

World Record Capable Jump Course Setup



Based on 2026 WBC Technical Rules | Must be read with WBC PPG & Requirements for IWWF Records

STEP 0 — Before You Touch the Water: Prerequisites & Approvals

Before anyone starts dragging buoys around, there are a few things that must be sorted in advance. Skipping these steps means your event won't count for RC purposes — no matter how good the setup is on the day.

CRITICAL — Written WBC Approval Required 30 Days Before the Event

Written RC approval from the WBC Chairman is mandatory at least 30 days before your tournament. Without it, no World Records set at your event can be ratified.

The tournament must appear on an official federation or confederation calendar at least 30 days out. Ad hoc competitions do not qualify for RC status.

Send your request to the WBC Chairman with a copy to the WBC Secretary.

IWWF Licences

Every skier who competes at an RC event must hold a valid IWWF licence. Check this before the event.

Check Your Jump & Equipment

Before anything goes in the water, confirm your jump ramp design and materials comply with the rule book. [\[Rule 1406\]](#)

Jump ramp height: 18 inches / 45.7 cm above the water surface

Construction materials and dimensions within WBC-approved tolerances

Handles, ropes, and leader comply with Rules 1402–1403

Towboat meets required specification [\[Rule 1501\]](#)

STEP 1 — Laying Out the Jump Course [\[Rule 1601\]](#)

Once your jump is in the water and confirmed compliant, it's time to lay out the course. The jump course dimensions and setup must be in strict accordance with Rule 1601 of the 2026 WBC Technical Rules.

OFFICIAL RULE — Rule 1601: Jump Course

The Jump course dimensions shall be in accordance with the following:

(A) Jump Ramp. The jump ramp shall be set parallel to the jump course. The method of determining this requirement shall be either via a surveyed course or a measured course.

(B) Buoys. No buoys or markers other than those required by Figure 1601 are permitted within the jump course area except to mark safety hazards. Any such buoys shall be distinguishable from course buoys and shall be pointed out to team representatives/skiers before the start of the competition.

(C) Departure Point. The departure point for the Jump Event shall be not less than 200m before the jump course entrance gate and shall be as close as possible to an extension of the course line.

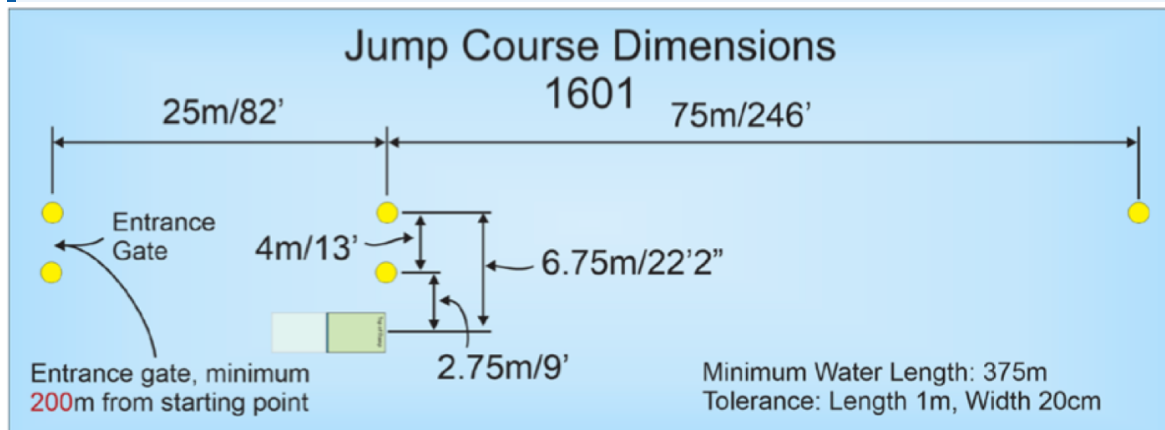


Figure 1601 — Key Course Dimensions

Dimension	Metric	Imperial	Tolerance
Entrance gate to jump ramp	25m	82'	±1m
Jump ramp to end of course	75m	246'	±1m
Jump ramp overall width	6.75m	22'2"	±20cm
Jump ramp deck width	2.75m	9'	±20cm
Lateral offset to entrance gate	4m	13'	±20cm
Minimum water length	375m	—	±1m

