



## Classification for Bicycle Usage

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Our wheels, as well as all bicycle types, are designed to endure specific usage conditions and terrains. Depending on the type of challenge you want to tackle and the usual conditions it presents, you need to be aware of the stress your bicycle components will go through.

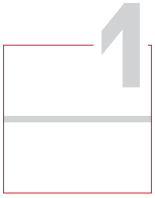
For example, if your riding style includes rougher tracks and extreme jumps, your bicycle model and its components have to be designed to endure more intense conditions. The wear and tear of the materials will be faster, so choosing the right equipment and implementing a maintenance regime for your bike are the first and most important steps to increase its life span and ensure great performance. On the other hand, if you are looking forward to tackling a long road and embracing your competitive side, your bicycle model has to be designed to endure higher speed and sprinting moments. Also, be aware each usage condition requires different technical skills, practice and control levels.

**BLACKJACK** wants you to get the full experience with your wheelset, so we have implemented the international standard **ASTM F2043-13\***, which consists of five categories, each related to a specific usage condition. We advise you to acquire bike components according to the following usage classifications and your personal preference.

\* Based on ASTM F2043-13 Standard Classification for Bicycle Usage, copyright ASTM International 100 Barr Harbor Drive, West Conshohocken, PA 19428, USA, [www.astm.org](http://www.astm.org).



## CATEGORY 1



**Examples of types of bicycles:** Road bicycles and City&Urban bicycles;

**Intended riding conditions:** Applies to bicycles used on paved surfaces where the tires are intended to maintain ground contact. The average speed depends on the specific usage conditions – if it is for commute or leisure, or if it is for sportive or competitive purposes, in which case the speed can go up to 50 km/h when sprinting;

**Level of riding skills:** The level of riding skills depends on the specific usage conditions – City&Urban bicycles require no specific skills, while sporty road bikes require more technical skills and practice;

**Intended jump height:** <15 cm.

## CATEGORY 2



**Examples of types of bicycles:** Gravel and Trekking bicycles;

**Intended riding conditions:** Applies for bicycles under Category 1 as well as intended to ride on gravel and unpaved roads. It is an 'irregular terrain' type, so a loss of tire contact with the ground may occur. The typical average speed is low, as this is typically a ride with leisure purposes;

**Level of riding skills:** The category does not require specific riding skills;

**Intended jump height:** <15 cm.

## CATEGORY 3



**Examples of types of bicycles:** Cross-Country bicycles;

**Intended riding conditions:** Applies for bicycles under Categories 1 and 2 as well as intended to ride on rough and unpaved terrain. It is a sportive type of ride with jumps and challenging trails. In this case, the level of average speed is not as relevant, but the technical skills are what makes a difference in a race;

**Level of riding skills:** The usage conditions require technical skills and practice;

**Intended jump height:** <60 cm.

## CATEGORY 4



**Examples of types of bicycles:** All-Mountain bicycles;

**Intended riding conditions:** Applies for bicycles under Categories 1, 2 and 3 as well as downhill gradients on very rough and rocky terrain. In this case, speed is required to be less than 40 km/h;

**Level of riding skills:** It is a sportive and competitive ride type with high jumps and on very rocky terrain. Control, technical skills and practice are a must;

**Intended jump height:** <120 cm.

## CATEGORY 5



**Examples of types of bicycles:** Enduro and Downhill bicycles;

**Intended riding conditions:** Applies for bicycles under all the above Categories as well as downhill gradients on very rough and rocky terrain, prepared for high and extreme jumps. In this case, speed is usually over 40 km/h;

**Level of riding skills:** Enduro and Downhill are extreme sports, so it is recommended for cyclists to have a high level of technical skills, practice, and riding control;

**Intended jump height:** <120 cm.