MELEE

LIGHTER. FASTER. NO COMPROMISE.





THE MODERN RACER

AERO WITHOUT COMPROMISE

Every gram shaved. Every watt saved. The Melee v2 is engineered for riders who demand the absolute best in lightweight performance and speed.

The Melee v2 improves the two things that matter most in modern road racing – weight and aerodynamics – at the same time. By advancing both critical performance areas simultaneously, it removes the tradeoff between a lightweight climbing bike and an aero race bike without sacrificing the responsive ride characteristics the Melee is known for.



EVOLUTION FOR SPEED

In 2022, ENVE introduced its first production road bike – the Melee – a race bike that offered unprecedented versatility and established a foundation of performance.

Melee v2 builds upon this foundation to deliver a truly world class, benchmark World Tour level race bike.









PROJECT OBJECTIVES

REAL-WORLD FAST:

- Benchmark setting aerodynamics

WORLD TOUR LIGHT:

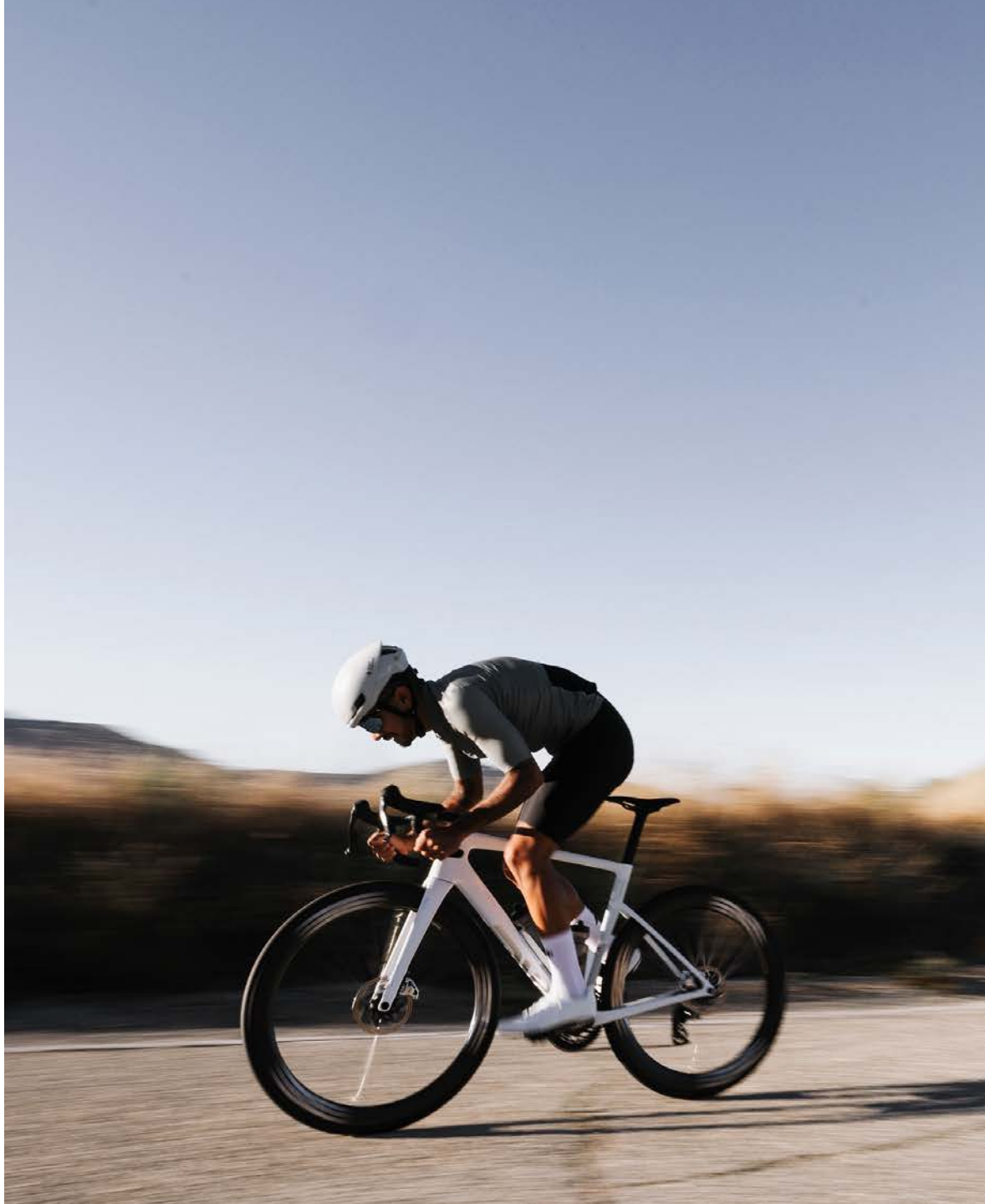
- Guarantee that a 56 cm complete bike can hit UCI's minimum bike weight of 6.8 kg with SRAM Red or equivalent build

