



FACILITIES RULES

November 2019

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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 general 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 comply with Rules FR 3, FR 6, FR 8 and FR 11.

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 should be conducted in pools that comply with all of the minimum standards contained within these Facilities Rules.

FR 1.4 In order to protect the health and safety of persons using swimming facilities for the purposes of recreation, training and competition, owners of public pools or pools restricted only to training and competition must comply with the requirements established by law and the health authorities in the country where the pool is situated.

FR 2 Swimming Pools

FR 2.1 Length

FR 2.1.1 50.000 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 50.000m between the two panels.

FR 2.1.2 25.000 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 25.000m between the two panels.

FR 2.2 Dimensional Tolerances

FR 2.2.1A The admissible tolerance in 50.00m swimming pools will be +0.010m, -0.000m

Tolerances will be measured as follows:

Wall to Wall: Minimum 50.020m / Maximum 50.030m

Tolerances have to be consistent 0.300m above to 0.800m below the water surface

These measurements should be certified by a surveyor

FR 2.2.2A The admissible tolerance in 25.00m swimming pools will be +0.010m, -0.000m

Tolerances will be measured as follows:

Wall to Wall: Minimum 25.020m / Maximum 25.030m

Tolerances have to be consistent 0.300m above to 0.800m below the water surface

These measurements should be certified by a surveyor

FR 2.3 Depth

A minimum depth of 1.35m, extending from 1.0m to at least 6.0m from the end wall is required for pools with starting blocks. A minimum depth of 1.0m is required elsewhere.

FR 2.3.1A Dive Entry for Competitive Swimming

Swimming dive entry activities into a water depth less than 1.8m must be supervised by an accredited Swimming Coach or under the control of an accredited Swimming Technical Official.

A risk assessment checklist must be undertaken prior to the undertaking of dive entry activities at all pool facilities where the Coach, Technical Official or swimmers are unfamiliar with the venue or the current facility condition.

Swimmers must be able to consistently demonstrate shallow dive entry technique in water above 1.8m in depth and deemed competent in dive technique before undertaking dive entries at minimum Swimming Australia guideline depths.

FR 2.3.2A Dive Entry Depth Guidelines

Less than 1.0m - no dives

1.0m to less than 1.2m - concourse dive (providing concourse is not more than 0.4m above the water surface)

1.2m to less than 1.35m – concourse dive or platform dive (as long as the platform is not more than 0.75m above the water surface)

1.35m and more - As per FINA Rule FR 2.7

FR 2.3.3A Shallow water starts in competition

If the water depth at the start end prevents compliance with the rules relating to dive starts, all swimmers shall commence the race in the water and shall be positioned in the water with one hand on the wall and shall have both feet on the wall.

In relay races where the water depth is less than 1.0m the changeover shall be from the water, with the swimmer having one hand and both feet on the wall at the point of changeover

FR 2.4 Walls

FR 2.4.1 End walls shall be vertical, parallel and form 90 degree right angles to the swimming course and to the surface of the water. They shall be constructed of solid material, with a non-slip surface extending 0.8m below the water surface, so as to enable the swimmers to touch and push off in turning without hazard.

FR 2.4.2 Rest ledges along the pool walls are permitted; they must be not less than 1.2m below the water surface and may be 0.1m to 0.15m wide. Both internal and external ledges are acceptable, however internal ledges are preferred.

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 0.3m above the water surface. They must be covered with a suitable grill or screen.

FR 2.5 Lanes

Shall be at least 2.5m wide, with two spaces of at least 0.2m outside of the first and last lanes.

FR 2.6 Lane Ropes

FR 2.6.1 In an eight lane pool, lane ropes shall extend the full length of the course, secured at each end wall to anchor brackets recessed into the end walls. The anchor shall be positioned so that the floats at each end wall of the pool shall be on the surface of the water. Each lane rope will consist of floats placed end-to-end having a minimum diameter of 0.10m to a maximum of 0.15m

In a swimming pool the colour of the lane ropes should be as follows:

- Two GREEN ropes for lanes 1 and 8
- Four BLUE ropes for lanes 2, 3, 6 and 7
- Three YELLOW ropes for lanes 4 and 5

The floats extending for a distance of 5.0m from each end of the pool shall be of RED colour.

There shall not be more than one lane rope between each lane. The lane ropes shall be firmly stretched. See Swimming Diagram SW 1, SW 6, SW 7.

FR 2.6.2 At the 15m mark from each end wall of the pool the floats shall be distinct in colour from the surrounding floats.

FR 2.6.3 In 50m pools the floats shall be distinct to mark 25m.

