



THE INTERNATIONAL ICE SWIMMING ASSOCIATION[®]

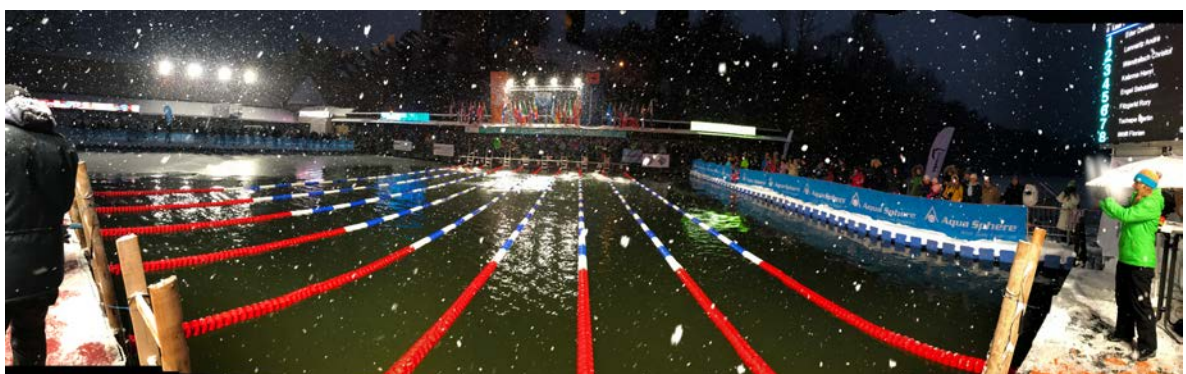
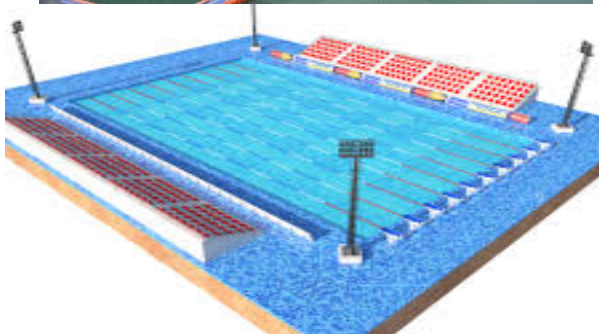
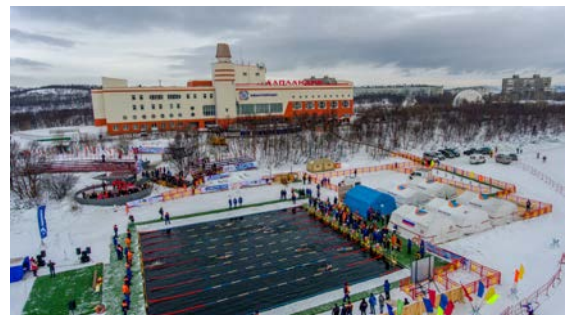
IISA[®]

ICE POOL MANUAL



1. IISA Standard ICE POOL

- 1.1. A POOL is defined as a regular mass of water confined on its both width-sides by a solid surface with a solid turn board on each width-side. At least one of the lengths needs to be solid and robust enough for safety personal to observe and ready to assist if required.
- 1.2. The Pool must be accessible from land with a wide enough passage to allow several people to walk through at the same time.
- 1.3. A competition ICE POOL must have at least 2 lanes.



2. IISA ICE POOL LOCATION

- 2.1.1. ICE POOL should be outdoors; however
- 2.1.2. IISA may grant special permission to use indoors pool in location where outdoor temperature never allows for sufficient cooling of the pool or other compelling reasons. This requires a special written permission by IISA.

3. IISA ICE POOL dimensions and tolerance

- 3.1. Any IISA ICE POOL will follow FINA® rules with regards to pool dimensions, tolerance and technical requirements. When in doubt in area that are not specified in IISA ICE POOL Manual, please refer to FINA® Pool structure. [FINA® Pool Structure](#).
- 3.2. The length of the pool must be the same for each swimming lane with the maximum deviation tolerance as specify below.
- 3.3. When turn 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 25.00 or 50.00 metres, accordingly to pool size, between the two panels.

