

Swimming Pool Code Amendments

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ARTICLE 20. SWIMMING POOL CODE

Rule 1. Indiana Swimming Pool Code (*Repealed*)

(*Repealed by Fire Prevention and Building Safety Commission; filed Aug 14, 1989, 9:00 a.m.: 13 IR 81*)

Rule 1.1. General Provisions and Definitions

675 IAC 20-1.1-1 Title and availability

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 1. (a) This article shall be known as the Indiana Swimming Pool Code, second edition, and will be published by the Indiana fire and building services department for general use and distribution under that title. Whenever the term “this code” is used in this article, it shall mean the Indiana Swimming Pool Code, second edition.

(b) The Indiana Swimming Pool Code is available for purchase from the Indiana Fire and Building Services Department, 1099 North Meridian Street, Suite 900, Indianapolis, Indiana 46204. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-1; filed Aug 14, 1989, 9:00 a.m.: 13 IR 38, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-1.1-2 Definitions; general

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 2. For the purpose of this code, the definitions in this rule apply throughout this article. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-2; filed Aug 14, 1989, 9:00 a.m.: 13 IR 38, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-1.1-3 Definitions “A”

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 3. (a) “Abrasion hazard” means a sharp or rough surface which could cause injury under normal use.

(b) “Accessible” means, when applied to a fixture, connection, appliance, or equipment, having access thereto, but may require the removal of an access panel, door, or similar obstruction. “Readily accessible” means direct access without the necessity of removing any panel, door, or similar obstruction.

(c) “Agitation” means the mechanical or manual movement to dislodge the filter aid and dirt from the filter element.

(d) “Airbreak” means a physical separation which may be a low inlet into the indirect waste receptor from the fixture, appliance, or device indirectly connected.

(e) “Air bump assist backwash” means, in a diatomite type filter, the compressing of a volume of air in the filter effluent chamber (by means of an air compressor or by the water pressure from the recirculating pump) which, when released, rapidly decompresses and forces water in the filter tank through the elements in a reverse direction dislodging the filter aid and accumulated dirt and carrying them to waste.

(f) "Air induction system" means a system whereby a volume of air (only) is induced into hollow ducts built into a spa floor, bench, or other location. The air induction system is activated by a separate air power unit (blower).

(g) "Airgap" means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet conveying water or waste to a tank, plumbing fixture receptor, or other device and the flood level rim of the receptacle.

(h) "Approved" means, as to materials and types of construction, the approval by the state building commissioner as the result of investigation and tests conducted by him, or by reason of accepted principles or tests by approved agencies.

(i) "Approved agency" means an established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when such agency has been approved by the state building commissioner or is listed in 675 IAC 12-6-11. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-3; filed Aug 14, 1989, 9:00 a.m.: 13 IR 38, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-1.1-4 Definitions "B"

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 4. (a) "Backwash" means the process of thoroughly cleaning the filter medium and/or elements by the reverse flow of water.

(b) "Backwash cycle" means the time required to backwash the filter system thoroughly.

(c) "Backwash pipe" means a type of filter waste discharge piping as defined in section 8(o) of this rule.

(d) "Backwash rate" means the rate of application of water through a filter during the backwash cycle expressed in United States gallons per minute per square foot (liters per minute per square meter) of effective filter area.

(e) "Bather" means a person using the pool and adjoining deck areas for the purpose of water sports or related activities.

(f) "Beginners' area" means the water areas ranging in depth from two (2) feet to three (3) feet.

(g) "Body feed" means the continuous addition of controlled amounts of filter aid during the operation of a diatomite type filter to maintain a permeable filter cake. If added as a slurry, this may be referred to as a slurry feed.

(h) "Booster pump system" means a device used to provide hydraulic support for certain types of equipment such as pool cleaning systems, gas chlorinators, and solar systems.

(i) "Breakpoint chlorination" means the addition of a sufficient amount of chlorine to water to destroy the combined chlorine present.

(j) "Broadcast" means a method of putting granular or powdered chemicals into a pool by spreading them widely over the surface of the water.

(k) "Building official" means the state building commissioner or officer of a local unit of government empowered by law to administer and enforce the rules of the commission. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-4; filed Aug 14, 1989, 9:00 a.m.: 13 IR 39, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-1.1-5 Definitions "C"

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 5. (a) "Cartridge" means a filter component of either the depth or surface type having fixed dimensions and designed to remove suspended particles from water flowing through the unit.

(b) "Cartridge, depth type" means a filter cartridge with a medium relying on penetration of particulates into the medium for removal and providing adequate holding capacity of such particulates.

(c) "Cartridge, surface type" means a filter cartridge with a medium relying on retention of particles on the surface of the cartridge for removal.

(d) "Chemical feeder" means any device used to feed chemicals such as sanitizers, pH adjusters, algicide, etc. into a pool or spa.

(e) "Chemical feeder output rate" means the weight or volume of active ingredients delivered by a chemical feeder expressed in units of weight or volume and time.

(f) "Chemical feed rate indicator" means a mechanism which will produce reproducible results expressed in units of weight

or volume of chemical per unit of time or per unit of volume of water; said mechanism may be a direct reading instrument or may require the use of a reference chart.

(g) "Chemical piping" means piping which conveys concentrated chemical solutions from a feeding apparatus to the circulation piping.

(h) "Circulation piping system" means the piping between the pool structure and the mechanical equipment. It usually includes suction piping, face piping, and return piping.

(i) "Combination valve" means multiport valve.

(j) "Contact concentration" means the concentration of a chemical in a flow of water. This concentration depends on the rate of addition, the flow rate of the water, and the efficiency of the mixing. It is calculated using the equation (assumes complete mixing):

Amount of chemical (grams per hour)/water flow rate (gallons per minute) \times 4.41 = contact concentration (milligrams per liter).

(k) "Corrosion-resistant" means capable of maintaining original surface characteristics under the prolonged influence of the use environment.

(l) "Cove" means the radius between the wall and the floor. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-5; filed Aug 14, 1989, 9:00 a.m.: 13 IR 39, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Nov 15, 1989, 5:00 p.m.: 13 IR 675; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-1.1-6 Definitions "D"

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 6. (a) "Decks" means those areas surrounding a pool which are specifically constructed or installed for use by bathers.

(b) "Deep areas" means the portions of a pool having water depths in excess of five (5) feet.

(c) "Design head" means the total head requirement of the circulation system at the design rate of flow.

(d) "Design rate of flow (design filter rate)" means the rate of flow in a system which is used for design calculation. (The volume of the pool, spa, or hot tub in gallons divided by the number of minutes in the turnover time.)

(e) "Diatomite filter" means one designed to filter water through a thin layer of filter aid such as diatomaceous earth or volcanic ash. Diatomite filters may be of the pressure or vacuum type.

(f) "Distribution system, upper" means those devices designed to distribute the water entering a sand type filter in a manner such as to prevent movement or migration of the filter media. This system shall also properly collect water during filter backwashing unless other means are provided.

(g) "Distribution system, lower" means those devices used in the bottom of a sand type filter to collect the water uniformly during the filtering and to distribute the backwash water uniformly during the backwashing.

(h) "Diving board" means a recreational mechanism for entering a swimming pool, consisting of a semirigid board that derives its elasticity through the use of a fulcrum mounted below the board.

(i) "Diving equipment, competitive" means competitive diving equipment including competitive diving boards and fulcrum setting diving stands intended to provide adjustment for competitive diving.