FR 2.6.4 Lane numbers of soft material may be placed on the lane ropes at the start and turning end of the pool.

FR 2.6.5 Lane marking measurements, please read in conjunction with FR 2.6.6 Pool Diagram SW 1, SW 6, SW 7.

FR 2.6.6 Pool Diagrams.

See Swimming Diagram SW 1, 50m Swimming Pool for Olympic Games
See Swimming Diagram SW 6, SW 7, 25m Swimming Pool

FR 2.7 Starting Platforms

Starting Platforms shall be firm and give no springing effect. The height of the platform above the water surface shall be from 0.5m to 0.75m. The surface area shall be at least 0.5m x 0.5m and covered with a non-slip material.

Maximum slope shall not be more than 10 degrees. The starting platform may have an adjustable setting back plate. 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 0.04m, grips of at least 0.1m width on each side and 0.4m width in the front be cut out to 0.03m from the surface of the platform.

Handgrips for the forward start may be installed on the sides of the starting platforms. Handgrips for backstroke starts shall be placed within 0.3m to 0.6m 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 from a distance of 0.1m to 0.6m from the end wall must be 1.35m 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. See Swimming Diagrams SW 1, SW 6, SW 7

FR 2.8 Numbering

Each starting block must be distinctly numbered on all four sides, clearly visible. It is recommended that lane number 0 shall be on the right-hand side when facing the course from the starting end with 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 shall be suspended across the pool, 1.8m above the water surface, from fixed standards placed 5.0m from each end wall. Distinctive marks must be placed on both sides of the pool, and where possible on each lane rope, 15.0m from each end wall.

FR 2.10A Backstroke Ledge

A backstroke ledge may be used:

The ledge may be adjustable to 0.04m above or 0.04m below the water level

The ledge is a minimum of 0.65m in length

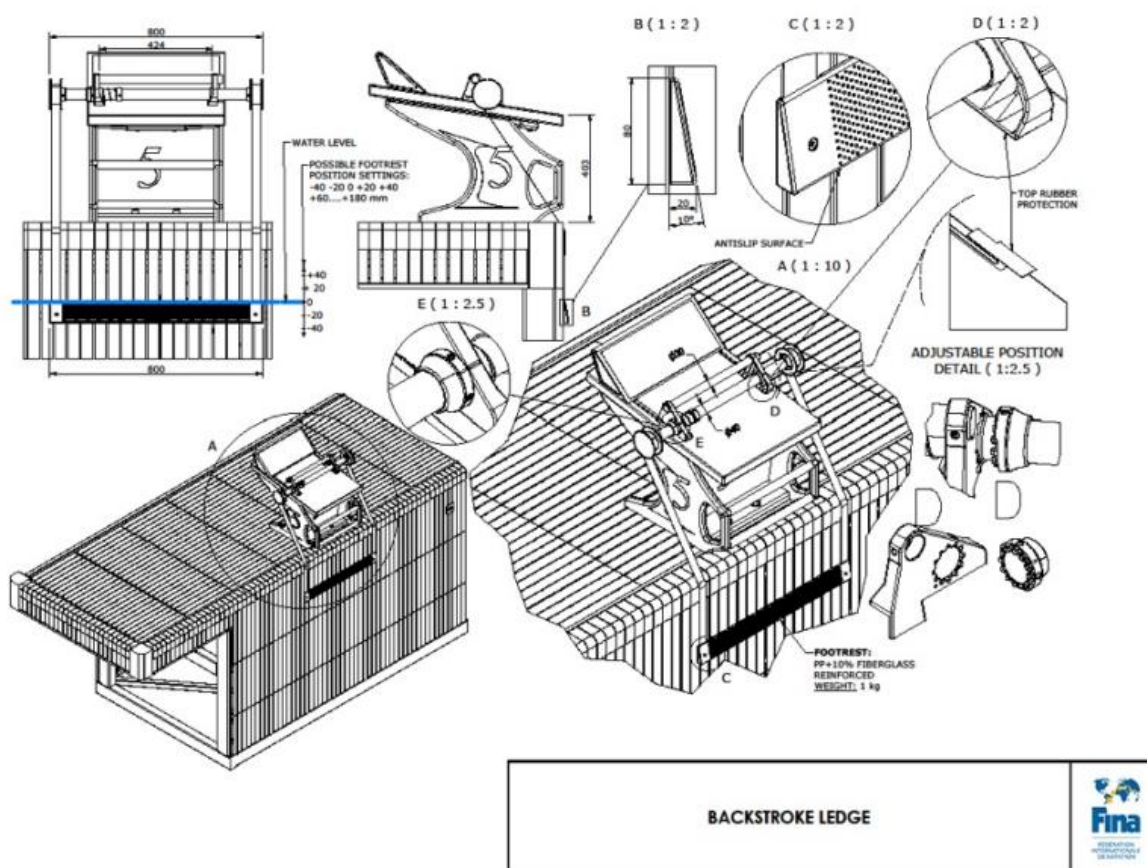
The ledge must be 0.08m in height, 0.2m at the width with 10 degrees of slope

