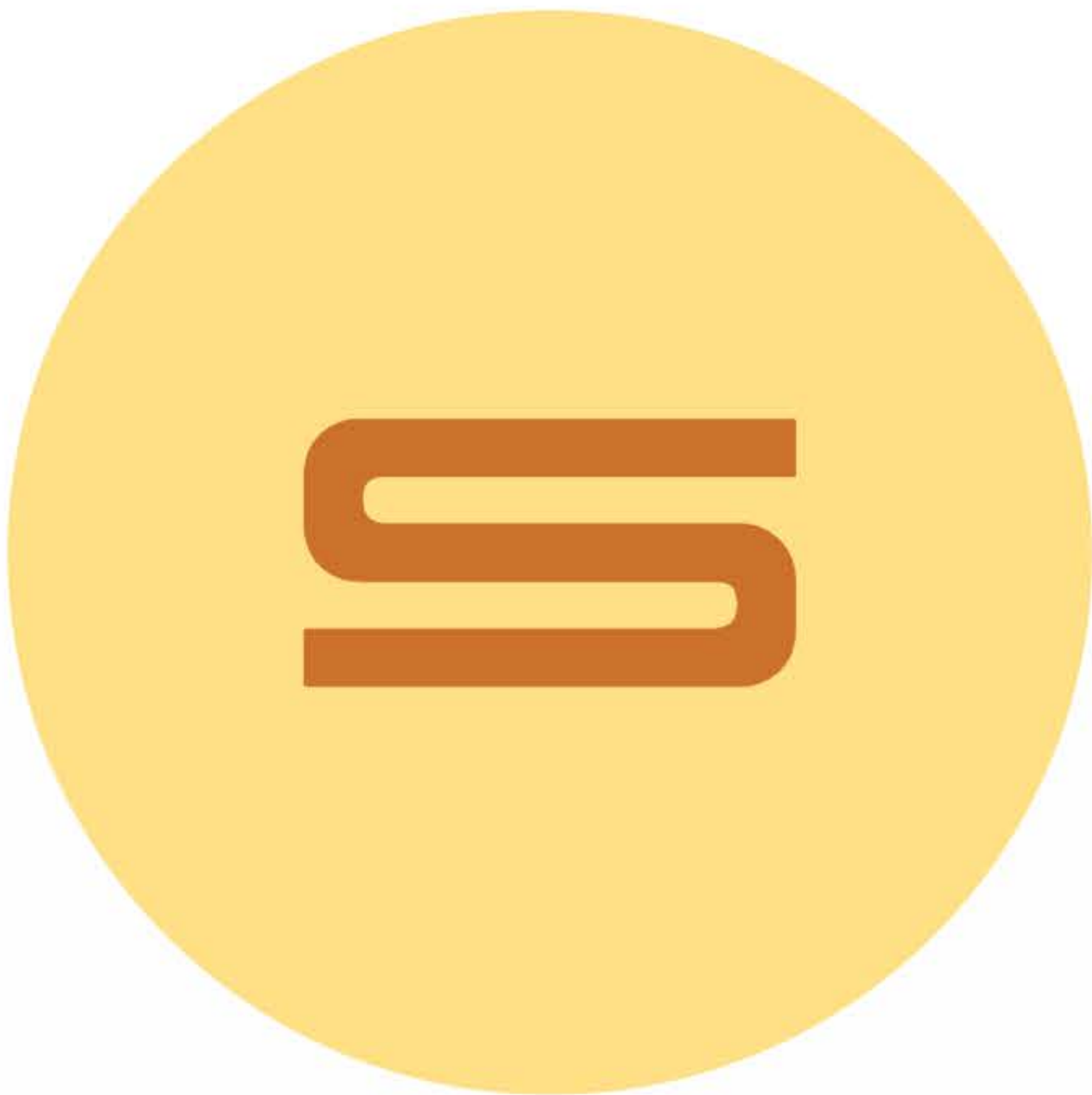
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S SERIES FRONT WING

ALL ROUND FRONT WING

The S Series is a wing for everybody and every discipline. We have designed this foil with a foil section that provides early smooth and predictable lift. With a mid to high aspect ratio and a high lift foil section the rider is able to use a smaller area foil to give more maneuverability, extreme glide and pumping efficiency to flow through turns and connect as many waves as you like. When pushed in the surf the wing tips will breach with ease and control and ride out of white water sections with confidence and stability under foot.



