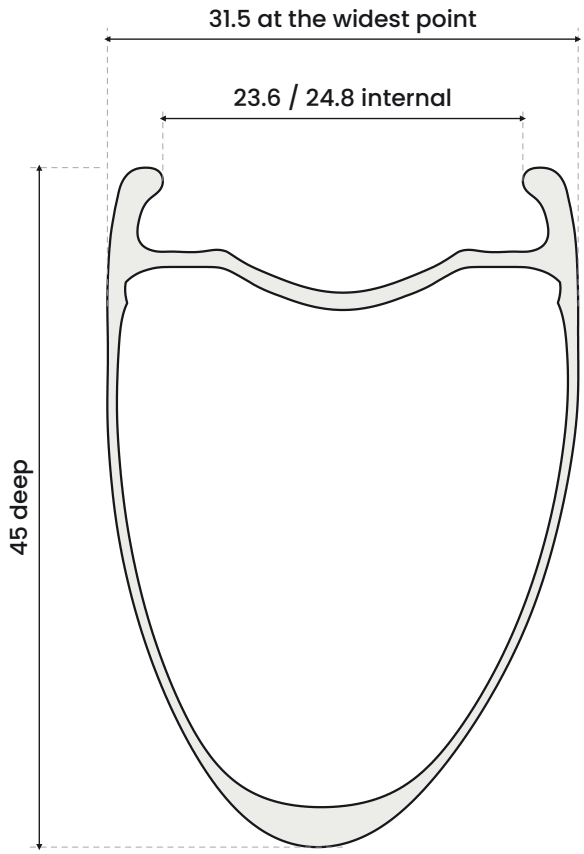
Venn 450A TCD UL

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



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

ERD	**549 mm** Factory figure
Internal width	**23.6 or 24.8 mm**
External width	31.5 mm at the widest point; 29.5 mm at the uprights
Depth	45 mm
Weight	325 ± 15 g Raw finished rim, no clear coat
Wheel size	700c / 29" (ISO 622)
Spoke holes	20 or 24 Moulded in, not drilled: no fibre is cut around the holes
Maximum spoke tension	150 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.
- **Asymmetric.** The spoke holes sit 2 mm off centre, which evens out the spoke tension between the two sides of the wheel. Lace it with the offset toward the non-drive side at the rear and away from the brake rotor at the front.
- **Nipples.** Order with tool access holes (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.