A REFINED RACER

The Melee v2 leans into its racing pedigree to deliver a purpose-built package with the singular objective of going faster.

MELEE v2 ACCOMPLISHES THIS BY:

- Reducing total surface area of the frame by 7.5%
- Reduced maximum tire clearance from 35mm to 33mm
- New headset design using smaller bearing
- New seat post design with new lightweight rail clamp
- BSA bottom bracket and UDH for further weight savings



WHERE THE WEIGHT WAS WON

NEW SEATPOST

New two-bolt seatpost design simplifies adjustment and sheds 28 grams

ULTRALIGHT PAINT

UL Black Melee v2 features an ultralight clear over raw carbon finish with minimal graphics, weighing a mere 31 grams

REDUCED FRAME SURFACE

Frame surface area has been reduced by a total of 7.5% reducing weight while improving aerodynamics



BSA BOTTOM BRACKET

BSA bottom bracket reduces weight by 30% over the previous T47 bottom bracket

UL Black 56 cm frame only - 791 grams
UL Black 56 cm as shown (frame, fork, headset, seatpost, thru-axles derailleur hangers) - 1442 grams

FRAME SHAPE REFINEMENT

HEADTUBE

Melee v2 features a new headtube shape and profile that both reduces weight and maximizes aerodynamic efficiencies. To achieve these weight and aero benefits, a new headset was also developed.

MELEE v2 HEADSET BEARING OVERVIEW:

- Upper & Lower Bearing: 40.5 x 49.5 x 6.5 45/45
- Compression Ring: Alloy
- Materials: Stainless Steel
- Seals: LLU (Max sealing capability)
- Grease: Permanent Water-Proof







TIRE CLEARANCE

LESS IS MORE

By reducing tire clearance from 35 mm to 33 mm, weight and aero drag savings are achieved without compromising the tire volume required for modern road racing.

ULTRALIGHT BLACK

THE COLOR OF SPEED

To guarantee a sub 800 gram 56cm frame, the UL Black Melee v2 features an ultralight clear over raw carbon with minimal graphics at a penalty of only 31 grams. Fast, Functional, and Feather Light.



NEW SEATPOST

SLIPS THROUGH THE AIR, NOT THE FRAME

Melee v2 features an all-new seatpost that reduces weight, improves aerodynamics, and moves to a new two-bolt design that retains critical hardware when performing a saddle installation – improving the user experience.

MELEE v2 SEATPOST OVERVIEW:

- Two bolt-design saves weight, simplifies adjustment
    - Weight savings of 28 grams
- More efficient aero profile
- Improved seat tube retention
- Zero offset seatpost included with frame



DEVELOPED TO WIN

ENVE's contribution to aerodynamics in cycling comes from an emphasis on real world speed, stability, and strength. The new Melee is our first ground-up aero bicycle development using our Real- World Fast protocol. This means:

- Developed at Mercedes-Petronas Wind Tunnel, Silverstone, UK
- Partnered with renowned aerodynamicist Simon Smart to develop the new Melee's tube shapes and components
- Real-World Fast applied to frame design
    - Developed with rider on-board with bottles and cages in the wind tunnel
    - Developed around SES rim shapes





SPEED SECRETS

Throughout the development of the Melee v2, the wind tunnel confirmed more than a few suspicions we had about what happens on the road, and why the most aero bikes aren't always the most winning.