(j) "Diving equipment, manufactured" means manufactured diving equipment and shall include diving boards, jump boards, spring boards, and starting platforms. Architectural features such as decorative rocks and elevated bond beams are not considered to be manufactured diving equipment. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-6; filed Aug 14, 1989, 9:00 a.m.: 13 IR 40, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-1.1-7 Definitions "E"

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 7. "Effective filtration area" means the total surface area through which the design flow rate will be maintained during filtration. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-7; filed Aug 14, 1989, 9:00 a.m.: 13 IR 40, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-1.1-8 Definitions “F”

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 8. (a) “Face piping” means the piping, with all valves and fittings, which is used to connect the filter system together as a unit.

(b) “Family pool” means a residential swimming pool.

(c) “Filter” means a device that separates solid particles from water by circulating the water through a porous substance (a filter medium element).

(d) “Filter, permanent medium” means a filter that under normal use will not have to be replaced.

(e) “Filter, diatomaceous earth” means a filter that uses a thin layer of diatomaceous earth as its filter medium that periodically must be replaced.

(f) “Filter, cartridge” means a filter that uses a porous cartridge as its filter medium.

(g) “Filter aid” means a type of finely divided media used to coat a septum type filter, usually diatomaceous earth or volcanic ash. (Note: Alum, as used on the bed of a sand filter, is also referred to as a filter aid.)

(h) “Filter cycle” means the operating time between cleaning or backwash cycles.

(i) “Filter element” means that part of a filter which supports the surface upon which the filter aid is deposited (usually in diatomite filters).

(j) “Filter media” means the finely graded material which entraps suspended particles (sand, anthracite, etc.).

(k) “Filter rate” means the rate of application of water to a filter expressed in gallons per minute per square foot of effective filter area.

(l) “Filter rock” means graded, rounded rock, and/or gravel not subject to degradation by common pool chemical used to support filter media.

(m) “Filter sand” means a specially graded type of permanent filter media.

(n) “Filter septum” means that part of the filter element in a diatomite type filter upon which a cake of diatomite or other nonpermanent filter aid may be deposited.

(o) “Filter waste discharge piping” means piping that conducts waste water from a filter to a drainage system. Connection to drainage system is made through an airgap or other approved method.

(p) “Flow balance valve” means a device to regulate the effluent from the skimmer housing of each of a combination of two (2) or more surface skimmers.

(q) “Floor” means the interior bottom pool surface and consists of that surface from a horizontal plane up to a maximum of a forty-five (45) degree slope.

(r) “Freeboard” means the clear vertical distance in a sand type filter between the top of the filter media and the lowest outlet of the upper distribution system.

(s) “Fresh water” means water having a specific conductivity less than a solution containing six thousand (6,000) parts per million of sodium chloride.

(t) “Friction loss” means the pressure drop expressed in feet (meters) of water or psi (Pascals) caused by liquid flowing through the piping and fittings. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-8; filed Aug 14, 1989, 9:00 a.m.: 13 IR 40, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-1.1-9 Definitions “H”

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 9. (a) “Head loss” means the total pressure drop in pounds per square inch (kilo Pascals) or feet (meters) or head between the inlet and the outlet of a component.

(b) “High rate sand filter” means a sand filter designed for flows in excess of five (5) gallons per minute per square foot.

(c) “Hydrojet booster pump system” means a system whereby one (1) or more hydrojets are activated by the use of a pump which is completely independent of the filtration and heating system of a spa.

(d) “Hydrojets” means a fitting which blends air and water creating a high velocity, turbulent stream of air enriched water. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-9; filed Aug 14, 1989, 9:00 a.m.: 13 IR 41, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document*

#89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)

675 IAC 20-1.1-10 Definitions “I”

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 10. (a) “Indirect waste pipe” means a pipe that does not connect directly with the drainage system but conveys liquid wastes by discharging into a plumbing fixture, interceptor, or receptacle which is directly connected to the drainage system.

(b) “Inlet fitting” means a fitting or fixture through which circulated or hydrojetted water enters a pool, spa, or hot tub. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-10; filed Aug 14, 1989, 9:00 a.m.: 13 IR 41, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)*)

675 IAC 20-1.1-11 Definitions “J”

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 11. (a) “Jump board” means a recreational mechanism that has a coil spring, leaf spring, or comparable device located beneath the board which is activated by the force exerted in jumping on the board.

(b) “Jtu” means Jackson turbidity units, used to measure water clarity. (*Fire Prevention Building Safety Commission; 675 IAC 20-1.1-11; filed Aug 14, 1989, 9:00 a.m.: 13 IR 41, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)*)

675 IAC 20-1.1-12 Definitions “L”

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 12. (a) “Ladders” mean the following:

(1) “Deck ladder” means a ladder for deck access from outside the pool.

(2) “In-pool ladder” means a ladder located in a pool to provide ingress and egress from the deck.

(3) “Limited access ladder” means a ladder with provision for making entry inaccessible when a pool is not in use, i.e., swing-up, slide-up, or equivalent.

(4) “Portable ladder” means a ladder that is intended to be removed easily when a pool is not in use.

(b) “Liner” means the membrane that acts as a container for the water, usually categorized as one (1) of the following:

(1) “Expandable liner” means a liner that is constructed of a material that has the capability of stretching into a greater depth of irregular shape other than the original constructed dimensions.

(2) “Hooper liner” means a liner that is used to obtain greater depth by geometrical pattern construction on the liner bottom or floor to fit a predetermined size and shape.

(c) “Listed” means equipment or materials included in a list published by a nationally recognized testing agency as identified in 675 IAC 12-6-11.

(d) “Lower distribution system” (underdrain) means those devices used in the bottom of a permanent medium filter to collect the water during the filtering and to distribute the water during the backwashing. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-12; filed Aug 14, 1989, 9:00 a.m.: 13 IR 42, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Nov 15, 1989, 5:00 p.m.: 13 IR 675; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)*)

675 IAC 20-1.1-13 Definitions “M”

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 13. (a) “Main outlet” means the outlet fitting(s) at the bottom of a swimming pool, spa, or hot tub through which passes water to the recirculating pump. This outlet is often erroneously referred to as the “main drain”.

(b) "Make-up water" means fresh water used to fill or refill the pool.

(c) "Multiport valve" means a valve for various filter operations, which combines in one (1) unit the function of two (2) or more single direct flow valves. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-13; filed Aug 14, 1989, 9:00 a.m.: 13 IR 42, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-1.1-14 Definitions "N"

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 14. (a) "Net positive suction head (NPSH)" means the head available at the entrance or eye of an impeller to move and accelerate the water entering the eye. This head is the gauge pressure at the suction flange of the pump plus the velocity head.

(b) "Nonswimming area" means any portion of a pool where water depth, offset ledges, or similar irregularities would prevent normal swimming activities.

(c) "NPSH, available" means a function of the system in which the pump operates. The available NPSH at the desired rate of flow.

(d) "NPSH, required" means a function of the pump design which varies between different makes, and a valve that must be supplied by the pump manufacturer. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-14; filed Aug 14, 1989, 9:00 a.m.: 13 IR 42, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-1.1-15 Definitions "O"

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 15. "Overflow system" means perimeter type overflows, surface skimmers, and surface water collection systems of various design and manufacture. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-15; filed Aug 14, 1989, 9:00 a.m.: 13 IR 42, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-1.1-16 Definitions "P"

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 16. (a) "Perimeter overflow system" means a continuous channel formed into the sidewall entirely around the perimeter of the pool, unless interrupted by steps, into which surface pool water is continuously drawn during normal operation to provide a skimming action.

(b) "Pinching hazard" means any configuration of components that would pinch or entrap the fingers or toes of a bather.

(c) "Pool" means swimming pool, as defined in section 18(s) of this rule.

(d) "Pool depth" means the distance between the floor of pool and the waterline.

(e) "Pool plumbing" means all chemical, circulation, filter waste discharge piping, deck drainage, and water filling systems.

(f) "Positive displacement" means the mechanical displacement of a volume of fluid.