Guidelines for the supply and use of Backstroke Ledges in Australian Competitions

- Backstroke ledges may be used only if they are available for all swimmers. This applies to all age groups – Age and Open
- If they are to be used, Backstroke Ledges must be available for all Backstroke events
- Swimming Australia will provide Backstroke Ledges at all Australian swimming events. The Backstroke Ledges will be set up by the Technical Officials and the swimmers will adjust to their preferred setting
- The use of Backstroke Ledges is not compulsory. A swimmers may choose not to use a Backstroke Ledge by informing the Technical Official appointed to install the Backstroke Ledge on their lane

- If Backstroke Ledges cannot be provided at a meet, athletes are not permitted to bring their own

See diagram below (source FINA Facility Rules 2017 – 2021, page 5)



FR 2.11 False Start rope

May be suspended across the pool not less than 1.2m above the water level from fixed standards placed 15.0m 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. See Swimming Diagram SW 1, SW 6, SW 7.

FR 2.12 Water Temperature and movement

Water temperature shall be 25° to 28°

During competition, the water in the pool must be at a constant level, with no appreciable movement.

In order to keep the water level, preserve the transparency of water and take into consideration the health regulations in force in most countries, inflow and outflow has to be regulated as follows:

- 220 to 250 m3/h for 50.00m pools
- 150 to 180 m3/h for 33.33m pools
- 120 to 150 m3/h for 25.00m pools

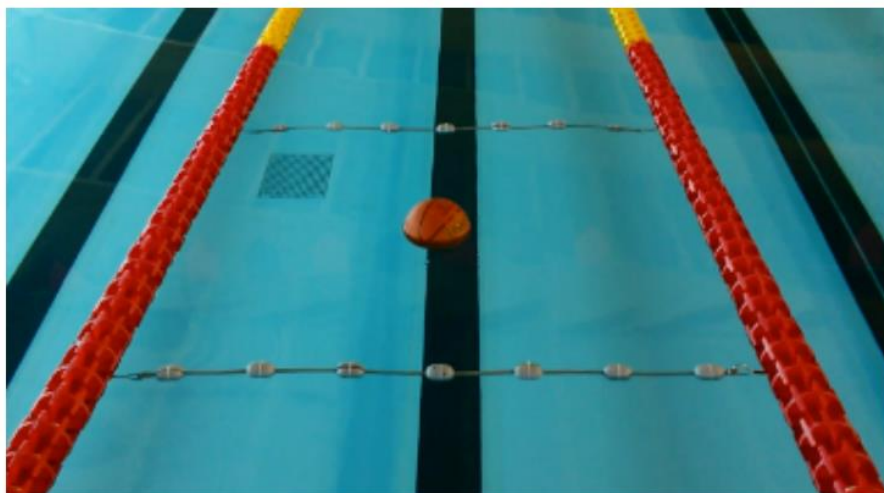
At these turnover rates, the water distribution has to be such that no appreciable current or turbulence is created.

“Appreciable current” is defined as water movement that can move a floating basketball (filled with 6 litres of water to obtain the right buoyancy) in one direction for more than 1,25m in 60 seconds.

The practical way to test this is to install two floating lines crosswise in a swim lane (to obtain a square with 2,5m size, see diagram below) and then to leave the basketball in the central point of the square. If the ball does not touch any of the four lane ropes within 60 seconds, the turbulence test is successful.

Test should be repeated in lanes 1,3,6,8 on two sides, at 5m from each headwall.

See diagram below (source FINA Facility Rules 2017 – 2021, page 6)



FR 2.13 Lighting

Light intensity over starting platforms and turning ends shall not be less than 600 lux.

FR 2.14 Lane Markings

Shall be of a dark contrasting colour, placed on the floor of the pool in the centre of each lane.

Width: minimum 0.2m, maximum 0.3m.

Length: 46.0m for 50m long pools;
21.0m for 25m long pools.

Each lane line shall end 2.0m from the end wall of the pool with a distinctive cross line 1.0m 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 to a maximum of 3m. A cross line 0.5m long shall be placed 0.3m below the water surface, measured to the centre point of the cross line.

