

# MSC RULES - APPENDICES 2009

## Appendix A

### Facility Rules

Based on material prepared by the FINA Masters Technical Committee in 2007. The MSC Facilities Rules are intended to provide the best possible environment for training and competition for Masters' swimmers. Although Masters Swimming Canada supports the development, operation and use of aquatic facilities across Canada for recreation, fitness and competition by all, these rules are not intended to govern rules related to facility use by the general public. It is the responsibility of the owner or controller of a facility to provide supervision of the activities of the public and to manage the facility in accordance with municipal and provincial regulations. See also CMGR 6.1 re smoking.

#### **CMFR 1        GENERAL**

**CMFR 1.1**        Pools for MSC National Championships. This event should be held in pools that comply with all standards below. MSC may waive certain standards for existing pools if they do not materially interfere with the competition.

**CMFR 1.2**        Pools for Masters competitions. All other competitions should be held in pools that comply with minimum standards below. A PMO may require that their Provincial Championships or other competitions comply with a higher standard than this including that they comply with CMFR 1.1. A PMO may wave certain standards for existing pools including minimum standards if they do not materially interfere with the competition.

**CMFR 1.3**        There are no specific requirements for pools used for training by Masters other than health and safety issues as outlined in CMFR 1.4.

**CMFR 1.4**        In order to protect the health and safety of persons using swimming facilities for the purpose 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 province or municipality where the pool is located.

#### **CMFR 2        SWIMMING POOLS FOR COMPETITION**

##### **MFR 2.1        Length**

**MFR 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.

**MFR 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.

##### **CMFR 2.2        Dimensional Tolerances**

**CMFR 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. Tolerances cannot be exceeded when touch pads are installed.

**CMFR 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. Tolerances cannot be exceeded when touch pads are installed.

**CMFR 2.2.3** A minimum standard is allowed on the plus tolerance for both 25.0 metre and 50.0 metre pools of 0.06 metres.

### **CMFR 2.3 Depth**

**CMFR 2.3.1** 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.

**CMFR 2.3.2** A minimum standard is allowed on the depth at the start end of 1.20 metres extending from 1.0 metre to 6.0 metres from the end wall.

### **MFR 2.4 Walls**

**MFR 2.4.1** End walls shall be parallel and form 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 0.8 metre below the water surface so as to enable the competitor to touch and push off in turning without hazard.

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

**MFR 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 pads to the required 0.3 metre above the water surface. They must be covered with a suitable grill or screen.

### **CMFR 2.5 Lanes**

**MFR 2.5.1** Lanes shall be at least 2.5 metres wide, with two spaces of at least 0.2 metre wide outside of the first and last lanes.

**CMFR 2.5.2** A minimum standard is allowed for lane width of 2.0 metres with no outside spaces provided.

**CMFR 2.5.3** Pools used for MSC National championships shall have a minimum of eight lanes. All pools used for Masters competitions in Canada must have a minimum of four lanes.

## **CMFR 2.6 Lane Ropes**

**CMFR 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. 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 0.05 metre to 0.15 metre. The lane ropes shall be firmly stretched

**CMFR 2.6.2** The floats extending for a distance of 5.0 metres from each wall shall be of a different colour from the rest of the floats.

**CMFR 2.6.3** There shall not be more than one lane rope between each lane. A minimum standard option for facilities with no warm up/cool down pool is to use one outside lane for this purpose during the competition. In this case two lane ropes may be located between the warm up/cool down lane and the adjacent lane being used for competition.

## **CMFR 2.7 Starting Platforms**

**CMFR 2.7.1** Starting Platforms shall be firm and give no springing effect. The height of the platform shall be from 0.5 metre to 0.75 metre above the water surface. The surface area shall be at least 0.5 metre by 0.5 metre and covered with non-slip material. Maximum slope shall not be more than 10 degrees. The platform shall be constructed so as to permit the gripping of the platform by the swimmer at the front and the sides. Handgrips for the forward start may be installed on the sides of the starting platforms. 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.