- Super deep aero tube profiles are wind tunnel fast, but not always real-world fast
- The frame's tube shapes must work in harmony with the rider's body
- A rider's legs create turbulence and can dam up airflow, creating drag. The frame's tube shapes must allow the airflow to progress across/through the rider's legs and onto the back half of the frame and rear wheel
- Water bottles and their cages must be considered as part of the system





RIDER ON BOARD

ENVE'S REAL-WORLD FAST PROTOCOL HAS EVOLVED.

Initially, the protocol required that all aero wheel development must be considered within the system of the complete bicycle.

Over the years, we've seen that a rider's body greatly influences the aero performance of rim and tube shapes.

Today, ENVE's updated Real-World-Fast development protocol requires a rider on board to validate each design.

TAKEAWAYS:

- Aero testing without a rider is an incomplete system
- A rider's body can significantly impact downstream airflow
- Wind tunnel testing performed with real riders, not mannequins
    - Hand and body position, cadence all controlled using video monitoring
    - All equipment standardized throughout test sessions



WHERE THE WATTS WERE WON

17 WATTS FASTER:

- Frame, fork, & seatpost: -11.4 watts
- Handlebar & bar tape: -3 watts
- Aero cages with bottle: -2.6 watts

NEW SES AERO ROAD BAR

Introduced in 2016, the SES Aero Road Bar was ahead of its time. Understanding that the rider's body accounts for the majority of the drag in the aero system of bicycle and rider, we aimed to develop a handlebar that helped reduce the rider's frontal area – reducing drag. This is real world fast.

Since it's introduction, the SES Aero Road Bar has proven itself as the benchmark aero road handlebar and is the handlebar of choice for Tadej Pogacar and his UAE Team Emirates teammates.

SES AERO ROAD BAR v2 SPECS:

- Reach: 76mm
- Drop: 128mm
- Drop Shape: Aergonomic
- Available Length: 90, 100, 110, 120, 130, 140
- Available Width: 37/40, 39/42, 41/44
- Weight: 335-355g (dependent on stem length and bar width)
- Inclusions: Race Bar Tape, UL Computer Mount, Aergonomic Pads
- MSRP: $800 USD // 1049€



AERGONOMICS EXPLAINED



AERGONOMIC DROPS:

- Airfoil design for reduced drag
- Optional shaped pads allow for further drag reduction by increasing the cross section of the drops
- When pads are used, they are designed to dampen vibration, enhancing comfort
- New drop shape takes inspiration from the proven SES AR Bar



AERO RACE TAPE

Remember Tadej's 2025 TDF uphill TT when he ran no bar tape? Turns out your bar tape might be slowing you down. When watts count, our Aero Race Tape delivers.

HOW IT WORKS:

- The minimalist construction and design decreases total area exposed to the wind, reducing drag.

NEW FEATURES:

- Velvet touch microfiber construction
- 1.2 mm thick
- Designed for ¾ wrap aero road bars
- Designed for use with ENVE AERGONOMIC drops and pads
- MSRP: $35 USD // 42,99€



AERO BOTTLE CAGES

Hydration is a real-world necessity, and we learned in the wind tunnel, that a rider's body interacts with the bike, cages, and bottles in a meaningful way. Ultimately, the Melee and our new SES Aero Bottle Cages reduce the aerodynamic losses created by adding bottles and cages to a bike.

- All bikes lose efficiency when adding bottles and cages
- Aero cages limit those losses better than standard bottle cages
- Designed for use with standard round water bottles
- **Reduces system drag of the original Melee and competitor road bikes as well. Not limited to use on the new Melee**
- MSRP: $85 USD // 99€

