

SPECIALIZED BICYCLE OWNER'S MANUAL

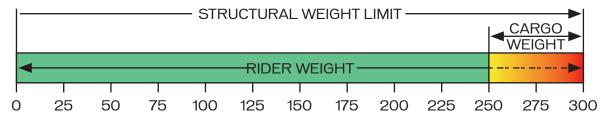
APPENDIX A SUPPLEMENT



INTRODUCTION

This Appendix A manual supplement is designed as an annual addition to the Appendix A section found in the Specialized Bicycle Owner's Manual. This appendix is designed to help the rider determine if a bike is suitable for the intended use and the combined Rider Weight and Cargo Weight.

Each bike model has an intended use and is designed and tested to support a Structural Weight Limit, which includes a Cargo Weight Limit. As the weight of the rider approaches the Structural Weight Limit of the bike, the allowable Cargo Weight might be reduced. For example, a bike may have a 55lb Cargo Weight Limit, but if the weight of the rider is too close to the bike's Structural Weight Limit, the rider may only be allowed to carry a smaller amount of cargo or no cargo at all. See the following page for a model-specific example and graphs.



UNDERSTANDING WEIGHT LIMITS

FRAME STRUCTURAL WEIGHT LIMITS

Structural Weight Limits for each bike are determined by Specialized through extensive lab testing, and are listed in the Bike Model, Structural Weight Limit and Cargo Weight Limit Tables.

A STATE OF THE STA	STRUCTURAL WEIGHT LIMIT	The maximum Total Weight (rider and cargo) a bike is designed and tested to support structurally.
lb lkg	RIDER WEIGHT	The weight of the rider in riding gear (e.g., jacket, helmet cam, hydration pack, helmet, etc.).
lb/kg	CARGO WEIGHT	The weight of any additional accessories (e.g., panniers, front/rear racks, saddle bags, handlebar bags, baskets, etc.) not accounted for in Rider Weight.
	CARGO WEIGHT LIMIT	The maximum Cargo Weight a bike has been designed and tested to support structurally.
THÎ!	TOTAL WEIGHT	The sum of Rider Weight and Cargo Weight.

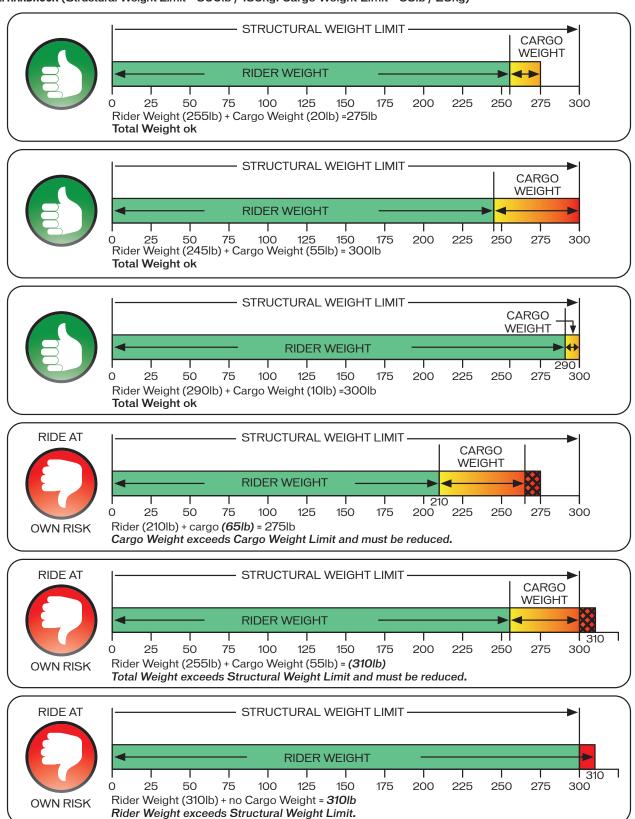


WARNING! Failure to follow these instructions and exceeding the specified Structural Weight and Cargo Limits may impair the structural integrity of the bicycle and may cause serious personal injury or death. For riders at the Rider Weight Limit, you may not be able to carry cargo if the Structural Weight Limit is exceeded.

DETERMINING MAXIMUM STRUCTURAL WEIGHT LIMITS

- 1. Determine the bike model in the Structural Weight Limit Table (see page 7).
- 2. Look up the Structural Weight and Cargo Weight Limits of the bike model.
- 3. Determine the Rider Weight, which includes all riding gear.
- **4.** Determine the Cargo Weight, which includes the weight of any additional accessories.
- 5. Subtract the Rider Weight from the Structural Weight Limit. The result is the amount the rider is allowed for Cargo Weight, up to the Cargo Weight Limit prescribed for the bike model.