SIZE	SPAN (mm)	SPAN (in)	AREA (cm ²)	AREA (in ²)	ASPECT RATIO
500S	695 mm	27.3 in	500 cm ²	77.5 in ²	9.5
615S	765 mm	30.1 in	615 cm ²	95 in ²	9.5
720S	830 mm	32.7 in	720 cm ²	112 in ²	9.5
850S	900 mm	35.4 in	850 cm ²	132 in ²	9.5
980S	965 mm	38.0 in	980 cm ²	152 in ²	9.5
1130S	1035 mm	40.55 in	1130 cm ²	175 in ²	9.5
1300S	1115 mm	43.9 in	1300 cm ²	201.5 in ²	9.5
1540S	1210 mm	47.6 in	1540 cm ²	238.7 in ²	9.5

- The ultimate all round wing, beginner to advanced
- Prone, Wing, SUP or even Downwind this foil excels in all disciplines of foiling.
- Adept in critical sections as well as drawing smooth flowing lines.
- Suitable for all levels of rider.
- The High Modulus 1130 and 1300 are the go-to wing for heavier riders in all disciplines.
- Currently available in six sizes 615, 720, 850, 980, 1130 and 1300.

R SERIES FRONT WING

DOWNWIND FRONT WING

The R-Series Front Wings by Code Foils are specifically designed for downwind SUP foiling. They include models such as the 860R High Modulus and 770R High Modulus, which have proven their performance and efficiency in major racing competitions like the Molokai 2 Oahu Downwind World Championship and Paddle Imua race in Hawaii where James Casey won using these foils. The series also includes larger sizes like the 960R and 1075R, which are ideal for learners due to their user-friendly nature and for experienced riders who aim to foil in nearly windless conditions. Constructed from High Modulus carbon, these wings are recognized for their lightweight build and exceptional stiffness, making them suitable for high-speed and long-distance downwind foiling. The design focuses on a wide speed range and efficient pumping, although they are less maneuverable compared to the S series.

The series is scaled, keeping a familiarity as users move from size to size.



SIZE	SPAN (mm)	SPAN (in)	AREA (cm ²)	AREA (in ²)	ASPECT RATIO
600R	880 mm	34.6in	600 cm ²	93.0 in ²	13.0
680R	935 mm	36.8 in	680 cm ²	105.4 in ²	13.0
770R	1000 mm	39.4 in	770 cm ²	119.3 in ²	13.0
860R	1050 mm	41.3 in	860 cm ²	133.0 in ²	13.0
960R	1115 mm	43.9 in	960 cm ²	148.8 in ²	13.0
1075R	1180 mm	46.5 in	1075 cm ²	166.6 in ²	13.0

• The 600R is constructed in Ultra High Modulus Carbon for maximum stiffness

AR SERIES TAIL WING

ALL ROUND TAIL WING

The AR Series Tail Wings from Code Foils are designed to cater to foilers of all skill levels, providing a smooth and predictable experience that boosts rider confidence across various foiling disciplines such as carving, jumping, and downwind riding. Available in six sizes (142AR, 150AR, 158AR, 166AR, 175AR, 188AR), these wings are crafted to offer a consistent feel while delivering excellent glide and carving capabilities. The larger sizes, 175AR and 188AR, are particularly suited for beginners or heavier riders who require more stability and a lower stall speed to maintain height and power on the foil. This range is praised for its versatility and efficiency, making it a top choice for those seeking to enhance their foiling performance across multiple conditions and styles



SIZE	SPAN (mm)	SPAN (in)	AREA (cm ²)	AREA (in ²)	ASPECT RATIO
142AR	340mm	13.4 in	142 cm ²	22.0 in ²	8.64
150AR	360mm	14.2 in	150 cm ²	23.3 in ²	8.64
158AR	380mm	15.0 in	158 cm ²	24.5 in ²	8.64
166AR	400mm	15.75 in	166 cm ²	25.7 in ²	8.64
175AR	420mm	16.5 in	175 cm ²	27.1 in ²	8.64
188AR	450mm	17.7 in	188 cm ²	29.1 in ²	8.64

