

**SPECIALIZED BICYCLE  
OWNER'S MANUAL**



**2010 APPENDIX A  
INTENDED USE / MAXIMUM WEIGHT CATEGORIES**

# 2010 APPENDIX A

## Intended use of your bicycle

**WARNING:** Understand your bike and its intended use. Choosing the wrong bicycle for your purpose can be hazardous. Using your bike the wrong way is dangerous.

No one type of bicycle is suited for all purposes. Your retailer can help you pick the “right tool for the job” and help you understand its limitations. There are many types of bicycles and many variations within each type. There are many types of mountain, road, racing, hybrid, touring, cyclocross and tandem bicycles.

There are also bicycles that mix features. For example, there are road/racing bikes with triple cranks. These bikes have the low gearing of a touring bike, the quick handling of a racing bike, but are not well suited for carrying heavy loads on a tour. For that purpose you want a touring bike.

Within each of type of bicycle, one can optimize for certain purposes. Visit your bicycle shop and find someone with expertise in the area that interests you. Do your own homework. Seemingly small changes such as the choice of tires can improve or diminish the performance of a bicycle for a certain purpose.

On the following pages, we generally outline the intended uses of all bike types and, based in part on CEN brake standards, we specify the maximum rider weights by bike family/model.

**Industry usage conditions are generalized and evolving. Consult your dealer about how you intend to use your bike.**

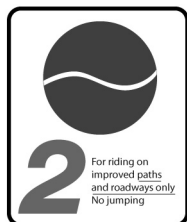
### High-Performance road



- **CONDITION 1:** Bikes designed for riding on a paved surface where the tires do not lose ground contact.
- **INTENDED:** To be ridden on paved roads only.
- **NOT INTENDED:** For off-road, cyclocross, or touring with racks or panniers.
- **TRADE OFF:** Material use is optimized to deliver both light weight and specific performance. You must understand that (1) these types of bikes are intended to give an aggressive racer or competitive cyclist a performance advantage over a relatively short product life, (2) a less aggressive rider will enjoy longer frame life, (3) you are choosing light weight (shorter frame life) over more frame weight and a longer frame life, (4) you are choosing light weight over more dent resistant or rugged frames that weigh more. All frames that are very light need frequent inspection. These frames are likely to be damaged or broken in a crash. They are not designed to take abuse or be a

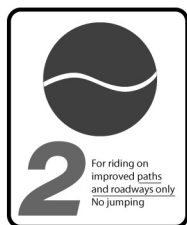
rugged workhorse. See also Appendix B.

### General purpose riding



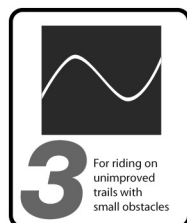
- **CONDITION 2:** Bikes designed for riding Condition 1, plus smooth gravel roads and improved trails with moderate grades where the tires do not lose ground contact.
- **INTENDED:** For paved roads, gravel or dirt roads that are in good condition, and bike paths.
- **NOT INTENDED:** For off-road or mountain bike use, or for any kind of jumping. Some of these bikes have suspension features, but these features are designed to add comfort, not off-road capability. Some come with relatively wide tires that are well suited to gravel or dirt paths. Some come with relatively narrow tires that are best suited to faster riding on pavement. If you ride on gravel or dirt paths, carry heavier loads or want more tire durability talk to your dealer about wider tires.

### Cycle-Cross



- **CONDITION 2:** Bikes designed for riding Condition 1, plus smooth gravel roads and improved trails with moderate grades where the tires do not lose ground contact.
- **INTENDED:** For cyclo-cross riding, training and racing. Cyclo-cross involves riding on a variety of terrain and surfaces including dirt or mud surfaces. Cyclo-cross bikes also work well for all weather rough road riding and commuting.
- **NOT INTENDED:** For off road or mountain bike use, or jumping. Cyclo-cross riders and racers dismount before reaching an obstacle, carry their bike over the obstacle and then remount. Cyclo-cross bikes are not intended for mountain bike use. The relatively large road bike size wheels are faster than the smaller mountain bike wheels, but not as strong.

