



WHITE PAPER 1.0



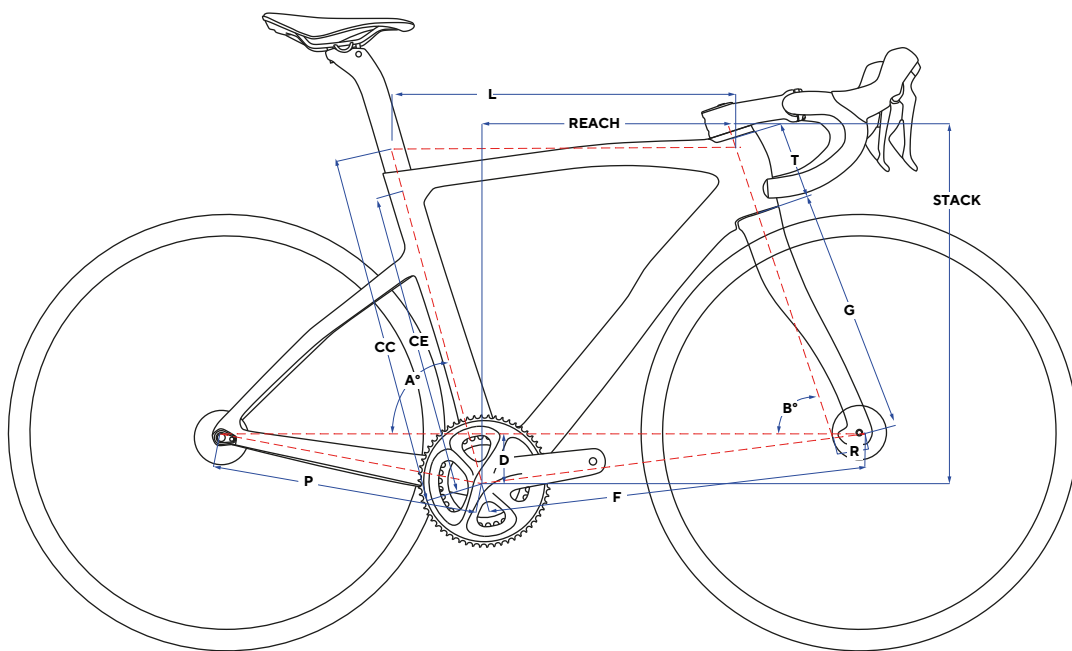
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1. DEDICATED COMPETITION GEOMETRY

For the Pinarello F, we produced a dedicated competition geometry based closely on the Dogma F (available in 9 sizes rather than the Dogma F's 11). Our goal was to satisfy the needs of not only hardcore racing cyclists, but every kind of high-end customer worldwide.

See below:

