

Guide to Barnett Rollerskis

Barnett rollerskis have a long tradition and are used by biathlon federations around the world. Barnett is a supplier to the IBU (International Biathlon Union). Our Barnett rollerskis are available in many styles, sizes, materials and can be assembled with different wheels and bindings.

This guide is intended to help you find the perfect rollerskis for optimal and comfortable use. The first step is to choose a sliding technique. Indeed, as for cross-country skiing, there are two possibilities: the "classic" technique and the "skating" technique. Next, you need to assess your level (initiation, training, competition, etc.). Finally, you have to choose a type of wheel among the three models proposed: slow, medium or fast. It is important to tell us the type of binding you want according to the shoes you have.

Contents of the GUIDE

1) *barnett* ROLLERSKIS

2) THE STRUCTURE

- A. Frames
- B. Forks
- C. Bindings
- D. Wheels

3) OUR MATERIALS

- A. Carbon
- B. Aluminium

4) HOW TO CHOOSE THE RIGHT ROLLERSKI ?

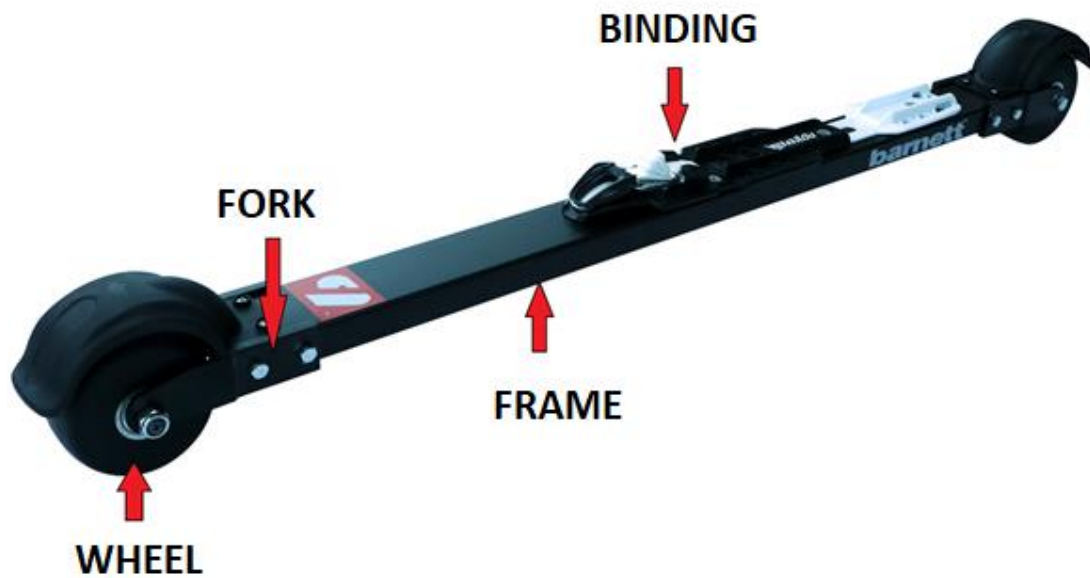
- A. Classic
- B. Skating

5) MAINTENANCE

1. Barnett ROLLERSKIS

REFERENCE	LEVEL	STYLE	MATERIAL	LENGTH	COLOUR
RCE 700	Initiation, Training	Classic	Aluminium	27" 9/16 inch (700mm) Axle to axle	BLACK
RCC-CARBON	Training, Competition	Classic	Carbon	27" 9/16 inch (700mm) Axle to axle	Visible carbon
RSE 530	Initiation, Training	Skating	Aluminium	20" 55/64 inch (530mm) Axle to axle	BLACK
RSE 610	Training, Competition	Skating	Aluminium	24" 1/64 inch (610mm) Axle to axle	BLACK, GREY, PINK

2. THE STRUCTURE



A. Frames

The frame holds all the components together and gives flexibility to the ski-wheel. It can be made of several materials depending on the characteristics required.

B. Forks

The forks are the only link between the wheels and the beam. They are made of aluminium on all our models and are firmly screwed to the frame.

C. Bindings

The bindings allow the bodies to be attached to the rollerskis by means of the binding manufacturer's specific shoes. They are attached to the frame with screws. We leave it up to you to choose whether you want to mount your bindings yourself or have the Barnett team mount them for you. You can choose between SNS or NNN bindings, depending on the rollerskis you choose or your cross-country ski boots. It is important to specify which type of boots or bindings you want so that we can fit them for you.