For 50m pools constructed after 1 January 2006, cross lines 0.5m long shall be placed at the 15m mark from each end of the pool. After October 2013 this shall be measured

from the end wall to the centre point of the cross line. See Swimming Diagram SW 1, SW 6, SW 7

FR 2.15 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: 50.0m between the Automatic Officiating Equipment touch panels, except for the World Swimming Championships (25m), which shall be 25.0m 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 2.2.1A

FR 3.2 Width:

Olympic Games

- Permanent Swimming Pools: 25.00m
- Temporary Swimming Pools: 25.00m

World Championships

- Permanent Swimming Pools: 25.00m
- Temporary Swimming Pools: 26.00m

FR 3.3 **Depth:** 2m (minimum); 3m recommended, when using the pool for multi disciplines i.e. Artistic Swimming

FR 3.4 **Walls:** as in FR 2.4.1.

FR 3.5 Pools for Olympic Games and World Championships must be equipped with flush walls (consistently flat) at both ends.

FR 3.6 Number of lanes:

- Eight lanes for Olympic Games
- Ten lanes for World Championships

FR 3.7 Lanes shall be 2.5m wide with two spaces 2.5m wide outside of lanes 1 – 8. There must be a lane rope separating these spaces from lanes 1 and 8 for Olympic Games and World Championships. If 10 lanes, these must be marked from 0 to 9.

For permanent swimming pools there must be a lane rope separating these spaces from lanes 0 and 9 for World Championships. See Diagram: SW 2, SW 4

For temporary swimming pools there must be a lane rope separating these spaces from lanes 0 and 9 for World Championships. See Diagram: SW 3, SW 5

FR 3.8 Lane Ropes: Lane ropes shall extend the full length of the course, secured at each end wall to anchor brackets recessed into the end walls. The anchor shall be positioned so that the floats at each end wall of the pool shall be on the surface of the water. Each lane rope will consist of floats placed end-to-end having a diameter of 0.15m.

Olympic Games

In an eight lane swimming pool the colour of the lane ropes should be as follows:

- Two GREEN ropes for lanes 1 and 8
- Four BLUE ropes for lanes 2, 3, 6 and 7
- Three YELLOW ropes for lanes 4 and 5

1		GREEN
2		BLUE
3		BLUE
4		YELLOW
5		YELLOW
6		YELLOW
7		BLUE
8		BLUE
		GREEN

World Championships

In a 10 lane swimming pool the colour of the lane ropes should be as follows:

- Two GREEN ropes for lanes 0 and 9
- Six BLUE ropes for lanes 1, 2, 3, 6, 7 and 8
- Three YELLOW ropes for lanes 4, 5

0		GREEN
1		BLUE
2		BLUE
3		BLUE
4		YELLOW
5		YELLOW
6		YELLOW
7		BLUE
8		BLUE
9		BLUE
		GREEN

The floats extending for a distance of 5.0m from each end of the pool shall be of RED colour.

There shall not be more than one lane rope between each lane. The lane ropes shall be firmly stretched.

- FR 3.9 Starting Platforms:** as in FR 2.7.
Except the surface area shall be at least 0.5m wide X 0.6m in length and covered with non-slip material. 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 flagged ropes must be 1.8m above the water surface. Flags must be fixed to the ropes having the following dimensions: 0.20m on the rope forming a triangle measuring 0.40m on the sides. The distance between each flag must be 0.25m. If the flags are printed with or support / carry any signage this must be approved in advance by FINA.
- FR 3.12 False Start Rope:** as in FR 2.11.
- FR 3.13 Water Temperature:** as in FR 2.12.
- 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 2.14. The distance between the centre points of each lane shall be 2.5m.
- FR 3.16** If the swimming pool and the diving well are in the same area the minimum distance separating the pools shall be 5.0m. For pools constructed from 1 January 2014 the minimum distance separating the pool shall be a minimum of 8m however 10m is preferred
- 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 2.4m wide and 0.9m high, and the thickness shall be 0.01m when the contact is closed (and the time is stopped).

They shall extend 0.3m above and 0.6m 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 0.025m 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. For differential in the relays take-off the manufacturer of the device shall be consulted.