(g) "Precipitate" means a solid material which is forced out of a solution by some chemical reaction and which may settle out or remain as a haze in suspension (turbidity).

(h) "Precoat" means the initial coating of filter aid on the septum of a diatomaceous earth filter.

(i) "Pump discharge pressure" means the actual gauge reading measured in pounds per square inch taken at the discharge outlet of a pump.

(j) "Puncture hazard" means any surface or protrusion that would puncture a bather's skin under casual contact. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-16; filed Aug 14, 1989, 9:00 a.m.: 13 IR 43, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Nov 15, 1989, 5:00 p.m.: 13 IR 675; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-1.1-17 Definitions "R"

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 17. (a) "Rapid sand filter" means a filter designed to be used with sand as the filter media and for flows not to exceed five (5) gallons per minute per square foot.

(b) "Rated pressure" means that pressure which is equal to or less than the designed pressure and appears on the data plate of the equipment.

(c) "Receptor" means an approved plumbing fixture or device of such material, shape, and capacity as to adequately receive the discharge from indirect waste piping, so constructed and located as to be readily cleaned.

(d) "Recessed treads" means a series of vertically spaced cavities in the pool wall creating tread areas for stepholes.

(e) "Recirculation system" means the interconnected system traversed by the recirculated water from the pool until it is returned to the pool.

(f) "Removable" means capable of being disassembled with the use of only simple tools such as a screwdriver, pliers, or wrench.

(g) "Return piping" means that part of the piping between the filter and the pool or spa through which passes the filtered water. (This piping is frequently referred to as effluent.)

(h) "Rope and float line" (transition rope) means a continuous line not less than one-fourth (1/4) inch in diameter which is supported by buoys and attached to opposite sides of a pool to separate the deep and shallow ends. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-17; filed Aug 14, 1989, 9:00 a.m.: 13 IR 43, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-1.1-18 Definitions "S"

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 18. (a) "Saline water" means water having a specific conductivity in excess of a solution containing six thousand (6,000) parts per million of sodium chloride.

(b) "Separation tank" means a device used to clarify filter rinse or waste water. It is sometimes called a "reclamation tank".

(c) "Septum" means that part of the filter element consisting of cloth, wire screen, or other porous material on which the filter cake is deposited.

(d) "Shallow areas" means those portions of a pool ranging in water depth from three (3) to five (5) feet.

(e) "Skim filter" means a surface skimmer combined with a vacuum filter.

(f) "Spa" means any swimming pool of irregular or geometric shell design which incorporates hot water jets, cold water jets, aeration systems, or any combination of the same for hydromassage.

(g) "Spa, permanent" means a spa in which the water-heating and water-circulating equipment is not an integral part of the product. Permanent spas may employ separate components such as an individual filter, pump, heater, and controls, or they may employ assembled combinations of various components.

(h) "Spa, portable, residential" means a spa in which all control, water-heating, and water-circulating equipment is an integral part of the product. Portable residential spas may be permanently wired or cord-connected. The spa shall be movable and aboveground.

(i) "Spa, public" means any spa that is neither for the sole residential use of two (2) or less owner families and their guests nor spas which are operated for medical treatment or physical therapy under medical supervision.

(j) "Spray rinse, manual" means a spray system intended to be used manually for the washing of filter aid and/or accumulated dirt from a filter surface either in place or after removal from the filter tank. This is usually accomplished by means of a hose and nozzle.

(k) "Spray rinse, mechanical" means a fixed or mechanically movable spray system directing a stream of water against a filter surface causing the filter aid and/or accumulated dirt to dislodge into the empty tank.

(l) "Static suction lift" means the vertical distance in feet (meters) from the center line of the pump impeller to the level of water in the pool.

(m) "Steps" means a riser tread or series of riser treads extending down from the deck and terminating at the pool bottom.

(n) "Steps, recessed" means a step or series of steps that are recessed so that all risers are located outside the pool wall.

(o) "Steps, recessed steps, ladders, and recessed treads" means methods of pool ingress and egress that may be used alone

or in conjunction with one another.

(p) "Strainer" means a device used to remove hair, lint, leaves, or other coarse material on the suction side of a pump.

(q) "Suction piping" means that portion of the circulation piping located between the pool structure and the inlet side of the pump and usually includes the following:

(1) Main outlet piping.

(2) Skimmer piping.

(3) Vacuum piping.

(4) Surge tank piping.

(r) "Surface skimmer" means a device designed to continuously remove surface film and water and return it through the filter as part of the recirculation system, usually incorporating a self-adjusting weir, a collection tank, and a means to prevent air lock of the pump. It is sometimes referred to as a "recirculating overflow", a "mechanical", or "automatic skimmer".

(s) "Swimming pool" means any artificial basin of water constructed, modified, or improved for wading, swimming, or diving. This term does not include artificial lakes.

(t) "Swimming pool, in-ground" means any pool whose sides rest in partial or full contact with the earth.

(u) "Swimming pool, nonpermanently installed" means any pool that is so constructed that it may be readily disassembled for storage and reassembled to its original integrity.

(v) "Swimming pool, on-ground" means any pool whose sides rest fully above the surrounding earth.

(w) "Swimming pool, permanently installed" means any pool that is constructed in the ground or in a building in such a manner that the pool cannot be readily disassembled for storage.

(x) "Swimming pool, public" means any pool other than a residential pool which is intended to be used for swimming or bathing and is operated by an owner, lessee, operator, licensee, or concessionaire, regardless of whether a fee is charged for use. Reference within the standards to various types of public pools are defined by the following categories:

(1) Class A—competition pool: Any pool intended for use for competitive aquatic events sanctioned by nationally recognized athletic organizations such as the following:

(A) FINA (Federation International De Natation Amateur).

(B) AAU (Amateur Athletic Union).

(C) NCAA (National Collegiate Athletic Association).

(D) USD (United States Diving, Inc.).

(E) NAIA (National Association of Intercollegiate Athletics).

Such pools may also be used for public recreation.

(2) Class B—public pool: Any pool intended for public recreational use.

(3) Class C—semipublic pool: Any pool operated solely for and in conjunction with lodgings such as hotels, motels, apartments, condominiums, etc.

(4) Class D—special purpose pool: Any pool operated for medical treatment, water therapy, or nonrecreational functions.

(y) "Swimming pool, residential" (family pool) means any constructed pool, permanent or nonportable, which is intended for noncommercial use as a swimming pool by not more than two (2) owner families and their guests.

(z) "Swimming pool, wading" means a pool that may range in water depth from two (2) feet to zero (0) feet for wading. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-18; filed Aug 14, 1989, 9:00 a.m.: 13 IR 43, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-1.1-19 Definitions "T"

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 19. (a) "Total discharge head" means the value in feet (meters) of water that a pump will raise water above its center line.

(b) "Total dynamic head" means the arithmetical difference between the total discharge head and total suction head (a vacuum reading is considered as a negative pressure). This value is used to develop the published performance curve.

(c) "Total dynamic suction lift (TDSL)" means the arithmetical total of static suction lift, friction head loss, and velocity head loss working on the suction side of the pump.

(d) "Total suction head" means the value in feet (meters) of water that a pump will lift by suction.

(e) "Toxic" means having an adverse physiological effect on man.

(f) "Trap" means a fitting or device so designed and constructed as to provide, when properly vented, a liquid seal which will prevent the back passage of air without materially affecting the flow of sewage or waste water through it.

(g) "Trimmer valve" means a flow adjusting device which is used to proportion flow over the skimming weir and flow through the main suction line from the main outlet or the vacuum cleaning line.