D. Wheels

Wheels are very important for good rollerskiing. There are several sizes with different characteristics. You can choose between slow and fast wheels, to adapt your rollerski to your personal needs. The shore and the rebound (elasticity) are two important factors that influence the grip and the rebound behaviour of the ski-wheel (energy recovery of the rubber).

We offer 3 types of wheels with different characteristics:

- The 76:35: Slow wheels allowing speeds of 10-29km/h
- The 76:50: Medium wheels allowing speeds of 10-35km/h
- The 76:75: Fast wheels allowing speeds of 10-50km/h

3. MATERIALS

The world of rollerskiing allows the use of a wide range of materials, including three main materials: carbon, aluminium and wood. Nowadays, wood is hardly used anymore because its resistance is rather poor compared to other materials.

A. Carbon

- It is a material that combines excellent strength and lightness. These parameters increase maneuverability and speed.
- It is very strong and difficult to break.
- It is not corrodible.

- It allows for good vibration absorption, which results in a smooth yet rigid ride.

B. Aluminium

- Aluminium is a light metal that increases control and speed
- Very strong
- Very resistant to corrosion
- The different types of aluminium alloys allow us to vary certain parameters such as weight and strength.
- The different alloys we use are:
 - **6061** : The magnesium and silicon present in this standard alloy, used by most ski wheels. Its high resistance, its solidity and its good hardness make this one a sure value.
 - **7075** : Zinc is the secondary element in this alloy. It has better characteristics than 6061 in terms of strength and weight, which leads to thinner thicknesses.

4. HOW TO CHOOSE THE RIGHT ROLLERSKI ?

To choose the right rollerski, you need to consider the following factors:

- What is the right size/length for your rollerski? (axle to axle)
- At what level do you practice this sport?
- What is your goal?
- What type of bindings do you need?
- What wheels do you need?

Please note : It is very important to specify which type of bindings and which size you will need for your rollerskis.

A. Classic

Reference	RCE 700	RCC-CARBON
Frame	Aluminium 6061	Carbon
Mass (One ski with wheels and binding)	1118g	1105g
Length (axle to axle)	27" 9/16 inch (700mm)	27" 9/16 inch (700mm)
Forks	Aluminium 7075	Aluminium 7075
Ground clearance	1" 1/8 inch (29mm)	1" 1/8 inch (29mm)
Wheels	PU 76 35, 3" x 1" 9/16 (73x43mm)	PU 76 35, 3" x 1" 9/16 (73x43mm)
Bearings	ABEC 9 waterproof	ABEC 9 waterproof
Bindings	SNS or NNN	SNS or NNN

B. Skating

Reference	RSE 530	RSE 610
Frame	Aluminium 6061	Aluminium 6061
Mass (One ski with wheels and binding)	968g	1023g
Length (axle to axle)	(530mm)	24" 1/64 inch (610mm)
Forks	Aluminium 6061	Aluminium 6061
Ground clearance	1" 1/16 inch (27mm)	1" 1/16 inch (27mm)
Wheels	Dimension 0,94/3,94 inch (24/100mm) 76:35: Slow wheels allowing speeds of 10-29km/h 76:50: Medium wheels allowing speeds of 10-35km/h 76:75: Fast wheels allowing speeds of 10-50km/h	Dimension 0,94/3,94 inch (24/100mm) 76:35: Slow wheels allowing speeds of 10-29km/h 76:50: Medium wheels allowing speeds of 10-35km/h 76:75: Fast wheels allowing speeds of 10-50km/h
Bearings	ABEC 9 waterproof	ABEC 9 waterproof
Bindings	SNS or NNN	SNS or NNN

5. MAINTENANCE

The maintenance of barnett rollerskis is very simple. They should be cleaned after use and stored in a dry place. It is possible to use cleaning products related to bicycles or only water. Our materials are corrosion resistant and do not rust.

Attention: The bearings must not be damaged during the cleaning session.

Before and after each use, we recommend checking all screws again.

Concerning the consumption of the wheels, as an indication, a professional will use 8 wheels per year, a person who does not ski-wheel as regularly will only need 4 wheels per year (or even over two years).

Caution: There are no brakes on our rollerskis, so we do not recommend the use of skis on roads with steep inclines.

We also recommend the use of a helmet, knee and elbow pads when skiing to avoid injury.

You can find standard and high-performance helmets and poles for rollerskiing on our online shop www.barnettsports.com