**CMFR 2.7.2** Starting Platforms may not be used for Masters training or competition where the water depth in front of the blocks to 6.0 metres from the wall is less than 1.2 metres deep.

## **CMFR 2.8 Numbering**

**CMFR 2.8.1** Each starting block must be distinctly numbered. Lane number 1 shall be on the right hand side when facing the course from the starting end with the exception of a 50m event in a Long Course Metre set up which may start from the opposite side.

## **CMFR 2.9 Backstroke Turn Indicators**

**CMFR 2.9.1** Flagged ropes extended 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.

## **CMFR 2.10 False Start Rope and 15 metre markerings**

**CMFR 2.10.1** False Start Rope shall be suspended across the pool not less than 1.2 metres above the water level from fixed standards placed 15 metres from the starting end.

It shall be attached to the standards by a quick release mechanism. The rope must effectively cover all lanes when activated.

**CMFR 2.10.2** 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.

### **CMFR 2.11 Water Temperature**

**CMFR 2.11.1** Water Temperature shall be 25 to 28 degrees for competition. 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 across Canada, inflow and outflow is permissible as long as no appreciable current or turbulence is created.

### **CMFR 2.12 Lighting**

**CMFR 2.12.1** Light intensity over starting platforms and turning ends shall not be less than 600 lux.

### **CMFR 2.13 Lane Markings**

**CMFR 2.13.1** Lane markings shall be of a dark contrasting colour, placed on the floor of the pool in the centre of each lane. The minimum width shall be 0.2 metre, the maximum 0.3 metre. The length shall be 46.0 metres for 50 metre long pools and 21.0 metres for 25 metre long pools.

**CMFR 2.13.2** 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. For 50m pools constructed after 1 January 2006, cross lines 0.5 metre long shall be placed at the 15 metre mark from each end of the pool.

### **MFR 2.14 Bulkheads**

**MFR 2.14.1** 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.

## **MFR 3 AUTOMATIC OFFICIATING EQUIPMENT**

**MFR 3.1** 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.

**MFR 3.2** The Equipment must:

**MFR 3.2.1** Be activated by the starter.

**MFR 3.2.2** Have no exposed wires on the pool deck, if possible.

**MFR 3.2.3** Be able to display all recorded information for each lane by place and by lane.

**MFR 3.2.4** Provide easy digital reading of a swimmer's time.

**MFR 3.3 Starting devices**

**MFR 3.3.1** The starter shall have a microphone for oral commands.

**MFR 3.3.2** If a pistol is used, it shall be used with a transducer.

**MFR 3.3.3** 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.

**MFR 3.4 Touch panels for Automatic Equipment**

**MFR 3.4.1** The minimum measurement of the touch panels shall be 2.4 metres wide and 0.9 metre high, and their thickness shall be 0.01 metre  $\pm$  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.

**MFR 3.4.2** 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.

**MFR 3.4.3** 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.

**MFR 3.4.4** 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.

**MFR 3.4.5** Safety - The panels shall be safe from the possibility of electrical shock and shall not have sharp edges.

**MFR 3.5** With Semi-Automatic Equipment, the finish shall be recorded by buttons pushed by timekeepers at the finish touch of the swimmer.

**MFR 3.6** The following accessories are essential for a minimum installation of Automatic Equipment:

**MFR 3.6.1** Printout of all information, which can be regenerated during a succeeding race.

**MFR 3.6.2** Spectator readout board.

**MFR 3.6.3** 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 the differential in the relays take-off the manufacturer of the device shall be consulted.

**MFR 3.6.4** Automatic lap counter.

**MFR 3.6.5** Readout of splits.

**MFR 3.6.6** Computer summaries.

**MFR 3.6.7** Correction of erroneous touch.

**MFR 3.6.8** Automatic rechargeable battery operation possibility.

**MFR 3.7** 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.

## **NOTES**