



[Design Resources](#) > [Design Responses](#) > [About Bikes](#) > [Typology](#)

Mountain Bike (MTB)

MTB geometry creates an upright riding position. Higher end examples have strong, durable, lightweight frames and often include front and/or rear suspension (hydraulic or pneumatic) built to deal with the stresses of downhill impact and increase traction.

SUSPENSION POP UP:

Front suspension is common to most MTB's. Those with rear suspension are referred to as 'fully suspended' and those without as 'hard tails'. Suspension can often be 'locked out' on climbs and activated for downhill use. This preserves riders' energy as a lot of force is absorbed by suspension limiting the power delivered to the road as forward momentum.

A large number of closely-ratioed gears reflect the demands of high gradient climbs.

Frame shape and dimension:

Squat diamond frame from 13-23 inches.

Wheel size and wheel inner rim to inner rim:

26 inches and 57cm average distance.

Gears:

Up to 27 derailleur gears.

Brakes/Levers:

Disc, Cantilever or V brakes.

Typical accessories:

Lights. Rack.

Strengths:

- Built for off-road riding so is tough enough for the streets

Weaknesses:

- Suspension can reduce the rider's energy transfer on roads so rigid forks and frames are preferable for city use
- Lower end models are often heavy
- Often supplied with knobby tyres which are not efficient on roads
- Frames are often highly branded making them a 'target'