(h) "Turnover time" means the period of time required to circulate a volume of water equal to the pool capacity. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-19; filed Aug 14, 1989, 9:00 a.m.: 13 IR 45, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-1.1-20 Definitions "U"

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 20. (a) "Underwater light" means a fixture designed to illuminate a pool from beneath the water surface, further defined as:

(1) "wet niche light" means a watertight and water-cooled light unit placed in a submerged, wet niche in the pool wall and accessible only from the pool; or

(2) "dry niche light" means a light unit placed behind a watertight window in the pool wall.

(b) "Upper distribution system" means those devices designed to distribute the water entering a permanent medium filter in a manner so as to prevent movement or migration of the filter medium. This system shall also properly collect water during filter backwashing unless other means are provided. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-20; filed Aug 14, 1989, 9:00 a.m.: 13 IR 45, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-1.1-21 Definitions "V"

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 21. (a) "Vacuum piping" means the piping from the suction side of a pump connected to a vacuum fitting located at the pool and below the water level to which underwater cleaning equipment may be attached.

(b) "Velocity" means a measurement of the motion of liquids usually expressed in feet per second.

(c) "Vertical" means a line of surface running perpendicular to the plane of the horizon. A truly plumb line. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-21; filed Aug 14, 1989, 9:00 a.m.: 13 IR 45, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-1.1-22 Definitions "W"

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 22. (a) "Wading area" means the portions of a pool having water depths of two (2) feet and less.

(b) "Walls" means interior pool wall surfaces consisting of surfaces from the vertical to a forty-five (45) degree slope.

(c) "Waste piping" means piping that conveys waste water.

(d) "Waterline" means one (1) of the following:

(1) The waterline for the skimmer system shall fall in the midpoint of the operating range of the skimmers.

(2) The waterline for the overflow system shall be established by the height of the overflow rim.

(e) "Width or length" means the actual water dimension taken from wall to wall at the waterline.

(f) "Winterizing" means the procedure for preparing pools from freezing weather. Includes chemical treatment of the standing water, plus physical and chemical protection of the pool and its equipment against freezing.

(g) "Working pressure" means the maximum operating water pressure recommended by the manufacturer. (*Fire Prevention and Building Safety Commission; 675 IAC 20-1.1-22; filed Aug 14, 1989, 9:00 a.m.: 13 IR 46, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

Rule 2. Public Swimming Pools

675 IAC 20-2-1 Content of plans; filing requirements

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 1. (a) Plans and specifications of all public pools shall be submitted pursuant to 675 IAC 12, the general administrative rules, for design release prior to the construction, rehabilitation, or alteration of any public swimming pool.

(b) Such plans and specifications shall contain sufficient information to show that the pool, pool systems, bathhouse, equipment, or improvements thereto will meet the requirements of this code, and shall indicate not less than the following:

- (1) Physical description of the pool including: pool perimeter, area, depths, location of inlets and outlets, waterline, stairs, ladders, diving equipment, and materials of construction.
- (2) Pool volume, turnover, rate of filtration, flow rates, and total dynamic head.
- (3) Source, quality, and characteristics of the make-up water supply.
- (4) Detailed description of filtration, circulation, and chemical feeder equipment.
- (5) Scale, north point, and direction of prevailing wind.
- (6) Occupant load.

(c) This section shall not be considered as a substitute for the requirements of 675 IAC 12, the general administrative rules, on the submission of plans and specifications for pools, their appurtenant equipment, decks, bathhouses, and appliances necessary to maintain the pool in a safe and sanitary condition. *(Fire Prevention and Building Safety Commission; 675 IAC 20-2-1; filed Aug 14, 1989, 9:00 a.m.: 13 IR 46, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)*

675 IAC 20-2-2 Materials of construction

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 2. Swimming pools and all appurtenances thereto shall be constructed of materials which:

- (1) are nontoxic to man and the environment;
- (2) are impervious and enduring;
- (3) can withstand the design stresses;
- (4) will provide a watertight structure with a smooth and easily cleaned surface without cracks or joints, excluding structural joints; or
- (5) a smooth, easily cleaned surface finish is applied or attached.

(Fire Prevention and Building Safety Commission; 675 IAC 20-2-2; filed Aug 14, 1989, 9:00 a.m.: 13 IR 46, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)

675 IAC 20-2-3 Structural design

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 3. (a) All pools shall be designed and constructed to withstand all anticipated loading for both empty and full conditions, a hydrostatic relief valve shall be provided for all in-ground pools. The design professional as described in 675 IAC 12, the general administrative rules, shall be responsible for the structural stability as described above.

(b) Sand or earth shall not be permitted as an interior finish in a public swimming pool.

(c) In all pools not completely enclosed in a heated building the pool shell and appurtenances, piping, filter system, pump, motor, and other components shall be so designed and constructed to facilitate protection from damage due to freezing.

(d) The surfaces within a swimming pool intended to provide footing for bathers shall be designed to provide a slip-resisting surface. The roughness or irregularity of such surfaces shall not provide an abrasion hazard to the feet during normal use.

(e) The color, pattern, or finish of the pool interior shall not obscure the existence or presence of objects or surfaces within the pool. The floor of all pools shall be white, light colored, or light colored patterns in order to facilitate the identification of any

objects within the pool. (*Fire Prevention and Building Safety Commission; 675 IAC 20-2-3; filed Aug 14, 1989, 9:00 a.m.: 13 IR 47, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Nov 15, 1989, 5:00 p.m.: 13 IR 675; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-2-4 Dimensional design

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 4. (a) No limits are specified for the shape of swimming pools except that consideration shall be given to shape from the standpoint of safety and circulation of the swimming pool water.

(b) There shall be no protrusions, extensions, means of entanglement, or other obstructions in the swimming area which can cause the entrapment or injury of the bather.

(c) There shall be construction tolerances allowed on all dimensional designs. Overall length, width, and depth in the deep end may vary plus or minus three (3) inches. All other overall dimensions may vary plus or minus two (2) inches, unless otherwise specified (such as in a Class A pool). The designed waterline shall have a maximum construction tolerance at the time of completion of the work of plus or minus one-fourth (1/4) inch for pools with adjustable weir surface skimming systems, and of plus or minus one-eighth (1/8) inch for pools with nonadjustable surface skimming systems.

(d) The size of Class A or D pools shall be governed by the requirements of the activities for which the installation is intended. (*Fire Prevention and Building Safety Commission; 675 IAC 20-2-4; filed Aug 14, 1989, 9:00 a.m.: 13 IR 47, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Nov 15, 1989, 5:00 p.m.: 13 IR 675; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-2-5 Floor

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 5. (a) All slopes shall be uniform.

(b) The slope of the floor from the shallow end wall towards the deep end shall not exceed one (1) foot in twelve (12) feet to the point of the first slope change for Class A and B pools or one (1) foot in ten (10) feet for Class C pools.

(c) The point of the first slope change shall be defined as the point at which the floor slope exceeds one (1) foot in twelve (12) feet for Class A and B pools or one (1) foot in ten (10) feet for Class C pools.

(d) The slope of the floor from the point of the first slope change to the deep end shall not exceed one (1) foot in three (3) feet. Such slopes are not intended to provide any less water depth than those specified if the pool is intended for diving.

(e) The transitional radius between the pool wall and floor shall be as follows:

(1) The radius shall have its center no less than two (2) feet nine (9) inches below the waterline in deep areas or two (2) feet six (6) inches in the shallow area.

(2) The radius shall be tangent to the wall.

(3) The radius shall be at least equal to, or greater than, the depth of the pool minus the vertical wall depth measured at the waterline minus three (3) inches to allow draining to the main outlet.

(*Fire Prevention and Building Safety Commission; 675 IAC 20-2-5; filed Aug 14, 1989, 9:00 a.m.: 13 IR 47, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Nov 15, 1989, 5:00 p.m.: 13 IR 675; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-2-6 Walls

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 6. (a) Walls in Class B and C pools shall be vertical or within eleven (11) degrees of vertical for a minimum distance of two (2) feet nine (9) inches from the waterline in deep areas or two (2) feet three (3) inches in shallow areas and curved to join the floor.