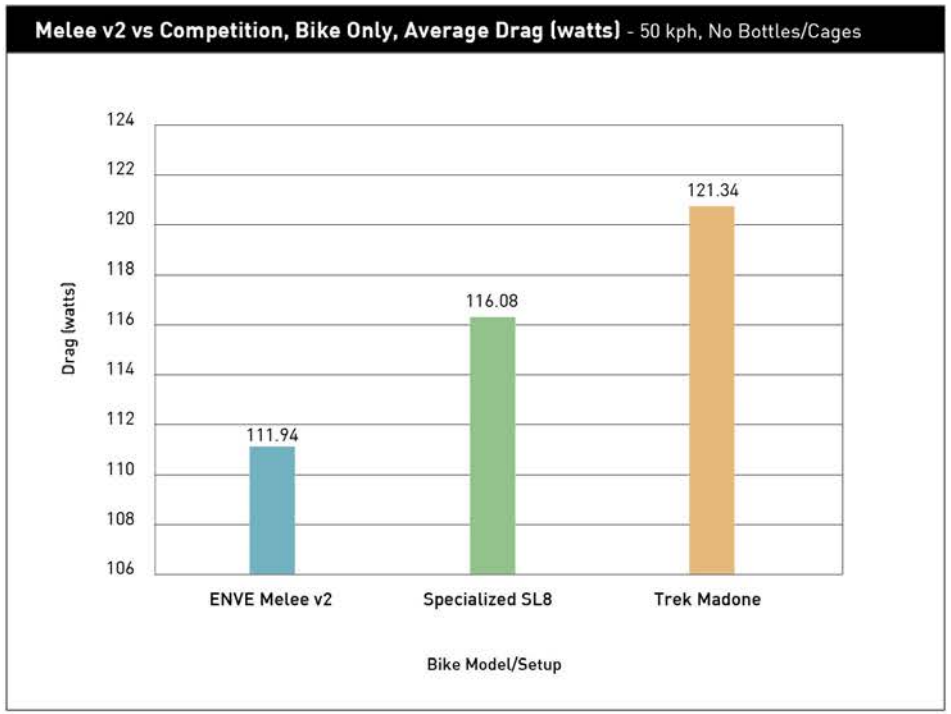


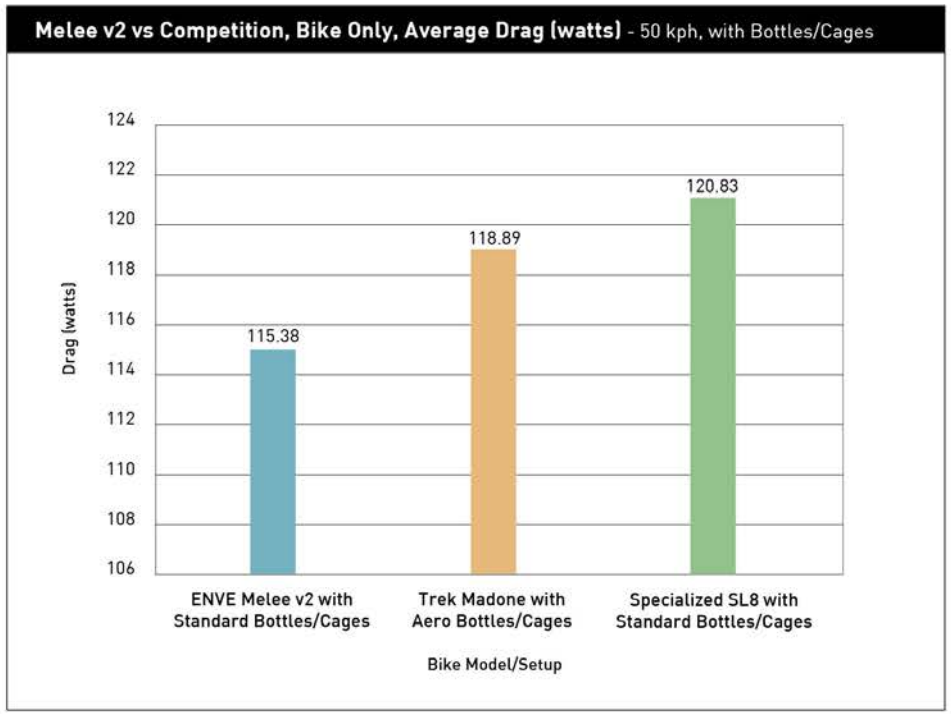

WIND TUNNEL RESULTS



WIND TUNNEL RESULTS

Water Bottle Sensitivity



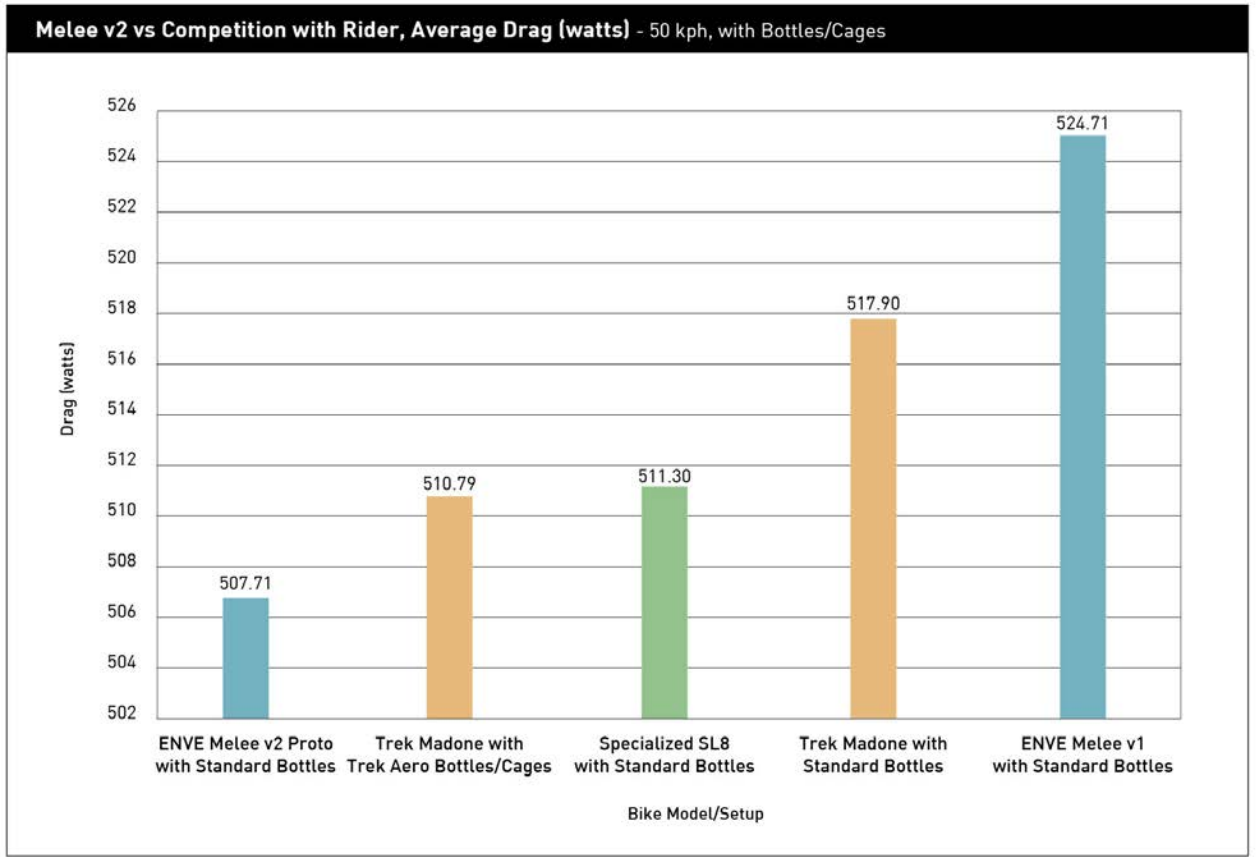


These charts highlight the effect that water bottles can have on frame efficiency. Melee v2 is designed to limit the aerodynamic losses caused by adding bottles and cages to the system.



WIND TUNNEL RESULTS

Complete Real-World System (Bike, Bottles, Cages, and Rider)