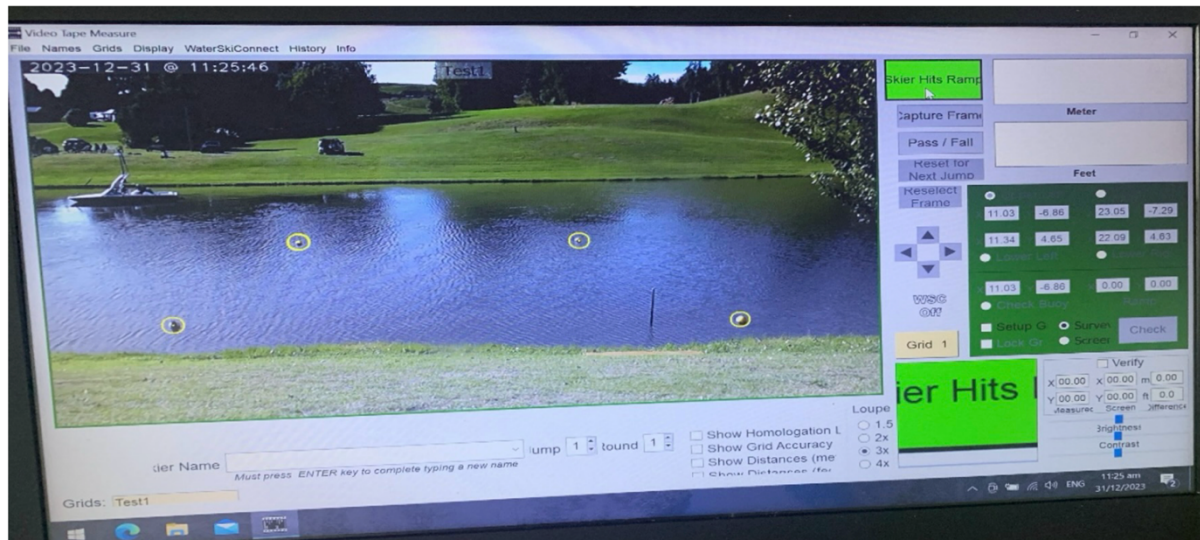
STEP 2 — Setting the Grid Box [Rule 407]

Once the jump course is laid out, it's time to set the **grid box** — the measurement zone in front of the jump where distances are calculated. You can run either a one-grid-box system (4 buoys) or a two-grid-box system (6 buoys). Two boxes are strongly recommended for any serious RC event, as they give you greater accuracy. [\[Rule 407\]](#)

What Does the Grid Box Do?

The grid box gives the video measurement software a fixed reference frame. The computer uses the known positions of those buoys to calculate where the skier lands, then works out the jump distance from the front of the ramp.

Single vs. Two-Grid-Box Systems



One-Grid-Box System (4 Buoys) — Minimum RC	Two-Grid-Box System (6 Buoys) — Recommended
First two buoys: 10m from the ramp	First two buoys: 5m from the ramp
Second two buoys: 22m from the ramp	Second two buoys: 15m from the ramp
Outside buoys align with outer boat buoys	Third two buoys: 25m from the ramp
Inside buoys: inward toward shore	Same lateral alignment applies
Requires 1 camera & 1 computer	Requires 2 cameras & 2 computers (one per grid)
Minimum requirement for RC events	Strongly recommended for World Record attempts

⚠ Buoy Placement Must Be Exact — No "Approximately"

These buoys define the measurement zone. Secure all anchor ropes properly and re-check positions before competition starts.

Common issues: loose buoy ropes, buoys drifting after anchoring, loose or stretched jump cables affecting ramp position.

Re-check all of these before the first competitive pass of the day.

STEP 3 — Camera & Video Measurement Setup [Rule 1303 & Rule 407]

This step must be completed **before you finalise measurements**. The camera position is critical — get this wrong and your video measurements could be unreliable or invalid. [\[Rule 1303\]](#)

⚠️ Approved Software Only — Rule 407

Only WBC-approved video jump measurement programs may be used. The video result is FINAL.

Currently approved: Video Tape Measure | Boettcher Jump Measurement System | SplashEye | Bob Corson System.

Check WorldBarefootCouncil.com for the current approved list before your event.

Camera Placement Specifications

Requirement	Specification
Minimum height above water [Rule 1303]	At least 5 metres above water level. Higher is better — the greater the vertical angle, the more accurate the measurement.
Horizontal alignment	Camera must be centred on the grid box, mounted perpendicular to the jump course centreline, directly opposite the grid.
Two-grid-box system	Two separate cameras required — one per grid box. Use two computers for best efficiency.
Mount stability	Use a solid scaffold, platform, or fixed structure. Any camera movement between passes will corrupt your calibration.
World Record video evidence [Rule 407 & 1706]	Save: (1) image of the landing box, (2) image of the jump landing, (3) a no-skier image using the exact same setup.

