

## SECTION 8 - REQUIREMENTS FOR SPECIAL FEATURES

Diving is an inherently dangerous activity that can produce serious injuries if not performed under safe conditions.

Forces sufficient to crush the cervical spine are generated at a water impact speed of only 1.22 metres per second. Studies have shown that people diving from a 1-metre board can reach water entry velocities of 6.1 to 6.71 metres per second.

The majority of spinal and head injuries have been found to occur as a result of divers impacting with the bottom of the pool. Therefore, it is important that diving facilities are designed to provide a sufficient depth of water, together with adequate clearance around the diving boards, diving platforms and the water entry zone.

Inexperienced people, using unsafe diving techniques, have also been associated with a significant number of injuries. Management and supervision plays a crucial role in preventing diving injuries.

Moveable booms are used in the aquatic industry as dividing barriers, to enable larger pools to be operated as two or more smaller pools. The booms are most commonly used to divide 50 metre pools into two 25 metre facilities. The devices can present special hazards if improperly designed or constructed.

A number of modern aquatic facilities are being designed with child amusement devices, to increase their appeal to families with younger children. Although the devices increase the recreational value of facilities, they can present a number of hazards if not properly designed and constructed. Hazards include possible entrapment and injury to young children, harbouring of micro-organisms, and interference with water circulation systems.

Wave pools are specialised, complex facilities, designed to imitate the wave action found on natural beaches. To provide a safe environment, these facilities need to be designed, constructed and operated under special conditions.

## 8.1 DIVING FACILITIES

Diving pools shall provide a sufficient depth of water to safely break the fall of a diver. The facility shall allow divers to reduce their velocity in a safe manner, to prevent injuries created by excessive deceleration forces.

Diving boards, diving platforms and diving pools shall be designed and constructed in accordance with the requirements of sections FR 5.1 - 5.3 in the FINA Constitution and Rules 2001-2002.

Access stairways and ladders shall be designed and constructed in accordance with Appendix 5 of this Code.

## 8.2 MOVEABLE BOOMS

Moveable booms shall be designed and constructed in accordance with Guideline FD 1.07 - *Moveable Booms - 1996* of the Pool Safety Guidelines. For the purposes of this Clause of the Code, provisions of the Guidelines incorporating the word "should" shall be construed as mandatory requirements.

## 8.3 CHILD AMUSEMENT DEVICES - LEISURE POOLS

Child amusement devices shall be designed and maintained with smooth, non-toxic, easily cleanable surfaces, and not pose a safety or health hazard to bathers.

The devices shall not interfere with water circulation or disinfection, or obscure supervision of patrons in the water.

## 8.4 WAVE POOLS

The generation of waves more than 900mm in height shall not continue for more than 15 minutes at a time.

An emergency shut-off system shall be provided for control of the wave action.

An audible warning system shall be provided to alert bathers of the beginning of wave generation.

The facility shall only be used if the main drain is clearly visible from the deck, with the wave generating equipment in operation.

Bathers shall obtain access to the wave pool at the shallow or beach end. Side entry to the wave pool shall be prevented by the use of a fence or other barrier.

Handholds shall be provided at the static water level. These handholds shall be self-draining, and shall be installed so that their outer edge is flush with the pool wall. The design of the handholds shall ensure that body extremities will not become entangled during wave action.

Stepholds and handrails shall be provided at one or more locations along the wall of the wave pool.

The stepholds and handrails shall extend down the wall so they will be accessible during wave generation at the lowest water level.

The distance between the handrail and the wall shall not exceed 15mm.

## 8.5 RIVER RIDES

River Rides are designed to imitate the flow of water found in natural rivers. To provide a safe environment, these facilities need to be designed, constructed and operated under the following conditions:

- Handrails, steps, stairs and booster inlets for river rides shall not protrude into the river feature.
- An approved method of exit shall be provided not less than every 60 metres along the river.
- The design velocity of the water in a river ride shall not exceed 3.2 kilometres per hour.