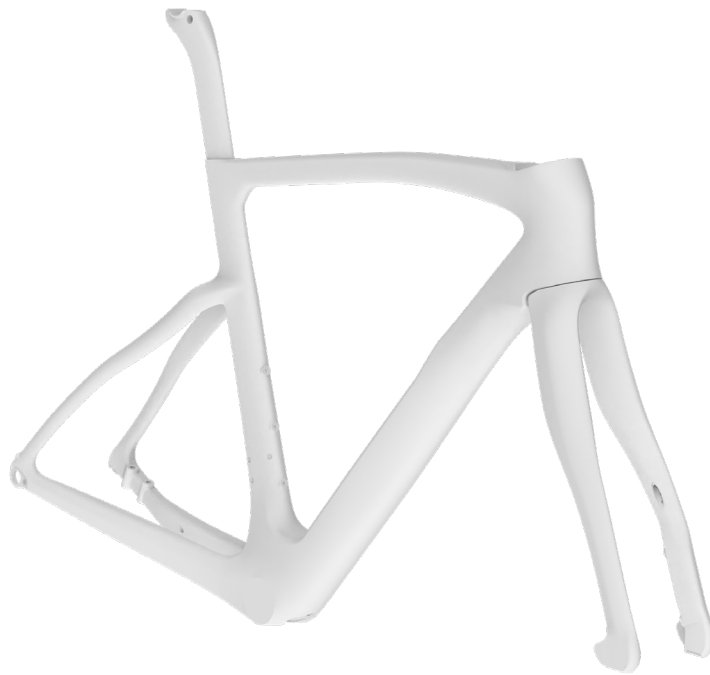


CE	CC	L	A [°]	B [°]	P	T	D	R	G	REACH	STACK
425	430	500	74,4	69,5	406	97	67	43	373	351,3	502,5
450	465	515	74,4	70,5	406	104	72	43	373	365,2	517,7
465	500	525	74	71,4	408	109	72	43	373	372,1	525,5
485	515	535	73,7	72	408	114	72	43	373	378,1	532,3
500	530	545	73,7	72,5	408	123	72	43	373	385,6	542,6
515	545	555	73,4	72,8	410	138	72	43	373	388,3	557,9
525	560	565	73	73,2	410	149,5	72	43	373	390,8	570,3
560	575	578	73	73,7	410	178	72	43	373	395,4	599,3
580	595	600	72,4	73,4	410	220	67	43	373	400,3	633,5

CE: SEAT TUBE Centre - END | CC: SEAT TUBE Centre - Centre | L: TOP TUBE Centre - Centre | A [°]: SEAT TUBE ANGLE
 B [°]: HEAD TUBE ANGLE | P: CHAINSTAY | T: HEAD TUBE | D: BB DROP | R: FORK RAKE | G: FORK HEIGHT | REACH | STACK



For this project, the detailed areas of focus for the Pinarello Lab were:



- 1. CARBON LAYUP:** two different carbon layups able to meet the demands of the market. Racing geometry, aero design, and lightweight performance for the F9 and F7 with a high-end carbon fibre. For the F5, racing geometry and aero performance with a more accessible carbon fibre layup.
- 2. FORK:** 520g with the same rake as the Dogma F, to ensure the best handling and sprint responsiveness.
- 3. FRAME WEIGHT:** 955g for the F9 and F7; 995g for the F5, balancing aero performance, stiffness, and weight.
- 4. SEAT POST:** a completely new, hidden, frontal seat clamp. Very compact and lightweight, to ensure the best ratio between aero performance and weight. And the same Dogma F seatpost: A full carbon post to keep weight low and deliver the best possible aero performance based on extensive studies.

2. TYRE CLEARANCE

Improving tyre clearance was one of our main objectives on the project, because even on a racing bike the benefits of wider tyres are proven. The F series will fit tyres up to 30mm.



3. FRAME DESIGN

A. CHAIN STAY DESIGN

Asymmetry is always central to our design DNA. To balance the greater torsional force imparted by the chain, all of our frames are asymmetric around the seat and chain stays to allow you to ride in a perfectly symmetrical way.

For the F series, we push the boundaries again, to have an asymmetric chain stay design, improving lateral stiffness, reducing watt dispersion, and providing overall better handling.

B. SEAT STAY DESIGN

Asymmetry has also been applied to the seat stay design. The disc brake's position on the left, together with the drivetrain forces on the right side, brought us to the conclusion that to better balance the frame, we needed asymmetric seat stays. The result is a more responsive, better-balanced frame.

C. HEAD TUBE DESIGN

Even the F's head tube is asymmetric, as it progresses from an aerodynamic shape to allow more lateral room on the right-side for cabling to pass through the frame.