EXAMPLE: HARDROCK (Structural Weight Limit = 300lb / 136kg. Cargo Weight Limit = 55lb / 25kg)



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.

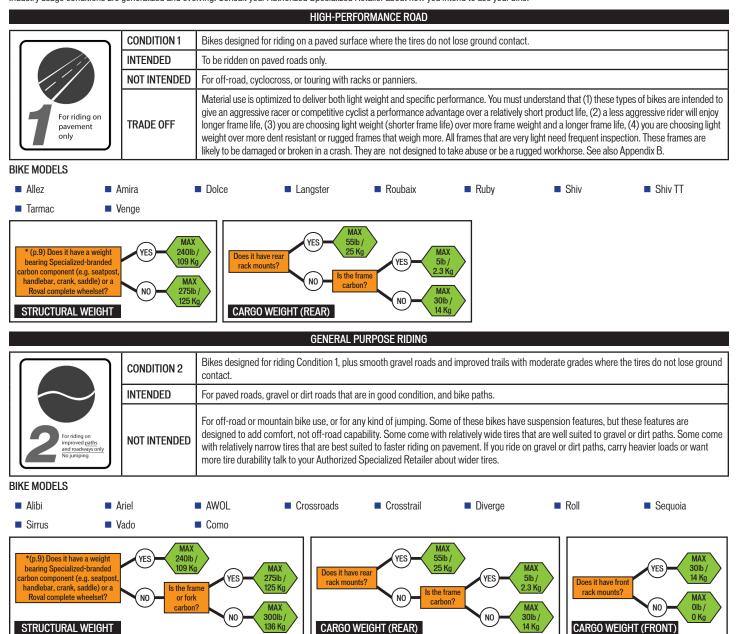
No single type of bicycle is suited for all purposes. Your Authorized Specialized Retailer can help you pick the "right tool for the job" and help you understand its limitations. There are many types of bicycles and many variations within each type. There are many types of mountain, road, racing, hybrid, 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 which, you want a touring bike.

Within each of type of bicycle, one can optimize the bicycle for certain purposes. Visit your Authorized Specialized Retailer 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 we specify the Structural Weight Limit by bike family/model.

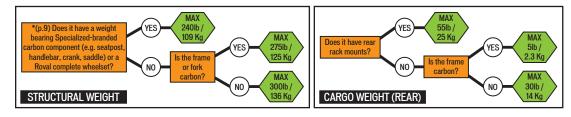
Industry usage conditions are generalized and evolving. Consult your Authorized Specialized Retailer about how you intend to use your bike.



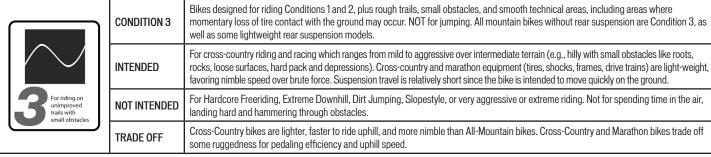
CONDITION 2 Bikes designed for riding Condition 1, plus smooth gravel roads and improved trails with moderate grades where the tires do not lose ground contact. INTENDED For cyclo-cross riding, training and racing. Cyclo-cross involves riding on a variety of terrain and surfaces including dirt or mud surfaces. Cyclo-cross bikes also work well for all weather rough road riding and commuting. 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 are not as strong.

