

FACILITIES RULES

The Facilities Rules are intended to provide the best possible environment for competitive use and training. These Rules are not intended to govern issues related to the general public. It is the responsibility of the owner or controller of a facility to provide supervision of activities of the public.

FR 1.1 **FINA Olympic Standard Pools.** All World Championships (except the Masters World Championships) and Olympic Games must be held in a pool which complies with Rule FR3.

FR 1.2 **FINA General Standard Pools.** Other FINA events should be held in a FINA Olympic Standard Pool, but the Bureau may waive certain standards for existing pools if it does not materially interfere with the competitions.

FR 1.3 **FINA Minimum Standard Pools.** All other events held under FINA rules must be conducted in pools which comply with all of the minimum standards contained in this Part.

FR 2 **SWIMMING POOLS**

FR 2.1 **Length**

FR 2.1.1 **50.0 metres.** When touch panels of Automatic Officiating Equipment are used on the starting end, or additionally on the turning end, the pool must be of such length that ensures the required distance of 50.0 metres between the two panels.

FR 2.1.2 **25.0 metres.** When touch panels of Automatic Officiating Equipment are used on the starting end, or additionally on the turning end, the pool must be of such length that ensures the required distance of 25.0 metres between the two panels.

FR 2.2 **Dimensional Tolerances**

FR 2.2.1 Against the nominal length of 50.0 metres, a tolerance of plus 0.03 metre in each lane minus 0.00 metre on both end walls at all points from 0.3 metre above to 0.8 metre below the surface of the water is allowed. These measurements should be certified by a surveyor or other qualified official, appointed or approved by the Member in the country in which the pool is situated. Tolerances cannot be exceeded when touch panels are installed.

FR 2.2.2 Against the nominal length of 25.0 metres, a tolerance of plus 0.03 metre in each lane minus 0.00 metre on both end walls at all points from 0.3 metre above to 0.8 metre below the surface of the water is allowed. These measurements should be certified by a surveyor or other qualified official, appointed or approved by the Member in the country, in which the pool is situated. Tolerances cannot be exceeded when touch panels are installed.

FR 2.3 **Depth** – A minimum depth of 1.35 metres, extending from 1.0 metre to at least 6.0 metres from the end wall is required for pools with starting blocks. A minimum depth of 1.0 metre is required elsewhere.

FR 2.4 Walls

FR 2.4.1 End walls shall be parallel and form right angles to the swimming course and to the surface of the water, and shall be constructed of solid material, with a non slip surface extending 0.8 metre below the water surface, so as to enable the swimmer to touch and push off in turning without hazard.

FR 2.4.2 Rest ledges along the pool walls are permitted; they must not be less than 1.2 metres below the water surface, and may be 0.1 metre to 0.15 metre wide.

FR 2.4.3 Gutters may be placed on all four walls of the pool. If end wall gutters are installed, they must allow for attachment of touch panels to the required 0.3 metre above the water surface. They must be covered with a suitable grill or screen.

FR 2.5 **Lanes** shall be at least 2.5 metres wide, with two spaces of at least 0.2 metre outside of the first and last lanes.

FR 2.6.1 **Lane Ropes** shall extend the full length of the course, secured at each end wall to anchor brackets recessed into the end walls. Each lane rope will consist of floats placed end to end having a minimum diameter of 0.05 metre to a maximum of 0.15 metre. The colour of the floats extending for a distance of 5.0 metres from each end of the pool shall be distinct from the rest of the floats. There shall not be more than one lane rope between each lane. The lane ropes shall be firmly stretched.

FR2.6.2 At the 15-metre mark from each end wall of the pool the floats shall be distinct in colour from the surrounding floats.

FR2.6.3 In 50 metre pools the floats shall be distinct to mark 25 metres.

FR2.6.4 Lane number of soft material may be placed on the lane ropes at the start and turning end of the pool.