R SERIES TAIL WING

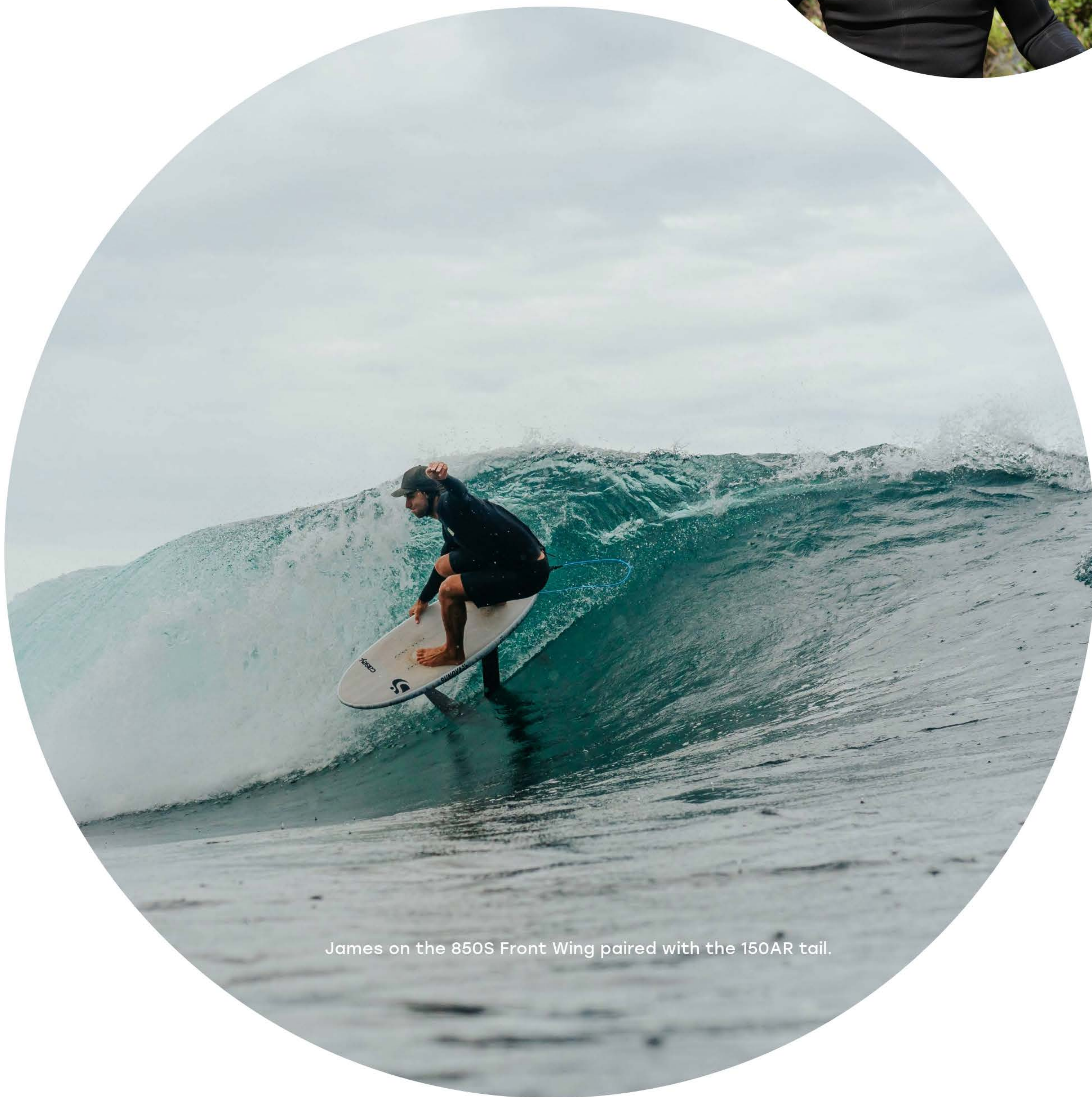
THE ULTIMATE IN GLIDE



The R Series Tail Wings from Code Foils are engineered for exceptional glide and efficiency. Available in three sizes, 120R, 135R & 151R, these high-aspect-ratio tail wings are optimized for use with both S and R series front wings, enhancing performance with a compact form. The design ensures superior stiffness and reliability across all disciplines, making them ideal for foilers seeking high performance.

These tails can be used across all disciplines of foiling. We recommend no shim in the tail.

SIZE	SPAN (mm)	SPAN (in)	AREA (cm ²)	AREA (in ²)	ASPECT RATIO
120R	360 mm	14.2 in	120 cm ²	18.6 in ²	10.8
135R	380 mm	15.0 in	135 cm ²	20.9 in ²	10.8
151R	400 mm	15.7 in	151 cm ²	23.4 in ²	10.8



James on the 850S Front Wing paired with the 150AR tail.