STEP 4 — Surveying the Grid Box Course

A proper survey turns your physical buoy setup into precise coordinates the measuring software can use. This is not optional — it's the foundation of the whole measurement system.

Capture grid buoy coordinates. Survey every grid box buoy to get accurate coordinate data. GPS-RTK equipment (e.g., Emlid Reach) gives best accuracy.

Input coordinates into your measurement software. Follow the exact input procedure for your approved software system — each system has its own specific process.

Set up camera calibration. With buoy coordinates entered, calibrate the camera so the software correctly maps screen positions to real-world positions.

Check data accuracy. Run a thorough system check to confirm data is reading correctly and the system is functioning properly.

Validate and certify. Once satisfied with accuracy, proceed to the Certification step (Step 5).

 Common Causes of Survey Errors — Check These

Buoys that have drifted from their surveyed position since measurement

Camera movement between calibration and competition

Loose anchor ropes on grid buoys allowing buoy movement

Loose or stretched jump cables affecting ramp position

Re-check all of these before the first competitive pass of the day.

STEP 5 — Certifying the Measurements

Before competition begins, you need to physically verify that your video measurement system is reading the correct distances. There are two methods: the tape measure check and/or the test buoy check — if there's a discrepancy, fix it here, not after someone breaks a World Record.

For World Record and Ranking List Homologation, the test buoy check must be used.

The Tape Measure Check



1. **Attach a tape measure to the front of the jump ramp.** Secure a tape measure (with floats) to the front edge — this is your zero-reference point
2. **Measure three points per grid.** Check at: the beginning, the middle, and the end of each grid. Repeat for both grids if using two.
3. **Compare against system readings.** At each point, compare your tape measure reading with what the video system shows. They must match.
4. **If there is a discrepancy — fix it.** Check survey, Check plot points of the Buoys, Adjust or recalibrate until the tape and the software agree. Do not proceed to competition until resolved.
5. **Record everything.** Document certification results, any corrective actions taken, and final verified measurements for your dossier.

The Test Buoy Check

1. **Place a test buoy in the landing area.** Ideally, the test buoy should be within the grid area close to the landing point approximately 15 metres from the front edge of the ramp. The test buoy distance should be measured initially by survey to compare the system measurement with the surveyed distance.
2. **Measure the test buoy using the video jump measurement system.** Note the reported distance. Repeat for both grids if using two.
3. **Compare against system readings.** Compare the surveyed distance with what the video system shows. They must match within a tolerance of +/- 10cm.

4. **If there is a discrepancy — fix it.** Check survey, Check plot points of the grid buoys, adjust or recalibrate until the surveyed distances and the software-reported distances agree within tolerance. Do not proceed to competition until resolved.
5. **Record everything.** Document certification results, any corrective actions taken, and final verified measurements for your dossier.

Final Pre-Competition Checklist

Once certified, recheck and document all of the following:

Jump height — ramp height above water level confirmed

Jump cable tension and anchor security

Grid box buoy positions — confirmed not drifted since survey

Camera position and stability — not moved since calibration

GPS speed system operational [\[Rule 1503–1504\]](#)

All measurements logged in the jump scoring system

✓ GPS Speed Verification — Do Not Forget! [\[Rule 405\]](#)

Towboat speed must be controlled using a WBC-approved GPS speed system.

A jump pass is automatically disallowed if GPS confirms speed exceeded 73.5 kph (45.7 mph) while the skier held the handle.

Speed compliance must be documented as part of your RC homologation dossier.

STEP 6 — Officials & Minimum Qualifications [\[Rule 213\]](#)

An RC tournament has minimum qualification requirements for all Lead Officials. Running an RC event with under-qualified officials means any World Records won't be ratified. [\[Rule 213\]](#)

Official Role	Minimum Level (RC)	Note
Chief Judge	Level 2	Level 1 required at World Championships
Chief Scorer	Level 2–3	Level 1 required at World Championships
Chief Driver	Level 2	Level 1 required at World Championships
Homologator	Level 2	Must sign and submit the Homologation Dossier

For the Jump event: minimum one Level 2 Event Judge, one Level 3 Event Judge, and one Level 4 Event Judge. [\[Rule 213\(B\)\]](#)

STEP 7 — World Record Requirements [Chapter 17]

An RC event is the only place a World Record can be set. But not every great jump automatically becomes a record — there are a few more boxes to tick.

