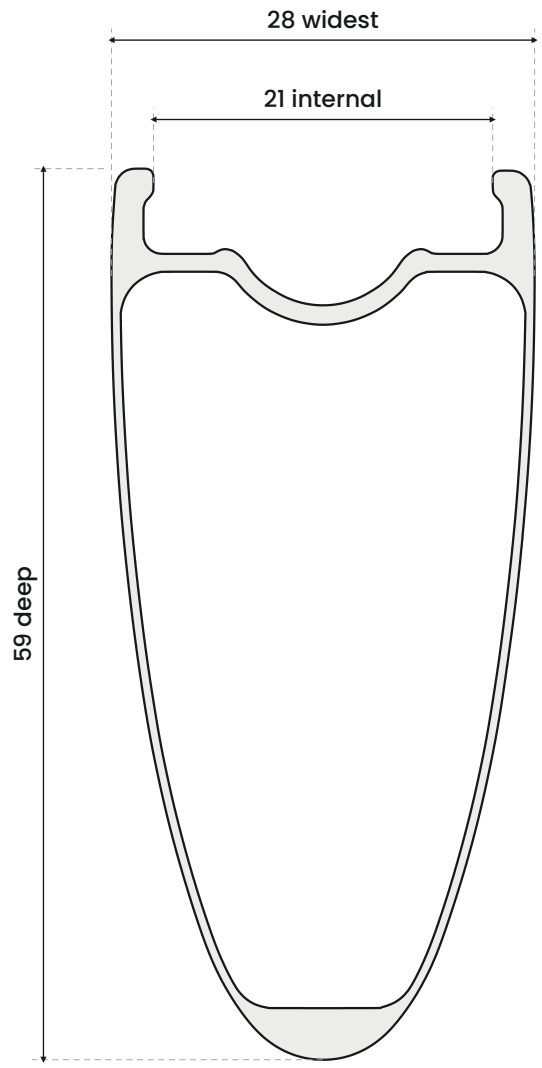
Venn 590 TCC

Road rim brake carbon rim, 59 mm deep, 1k filament wound. 5-year rim warranty.



Section at 2:1 when printed at 100% on A4. Figures in mm.

ERD	**522.2 mm** Factory figure
Internal width	**21 mm**
External width	28 mm widest; 27.5 mm at the bead
Depth	59 mm
Weight	500 ± 15 g Raw finished rim, no clear coat
Wheel size	700c / 29" (ISO 622)
Spoke holes	20 / 24 (front / rear) Drilled after moulding
Maximum spoke tension	130 kgf
Brake	Rim brake Brake track in high-Tg resin, Tg 250 °C (data on file); use pads made for carbon rims
Tyre	Tubeless ready, hooked Tubeless or with inner tubes
Rider weight limit	110 kg

FOR THE BUILD

- **Spoke length.** Use the ERD above. Before cutting spokes for a full order, measure one rim from the batch.
- **Nipples.** Order with tool access holes for internal nipples (the rim then needs tubeless tape), or without them for a true tubeless rim bed (external nipples only).
- **Brake track.** Carbon-specific pads only; bed them in before hard braking.
- **Finish.** Gloss uncoated, matte uncoated or filament wound 25k (+25 g per rim). Decals: black or none.

TESTED

- **Impact:** 100 J pass mark for road rim brake rims. The UCI's wheel requirement is 40 J (ISO 4210-7). A pass mark is the energy every rim must pass, not a failure point.
- **Spoke holes:** pull-through tested; pass mark 300 kgf.
- Every rim model goes through the same programme: fatigue, run-out, spoke hole strength, lateral rigidity, tyre retention and heat.