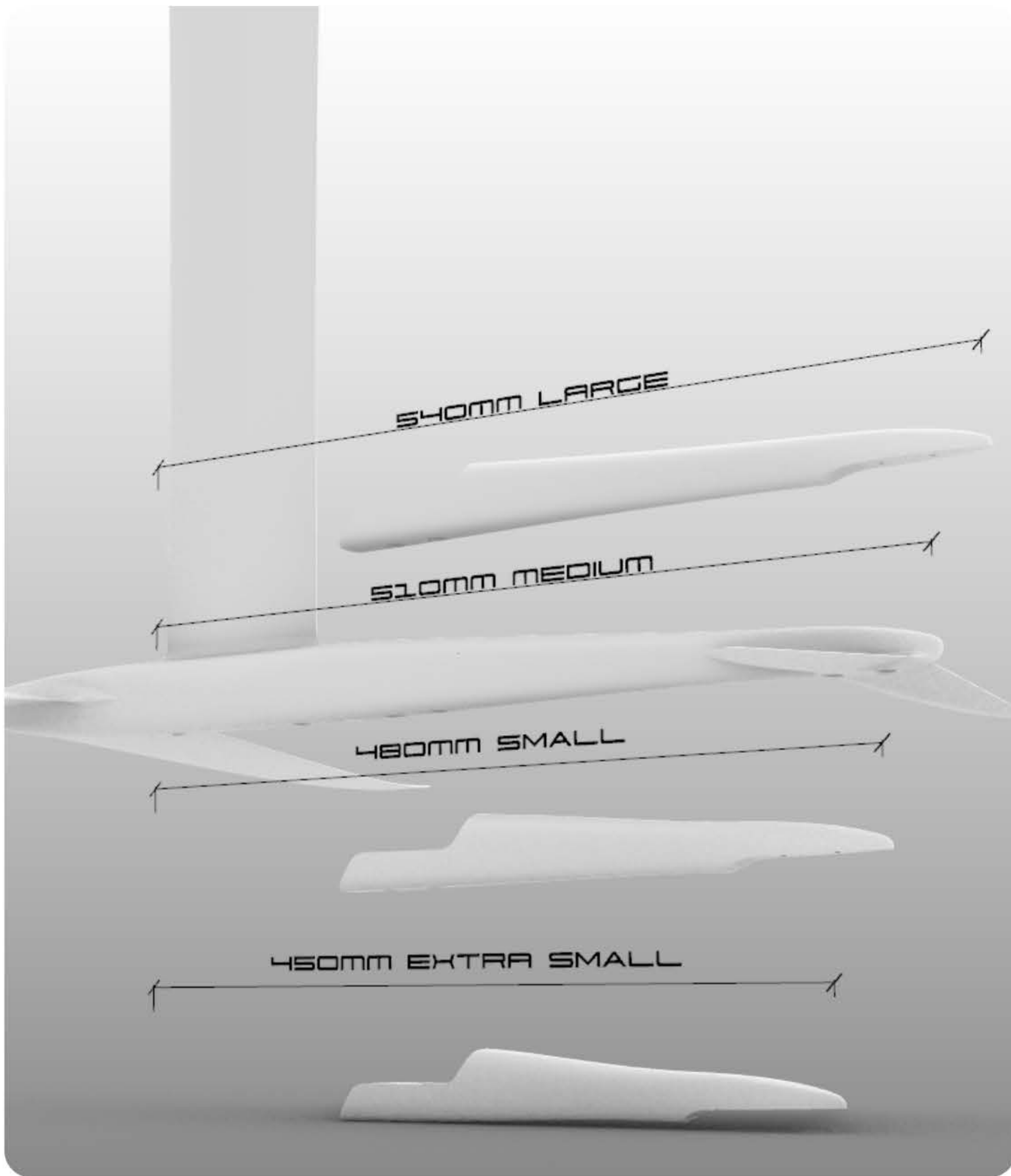
FUSELAGES



The Code Foils Fuselage is designed with versatility and performance in mind, available in four different lengths: x-small, small, medium, and large. This range allows users to customize their setup based on their riding style and conditions. The x -small to small fuselages are ideal for riders looking for high maneuverability and a faster cadence pump, while the large fuselage provides greater pitch stability, beneficial for learners and downwind foilers who prefer a slower pump for stability. Each fuselage incorporates a unique joining system that ensures zero movement at the joints, enhancing the overall strength and stiffness of the setup. Additionally, the tail mounting plate is designed to accommodate various tail wings with m6 bolts spaced 30mm apart, allowing further customization

We measure fuse length from front of mast.

XS	EXTRA SMALL	450mm	17.7 inch
SML	SMALL	480mm	18.9 inch
MED	MEDIUM	510mm	20.1 inch
LGE	LARGE	540mm	21.2 inch