FR 2.7 **Starting Platforms** shall be firm and give no springing effect. The height of the platform above the water surface shall be from 0.5 metre to 0.75 metre. The surface area shall be at least 0.5 metre x 0.5 metre and covered with non-slip material. Maximum slope shall not be more than 10°. The platform shall be constructed so as to permit the gripping of the platform by the swimmer in the forward start at the front and the sides; it is recommended that, if the thickness of the starting platform exceeds 0.04 metre, grips of at least 0.1 metre width on each side and 0.4 metre width in the front be cut out to 0.03 metre from the surface of the platform. Handgrips for the forward start may be installed on the sides of the starting platform. Handgrips for backstroke starts shall be placed within 0.3 metre to 0.6 metre above the water surface both horizontally and vertically. They shall be parallel to the surface of the end wall, and must not protrude beyond the end wall. The water depth for a distance of 1.0 metre to 6.0 metres from the end wall must be at least 1.35 metres where starting platforms are installed. Electronic read-out boards may be installed under the blocks. Flashing is not allowed. Figures must not move during a Backstroke start.

FR 2.8 **Numbering** - Each starting block must be distinctly numbered on all four sides, clearly visible. Lane number 1 shall be on the right-hand side when facing the course from the starting end with the exception of 50m events, which may start from the opposite end. Touch panels may be numbered on the top part.

- FR 2.9** **Backstroke turn indicators** - Flagged ropes suspended across the pool, minimum 1.8 metres and maximum 2.5 metres above the water surface, from fixed standards placed 5.0 metres from each end wall. Distinctive marks must be placed on both sides of the pool, and where possible on each lane rope, 15.0 metres from each end wall.
- FR 2.10** **False Start rope** shall be suspended across the pool not less than 1.2 metres above the water level from fixed standards placed 15.0 metres in front of the starting end. It shall be attached to the standards by a quick release mechanism. The rope must effectively cover all lanes when activated.
- FR 2.11** **Water temperature** shall be 25°-28°C. During competition the water in the pool must be kept at a constant level, with no appreciable movement. In order to observe health regulations in force in most countries, inflow and outflow is permissible as long as no appreciable current or turbulence is created.
- FR 2.12** **Lighting** - Light intensity over starting platforms and turning ends shall not be less than 600 lux.
- FR 2.13** **Lane Markings** - shall be of a dark contrasting colour, placed on the floor of the pool in the centre of each lane.
- Width: minimum 0.2 metre, maximum 0.3 metre.
 Length: 46.0 metres for 50 metre long pools;
 21.0 metres for 25 metre long pools.

Each lane line shall end 2.0 metres from the end wall of the pool with a distinctive cross line 1.0 metre long and of the same width as the lane line. Target lines shall be placed on the end walls or on the touch panels, in the centre of each lane, of the same width as the lane lines. They shall extend without interruption from the deck edge (curb), to the floor of the pool. A cross line 0.5 metre long shall be placed 0.3 metre below the water surface, measured to the centre point of the cross line.

- FR2.14** **Bulkheads** – when a bulkhead serves as an end wall, it must extend the full width of the course and present a solid smooth, non-slippery stable vertical surface on which touch pads may be mounted extending not less than 0.8m below and 0.3m above the surface of the water, and must be free of hazardous openings above or below the waterline which may be penetrated by a swimmer's hands, feet, toes or fingers. A bulkhead must be of a design that provides for the free movement of officials along its length without such movement creating any appreciable current or water turbulence.

FR 3 **SWIMMING POOLS FOR OLYMPIC GAMES AND WORLD CHAMPIONSHIPS**

Length: 50.0 metres between the Automatic Officiating Equipment touch panels, except for the World Short Course Championships, which shall be 25.0 metres between the Automatic Officiating Equipment touch panels at the starting end and the wall or touch panels at the turning end.

- FR 3.1** Dimensional Tolerances as in FR 2.2.1.
- FR 3.2** Width: 25.0 metres, for Olympic Games and World Championships.
- FR 3.3** Depth: 2.0 metres (minimum).

- FR 3.4** Walls: as in FR 2.4.1.
FR 3.5 Gutters: as in FR 2.4.3.
- FR 3.6** Number of lanes: 8 (eight).
- FR 3.7** Lanes shall be 2.5 metres wide with 2 spaces 2.5 metres wide outside of lanes 1 and 8. There must be a lane rope separating these spaces from lanes 1 and 8 respectively for Olympic Games and World Championships.
- FR 3.8** Lane Ropes: as in FR 2.6.
- FR 3.9** Starting Platforms: as in FR 2.7 False start control equipment must be installed.
- FR 3.10** Numbering: as in FR 2.8.
- FR 3.11** Backstroke turn indicators: as in FR 2.9.
- FR 3.12** False Start Rope: as in FR 2.10.
- FR 3.13** Water temperature: as in FR 2.11.
- FR 3.14** Lighting: Light intensity over the whole pool shall not be less than 1500 lux.
- FR 3.15** Lane Markings: as in FR 2.13. The distance between the centre points of each lane shall be 2.5 metres.
- FR 3.16** If the swimming pool and the diving well are in the same area the minimum distance separating the pools shall be 5.0 metres.