Minimum Improvement Threshold

For a jump to be registered as a new World Record, it must exceed the existing record by at least **10 centimetres**. [\[Rule 1703\]](#)

Affidavit & Documentation Requirements

Signed affidavits required from the following officials if a World Record is broken: [\[Rule 1706\]](#)

Chief Judge

Chief Driver

Homologator

Any other officials as specified in the current WBC PPG

Video Evidence, System Calibration & Verification Required

For every World Record claim, save and submit the following: [\[Rule 407 & 1706\]](#)

Image / screen capture of the landing box (the grid)

Image / screen capture of the jump landing (skier's first contact point)

A no-skier image using the exact same camera setup (calibration verification) showing a test buoy.

a no-skier image of the same system-measured test buoy distance **plus one screen pixel along the [horizontal] x-axis**. The reported distance must be within 10cm (.1m) of the original test buoy system measurement for RC homologation. [20cm (.2m) for RL Homologation.]

a no-skier image of the same system-measured test buoy distance **minus one screen pixel along the [horizontal] x-axis**. The reported distance must be within 10cm (.1m) of the original test buoy system measurement for RC homologation. [20cm (.2m) for RL Homologation.]

✓ Submit Within 14 Days of the Event [\[Rule 1707\]](#)

World Record applications must reach the Records Review Committee (RRC) within 14 days of the event.

Include: Homologator's signed report, all video evidence, affidavits, and the completed Homologation Dossier.

STEP 8 — Homologation Dossier & Submission

Everything you've documented through this process needs to be compiled into the WBC Homologation Dossier — the official record of your event setup submitted for ratification. Instructions are in the WBC PPG document, available at WorldBarefootCouncil.com.

What Goes in the Dossier

Course & Setup Documentation	Measurement & Certification Records
✓ Jump ramp compliance confirmation	✓ Tape measure & test buoy certification (3 points per grid)
✓ Course layout and buoy positions (per Figure 1601)	✓ System calibration images with measurements
✓ Grid box buoy coordinates (surveyed)	✓ Final certified measurements
✓ Camera height and horizontal position	✓ Photographic evidence of complete setup
✓ Jump measurement software system used	✓ Homologator's signed report (Level 2 minimum)
✓ GPS speed system confirmation	✓ Officials' qualifications on file

⚠ Incomplete Dossiers = No Ratification

A missing signature, absent calibration record, or no photographic evidence can hold up or void a World Record.

Keep records at every step, photograph the setup before competition starts, and save everything.

Submit the completed dossier (including the Homologator's signed report) to the WBC within 14 days of the event.

Quick Reference — RC Jump Course At a Glance

Use this table as a fast checklist on event day.

Item	Requirement	Rule Reference
WBC pre-approval	30 days before event — written from WBC Chairman	WBC RC Policy
IWWF licences	All competing skiers must hold a valid IWWF licence	WBC RC Policy
Ramp parallel to course	Confirmed via survey or measured course	Rule 1601(A)
No extra buoys in course area	Only Figure 1601 buoys permitted; safety hazards distinguishable	Rule 1601(B)
Departure point	Minimum 200m before jump course entrance gate	Rule 1601(C)
Entrance gate to ramp	25m / 82'	Figure 1601

Ramp to end of course	75m / 246'	Figure 1601
Minimum water length	375m	Figure 1601
Single grid (4 buoys)	10m & 22m from ramp; inside buoys 8m inward	Rule 407
Two grids (6 buoys)	5m, 15m & 25m from ramp; same lateral placement	Rule 407
Camera height	Minimum 5m above water level	Rule 1303
Camera alignment	Centred perpendicular to course, opposite grid box	Rule 1303
Measurement software	WBC-approved only (Boettcher, SplashEye, Corson, Loreto)	Rule 407
Max boat speed	73.5 kph / 45.7 mph via GPS	Rule 405
Tape measure (TM) or test buoy check	3 points per grid (TM only); must match video system readings	Rule 407
System calibration check	+/- 1 screen pixel; must measure within RC and/or RL tolerances	WBC RC/RL Policy
Officials minimum (RC)	Level 2 Chief Judge, Driver, Homologator; Level 2–3 Scorer	Rule 213
World Record margin	Must exceed existing record by at least 10cm	Rule 1703
WR submission deadline	14 days after event to the RRC	Rule 1707
Homologation dossier	Compiled per WBC PPG; includes Homologator's signed report	WBC PPG

This document is a guide only and must be read in conjunction with the 2026 WBC Technical Rules, the WBC PPG, and the Requirements for IWWF Records — all available at WorldBarefootCouncil.com. In the event of any conflict between this guide and the official rule book, the rule book prevails. For questions about RC approval, contact the WBC Chairman.