### Cross-Country, Marathon, Hardtails



- **CONDITION 3:** Bikes designed for riding Conditions 1 and 2, plus rough trails, small obstacles, and smooth technical areas, including areas where momentary loss of tire contact with the ground may occur. NOT jumping. All mountain bikes without rear suspension are Condition 3, and so are some lightweight rear suspension models.
- **INTENDED:** For cross-country riding and racing which ranges from mild to aggressive over intermediate terrain (e.g., hilly with small obstacles like roots, rocks, loose surfaces and hard pack and depressions). Cross-country and marathon equipment (tires, shocks, frames, drive trains) are light-weight, favoring nimble speed over brute force. Suspension travel is relatively short since the bike is intended to move quickly on the ground.
- **NOT INTENDED:** For Hardcore Freeriding, Extreme Downhill, Dirt Jumping, Slopestyle, or very aggressive or extreme riding. No spending time in the air landing hard and hammering through obstacles.

• **TRADE OFF:** Cross-Country bikes are lighter, faster to ride uphill, and more nimble than All-Mountain bikes. Cross-Country and Marathon bikes trade off some ruggedness for pedaling efficiency and uphill speed.

## All Mountain



- **CONDITION 4:** Bikes designed for riding Conditions 1, 2, and 3, plus rough technical areas, moderately sized obstacles, and small jumps.

- **INTENDED:** For trail and uphill riding. All-Mountain bicycles are: (1) more heavy duty than cross country bikes, but less heavy duty than Freeride bikes, (2) lighter and more nimble than Freeride bikes, (3) heavier and have more suspension travel than a cross country bike, allowing them to be ridden in more difficult terrain, over larger obstacles and moderate jumps, (4) intermediate in suspension travel and use components that fit the intermediate intended use, (5) cover a fairly wide range of intended use, and within this range are models that are more or less heavy duty. Talk to your retailer about your needs and these models.

- **NOT INTENDED:** For use in extreme forms of jumping/riding such as hardcore mountain, Freeriding, Downhill, North Shore, Dirt Jumping, Hucking etc. No large drop offs, jumps or launches (wooden structures, dirt embankments) requiring long suspension travel or heavy duty components; and no spending time in the air landing hard and hammering through obstacles.

- **TRADE OFF:** All-Mountain bikes are more rugged than cross country bikes, for riding more difficult terrain. All-Mountain bikes are heavier and harder to ride uphill than cross country bikes. All-Mountain bikes are lighter, more nimble and easier to ride uphill than Freeride bikes. All-Mountain bikes are not as rugged as Freeride bikes and must not be used for more extreme riding and terrain.

## Gravity, Freeride and Downhill



- **CONDITION 5:** Bikes designed for jumping, hucking, high speeds, or aggressive riding on rougher surfaces, or landing on flat surfaces. However, this type of riding is extremely hazardous and puts unpredictable forces on a bicycle which may overload the frame, fork, or parts. If you choose to ride in Condition 5 terrain, you should take appropriate safety precautions such as more frequent bike inspections and replacement of equipment. You should also wear comprehensive safety equipment such as a full-face helmet, pads, and body armor.

- **INTENDED:** For riding that includes the most difficult terrain that only very skilled riders should attempt. Gravity, Freeride, and Downhill are terms which describe hardcore mountain, north shore, slopestyle. This is “extreme” riding and the terms describing it are constantly evolving.

Gravity, Freeride, and Downhill bikes are: (1) heavier and have more suspension travel than All-Mountain bikes, allowing them to be ridden in more difficult terrain, over larger obstacles and larger jumps, (2) the longest in suspension travel and use components that fit heavy duty intended use. While all that is true, there is no guarantee that extreme riding will not break a Freeride bike.

The terrain and type of riding that Freeride bikes are designed for is inherently dangerous. Appropriate equipment, such as a Freeride bike, does not change this reality. In this kind of riding, bad judgment, bad luck, or riding beyond your capabilities can easily result in an accident, where you could be seriously injured, paralyzed or killed.

- **NOT INTENDED:** To be an excuse to try anything. Read Section 2. F, of the Bicycle Owner’s Manual, p. 12.