(b) Walls in Class A pools where racing lanes terminate shall be vertical with a construction tolerance of one (1) degree. *(Fire Prevention and Building Safety Commission; 675 IAC 20-2-6; filed Aug 14, 1989, 9:00 a.m.: 13 IR 48, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)*

675 IAC 20-2-7 Depths

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 7. (a) Class A pools intended for competitive diving and swimming shall not be required to comply with the water depth requirements of this code.

(b) Class B and C swimming pools shall have a minimum depth of water in the shallow end of the main swimming area of three (3) feet. Advisory note: Three (3) feet six (6) inches is the minimum recommended depth for racing lanes. Exception: Recessed areas of an irregularly shaped pool.

(c) The beginners' area of a Class B pool shall be visually set apart from, but may be adjoined to, the shallow area and shall not adjoin the deep area. The wading area of a Class B pool shall be visually set apart from, but may be adjoined to, the beginners' area and shall be physically separated from shallow and deep areas of the pool.

(d) The transition point between the wading area and beginners' area of a Class B pool shall be visually set apart with depth numbers, a four (4) inch width row of floor tile, painted line, or similar means of a color contrasting with the bottom. The transition point of the pool from the beginners' area shall be visually set apart with a transition line, depth numbers, and a four (4) inch minimum width row of floor tile, painted line, or similar means of a color contrasting with the bottom. In all pools with diving equipment the shallow area shall be visually set apart from the deep area with a transition line, depth numbers, and a four (4) inch color contrasting with the bottom. Exception: Pools designed and constructed for the sole purpose of diving.

(e) Class B and C pools intended for diving shall meet or exceed the dimensional requirements called for by section 15 of this rule, Figure No. 2-1. Point A is a base reference point for pools designed for diving and shall be the horizontal location of the tip of the diving equipment.

(f) Public pools with diving facilities in excess of three (3) meters in height or pools designed for platform diving shall meet or exceed the dimensional requirements called for by section 16 of this rule, Figure No. 2-2. *(Fire Prevention and Building Safety Commission; 675 IAC 20-2-7; filed Aug 14, 1989, 9:00 a.m.: 13 IR 48, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)*

675 IAC 20-2-8 Diving equipment

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 8. (a) When diving equipment is installed, it shall be so located in the diving area of the pool so as to provide not less than the minimum dimensions shown in section 15 of this rule, Figure No. 2-1.

(b) There shall be a completely unobstructed clear vertical distance of not less than fifteen (15) feet above any diving board measured from the center of the front end of the board. This area shall extend horizontally at least eight (8) feet behind, eight (8) feet to each side, and sixteen (16) feet ahead of point "A", as shown in section 15 of this rule, Figure No. 2-1.

(c) Supports, platforms, stairs, and ladders for diving equipment shall be of substantial construction and of sufficient structural strength to safely carry the anticipated loads. Stairs and ladders shall be of corrosion-resisting material easily cleanable and with tread of slip-resisting design. All diving stands higher than twenty-one (21) inches measured from the deck to the top butt end of the board shall be provided with stairs and/or a ladder.

(d) Platforms and diving equipment which are one (1) meter or higher shall be protected with guard rails. One (1) meter diving equipment guard rails shall be at least thirty (30) inches above the diving board and extend to the edge of the pool wall. All platform or diving equipment higher than one (1) meter shall have guard rails which are at least thirty-six (36) inches above the diving board and extend to the edge of the pool wall.

(e) A label shall be permanently affixed to the diving or jump board and shall include the following:

- (1) Manufacturer's name and address.
- (2) Board length.
- (3) Identification as to diving or jump board.

- (4) Fulcrum setting specifications (if applicable).
- (5) Date of manufacture.
- (6) Reference to the manufacturer's safety standard (if any) that the board will meet.

(f) Diving equipment suitable for installation on a lower pool type may be installed on any higher pool type, providing no less a water envelope is provided from the tip of the board than called for in the lower pool type as described in section 15 of this rule, Figure No. 2-1. Diving equipment of a greater type shall not be installed on a pool of lesser type. Should diving equipment be installed at any greater heights than specified for the lower pool type, then the board shall be installed so that the location of the tip of the board falls within the limitations specified for the higher pool type.

- (g) Diving equipment shall have slip-resisting tread surfaces.
- (h) Diving equipment shall be permanently anchored to the deck.

(i) Maximum board height over the water shall have plus three (3) inches tolerance to allow for construction variances on Class B and C pools.

(j) The maximum horizontal construction tolerance of the tip of the board from point "A" in section 15 of this rule, Figure No. 2-1, shall be plus or minus three (3) inches on Class B and C pools. *(Fire Prevention and Building Safety Commission; 675 IAC 20-2-8; filed Aug 14, 1989, 9:00 a.m.: 13 IR 48, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)*

675 IAC 20-2-9 Swimming pool slides

Authority: IC 22-13-2-2
 Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 9. Slides, where provided for use with swimming pools, shall have a permanent label or separate certificate indicating conformance with the rules of the Consumer Product Safety Commission issued as 16 C.F.R. Ch. II, Part 1207. *(Fire Prevention and Building Safety Commission; 675 IAC 20-2-9; filed Aug 14, 1989, 9:00 a.m.: 13 IR 49, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)*

675 IAC 20-2-10 Offset ledges and underwater seat benches

Authority: IC 22-13-2-2
 Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 10. (a) Offset ledges, when provided, shall fall within eleven (11) degrees from vertical starting at the junction of the pool wall and waterline and shall have a slip-resisting surface.

(b) Underwater seat benches, when provided, shall have a maximum depth of twenty (20) inches below the waterline at the horizontal seat, be visually set apart, have a slip-resisting surface, and shall be located fully outside of the required minimum diving water envelope if the pool is intended for use with diving equipment.

(c) Underwater seat benches shall be permitted in the deep end of the pool only if they are completely recessed, shaped to be compatible with the shape of the pool wall, or in a corner of the pool. *(Fire Prevention and Building Safety Commission; 675 IAC 20-2-10; filed Aug 14, 1989, 9:00 a.m.: 13 IR 49, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)*

675 IAC 20-2-11 Maximum bather load

Authority: IC 22-13-2-2
 Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 11. The maximum bather load at Class B or C pools shall be in accordance with the following table:

Shallow, Beginners' or Wading Areas	Deep Areas (not including diving areas)	Diving Areas (per board)
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Pools with minimum deck areas	15 square feet per bather	20 square feet per bather	300 square feet per bather
Pools with deck area at least equal to the surface area of the pool	12 square feet per bather	15 square feet per bather	same as above
Pools with deck area at least twice the surface area of the pool	8 square feet per bather	10 square feet per bather	same as above

(Fire Prevention and Building Safety Commission; 675 IAC 20-2-11; filed Aug 14, 1989, 9:00 a.m.: 13 IR 49, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)

675 IAC 20-2-12 Wading pools and areas

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 12. (a) Separate wading pools shall be physically set apart from beginners' or shallow areas of swimming pools by at least six (6) feet of deck at Class B pools or four (4) feet of deck at Class C pools. Where a wading pool is adjacent to any deep water area, a barrier not less than four (4) feet high shall be installed separating the two (2) pools or pool areas.

(b) Wading pools and areas shall have a maximum water depth of twenty-four (24) inches. The water depth at the perimeter shall not exceed eighteen (18) inches. The minimum depth of wading pools or areas shall be zero (0). Exception: Zero (0) depth pools.