4. Dimensional Tolerances

- 4.1. The admissible tolerance in 25.00 m swimming pools will be +/-1.00 cm
- 4.2. Tolerances have to be measured at wall level at the pool start side in the middle of every lane.
- 4.3. These measurements should be certified by a surveyor or other IISA qualified official.

5. Pool Depth

- 5.1. A minimum depth of 1.35 metres is required in the whole pool.

6. Pool Walls

- 6.1. End walls shall be vertical, parallel and form 90-degree right angles to the swimming course and to the surface of the water.
- 6.2. The start and end walls shall be constructed of solid material with a non-slip surface.
- 6.3. If pool walls are constructed of wood, width must be at least 30 cm.
- 6.4. The wall surface must be even with no sharp objects such as nails, screws or wood splinters sticking out.
- 6.5. The wall surface must be examined and approved by the event safety officer prior to the coemption to ensure no possible injury may occur during the competition.

7. Lane width

- 7.1. shall be at least 2.0 metres wide with maximum of 2.5 meters, inclusive the ladder.

8. Rest ledges

- 8.1. Rest ledgers along the pool walls are permitted but not compulsory.



- 8.2. The rest ledge must be at least than 1.20 metres below the water surface and must be at least 20 cm wide.

9. Ladders

- 9.1. Each lane must have a ladder to allow the swimmer to enter and exit the pool safely.
- 9.2. All ladder must be on the same side of each lane [left or right, as long as all on the same side]
- 9.3. The ladder shall be Min 50 cm to Max 60 cm. Ladders should be constructed or covered with non-slippery material, where swimmer steps or holds with hand. upper step of the ladder shall be above the water. The under most step of the ladder shall be at least 1.2 meters below the water level with inclination between 00 – 150 degrees from vertical.

10. Lanes and Ropes

- 10.1. World Championships and Olympic Games requires 10 lanes 0-9. Lane 0 and 9 should only be used, if required, for distances of 250m or shorter.
- 10.2. 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 will have standard Olympic swimming lane ropes.
- 10.3. The floats extending for a distance of 5.0 metres 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.
- 10.4. A red flag will be posted on each side of the pool, 5m from start and end. The flag will be placed on a pole at least 1.5m above the ground.

11. Numbering

- 11.1. Each starting lane must be distinctly numbered, clearly visible. It is recommended that lane number 1 shall be on the right-hand side when facing the course from the starting end with exception of 25m events, which may start from the opposite end. Touch panels may be numbered on the top part.

12. Backstroke Turn Indicators

- 12.1. If backstroke or individual medley is included in competition program, flagged ropes shall be suspended across the pool, 1.8 metres above the water surface, from fixed standards placed 5.0 metres from each end wall.

13. Lighting

- 13.1. Light intensity over the whole pool must be sufficient for easy sighting of turn walls and lane lines. Artificial lighting shall be used if necessary.



14. Automatic Officiating Equipment

14.1. Automatic and Semi-Automatic Officiating Equipment

14.2. See [FINA® Pool Structure](#).

14.3. The Race director must test the system in sub 5C water for a relevant period of time before committing it to the event.