BIKE MODELS

■ CruX



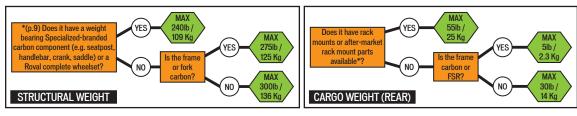




BIKE MODELS

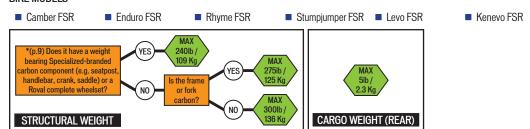


Ruze

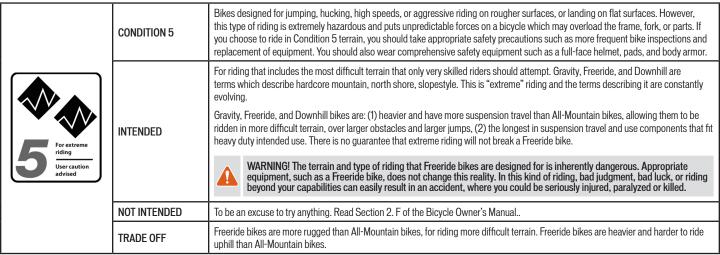


ALL MOUNTAIN		
	CONDITION 4	Bikes designed for riding Conditions 1, 2, and 3, plus rough technical areas, moderately sized obstacles, and small jumps.
	INTENDED	For trail and uphill riding. All-Mountain bicycles are: (1) more heavy duty than cross country bikes, but less heavy duty than Freeride bikes, (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, with models that are more or less heavy duty. Talk to your Authorized Specialized Retailer about your needs and these models.
For riding on rough trails with medium obstacles	NOT INTENDED	For use in extreme forms of jumping/riding such as hardcore mountain, Freeriding, Downhill, North Shore, Dirt Jumping, Hucking etc. Not for large drop offs, jumps or launches (wooden structures, dirt embankments) requiring long suspension travel or heavy duty components; and not for spending time in the air landing hard and hammering through obstacles.
Justacies	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.

BIKE MODELS

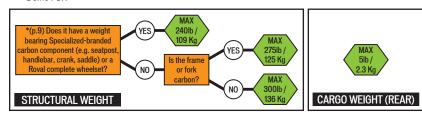


GRAVITY, FREERIDE AND DOWNHILL



BIKE MODELS

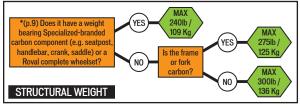
■ Demo FSR



DIRT JUMP 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 **CONDITION 5** 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. 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. INTENDED A Dirt Jumping bike does not give you skills to jump. Read Section 2. F of the Bicycle Owner's Manual. For terrain, drop offs or landings where large amounts of suspension travel are needed to help absorb the shock of landing and help **NOT INTENDED** maintain control. Dirt Jumping bikes are lighter and more nimble than Freeride bikes, but they have no rear suspension and the suspension travel in the TRADE OFF front is much shorter.

BIKE MODELS

P.Series





KIDS



CONDITION 6

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.

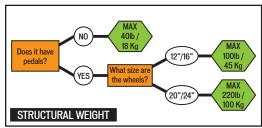
The Hotwalk Owner's Manual is available as a separate document, supplied with the Hotwalk bikes