(c) Walls in wading pools and areas shall be vertical or within eleven (11) degrees of vertical except for the lower six (6) inches which shall be curved to the floor. Walls shall not extend more than six (6) inches above the waterline at any point.

(d) Floors of wading pools and areas shall be uniform sloped to drain to the main outlet with a maximum slope of one (1) foot in twelve (12) feet. *(Fire Prevention and Building Safety Commission; 675 IAC 20-2-12; filed Aug 14, 1989, 9:00 a.m.: 13 IR 50, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)*

675 IAC 20-2-13 Decks and deck equipment

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 13. (a) Deck work shall be designed and installed so as to include the quality of subbase, concrete mix design, reinforcing, joints, and finishes. Work performed in accordance with the American Concrete Institute (ACI) Standard 302.1R-80, "Guide for Concrete Floor and Slab Construction" may be deemed acceptable.

(b) Decks, ramps, and similar surfaces including step treads and coping shall be slip-resisting. The roughness or irregularity of such surfaces shall not cause injury or provide an abrasion during normal use. Depth markers, pool brand insignias, or similar special features located in or on the deck shall conform to this section.

(c) Steps for the deck outside the perimeter shall be in accordance with 675 IAC 13, the Indiana Building Code.

(d) The minimum continuous, unobstructed deck width, including the coping, shall not be less than the following:

(1) Class A pools shall be allowed to comply with the deck width requirements of a nationally recognized athletic sanctioning agency, e.g., NCAA, AAU, or FINA, in lieu of other requirements found in this code.

(2) Class B pool: six (6) feet minimum.

(3) Class C pool: four (4) feet minimum.

(4) Class D pool: three (3) feet minimum where provided.

(5) A minimum of four (4) feet walk width shall be provided on the sides and rear of any diving equipment. A deck clearance of twenty-four (24) inches shall be provided around any other deck equipment that is thirty-six (36) inches or less in height above the deck and a thirty-six (36) inch deck clearance around all other deck equipment.

(e) The maximum slope of decks shall be one-half (1/2) inch per foot with a minimum slope of one-fourth (1/4) inch per foot. Exception: Access ramps, where the maximum slope shall be one (1) inch per foot.

(f) The maximum width of voids between adjoining concrete slabs and/or between concrete slabs and expansion joint material shall be three-sixteenths (3/16) inch of horizontal clearance with a maximum difference in vertical elevation of one-fourth

(1/4) inch.

(g) Joints, where the pool coping meets the concrete decks, shall be watertight. Where deck work joins the pool coping, the joining areas shall be designed and installed so as to adequately protect the pool and its mortar bed from damage.

(h) Decks shall be edged, provided with a radius, or otherwise relieved so as to prevent exposed sharp corners.

(i) Decks shall be sloped to effectively drain either to perimeter areas or to deck drains. Drainage shall remove pool splash water, deck cleaning water, and rainwater. Site drainage shall be provided away from all decks so as to direct all perimeter deck drainage as well as general site drainage away from decks. Deck draining systems, when used, shall not drain more than four hundred (400) square feet to a single drain or twenty-five (25) feet of deck perpendicular to a continuous drain.

(j) Open pits (leeching design) for backwash sump purposes shall be located so that it falls completely below adjacent deck work and fully outside a line projected forty-five (45) degrees downward and away from such deck work.

(k) Circulation system piping, other than that integrally included in the manufacture of the pool, shall be subject to an induced static hydraulic pressure test (sealed system) at twenty-five (25) pounds per square inch for thirty (30) minutes. This test shall be performed before the deck is poured, and the pressure shall be maintained through the deck pour.

(l) Recirculation line valves installed in or under any deck(s) shall provide a minimum ten (10) inches diameter access cover and valve pit. Other valves shall not be installed in or under decks.

(m) Hose bibbs with vacuum breakers shall be provided in numbers and locations sufficient for washing down the entire deck area. (*Fire Prevention and Building Safety Commission; 675 IAC 20-2-13; filed Aug 14, 1989, 9:00 a.m.: 13 IR 50, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-2-14 Means of entry and exit

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 14. (a) All public pools shall have not less than two (2) means of entry and exit located so as to serve both ends of the pool. Pools or water areas over thirty (30) feet in width shall have not less than one (1) means of entry and exit on each side. Not less than one (1) means of entry and exit shall be provided for each seventy-five (75) linear feet, or fraction thereof, of pool perimeter.

(b) A means of entry/exit for the shallow end shall be located between the shallow end wall and the cross section at point "D" in section 15 of this rule, Figure No. 2-1, while a means of entry/exit for the deep end shall be between the deep end wall and the cross section at point "B" in section 15 of this rule, Figure No. 2-1.

(c) Where water depths are twenty-four (24) inches or less at the pool wall, such areas shall be considered as providing their own natural means of entry/exit.

(d) Stairs, ladders, ramps, and recessed treads shall be located so as not to interfere with racing lanes if applicable.

(e) The design and construction of protruding and recessed pool stairs and ramps shall conform to the following:

(1) Stair treads shall have a minimum unobstructed horizontal tread depth of ten (10) inches and a minimum unobstructed surface area of two hundred forty (240) square inches.

(2) Risers at the center line of the treads shall have a maximum uniform height of twelve (12) inches with the bottom riser height allowed to vary plus or minus two (2) inches from the uniform riser height.

(3) Each set of stairs or each ramp shall be provided with at least one (1) handrail to fully serve all treads and risers. Handrails shall conform to the following:

(A) Handrails, if removable, shall be installed in such a way that they cannot be removed without the use of tools.

(B) The leading edge of handrails facilitating steps and pool exit must be located within eighteen (18) inches, plus or minus three (3) inches, horizontally measured from the vertical plane of the bottom riser.

(C) The outside diameter of handrails shall be between one and one-fourth (1 1/4) inches and two (2) inches.

(4) Ramps, when provided, shall be not less than three (3) feet wide nor have a slope greater than one (1) vertical to ten (10) horizontal.

(f) Underwater seats or benches may be provided as part of stairs or recessed treads.

(g) Stairs, ladders, or handrails shall not protrude into the minimum water dimensions shown in section 15 of this rule, Figure No. 2-1.

(h) Stairs or ramps which protrude into a pool shall be visually set apart such that a bather on the deck or in the water can clearly discriminate the stair or ramp from the unobstructed pool.

(i) The design and construction of pool ladders shall conform to the following:

(1) Pool ladders shall be made entirely of corrosion-resisting materials.

- (2) Ladders must provide not less than two (2) grabrails or two (2) handrails.
- (3) Below the water level there shall be a clearance of not more than six (6) inches nor less than three (3) inches between any ladder tread edge measured from the pool wall side of the tread and the pool wall.
- (4) The minimum distance between ladder handrails shall be seventeen (17) inches with a maximum distance of twenty-four (24) inches.
- (5) There shall be a uniform height between individual ladder treads with a seven (7) inch minimum distance and a twelve (12) inch maximum distance between ladder treads.
- (6) Ladder treads shall have a minimum tread depth of one and one-half (1 1/2) inches.
- (7) The outside diameter of grabrails or handrails shall be between one and one-fourth (1 1/4) inches and two (2) inches.
- (j) The design and construction of recessed treads in the pool wall shall conform to the following:
 - (1) Recessed treads at the center line shall have uniform vertical spacing of twelve (12) inches maximum and seven (7) inches minimum.
 - (2) Maximum vertical distance between the pool coping edge, deck, or stair surface, which shall be slip-resisting, and the uppermost recessed tread shall be twelve (12) inches.
 - (3) Recessed treads shall have a minimum tread depth of five (5) inches and a minimum width of twelve (12) inches.
 - (4) Recessed treads shall drain into the pool to prevent the accumulation of dirt thereon.
 - (5) Each set of recessed treads shall be provided with handrails or grabrails to fully serve all treads.
 - (6) The outside diameter of grabrails or handrails shall be between one and one-fourth (1 1/4) inches and two (2) inches.