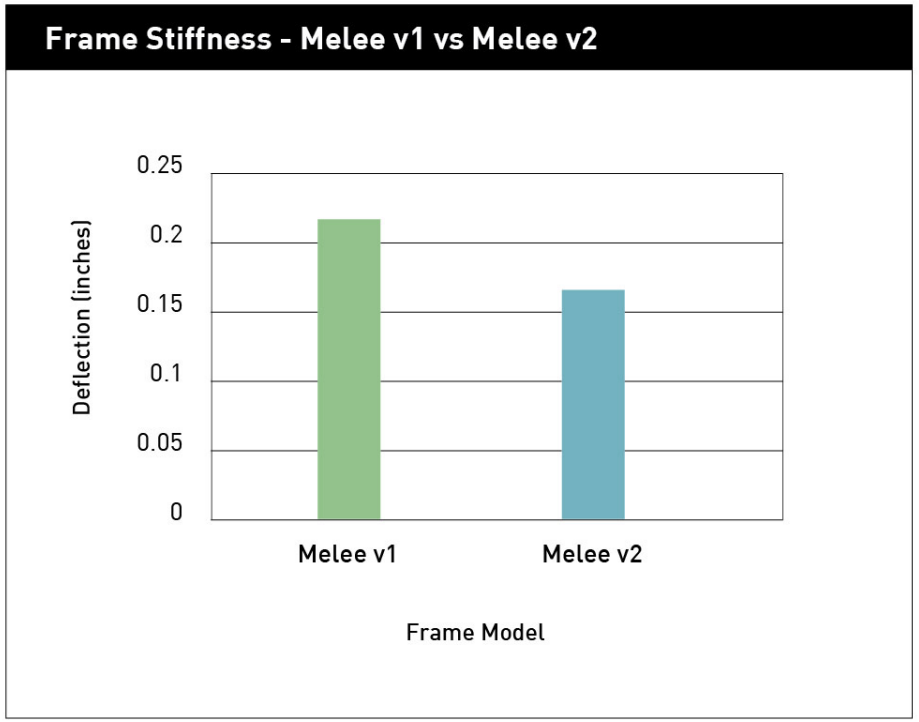


IT'S ALL ABOUT THE RIDE





RIDE DYNAMICS



While weight savings and improved aerodynamics were the two main objectives for the Melee v2, additional frame characteristics were not ignored. The Melee v2 is a thoroughbred race bike, and efficient power transfer remains a critical component for performance.

Frame stiffness represented by frame deflection at a given load. Lower value = greater stiffness.