THE CODE MAST

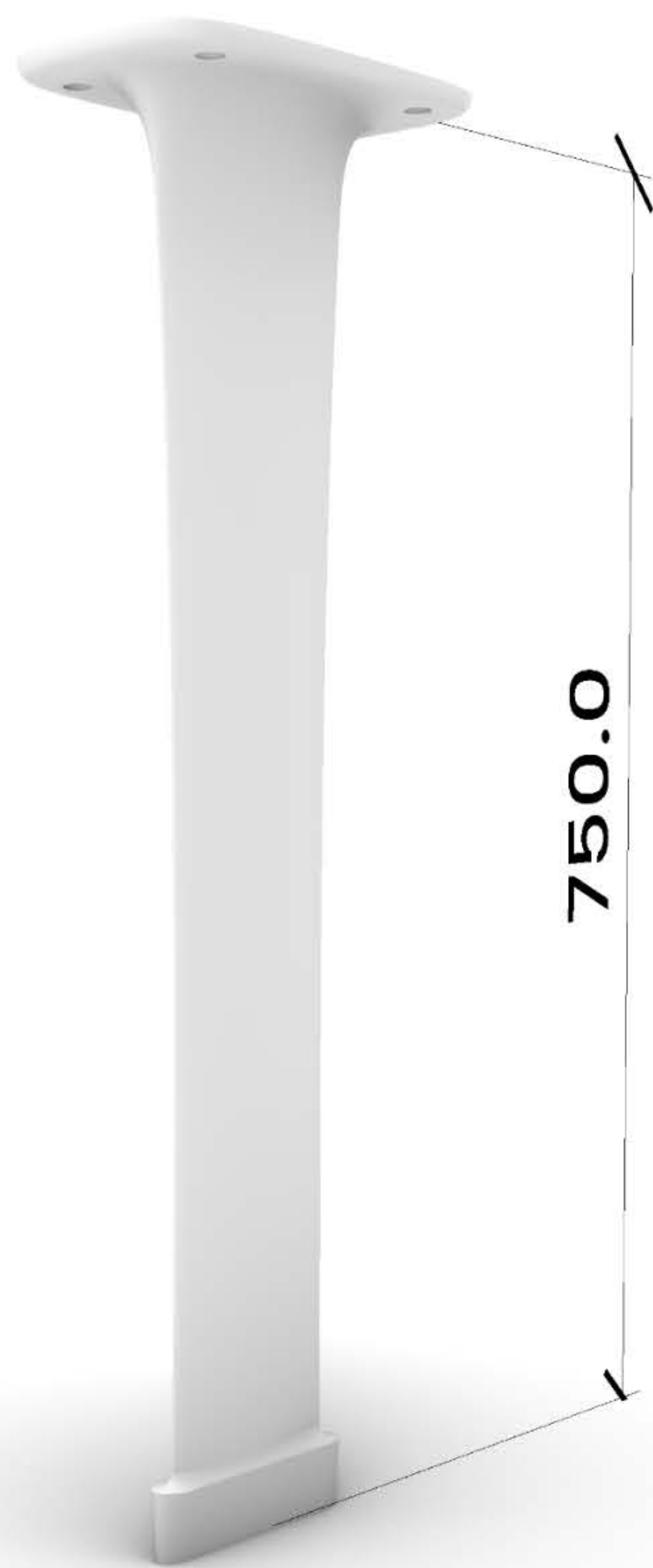
HIGH MODULUS



SIZES

75cm	Good option for shallow areas, prone, downwind, dock
80cm	Allows more bank in the turn, one mast quiver option between disciplines.
85cm	Wing foil, bigger surf and tow

The High Modulus Mast from Code Foils is crafted from high modulus carbon, providing exceptional stiffness and strength. It is recognized as one of the stiffest masts available in its price range, ensuring robust performance without compromising quality. This product features a unique design with an extended blend to base plate for enhanced stiffness and tapered bottom to improve glide and efficiency. It comes in three sizes: 75cm, 80cm and 85cm, specifically designed to optimize glide and energy efficiency while minimizing unwanted movements.



**We measure our mast from top of base plate to bottom of tuttle connection

THE CODE

'PLUS' + MAST

ULTRA HIGH MODULUS

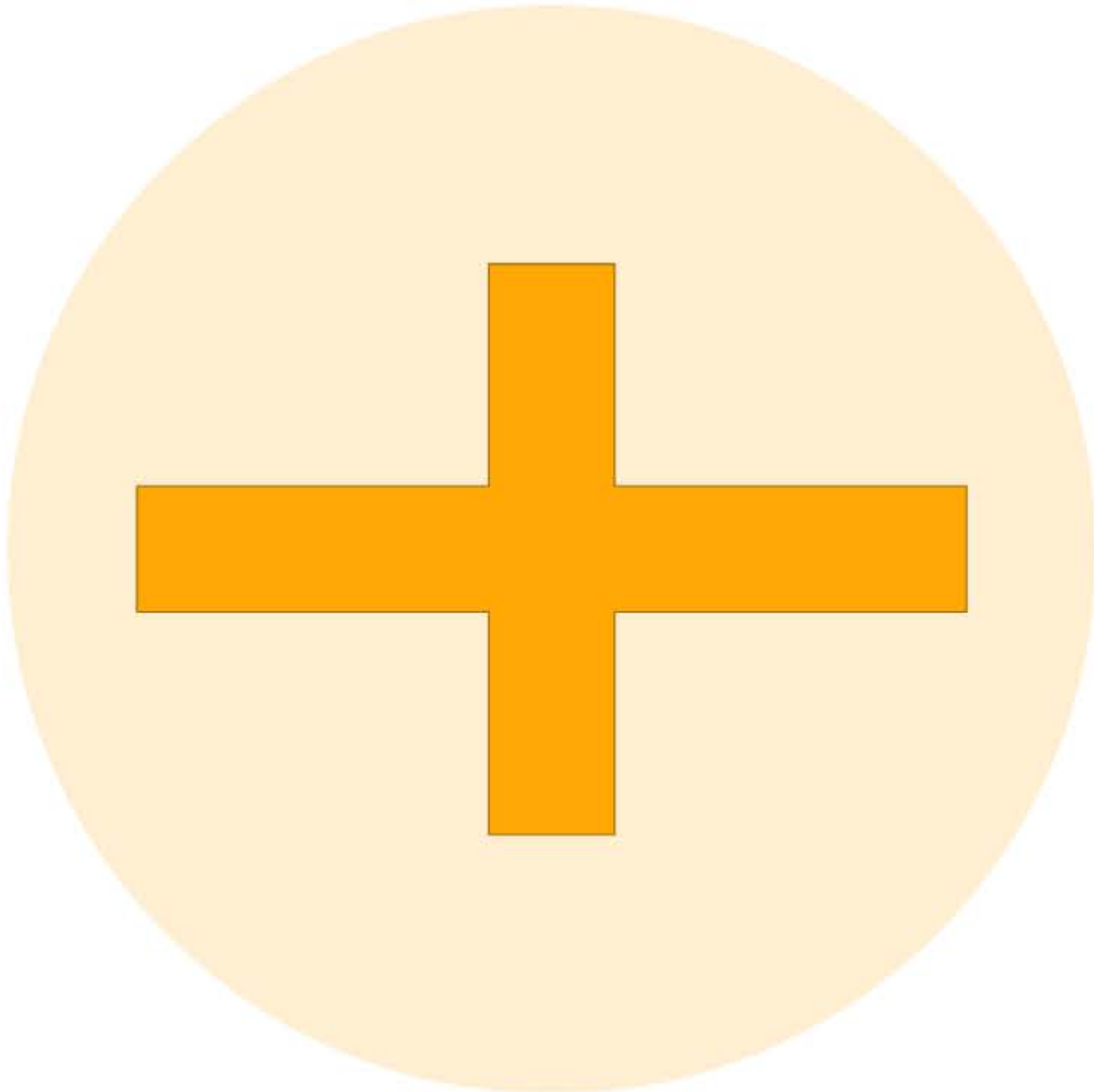
SIZES	
75cm	Good option for shallow areas, prone, downwind, dock
80cm	Allows more bank in the turn, one mast quiver option between disciplines.
85cm	Wing foil, bigger surf and tow



