2 · HEART RATE

HEART RATE ZONES

Lactate threshold heart rate (LTHR) test

1. 15-20' progressive warm-up in Z1-Z2.
2. 30-minute solo test (no drafting/group), at the steadiest and highest pace you can sustain for the whole duration.
3. Record your average heart rate over the last 20 minutes of the test: that is your LTHR (threshold heart rate).
4. As a practical alternative, you can use the average HR of the last 10-15' of the 20' FTP test (Coggan) as a proxy for LTHR.
5. Heart rate zones are calculated as a percentage of LTHR; repeat the test every 6-8 weeks together with the power test.

Heart rate zones (Friel 7-zone model, based on % LTHR)

ZONE	NAME	% LTHR	INDICATIVE POWER EQUIVALENT	USE IN THE PROGRAMME
Z1	**Active recovery**	**< 81% LTHR**	Z1 power	Recovery, warm-up, cool-down
Z2	**Endurance**	**81-89% LTHR**	Z2 power	Aerobic base, long rides
Z3	**Tempo**	**90-93% LTHR**	Z3 / SS power	Tempo/Sweet Spot blocks
Z4	**Threshold**	**94-99% LTHR**	Z4 power	Threshold work
Z5a	**Low VO2max**	**100-102% LTHR**	Z5 power (lower part)	Extensive VO2max sessions
Z5b	**High VO2max**	**103-106% LTHR**	Z5 power (upper part)/Z6	Shorter VO2max repeats
Z5c	**Anaerobic/Neuromuscular**	**> 106% LTHR**	Z6-Z7 power	Surges, short accelerations

NOTE

Heart rate must always be read with age-related physiological limits in mind (cardiac drift, lower max HR) and the effect of heat and altitude, which matter a lot on the Hero Dolomites course: on long climbs at altitude, HR can be a less reliable reference than power, so where available we recommend prioritising the power zones.