



BRITISHROWING

Performance Talent Profiling, Benchmarking and tracking: Testing Protocols

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TEAMWORK | OPEN TO ALL | COMMITMENT



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1. Introduction

The information provided in this document will enable you to perform the tests required to complete a '[Rower Report](#)'. The report generated will give you a visual representation of where you currently stand on ergo performance. This should be used in collaboration with the '[Rower Development Guide](#)' to fully view areas of potential improvement.

The results and the information given in the report should be used as an aid to help conversations between rowers and coaches about what areas you may wish to focus on.

Figure 1. The attributes and tests that are included in the Performance Talent Rower Report.

Performance	<ul style="list-style-type: none">•2km Ergo at Free Rate•5km Ergo at Free Rate
Anthropometry	<ul style="list-style-type: none">•Height, weight and arm span
Endurance Capacity	<ul style="list-style-type: none">•30 minute ergo (Rate 20)
Power Capacity	<ul style="list-style-type: none">•250m Ergo at Free Rate•7 Power Stroke Assessment

The '[Rower Report](#)' focuses on the performance data for a rowers development in the early stages of the performance pathway. For documentation to assist the development of the whole rower please refer to the '[Rower Development Guide](#)' as well as '[How Much How Often](#)'

To ensure that the report contains accurate reflections of a rower's development, it is important that the data collected is of a high quality. Following the procedures provided in this booklet will ensure the collection of high-quality data, however, the quality can be compromised if the rowers do not follow the instructions below:

- **Rowers cannot be tested in a fatigued state.** It is recommended that rowers do not undertake any moderate - strenuous exercise 24 hours prior to the testing. This includes activities like heavy lifting through such activities as DIY and gardening, as well as exercises performed in the gym.
- **Two hours (approx.) before testing,** the rower should have a light meal (e.g. cereal, toast or sandwiches) and at least a litre of water. If several tests are taking place throughout a day, the rower should ensure they bring some lunch/snacks and plenty of water with them, so they are sufficiently fuelled and hydrated to perform maximally in each test.
- **The rower should refrain from alcohol 24 hours** before a testing day.

2. Uploading data

The '[Rower Report](#)' is only available to those who have taken part in [Performance Talent](#) activity. A link to upload data will be sent prior to the dates shown below. Data should be uploaded four times a year at the following times for each specific period.

- September 1st – 15th - Baseline Scores
- December 15th – 31st for the September - December period.
- April 1st – 15th for the January - March period.
- July 10th - 20th for the April - July period.

General

- Upload as much data as accurately as possible that you have available to make the report as accurate and helpful as possible.

Performance and Endurance Data

- For the following tests, the result you upload should be as the table shown below.
- These can be performed at any time during that period allowing these tests to fit in with your training schedule.
- It is important that you upload scores only performed in that period even if this is not as good as your personal best. The report should reflect your current ability, not historical.

Test	September (Baseline)	December	April	July
2km	Best score from the previous season	Best score from September to December	Best score from January to April	Best score from Apr – July
5km				N/A
30 Minute	Performed no more than 2 weeks prior to upload.			

3. Tests to be performed

- **Notes on 'Actions to Improve'.**
 - *The results of these tests should be used to help aid the conversation between the rower and the coach.*
 - *Each piece of advice assumes that the specific test is your area in most need of improvement relative to all other testing. It suggests a method that is likely to improve your ability in that area.*
 - *There are many reasons a specific test may not be as good as you expect it to be, and many ways to improve.*
 - *These should not be used as quick fixes and any changes made to training should be thought about for the long-term benefit of the rower.*

3.1 Performance

3.1.1 2km and 5km performance tests

- Aim
 - 2K: To test your power at VO2 Max
 - 5K: To test your Anaerobic Threshold Capacity.
- Testing procedures:
 - Using a Concept 2 rowing machine.
 - From a standing start complete 2 or 5km in the fastest time possible.
 - Record time taken. (MM:SS.0)
- *Actions to improve:*
 - *Focus on shorter distance ergo pieces with short rests.*
 - *By performing multiple intervals with rest time, you can spend more time practising your technique at race pace.*
 - *Examples include:*
 - *2k: 8 Weeks twice a week 6x500m 1' rest on 2k Pace.*
 - *5k: 8 Weeks twice a week 6x1km 2' rest on 2k Pace.*

3.2 Anthropometry

- Height
 - Recorded in CM
 - Wearing no shoes on a flat surfaced measured to the top of your head.
- Weight
 - Recorded in KG
 - Wearing an all-in-one and no shoes.
- Arm span

- Recorded in CM
- Measured from fingertip to fingertip along your back. Keep your back/arms as flat as possible preferably along a wall.
- *Notes for measurements.*
 - *It is best to aim to get these measurements at the same time of day. E.g. Morning.*

3.3 Endurance Capacity

3.3.1 30 Minute Ergo (Rate 20)

- Aim
 - To test your aerobic capacity
- Testing Procedure
 - Using a Concept 2 rowing machine.
 - In the single time workout menu set:
 - Time to 30 minutes
 - Split length set to 30s
 - Row for 30 minutes at the lowest split possible. The split should be a split that the rower can hold for the whole 30 minutes.
 - Record distance, 500m split, watts and average stroke rate.
 - The final average rate must be rate 20.
- *Actions to Improve:*
 - *The focus should be on ensuring you are maintaining a high-quality, high intensity work at Rate 20.*
 - *Example:*
 - *6x5' at Rate 20. 1:30 rest which can be done once a week.*
 - *If the quality of the movement falls below what is expected you should move to other cross training activity.*
 - *Performing other cross training activity (e.g. swimming, cycling or running) over a minimum of 60 minutes at a low intensity (UT2 see Rower Development Guide) can also be done to improve your overall aerobic capacity.*

3.4 Power Capacity

- Aim:
 - To test your maximum power output.

3.4.1 250m Performance Test

- Testing procedures:
 - Using a Concept 2 rowing machine.

- From a standing start complete 250m in the fastest time possible.
- Record time taken. (MM:SS.0)
- All strokes must be full length.
- *Actions to Improve:*
 - *Practising your technique over speed is helpful for developing max power production.*
 - *Example:*
 - *100m max effort ergo. Performed once or twice per week for 12 weeks.*

3.4.2 7 Power Stroke Assessment

- Testing Procedure
 - Using a Concept 2 rowing machine.
 - Before starting the test, the rower is requested to ensure that their technique is as close as possible to what they would do on the water.
 - If you have the facility, filming the test will help the coach and athlete decide if their on-water technique is maintained throughout the test.
 - The rower then rows two build up strokes followed by five consecutive strokes at maximal effort. The rower must maintain a consistent SR of 34 (± 1).
 - For the last 5 strokes, record the following measurements 'live' for each stroke: Stroke Power (Watts) (or 500m split if you can't change the units to power), SR and distance if you can. The largest power achieved at R34 (± 1) is recorded as their best performance.
 - To ensure that the rower is able to produce a power capped at a SR of 34 this test is conducted twice.
- *Actions to Improve:*
 - *Power is about producing high force at high speed. Practise putting yourself in strong positions and moving fast.*
 - *This can be done through weight training with high bar speed, a high technical quality and a high load with a low number of reps.*
 - *Refer to Level 3 Athleticism of the Rower Development Guide for examples on exercise to focus on to improve power output.*

4. Recording Data

If you are not already doing so you may wish to keep a record of your ergo scores to show if you are progressing in your training.

Please see "Level 3, Lifestyle and Training" of the Knowledge, Understanding & Application pillar in the [Rower Development Guide](#) for more advice on what data you may wish to record in a training diary.