- **TRADE OFF:** Freeride bikes are more rugged than All-Mountain bikes, for riding more difficult terrain. Freeride bikes are heavier and harder to ride uphill than All-Mountain bikes.

## Dirt Jump



- **CONDITION 5:** Bikes designed for jumping, hucking, high speeds, or aggressive riding on rougher surfaces, or landing on flat surfaces. However, this type of riding is extremely hazardous and puts unpredictable forces on a bicycle which may overload the frame, fork, or parts. If you choose to ride in Condition 5 terrain, you should take appropriate safety precautions such as more frequent bike inspections and replacement of equipment. You should also wear comprehensive safety equipment such as a full-face helmet, pads, and body armor.

- **INTENDED:** For man-made dirt jumps, ramps, skate parks other predictable obstacles and terrain where riders need and use skill and bike control, rather than suspension. Dirt Jumping bikes are used much like heavy duty BMX bikes.

A Dirt Jumping bike does not give you skills to jump. Read Section 2. F of the Bicycle Owner’s Manual, p. 12.

- **NOT INTENDED:** For terrain, drop offs or landings where large amounts of suspension travel are needed to help absorb the shock of landing and help maintain control.

- **TRADE OFF:** Dirt Jumping bikes are lighter and more nimble than Freeride bikes, but they have no rear suspension and the suspension travel in the front is much shorter.


## Kids



Bikes designed to be ridden by children. Parental supervision is required at all times. Avoid areas involving automobiles, and obstacles or hazards including inclines, curbs, stairs, sewer grates or areas near drop-offs or pools.

Specialized Bike Models	Frame / Material	Rider (lbs/Kg)	Cargo (lbs/Kg)	Max Total** (lbs/Kg)
<b>CONDITION 1: High-Performance Road</b>				
<ul style="list-style-type: none"> <li>• Tarmac / Roubaix / Ruby (Pro, Comp with SRAM)</li> <li>• Tarmac SL3 (Super Light model)****</li> <li>• Roubaix (Base triple, Base compact with Tekro)</li> <li>• Roll (all)</li> </ul>		240 / 109	5 / 2.3*	264 / 120
• Allez (with non-Shimano brakes), Dolce, Secteur		200 / 91	55 / 25***	220 / 100
<ul style="list-style-type: none"> <li>• Tarmac / Allez / Amira / Ruby (With Shimano brakes)</li> <li>• Langster</li> </ul> <b>See note 1 below</b>		200 / 91	5 / 2.3*	220 / 100
• Tarmac / Ruby (S-Works, Elite) <b>See note 1 below</b>				
• Roubaix (S-Works, Pro, Expert, Comp, Elite) <b>See note 1 below</b>				
• Transition (all)		200 / 91	5 / 2.3*	220 / 100
<b>CONDITION 2: General Purpose Riding</b>				
<ul style="list-style-type: none"> <li>• Ariel / Ariel Deluxe (all)</li> <li>• Crosstrail / Crosstrail Deluxe - V-Brake (Elite, Sport, Base)</li> <li>• Vienna (all)</li> </ul>		280 / 127	55 / 25***	308 / 140
<ul style="list-style-type: none"> <li>• Vita (all)</li> <li>• Crosstrail Deluxe - Disc Brake (Expert)</li> <li>• Crosstrail - Disc Brake (Pro, Expert, Comp)</li> <li>• BG Roulux</li> <li>• Sirrus (Base, Sport, Comp, Elite)</li> <li>• Carmel 26" 3, 4, 5 / Carmel 26" Wmn 3, 4, 5</li> <li>• Carmel 700c / Carmel 700c Wmn (all)</li> </ul>		300 / 136	55 / 25***	330 / 150
• Sirrus (Pro)		240 / 109	5 / 2.3*	264 / 120
• Sirrus (Expert)		240 / 109	55 / 25***	295 / 134
• Haul 1, 2 / Haul Wmn 1, 2		300 / 136	110 / 50	330 / 150
• Live 1 / Live Wmn 1 (Coaster Brake)		200 / 91	90 / 40	220 / 100
<ul style="list-style-type: none"> <li>• Live 2 / Live Wmn 2 (V-Brake)</li> <li>• Live 3 / Live Wmn 3 (Disc Brake)</li> </ul>		300 / 136	90 / 40	330 / 150
• Carmel 26" 1 / Carmel 26" Wmn 1 (Coaster Brake)		200 / 91	55 / 25***	220 / 100
• Carmel 26" 2 / Carmel 26" Wmn 2 (Coaster Brake)		200 / 91	55 / 25***	220 / 100
<b>CONDITION 2: Cyclo-cross</b>				
• Tricross (Sport, Singlecross)		300 / 136	55 / 25	355 / 161
• Tricross (S-Works, Pro, Comp, Expert)		240 / 109	55 / 25***	295 / 134
<b>CONDITION 3: Cross-Country, Marathon, Hardtails</b>				
<ul style="list-style-type: none"> <li>• Stumpjumper (S-Works M5, Expert, Comp, Base)</li> <li>• Stumpjumper HT 29er (all)</li> <li>• Myka HT (all)</li> <li>• Rockhopper / Rockhopper SL / Hardrock (all 26" &amp; 29er)</li> <li>• P Series All Mountain (all)</li> </ul>	Hardtail Alloy	280 / 127	55 / 25***	308 / 140
<ul style="list-style-type: none"> <li>• Epic / Era / Stumpjumper / Safire (Comp, Elite, Expert)</li> <li>• FSRxc (all)</li> <li>• Myka FSR (all)</li> </ul>	FSR Alloy	280 / 127	5 / 2.3*	308 / 140
<ul style="list-style-type: none"> <li>• Epic / Era / Stumpjumper / Safire (S-Works, Pro, Marathon, Expert, Comp)</li> </ul>	FSR Carbon	240 / 109	5 / 2.3*	265 / 120
• Stumpjumper 26" / 29er (S-Works, Marathon, Expert, Comp)	Hardtail Carbon			
<ul style="list-style-type: none"> <li>• Hotrock 24" (all)</li> <li>• Hotrock A1 FSR</li> <li>• Hotrock A1 FS Girls &amp; Boys</li> </ul>		190 / 86	5 / 2.3*	220 / 100
<b>CONDITION 4: All Mountain</b>				
• Enduro (S-Works, Pro)	Carbon	240 / 109	5 / 2.3*	265 / 120
<ul style="list-style-type: none"> <li>• Enduro (Expert, Comp)</li> <li>• Pitch (all)</li> </ul>	Alloy	280 / 127	5 / 2.3*	308 / 140

