

## **Instructions to deal with proposal for construction of swimming pool**

### **1. STRUCTURE**

Condition has to be imposed so that IS 6494:1988 should be adhered to for the procedures and the precautions to be taken during construction of swimming pool to ensure the water tightness of the structure. The design of the pool shall be certified by a structural engineer. The location of the pool shall be easily accessible for emergency vehicles. In case of pools in amusement parks, an exclusive drive way of minimum width of 3.5m from a public road shall be made available without any obstruction up to a distance of at least 30m from the swimming pool.

### **2. FLOOR SLOPES**

Slope of the floor of the pool should be made downward toward the main drain. All slopes should be uniform. The slope in shallow areas should not exceed 30 cm vertical in 3.6 m horizontal except for a slope directed downward from a transition point, which shall not exceed 30cm vertical in 1m horizontal. In portions of the pool with a depth greater than 1.5 m, the front slope of the deep area shall not be steeper than 30 cm in 1 m. The slope requirements are illustrated in Fig.1 given in Annexure-I.

### **3. POOL WALLS**

(a) Where the pool depth is 1 m or less, pool walls shall be vertical to the floor and the junction of the wall with the floor shall consist of a cove with a radius not exceeding 15 cm. Where the pool depth exceeds 1 m, pool walls shall meet one of the following criteria:

- (i) The wall shall be vertical for a distance of at least 1.5 m below the water level, below which the wall may angle to the floor; or
- (ii) The wall shall be vertical for a distance of at least 1 m below the water level, below which the wall shall form a curve to the floor. The curve shall be tangent to the pool wall and shall have a radius of curvature at least equal to the vertical distance between the center of curvature and the pool floor.

(b) All junctions between pool walls and the pool floor, shall be coved with a minimum radius of 25 mm.

### **4. WATER DEPTH**

Water depth at the shallow end of the swimming pool should be 106 cm for all pools whereas the deeper end should not be more than 167 cm. In case of educational institutions proposing for swimming pool of dimension less than 15m x 10m, the deeper end of the pool should not be more than 152 cm for such pools. No diving pool should be approved without reference to Head office.

**5. SET BACKS, WALKWAYS AND DECK AREAS**

- (a) Pools shall be completely surrounded by a deck that is at least 3.0 m in width and extends completely around and adjacent to the pool. There shall be no obstructions or interruptions of the pool deck within the 3.0 m adjacent to the pool other than necessary structural supports, or appurtenances such as perimeter overflow systems, starting blocks, handrails, stand having life jackets and stand for life guard. A clear, unobstructed walkway of at least 1.1 m in width shall be maintained at such obstructions or interruptions. The walkway and deck area shall have a setback of at least 3.0m from any adjacent structure or boundary of the site. There shall be no obstructions or interruptions of the setback space within the 3.0m adjacent to the deck. The setback space shall have a level difference of not less than 10 cm and not more than 15 cm below the level of the deck area. In case of swimming pools in single dwelling unit, the minimum requirement is 1m wide deck area around the pool and the deck area shall have a setback of at least of 1m from any adjacent structure or boundary of the site.
- (b) Structural supports located within the minimum required deck width or within 3.0 m of the swimming pool shall be no closer than 3 m apart measured parallel to the adjacent perimeter of the pool, with the dimension of any single support in a plane parallel to the adjacent pool perimeter no greater than 1 m and the sum of all such support dimensions no greater than 10 percent of the pool perimeter.
- (c) The deck between two adjacent swimming pools shall be at least 6.0 m wide. All decks and walkways shall have an unobstructed overhead clearance of at least 2.0 m. Setbacks, walkways and deck areas are illustrated in Fig.2 given in Annexure-II.

**6. LADDERS, STEP-HOLES, STEPS AND RAMPS**

- (a) Swimming pool shall have at least two means of egress, located near opposite ends. A means of egress shall consist of a ladder, step-holes and grab rails, stair, ramp, or zero-depth edge. Pools of 9 m or more in width shall have at least four means of egress that shall be located near each end and on opposite sides. The distance from any point with a depth greater than 76cm in the swimming pool to a means of egress shall not exceed 15 m. At least two ladders or sets of step-holes shall be located at the deep area of the swimming pool.
- (b) Step-holes shall have a minimum tread depth of 12 cm. Where step-holes or ladders are provided, there shall be a handrail or grabrail at the top on both sides which extends to the edge of the pool.
- (c) Steps shall be of contrasting color or marked to contrast from the pool floor and have uniform size treads of at least 30 cm and a rise of not more than 23 cm. Steps shall be located where the water depth is 1.4 m or less and shall have no pointed or sharp edges. One sturdy handrail or grabrail per 4 m of step width or fraction thereof, extending the length of the steps shall be provided. In case of

educational institutions, if the swimming pool is proposed with dimension less than 10m x 6m, the overall dimension of the steps shall be over and above the required 10 m of minimum length of the pool.

- (d) Slope of the ramp shall not be more than one in twelve. Ramp shall have a slip-resistant surface; handrails on both sides and its width shall not be more than 1.4 m.

#### 7. VENTILATION

Adequate ventilation shall be provided in facilities to prevent objectionable odour. In case of indoor pools, sufficient number of windows and ventilators total providing a ventilation area of not less than one fifth of enclosed water surface area and floor area or proper mechanical ventilation should be provided. The windows and ventilators should be at least abutting for a length of not less than 2.5 metre on an open space, either external or internal. Such open space shall not be less than 1.75 metre in width.

#### 8. EXITS

- (a) All indoor and outdoor pools should be fenced. Fencing should be at least 1.2 m high and have no hand or footholds that could enable a young child to climb it. Care should also be taken to ensure that pool side equipment is not positioned such that it may be used to climb the fence and access the pool.
- (b) In case of educational institutions, swimming pool-in ground is only permitted and there should be no pool-on ground/ suspended pool.
- (c) All indoor and outdoor pool premises should have sufficient number of exits for safe exit from the swimming pool premises with at least 2 exits of minimum width of 2.0 m located near opposite ends.

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Commissioner of Town and Country Planning

/Forwarded by order/

  
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Assistant Director