FR 4 AUTOMATIC OFFICIATING EQUIPMENT

- FR 4.1** Automatic and Semi-Automatic Officiating Equipment records the elapsed time of each swimmer and determines the relative place in a race. Judging and timing shall be to 2 decimal places (1/100 of a second). Equipment that is installed shall not interfere with the swimmers' starts, turns, or the function of the overflow system.
- FR 4.2** The Equipment must:
- FR 4.2.1** Be activated by the starter.
- FR 4.2.2** Have no exposed wires on the pool deck, if possible.
- FR 4.2.3** Be able to display all recorded information for each lane by place and by lane.
- FR 4.2.4** Provide easy digital reading of a swimmer's time.
- FR 4.3 Starting devices**
- FR 4.3.1** The starter shall have a microphone for oral commands.
- FR 4.3.2** If a pistol is used, it shall be used with a transducer.
- FR 4.3.3** Both the microphone and the transducer shall be connected to loudspeakers at each starting block where both the starter's commands and the starting signal can be heard equally and simultaneously by each swimmer.

FR 4.4 Touch panels for Automatic Equipment

- FR 4.4.1** The minimum measurement of the touch panels shall be 2.4 metres wide and 0.9 metre high, and their maximum thickness shall be 0.01 metre + 0.002 metre. They shall extend 0.3 metre above and 0.6 metre below the surface of the water. The equipment in each lane shall be connected independently, so it may be controlled individually. The surface of the panels shall be of a bright colour and shall bear the line markings approved for the end walls.
- FR 4.4.2** Installation - The touch panels shall be installed in a fixed position in the centre of the lanes. The panels may be portable, allowing the pool operator to remove them when there are no competitors .
- FR 4.4.3** Sensitivity - The sensitivity of the panels shall be such that they cannot be activated by water turbulence, but will be activated by a light hand touch. The panels shall be sensitive on the top edge.
- FR 4.4.4** Markings - The markings on the panels shall conform with and superimpose on the existing markings of the pool. The perimeter and edges of the panels shall be defined by a 0.025 metre black border.
- FR 4.4.5** Safety - The panels shall be safe from the possibility of electrical shock and shall not have sharp edges.
- FR 4.5** With Semi-Automatic Equipment, the finish shall be recorded by buttons pushed by timekeepers at the finish touch of the swimmer.
- FR 4.6** The following accessories are essential for a minimum installation of Automatic Equipment:
- FR 4.6.1** Printout of all information which can be regenerated during a succeeding race.
- FR 4.6.2** Spectator readout board.
- FR 4.6.3** Relay take-off judging to 1/100 of a second. Where overhead video cameras are installed they may be reviewed as a supplement to the automatic system's judgement of relay take-off.
- FR 4.6.4** Automatic lap counter.
- FR 4.6.5** Readout of splits.
- FR 4.6.6** Computer summaries.
- FR 4.6.7** Correction of erroneous touch.
- FR 4.6.8** Automatic rechargeable battery operation possibility.
- FR4.7** For Olympic Games and World Championships the following accessories are also essential:
- FR4.7.1** The spectator electronic read-out board shall contain at least twelve (12) lines of thirty-eight (38) characters, each capable of displaying both letters and numbers. Each character shall have a height of 1 mm per 0.6 metres of viewing distance (minimum height – 200m). Each line – matrix scoreboard shall be able to scroll up or down, with blink function, and each full matrix scoreboard shall be programmable, and capable of showing animation.

- FR4.7.2** There shall be an air-conditioned control centre, with dimensions of least 6.0 metres x 3.0 metres, located between 3.0 metres and 5.0 metres from the finish wall, with an unobstructed view of the finish wall at all times during the race. The referee must have easy access to the control centre during the competition. At all other times the control centre shall be able to be secured.
- FR4.7.3** Video-tape timing system.
- FR 4.8** Semi-Automatic Equipment may be used as a backup to the Automatic Officiating Equipment at FINA or other major events if there are three buttons per lane, each operated by a separate official (in which case other finish judges shall not be required). An inspector of turns may operate one of the buttons.