Specialized Bike Models	Frame / Material	Rider (lbs/Kg)	Cargo (lbs/Kg)	Max Total** (lbs/Kg)
<b>CONDITION 5: Gravity, Freeride, and Downhill</b>				
• SX Trail, SX, Bighit, Demo & Gromhit		280 / 127	5 / 2.3*	308 / 140
<b>CONDITION 5: Dirt Jump</b>				
• P.Series (P.1, P.2, P.3, P.Grom)		280 / 127	0	308 / 140
<b>Kids</b>				
• Hotrock (20", 16", 12")		80 / 36	5 / 2.3*	100 / 45
• Hotwalk (12")		40 / 18	0	48 / 22


 **CONDITION 1 NOTE - WARNING:** For riders weighing over 200lbs/91kg, the equipped brake pads must be replaced with Specialized Roval All Condition Brake Pads or Shimano M50T (Part #Y8BC98100) Wet Weather Brake Pads to meet EN 14781 wet braking safety standards. Once replaced the Maximum weight limit for rider and max total are 240lbs/109kg and 260lbs/118kg respectively.

\* Seat Bag Only

\*\* Includes weight of bike, any cargo, and rider

\*\*\* For bikes manufactured w/o original equipment dropout rack mounts, cargo should be limited to 30lbs/14kg

\*\*\*\* The S-Works Tarmac SL3 (Super Light model) is equipped with Zipp 202 Tubular wheelset, which has a weight rating of 189lbs/86Kg. For riders above this weight, the wheels should be replaced with wheels that have appropriate weight ratings.

 **WARNING:** For riders at the max rider weight limit, you may not be able to carry cargo if the max total weight is exceeded