The PLUS MAST SERIES is the latest development by Code in masts. This Ultra High Modulus Mast from Code Foils has incredible stiffness in both torsion and flexion. It is crafted from ultra high modulus carbon with consideration in its layering to ensure the best possible product. It features the same distinctive design and comes from the same mold as the original mast. It features the same extended blend to the base plate and a tapered thinned bottom to improve glide and efficiency when high on the mast. Available in three sizes: 75cm, 80cm, and 85cm, this mast is specifically engineered to optimize glide and energy efficiency while minimizing unwanted movements.

Our existing mast, the stiffest in its price bracket on the market, serves as the benchmark for our comparisons. The Plus Masts exhibit a massive 41% increase in torsional stiffness and a 59% increase in flexural stiffness compared to our original high modulus standard masts.

*Calculations based on tests of the 80cm Mast.



THE CODE PADDLE



The Code Paddle from Code Foils is specifically designed for SUP downwind foiling. Crafted from 100% prepreg carbon, it boasts an ultra-lightweight yet strong build. It features a unique dihedral blade design for enhanced efficiency and direct tracking with reduced wobble. The tapered shaft enhances the paddle's lightweight feel, and the handle is ergonomically designed for a secure grip. The paddle is designed with performance and high cadence in mind, ideal for quick directional changes and durability in rough conditions. The size has been carefully considered for higher cadence paddle ups and lower stress on the shoulders and body

WIDE POINT (mm)	LENGTH TO SHAFT (mm)	AREA (cm2)	SHAFT TYPE	SHAFT LENGTH (mm)	NOTES
168 (6.6in)	470 (18.5in)	548 (75in2)	TAPER	1570 (61.8in)	HANDLE COMES FIXED, RETAILER TO CUT TO SIZE AND GLUE BLADE AND SHAFT