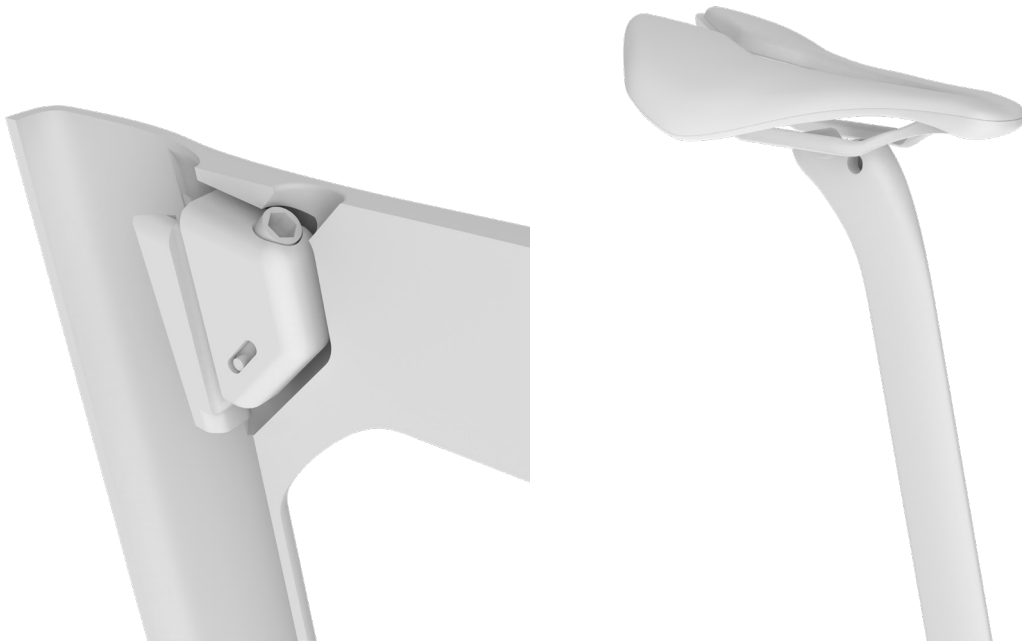
4. SEATPOST AREA

A. SEATPOST CLAMP

The integrated seatpost clamp on the Pinarello F reduces weight by 36g, compared to the previous model, and provides improved aerodynamic performance. We have also reduced the thickness of the top tube and the seat post to further improve aerodynamics.

B. SEATPOST

The Pinarello F series shares the same seatpost with the Dogma F – a masterpiece of aerodynamics, weight and stiffness.



The frame is compatible with 12mmx100mm through axle on the front and 12mmx142mm axle on the rear. This offers the most complete range of compatibility with rims on the market both for road and MTB riding.



5. MATERIAL CHOICE

The correct choice of materials will deeply influence a frame's performance, and the Pinarello F is available in different types of carbon fibre to best serve each rider's needs. These are provided by our partners at Toray in Japan, the world's leading manufacturer of carbon fibre:

- **T900:** Used on the F9 and F7 models, offering the ideal balance between reactivity, low weight, and vibration absorption. Perfect for competition.
- **T700:** Used on the F5 model, maintains excellent responsiveness and performance but with a greater capacity to absorb road vibration.

Carbon Reinforced Polymer (CFRP) is used to optimise every section of the frame to achieve the desired stiffness and lightness. For example, in areas where the stiffness is favoured, a high modulus fibre (HM) is chosen, while in areas where strength is essential, a high strength fibre (HT) is preferred. This choice contributes to increased impact strength, helping to prevent breakage.

6. AERODYNAMICS

Aerodynamic performance is absolutely crucial for a competition bike. For this reason, the F series shares many features with the Dogma F, but extensive R&D has also produced several other features that are unique to this new bike.

- 1. TICR** our integrated cable routing system. By removing loose cables from the front of the bike, it improves aerodynamics and therefore saves watts.
- 2. AERO SEATPOST** the seatpost's role on a race bike is crucial. The F series share its seatpost with the Dogma F, which has the best ratio ever between weight and aero performance.
- 3. THE F SERIES' DOWNTUBE** is very similar to the Dogma F's shape, hiding the bottle cage from the wind and improving aerodynamic performance considerably.
- 4. THE F SERIES' TOP TUBE** is thinner, improving aero performance and bringing it closer to the Dogma F.

GEOMETRIES AND SIZES

Pinarello continues to offer the perfect bike for every size of rider. Our well-known "Made4you" concept was applied to the F series, resulting in 9 frame sizes and a guaranteed perfect fit.

Every single size frame has been designed in isolation, meaning they will all perform to the same high standard. From the beginning, our goal was to design a bike that every rider can ride with the same Pinarello feeling and performance.



7. SPECIFIC PINARELLO F FEATURES

F SERIES

- Carbon T900 UD finish for F9 and F7
- Carbon T700 UD finish for F5
- Asymmetric frame
- Twin Arms
- Dedicated Onda fork
- Dedicated aero seat post
- Dedicated FSC Frontal seat clamp, integrated and aerodynamic
- Think 2, to fit electrical or mechanical group sets on the same frame
- TiCR internal cable routing
- TiCR integrated headset (1.5 upper and 1.5 lower)
- Italian thread BB
- Flatback profiles
- Fork Flap
- Max Tire: 700c x 30 mm
- RAD SYSTEM disc brakes
- Disc Flat Mount (max Ø160 mm)
- Front Axle Ø12 x 100 mm Shimano®
- Rear Axle Ø12 x 142 mm Shimano®



CICLI PINARELLO SRL

Viale della Repubblica 12

31020 Villorba (TV) Italy

tel. +39 0422 420877 fax +39 0422 421816

infobike@pinarello.com

www.pinarello.com