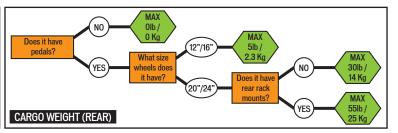
BIKE MODELS

Riprock

■ Hotrock

Hotwalk





STRUCTURAL WEIGHT LIMITS

		WEIGHT LIMITS (see page 9 for details)			
BIKE MODEL		CATEGORY (See Intended Use, p. 3)	La CARGO		STRUCTURAL
FAMILY	MODEL		REAR (lb/kg)	FRONT (lb/kg)	(lb/kg)
Alibi	All models	2	30 / 14	0/0	300 / 136
4.0	Sprint Comp	1	30 / 14	0/0	240 / 109
Allez	Elite, Sport, Base, Jr.	1	30 / 14	0/0	275 / 125
Amira	All models	1	5/2.3	0/0	240 / 109
	All alloy models	2	55 / 25	0/0	300 / 136
Ariel	All carbon models	2	55 / 25	0/0	275 / 125
	Comp, Base	2	55 / 25	30 / 14	300 / 136
AWOL	Expert	2	55 / 25	30 / 14	240 / 109
	S-Works, Expert	4	5/2.3	0/0	240 / 109
Camber FSR	Comp Carbon	4	5/2.3	0/0	275 / 125
	Comp, Base	4	5/2.3	0/0	300 / 136
Chisel	All models	3	30 / 14	0/0	300 / 136
	2.0, 3.0	2	33 / 15	30 / 14	300 / 136
Como	4.0, 5.0	2	33 / 15	0/0	300 / 136
Crossroads	All models	2	55 / 25	30 / 14	300 / 136
	Elite, Sport, Base	2	55 / 25	0/0	300 / 136
CrossTrail	Elite Carbon	2	55 / 25	0/0	275 / 125
	Expert Carbon, Expert	2	55 / 25	0/0	240 / 109
	S-Works, Expert	2	5/2.3	0/0	240 / 109
CruX	Elite, Sport	2	5/2.3	0/0	275 / 125
Glux	E5 Sport, E5 Base	2	30 / 14	0/0	275 / 125
	S-Works Carbon (bike)	5	5/2.3	0/0	240 / 109
Demo 8	S-Works Carbon (frame), I Carbon, I Alloy	5	5/2.3	0/0	275 / 125
	S-Works, Expert	2	55 / 25	30 / 14	240 / 109
Diverge	Comp, Elite, Sport, Base	2	55 / 25	30 / 14	275 / 125
Dolce	Elite, Sport, Base	1	55 / 25	0/0	275 / 125
	S-Works (bike), Pro, Elite, Coil	4	5/2.3	0/0	240 / 109
Enduro FSR	S-Works (frame)	4	5/2.3	0/0	275 / 125
	Comp	4	5/2.3	0/0	300 / 136
	S-Works, Pro, Expert	3	5/2.3	0/0	240 / 109
Epic FSR	Comp Carbon	3	5/2.3	0/0	275 / 125
Zpio i ori	Comp	3	5/2.3	0/0	300 / 136
	S-Works (bike), Pro Carbon, Expert Carbon	3	5/2.3	0/0	240 / 109
Epic HT	S-Works (frame), Comp Carbon	3	5/2.3	0/0	275 / 125
	S-Works	3	5/2.3**	0/0	240 / 109
	Expert Carbon, Comp Carbon	3	5/2.3**	0/0	275 / 125
Fatboy	Base	3	55 / 25	0/0	275 / 125
	SE	3	55 / 25	0/0	300 / 136
	24, 20	3	30 / 14	0/0	300 / 136
	S-Works	3	5/2.3**	0/0	240 / 109
Fuse	Expert Carbon, Comp Carbon	3	5/2.3**	0/0	275 / 125
	Expert, Comp, Sport, Base	3	30 / 14	0/0	300 / 136
	Hotwalk boy/girl	6	0/0	0/0	40 / 18
Hotrock	Hotrock 20" / 24" (all models)	6	55 / 25	0/0	220 / 100
Kenevo	All models	4	5/2.3	0/0	300 / 136
Langster	All models	1	30 / 14	0/0	275 / 125

			WEIGH	HT LIMITS (see page 9 fc	r details)	
BIKE MODEL		CATEGORY (See Intended Use, p. 3)	CARGO		STRUCTURAL	
FAMILY	MODEL		REAR (lb/kg)	FRONT (lb/kg)	(lb/kg)	
	S-Works FSR, Expert FSR	4	5/2.3	0/0	240 / 109	
Levo	Comp Carbon FSR	4	5/2.3	0/0	275 / 125	
LEVO	Comp FSR, Base FSR	4	5/2.3	0/0	300 / 136	
	HT Comp, HT Base	3	30 / 14	0/0	300 / 136	
P.Series	All models	5	0/0	0/0	300 / 136	
Pitch	All models	3	55 / 25	0/0	300 / 136	
	Expert Carbon	4	5/2.3	0/0	240 / 109	
Rhyme FSR	Comp Carbon	4	5/2.3	0/0	275 / 135	
	Comp	4	5/2.3	0/0	300 / 136	
	12", 16"	6	5/2.3	0/0	100 / 45	
Riprock	20", 24"	6	30 / 14	0/0	220 / 100	
Rockhopper	All models	3	55 / 25	0/0	300 / 136	
Roll	All models	2	55 / 25	30 / 14	300 / 136	
	S-Works, Pro, Expert, Comp, Elite, Sport	1	5/2.3	0/0	240 / 109	
Roubaix	Base	1	5/2.3	0/0	275 / 125	
5.1	S-Works, Expert, Comp, Elite, Sport	1	5/2.3	0/0	240 / 109	
Ruby	Base	1	5/2.3	0/0	275 / 125	
	Expert, Comp	3	5 / 2.3**	0/0	300 / 136	
Ruze	Base	3	30 / 14	0/0	300 / 136	
	Pro (module)	2	55 / 25	30 / 14	240 / 109	
Sequoia	Expert, Elite	2	55 / 25	30 / 14	275 / 125	
	Base	2	55 / 25	30 / 14	300 / 136	
Shiv	All models	1	5/2.3	0/0	240 / 109	
Shiv TT	All models	1	5/2.3	0/0	240 / 109	
	Pro Carbon, Expert Carbon, Comp Carbon	2	55 / 25	0/0	240 / 109	
C:	Elite Carbon	2	5/2.3	0/0	275 / 125	
Sirrus	SL, Expert, Elite, Sport	2	55 / 25	30 / 14	275 / 125	
	Base	2	55 / 25	30 / 14	300 / 136	
	S-Works, Pro Carbon, Expert Carbon, Coil	4	5/2.3	0/0	240 / 109	
SJFSR	S-Works (frame), Comp Carbon	4	5/2.3	0/0	275 / 125	
	Comp	4	5/2.3	0/0	300 / 136	
Tarmac	All models	1	5/2.3	0/0	240 / 109	
Vada	5.0	2	33 / 15	30 / 14	300 / 136	
Vado	6.0, 4.0, 3.0, 2.0	2	33 / 15	0/0	300 / 136	
Venge	All Models	1	5/2.3	0/0	240 / 109	