14.4. The real time results board must be visible to all spectators and to the starters.

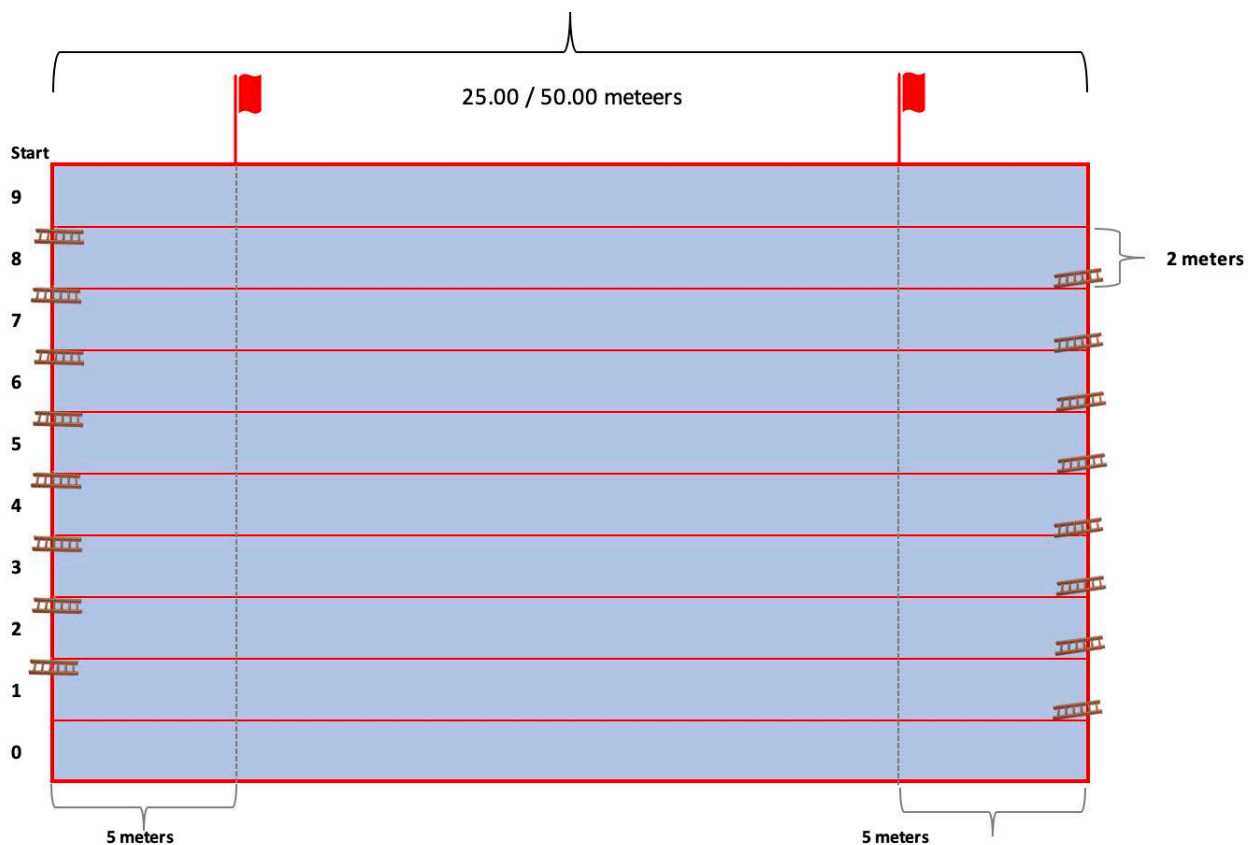
15. Manual Officiating Equipment

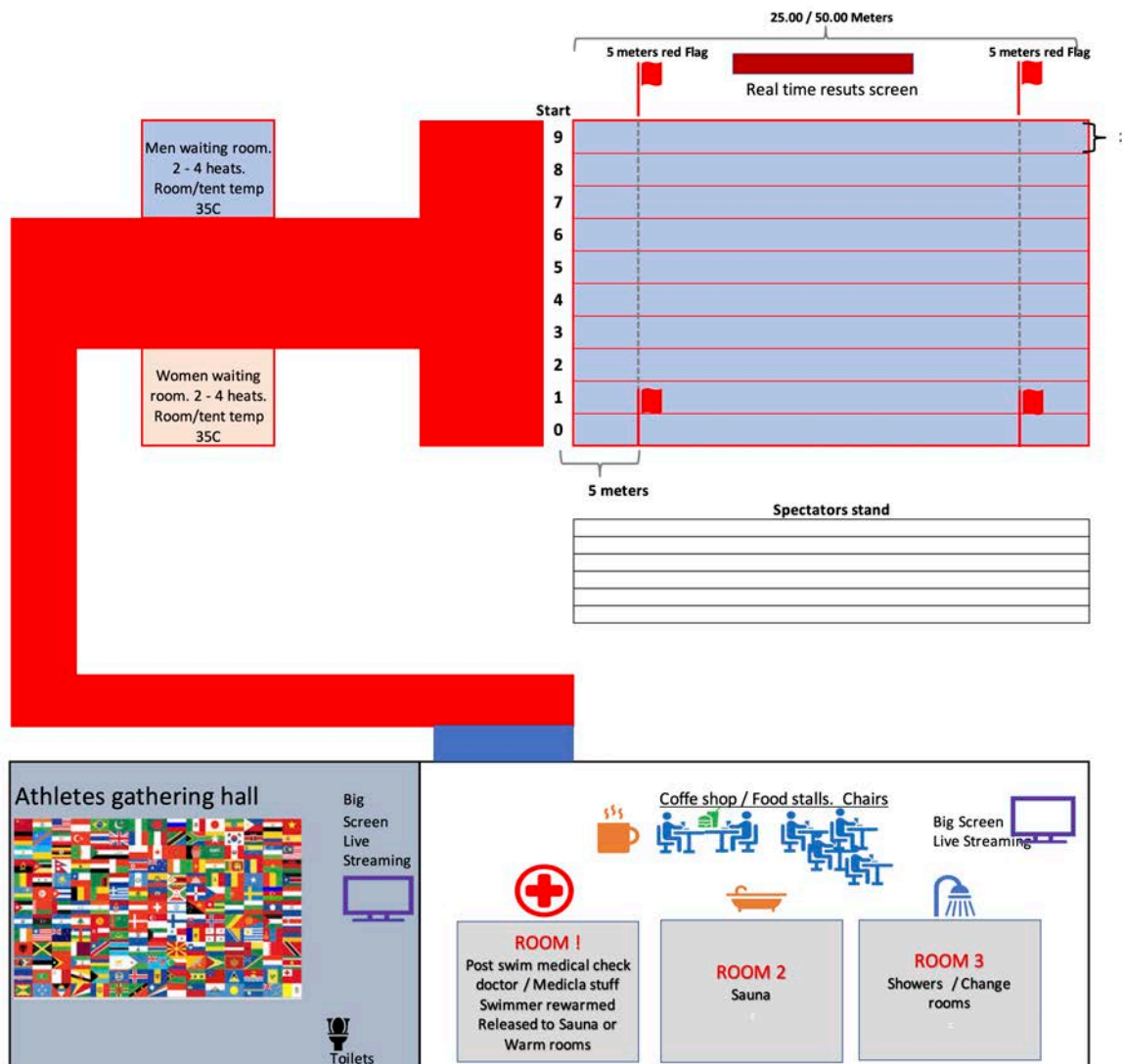
15.1. Back up manual time keeping is mandatory.

15.2. In case of manual timing keeping, each swimmer must have a dedicated timekeeper at the lane start point.

16. Safety and recovery facilities

16.1. The Pool should have 2 separate warm tents or room not further than 50m from the pool start side.





17. Safety at pool side

- 17.1. The Pool must have safety personal on pool side watching the swimmers at all time.
- 17.2. The Safety Personal must be trained in water rescue and dressed in dry suit or suitable diving gear to enable them to perform their duties in such cold-water temperature without it impacting their duties, and to be able to retrieve a swimmer in distress at all times
- 17.3. The pool side should be cleared from spectators or media so the safety personal and office las can do their job without interference.

18. How to cut a pool in the ICE

- 18.1. There are various ways to cut a pool in a frozen mass of water. The process dependent of various factors as ice thickness, depth of water and tools at hand.



- 18.2. IISA can't advise the process as it is location and condition dependent and safety is a critical factor.
- 18.3. IISA strongly advice to use local resources with people who understand the behaviour of an ice sheet, its thickness and its safety.
- 18.4. There various tools used, although chainsaw is the most common used to cut the ice.
- 18.5. Cut ice must be cleared so that the pool sides are accessible for swimmers, safety personal and officials.
- 18.6. Cut Ice mustn't block any access roads to recovery facilities.
- 18.7. A constant check of the ice surface is required for cracks and weak points during the competition.
- 18.8. The safety officer must observe load on the ice sheet in all location making sure the ice sheet can handle the people or other loads at all times.
- 18.9. If outside temperature rises significantly and the sun heat may affect the ice sheet stability, the safety officer must perform a safety check to ensure everyone safety.

