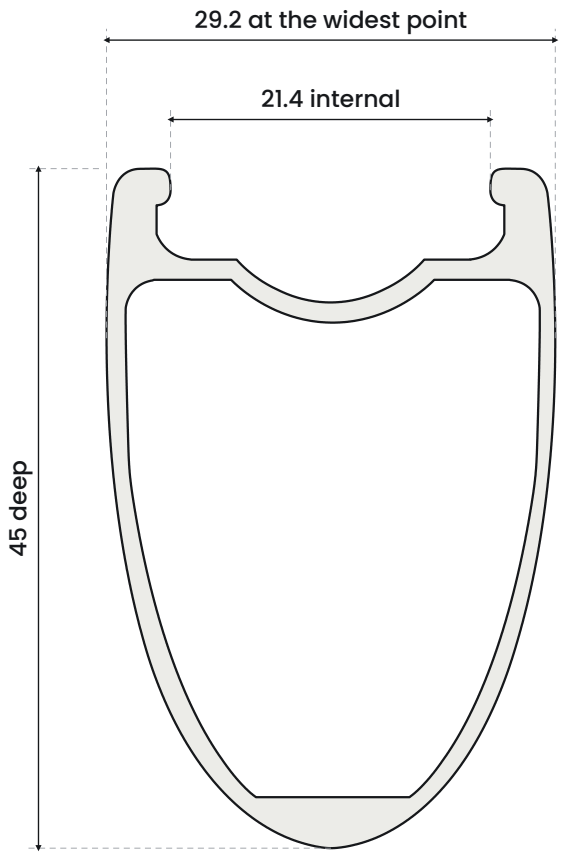
Venn 451 TCD

Road disc brake carbon rim, 45 mm deep, ETRTO standard. 5-year rim warranty.



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

ERD	**551 mm** Factory figure
Internal width	**21.4 mm**
External width	29.2 mm at the widest point; 28 mm at the uprights
Depth	45 mm
Weight	425 ± 10 g L version 390 ± 10 g Raw finished rim, no clear coat; the L version has the same profile, ERD and options
Wheel size	700c / 29" (ISO 622)
Spoke holes	20, 24 or 28 Drilled after moulding
Maximum spoke tension	130 kgf
Brake	Disc
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).
- **Finish.** Gloss uncoated, matte uncoated or 25k pattern (+30 g per rim). Decals: silver Venn Hanko, black Venn logo (original) or none (plain carbon).

TESTED

- **Impact:** 100 J pass mark for road disc 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.