(Fire Prevention and Building Safety Commission; 675 IAC 20-2-14; filed Aug 14, 1989, 9:00 a.m.: 13 IR 51, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Nov 15, 1989, 5:00 p.m.: 13 IR 675; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)

675 IAC 20-2-15 Figure No. 2-1

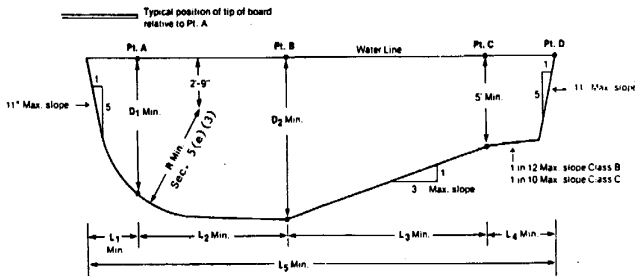
Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 15.

MINIMUM DIMENSIONS FOR DIVING PORTION OF CLASS B AND C POOLS

(This drawing does not show the shallow portion of the pool.)



NOTE: L_4 is a minimum dimension to allow sufficient length opposite the board. This must be lengthened to form the shallow portion of the pool

POOL TYPE	RELATED DIVING EQUIPMENT		MINIMUM DIMENSIONS								MINIMUM WIDTH OF POOL AT:		
	Max. Diving Board Length	Max. Board Hgt. Over Water	D_1	D_2	R	L_1	L_2	L_3	L_4	L_5	PT. A	PT. B	PT. C
VI	10'	26" ($\frac{2}{3}$ meter)	(2.13m) 7'-0"	(2.59m) 8'-6"	(1.68m) 5'-6"	(.76m) 2'-6"	(2.44m) 8'-0"	(3.20m) 10'-6"	(2.13m) 7'-0"	(8.53m) 28'-0"	(4.88m) 16'-0"	(5.49m) 18'-0"	(5.49m) 18'-0"
VII	12'	30" ($\frac{3}{4}$ meter)	(2.29m) 7'-6"	(2.74m) 9'-0"	(1.83m) 6'-0"	(.91m) 3'-0"	(2.74m) 9'-0"	(3.16m) 12'-0"	(1.22m) 4'-0"	(8.53m) 28'-0"	(5.49m) 19'-0"	(6.10m) 20'-0"	(6.10m) 20'-0"

VIII	16'	1 Meter	(2.59m) 8'-6"	(3.05m) 10'-0"	(2.13m) 7'-0"	(1.22m) 4'-0"	(3.05m) 10'-0"	(4.57m) 15'-0"	(.61m) 2'-0"	(9.45m) 31'-0"	(6.10m) 20'-0"	(6.71m) 22'-0"	(6.71m) 22'-0"
IX	16'	3 Meter	(3.35m) 11'-0"	(3.66m) 12'-0"	(2.59m) 8'-6"	(1.83m) 6'-0"	(3.20m) 10'-6"	(6.40m) 21'-0"	0	(11.43m) 37'-6"	(6.70m) 22'-0"	(7.32m) 24'-0"	(7.32m) 24'-0"

L₂, L₃ and L₄ combined represent the minimum distance from the tip of board to pool wall opposite diving equipment.

*NOTE: Placement of boards shall observe the following minimum dimensions. With multiple board installations minimum pool widths must be increased accordingly.

- 1 Meter or Deck Level Board to Pool Side 9' (2.74m)
- 3 Meter Board to Pool Side 11' (3.35m)
- 1 Meter or Deck Level Board to 3 Meter Board 10' (3.05m)
- 1 Meter or Deck Level to another 1 Meter or Deck Level Board 8' (2.44m)
- 3 Meter to another 3 Meter Board 10' (3.05m)

For pool Types O through V, see 675 IAC 20-4-9. (Fire Prevention and Building Safety Commission; 675 IAC 20-2-15; filed Aug 14, 1989, 9:00 a.m.: 13 IR 53, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Nov 15, 1989, 5:00 p.m.: 13 IR 675; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)

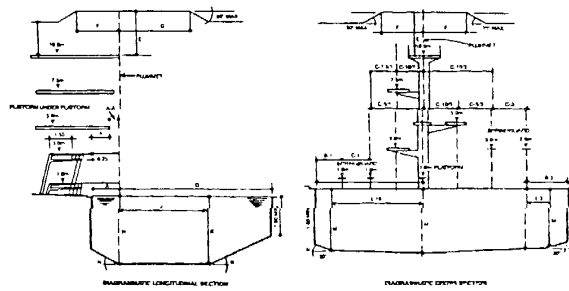
675 IAC 20-2-16 Figure No. 2-2

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 16. Minimum dimensions for Class A diving pools.

FINA Dimensions for Diving Facilities		Dimensions are in Metres		SPRINGBOARD				PLATFORM								
				1 Metres		3 Metres		1 Metre		3 Metres		5 Metres		7.5 Metres		10 Metres
		Length	Width	Height	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.	Horiz.	Vert.
A	From plummet BACK TO POOL WALL	Designation	A-1	A-3	A-1p1	A-3p1	A-5	A-7.5	A-10							
		Minimum	1.80	1.80	0.75	1.25	1.25	1.50	1.50							
A A	From plummet BACK TO PLATFORM plummet directly below	Designation							AA 5/1	AA 7.5/3/1	AA 10/5/3/1					
		Minimum							1.50	1.50	1.50					
B	From plummet to POOL WALL AT SIDE	Designation	B-1	B-3	B-1p1	B-3p1	B-5	B-7.5	B-10							
		Minimum	2.50	3.50	2.30	2.90	4.25	4.50	5.25							
C	From plummet to ADJACENT PLUMMET	Designation	C-1/1	C-3/3/1	C-1/1p1	C-3/1	1/3p1	C-5/3/1	C-7.5/5-3-1	C-10/7.5/5-3-1						
		Minimum	2.40	2.60	1.65	2.10	2.50	2.50	2.75	2.75						
D	From plummet to POOL WALL AHEAD	Designation	D-1	D-3	D-1p1	D-3p1	D-5	D-7.5	D-10							
		Minimum	9.00	10.25	8.00	9.50	10.25	11.00	13.50							
E	On plummet from BOARD TO CEILING	Designation	E-1		E-3		E-1p1		E-3p1		E-5		E-7.5		E-10	
		Minimum	5.00		5.00		3.50		3.50		3.50		3.50		5.00	
F	CLEAR OVERHEAD behind and each side of plummet	Designation	F-1	E-1	F-3	E-3	F-1p1	E-1p1	F-3p1	E-3p1	F-5	E-5	F-7.5	E-7.5	F-10	E-10
		Minimum	2.50	5.00	2.50	5.00	2.75	3.50	2.75	3.50	2.75	3.50	2.75	3.50	2.75	5.00
G	CLEAR OVERHEAD ahead of plummet	Designation	G-1	E-1	G-3	E-3	G-1p1	E-1p1	G-3p1	E-3p1	G-5	E-5	G-7.5	E-7.5	G-10	E-10
		Minimum	5.00	5.00	5.00	5.00	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50	6.00	5.00
H	DEPTH OF WATER at plummet	Designation	H-1		H-3		H-1p1		H-3p1		H-5		H-7.5		H-10	
		Minimum	3.50		3.80		3.30		3.60		4.00		4.50		5.00	
J K	DISTANCE AND DEPTH ahead of plummet	Designation	J-1	K-1	J-3	K-3	J-1p1	K-1p1	J-3p1	K-3p1	J-5	K-5	J-7.5	K-7.5	J-10	K-10
		Minimum	5.00	3.40	6.00	3.70	5.00	3.20	6.00	3.50	6.00	3.90	8.00	4.40	11.00	4.75
L M	DISTANCE AND DEPTH each side of plummet	Designation	L-1	M-1	L-3	M-3	L-1p1	M-1p1	L-3p1	M-3p1	L-5	M-5	L-7.5	M-7.5	L-10	M-10
		Minimum	1.50	3.40	2.00	3.70	1.40	3.20	1.80	3.50	4.25	3.90	4.50	4.40	5.25	4.75
N	MAXIMUM SLOPE TO REDUCE DIMENSIONS beyond full requirements	Pool Depth	30 degrees		NOTE: Dimensions C (plummet to adjacent plummet) apply for Platforms with widths as detailed. For wider Platform increase C by half the additional width(s)											
		Ceiling Ht	30 degrees													