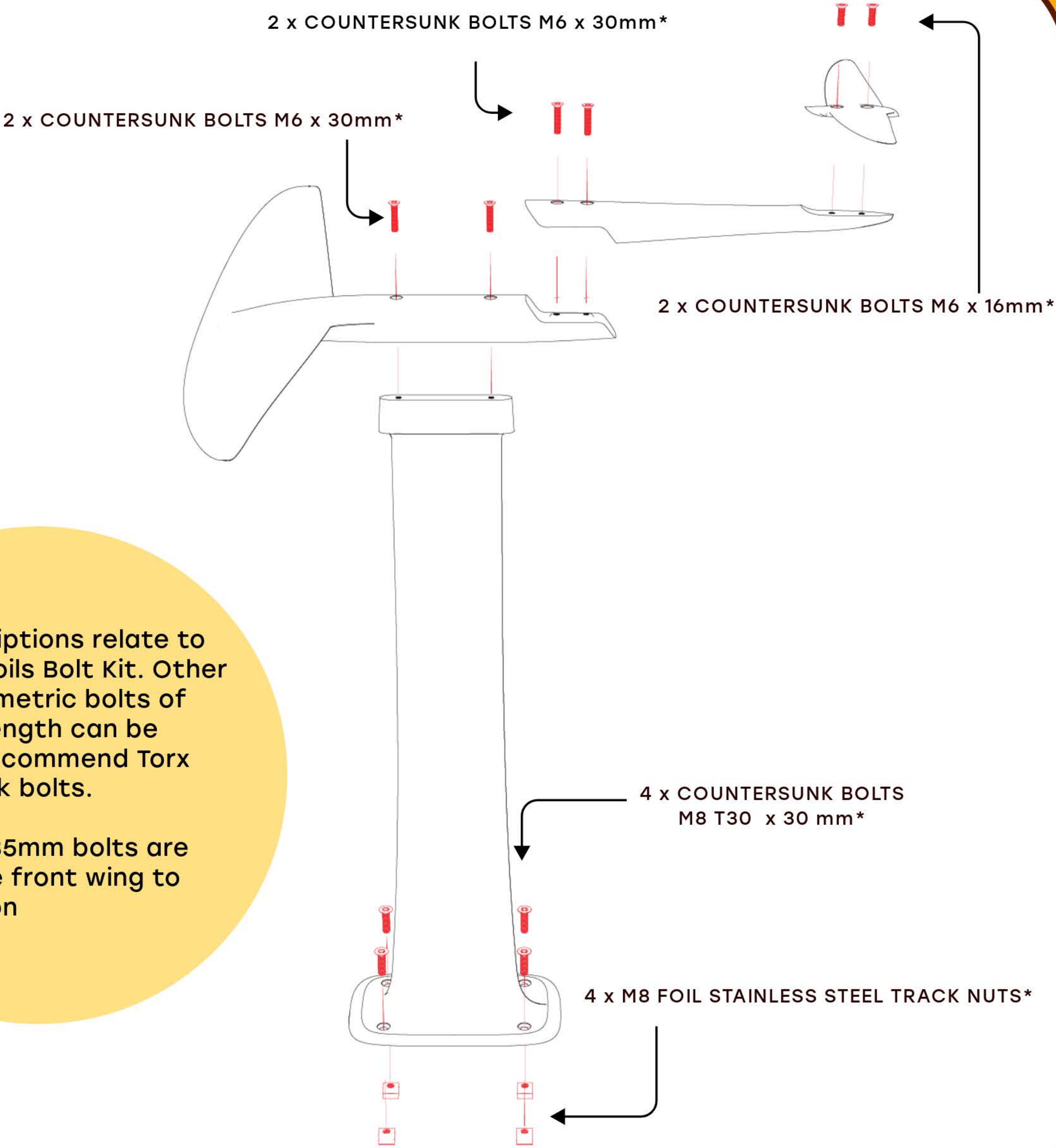
ASSEMBLY GUIDE

Take care of trailing edges and use care when handling foils and components.

When you're off the water store your foils and components in their cases. Most damage occurs when out of the water.

Damage caused to components from using power tools is not covered under warranty. This includes using drills or impact drivers to tighten and loosen screws

SCAN THE QR CODE TO SEE THE ASSEMBLY GUIDE VIDEO



*Bolt descriptions relate to the Code Foils Bolt Kit. Other M6 and M8 metric bolts of the same length can be used. We recommend Torx countersunk bolts.

Ensure 30-35mm bolts are used on the front wing to fuse junction

WARRANTY

Code Foils offer a 12 month warranty on foils and hardware.

The Code Foils warranty applies to Code Foils hydrofoils and hardware (Products) purchased from authorised retailers for personal use and not for resale.

Under this warranty, Code Foils warrants that the Product will be free from manufacturing defects in material or workmanship for a period of one year from the date of purchase. Proof of purchase is required for a warranty claim to be made.

If a Product is found to be defective by Code Foils, Code Foils will (in its sole discretion) credit, repair or replace the defective Product.

Warranties are non-transferrable and are only applicable to the original purchaser. Used and demo Products do not carry a warranty. Repaired or replaced products are covered for the remainder of the original warranty period.

This warranty does not apply to:

- Damage other than manufacturing defects in material or workmanship.
- Normal wear and tear.
- Damage caused by failure to properly maintain and care for the Product and its components.
- Chips, dings, scratches and cosmetic blemishes.
- Damage caused by transport or inappropriate storage, including any UV damage.
- Damage caused by the use of any cleaning products.
- Damage caused by use of the Product outside its intended purpose.
- Damage caused by use of improper hardware, improper installation or improper tightening of hardware. This includes damage caused by loosening or tightening using power tools.
- Seizing, rust and corrosion of hardware.
- Damage caused by collisions, abuse, misuse or impact with any object.
- Damage from natural causes, such as hurricanes, tornadoes and storms.
- Any Product that has been modified or repaired.
- Any Product that has been used with any third party parts.
- Any Product used for commercial purposes (including rental).

To make a claim under this warranty please take the product to the dealer that you purchased the product from. Code Foils is not responsible for any costs and expenses associated with a warranty claim (including shipping).

ETIQUETTE

Safety & Care

Foiling can be dangerous and physically demanding. The user of this product should understand that participating in any of these activities could cause injury or death to you and /or others.