STRUCTURAL WEIGHT LIMITS - CRITERIA

300lb / 136Kg		
All alloy mountain bikes (without carbon fork)		
All flat bar equipped alloy hybrid / city bikes (without carbon fork)		
275lb / 125Kg		
All drop bar equipped carbon or alloy road bikes (without carbon components)		
All carbon or alloy cyclocross bikes (without carbon components)		
All carbon or alloy triathlon / aero / time trial bikes (without carbon components)		
All flat bar equipped carbon hybrid / city bikes (without carbon components)		
All flat bar equipped alloy hybrid / city bikes (with carbon fork, without carbon components)		
All carbon mountain bikes (without carbon components)		
All alloy mountain bikes (with carbon rigid fork, without carbon components)		

240lb / 109Kg All bikes with weight-bearing Specialized-branded carbon components or Roval wheelsets (complete wheelsets with Roval-branded rims and hubs) 220lb / 100Kg All 24" and 20" Kids bikes with pedals 100lb / 45Kg All 16" and 12" Kids bikes with pedals 40lb / 18Kg All kids walking bikes (no pedals)



* WARNING! The Structural Weight Limit for your bicycle is only as high as the item (bicycle or component) with the lowest Structural Weight Limit. The Structural Weight Limit for Roval wheels (complete wheelsets - Roval branded rims and hubs) and/or any weight-bearing Specialized-branded carbon components (including, but not limited to, handlebar, seatpost, stem, crank, saddle, rim, etc.) installed on any brand bike is 240lb (109Kg). Failure to follow this warning may result in serious personal injury or death. This does not apply to non-weight-bearing Specialized-branded carbon components (including, but not limited to, brake levers, chainrings, bottle cages, etc.). In case of a weight bearing non-Specialize-branded carbon component, please refer to the manufacturer's instructions for the applicable structural weight limit.

CARGO WEIGHT LIMITS - CRITERIA

55lb / 25Kg	
All frames with built-in rear rack mounts	A rear rack with cargo (max $55lb / 25Kg$) and/or seat bag (max $5lb / 2.3Kg$) can be installed and loaded up to a total combined maximum weight of $55lb / 25Kg$
30lb / 14Kg	
All alloy frames without built-in (original equipment) rear rack mounts*	A rear rack (with the use of separate rack mount clips) with cargo (max 30lb / 14Kg) and/or seat bag (max 5lb / 2.3Kg) can be installed and loaded up to a total combined maximum weight of 30lb / 14Kg.
All forks with built-in front rack mounts.	A front rack with cargo can be installed and loaded up to a total maximum of 30lb / 14Kg
5lb / 2.3Kg	
All carbon frames without built-in rear rack mounts*	Cargo capacity is limited to a seat bag
All full suspension frames (except P.Slope)	Cargo capacity is limited to a seat bag
0lb / 0Kg	
All P.Series bikes	No cargo permitted
All kids walking bikes (no pedals)	No cargo permitted
All forks without built-in front rack mounts	No cargo permitted

^{**} Fatboy, Fuse and Ruze models: After-market thru-axle and seat collar kits with built-in rack mount threads are available to retrofit certain frames, which would reclassify the bikes as being able to support 55 lb / 25 Kg of rear cargo weight.



WARNING! The specified Cargo Weight Limit applies only to compatible front and rear racks and seat bags where indicated. In case the specified Cargo Weight Limit differs from the cargo weight limit specified by the rack or seat bag manufacturer, always use the lowest limit. If you add any other load-bearing accessories, including, but not limited to, baskets and child carriers, you do so at your own risk in that these accessories have not been tested for compatibility, reliability or safety on your bicycle. Failure to follow this warning may result in serious personal injury or death.

Recommended Structural Weight Limits are based on International Standards Organization (ISO) 4210 testing standards (for cargo and rider only).