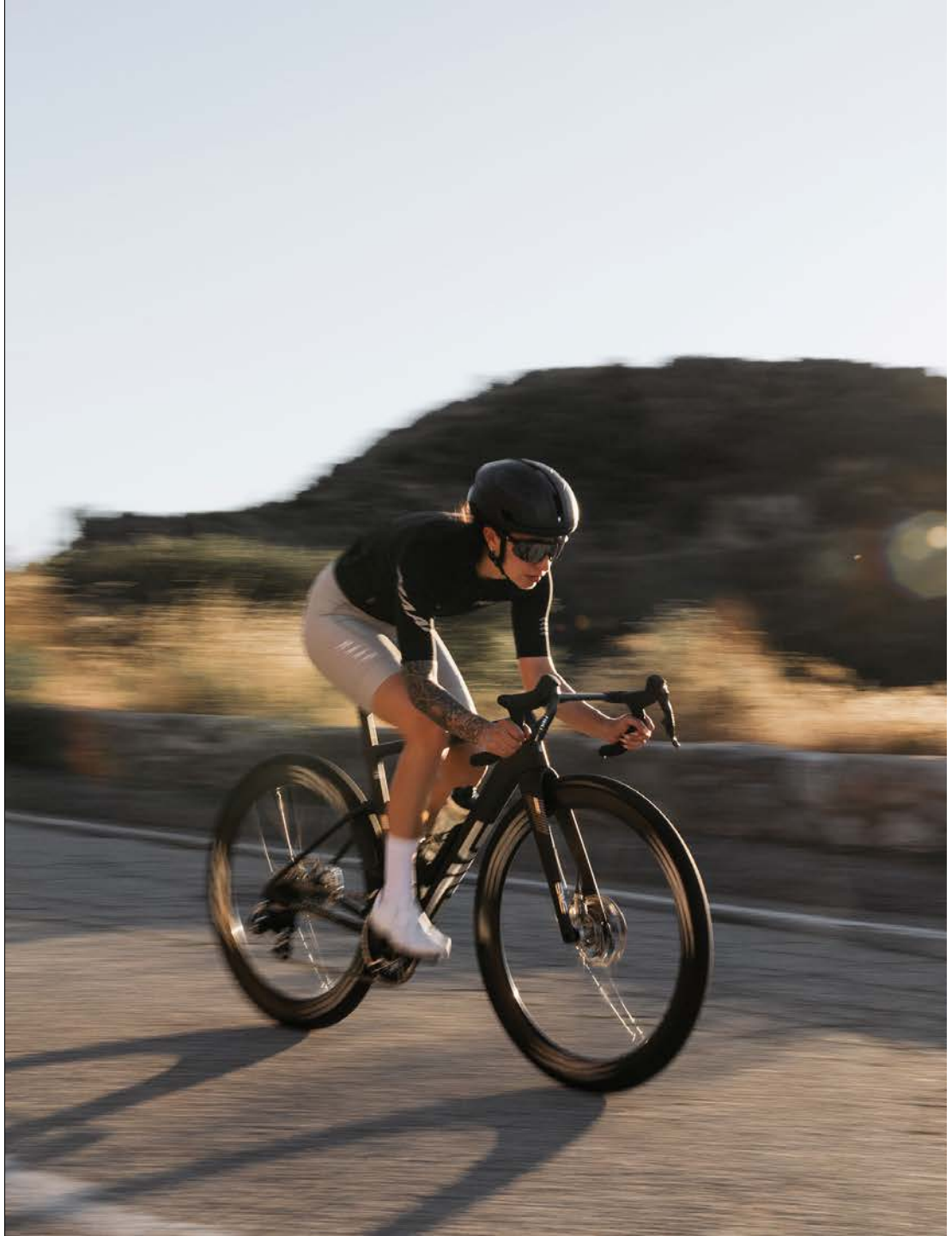


FIT FOR SPEED

Melee v2 Geometry Chart

Melee v2 Geometry Chart							
	47	50	52	54	56	58	60
Reach	367.6	374.6	380.7	386.7	393.3	400.1	407.5
Stack	501.7	517.4	532.9	547.4	564.7	584.9	610.4
STL (c-t)	421.4	442.1	464.5	479.7	502.9	522.4	554.2
TTL	502.1	518.1	533.5	546.2	560.6	576.7	597.1
SA	75.0	74.5	74	73.8	73.5	73.2	72.8
HA	70.8	71.5	72.3	72.5	73.2	73.2	73.8
HTL	97.5	110.1	122.2	138.8	153.3	176.5	199.5
BBD	75	75	75	73	73	71	71
CSL	410	410	410	410	410	412	412
WB	977.6	979.6	979.3	989.2	990.6	1006.5	1010.7
FC	579.3	581.4	581.1	590.3	591.7	604.8	609
S/O - 100mm	717.7	735.4	754.0	770.4	790.3	811.5	839.4
BB Height	267.4	267.4	267.4	269.4	269.4	271.4	271.4
RAKE	55	51	47	47	43	43	39
TRAIL 25	58.6	58.6	57.8	56.7	56.7	56.7	56.9
TRAIL 27	59.4	59.4	58.5	57.4	57.4	57.4	57.5
TRAIL 29	60	60	59	58	57.9	57.9	58
TRAIL 31	60.6	60.6	59.6	58.5	58.5	58.5	58.6
TRAIL 33	61.4	61.3	60.3	59.3	59.2	59.2	59.2

- Refined for racing
  - Lower stack height for sizes 56-60cm
  - 5mm in the frame, 6mm in the bar for a total of an 11mm reduction in stack height
- 5 Fork rakes across 7 sizes delivers no compromise handling characteristics for all sizes
- Increased seat tube length on larger sizes for more saddle height flexibility



LIMITED LIFETIME WARRANTY

LIMITED LIFETIME WARRANTY:

ENVE products are warranted to be in conformance with ENVE material and workmanship specifications. Items deemed eligible for coverage under the ENVE Limited Lifetime Warranty will be replaced or repaired at the discretion of ENVE for the defined period from date of purchase for firsthand original owners, and from date of the original product's manufacture for secondhand owners. Product registration is recommended to expedite ENVE Limited Lifetime Warranty service.

LIMITED LIFETIME CRASH REPLACEMENT:

ENVE carbon is engineered for performance at the highest levels of cycling and designed to lead the market in strength, durability, and ride quality. We do not design products to be indestructible. If you exceed the limits of your product while riding, racing, crashing, or driving your roof mounted bike into the garage – don't worry, we've got your back.

Protection begins from date of purchase and product registration is highly recommended. The ENVE Limited Lifetime Crash Replacement program is separate from the ENVE Limited Lifetime Warranty.