By purchasing a Code Foils product, you assume all responsibility for its use and any resulting injury or death to you and/or others

- Never foil in a crowded lineup or near other surfers
- This product is only to be used for surf foiling, downwinding and wing and kite surfing.
- When learning, start in small waves until you're comfortable.
- Always wear a leash or legrope
- Wear a helmet and an impact vest when foiling
- Stay in deep water so you don't drag your foil on reef and sandbars.
- Take care and don't foil alone



BEN TARDREW

Renowned Gold Coast shaper with many years of hydrofoil design experience. Ben has a lifetime on the ocean sailing, surfing and foiling since the sport's infancy. Ben has been making hydrofoils for 6 years.



JAMES CASEY

One of the world's most respected and accomplished watermen and foilers. Winner of Molokai 2 Oahu ocean race and numerous Aussie titles.



DANIEL JUENGLING

Industry-leading architect and builder with over 20 years of experience in computer-aided design and manufacturing..



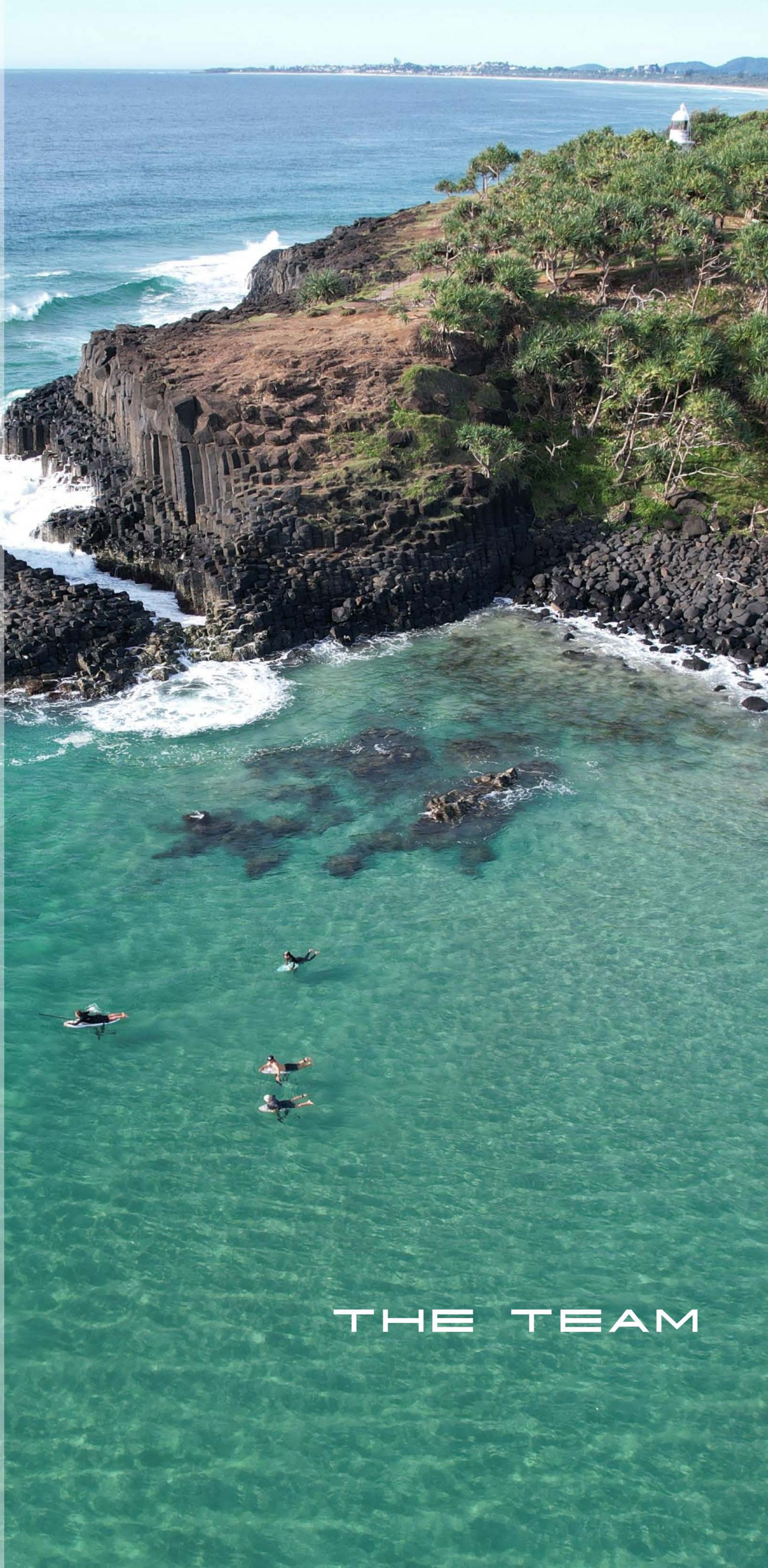
MARCUS TARDREW

Leading SUP and board shaper across multiple disciplines for the last 15 years. Board designer for Sunova. Marcus was the first Australian to complete the Molokai to Oahu race on a foil in 2019.



JOSHUA KU

Josh is a distinguished waterman and is the head of marketing at Code Foils. Josh plays a pivotal role in product development, brand promotion and community engagement.



THE TEAM



WWW.CODEFOILS.COM