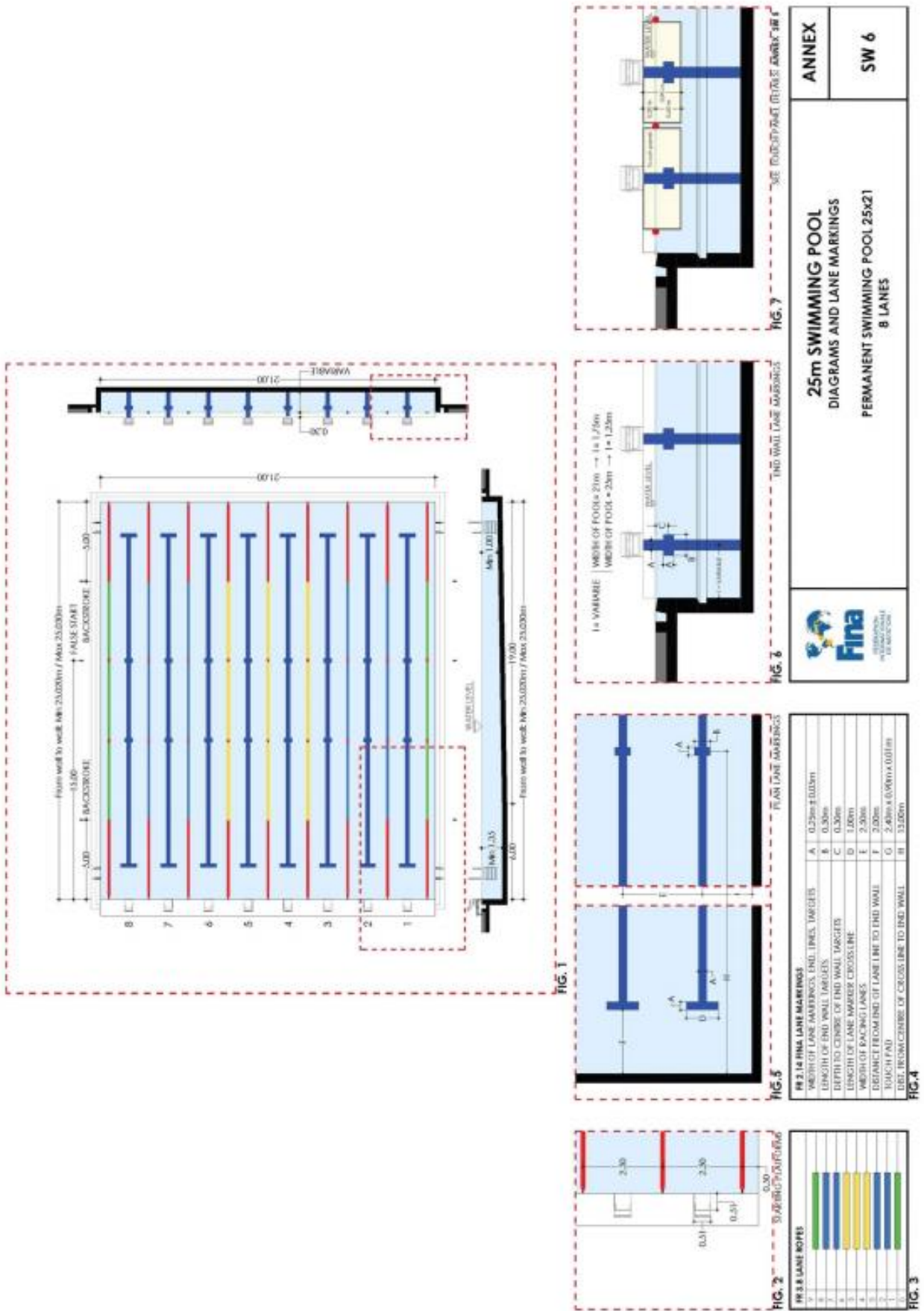
FR 4.6.4 Automatic lap counter.

FR 4.6.5 Readout of splits.

FR 4.6.6 Computer summaries.

FR 4.6.7 Correction of erroneous touch.

FR 4.6.8A Video timing system



25m SWIMMING POOL
 DIAGRAMS AND LANE MARKINGS
 PERMANENT SWIMMING POOL 25x21
 8 LANES

ANNEX

SW 6

Fina
 ASSOCIATION
 OF SWIMMING
 FEDERATIONS

FIG. 3 FINA LANE MARKINGS

WIDTH OF LANE MARKINGS, END LINE TARGETS	A	0.25m ± 0.01m
LENGTH OF END WALL TARGETS	B	0.30m
DEPTH TO CENTRE OF END WALL TARGETS	C	0.30m
LENGTH OF LANE MARKER CROSS-LINE	D	1.00m
WIDTH OF RACING LANES	E	2.50m
DISTANCE FROM END OF LANE LINE TO END WALL TOUCH PAD	F	2.00m
DIST. FROM CENTRE OF CROSS LINE TO END WALL TOUCH PAD	G	2.40m ± 0.00m ± 0.01m
	H	3.00m