(Fire Prevention and Building Safety Commission; 675 IAC 20-2-16; filed Aug 14, 1989, 9:00 a.m.: 13 IR 54, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Aug 11, 1990, 5:00 p.m.: 13 IR 2140; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)

675 IAC 20-2-17 Circulation systems

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 17. (a) A circulation system consisting of pumps, piping, overflows, skimmers, filters, and other necessary equipment shall be provided for complete and continuous circulation of water through all parts of the pool.

(b) The circulation system shall be of adequate size to produce not less than the following turnover times:

- (1) Class A, Class B, and Class C diving pools: twelve (12) hours.
- (2) Class A, Class B, and Class C pools without wading areas: six (6) hours.
- (3) Class B and Class C pools with wading areas: two (2) hours.
- (4) Class B and Class C wading pools: one (1) hour.
- (5) Class B and Class C wave pools and zero (0) depth pools: two (2) hours.

(c) Circulation components that may require replacement or servicing shall be accessible and available for inspection, repair, or replacement and installed according to manufacturer's instructions.

(d) Materials and equipment used in the circulation system shall be of an approved type.

(e) The water velocity in the pool piping shall not exceed ten (10) feet per second for discharge piping and six (6) feet per second for suction piping, unless summary calculations are provided to show that the greater flow is possible with the pump and piping provided. Pool piping shall be sized to permit the rated flows for filtering and cleaning without exceeding the maximum head at which the pump will provide such flows or exceeding the velocities stated. Exception: The water velocity in copper pipe shall not exceed eight (8) feet per second.

(f) The circulation piping and fittings shall be nontoxic and capable of withstanding operating pressures and conditions.

(g) The suction side of the circulation system shall be tied and split hydraulically equally between the two (2) or more main drains. Both branches shall have the same size pipe as the main drain.

(h) Pool piping shall have a uniform slope in one (1) direction equipped with valves for adequate drainage. Pool piping shall be supported at sufficient intervals to prevent entrapment of air, water, or dirt. Provision shall be made for expansion or contraction of pipes.

(i) Equipment shall be designed and fabricated to drain the pool water from the equipment, together with exposed face piping, by removal of drain plugs and manipulating winter drain valves.

(j) A pressure or vacuum gauge or other means of indicating system condition shall be provided in the circulation system in an accessible location. Class A, Class B, and Class C pools shall be provided with an indicator measuring the rate of flow through the filter system with an appropriate range readable in gallons per minute and accurate within ten percent (10%) actual flow.

(k) When time clocks are used to regulate the operation of circulation systems, they shall be set to regulate all circulation equipment and appurtenant devices.

(l) Operation and maintenance instructions shall be provided for circulation system components. (*Fire Prevention and Building Safety Commission; 675 IAC 20-2-17; filed Aug 14, 1989, 9:00 a.m.: 13 IR 55, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Aug 11, 1990, 5:00 p.m.: 13 IR 2140; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530; filed Nov 25, 2002, 9:00 a.m.: 26 IR 1100*)

675 IAC 20-2-18 Filters

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 18. (a) Filters shall be designed and constructed so that after cleaning per manufacturer's instructions the system can provide the water clarity such that a six (6) inch black disc, placed upon a white background, is clearly visible at the deepest point of the pool when viewed from the edge of the pool.

(b) Filters shall be designed so that filtration surfaces can be inspected and serviced.

(c) On pressure-type filters, a means shall be provided to permit the release of air which enters the filter tank. Any filter incorporating an automatic internal air release as its principal means of air release must have lids which provide a slow and safe release of pressure as a part of its design. Any separation tank used in conjunction with any filter tank must have a manual means of air release or lid which provides a slow and safe release of pressure as they are opened as a part of its design.

(d) Pressure filters and separation tanks shall have operation and maintenance instructions permanently installed on the filter or separation tank and shall include a precautionary statement warning not to start up the system after maintenance without first opening the air release and proper reassembly of the filter and separation tank. The statement must be visible and noticeable within the area of the air release.

(e) Piping furnished with the filter shall be of suitable material capable of withstanding one and one-half (1 1/2) times the working pressure.

(f) Filter components which require servicing shall be accessible for inspection and repair when installed according to the manufacturer's instructions.

(g) The rate of filtration shall not exceed three (3) gallons per minute per square foot of filter surface unless the filtration system is specifically listed and labeled for use above said rate. (*Fire Prevention and Building Safety Commission; 675 IAC 20-2-18; filed Aug 14, 1989, 9:00 a.m.: 13 IR 55, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-2-19 Pumps

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 19. (a) A pump and motor shall be provided for circulation of the pool water. Performance of all pumps shall meet or exceed the conditions of flow required for filtering and cleaning (if applicable) the filters against the total dynamic head developed by the complete system.

(b) Water entering the pump(s) shall pass through the removable strainer.

(c) Pumps shall be selected to perform the functions for which they were intended. Pumps and motors must be accessible for inspection and service.

(d) All motors shall have as a minimum an open, drip-proof enclosure and be constructed electrically and mechanically so they will perform satisfactorily under the conditions of load and environment normally encountered in swimming pool installations.

(e) Motors shall be capable of operating the pump under full load with a voltage variation of at least five percent (5%) from name plate rating. If the maximum service factor of the motor is exceeded (at full voltage), the manufacturer shall indicate this on the pump curve.

(f) All motors shall have thermal or current overload protection, either built in or in the line starter, to provide locked rotor and running protection.

(g) The motor frame shall contain adequate provisions for proper grounding. When a pump is installed below the waterline of a pool, valves shall be installed on permanently connected suction and discharge lines, located in a place outside the walls of the pool, where they will be readily accessible for maintenance and removal of the pump.

(h) Pressure and vacuum gauges shall be installed on all Class A and B pools and:

(1) the vacuum gauge shall be installed as close to the pump suction inlet as possible and still maintain an accurate reading; and

(2) the pressure gauge shall be installed on the face piping ahead of the filter or on the top of the filter in the area of greatest filter pressure.

(i) Where a mechanical pump seal is provided, components of the seal must be corrosion-resisting and capable of operating under conditions normally encountered in swimming pool operation. (*Fire Prevention and Building Safety Commission; 675 IAC 20-2-19; filed Aug 14, 1989, 9:00 a.m.: 13 IR 56, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Aug 11, 1990, 5:00 p.m.: 13 IR 2140; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-2-20 Inlets and outlets

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 20. (a) Pool inlets and outlets for circulated water shall be located to produce uniform circulation of water and to facilitate the maintenance of a uniform disinfectant residual throughout the entire pool. Where skimmers are used, the inlets shall be located so as to help bring floating particles within range of the skimmers.

(b) The minimum number of inlets required shall be based on two (2) inlets per six hundred (600) square feet of pool surface area or fraction thereof.

(c) Inlets shall be sufficient in number such that the flow through any single inlet shall not exceed forty (40) gallons per minute.

(d) Wall inlets shall be located not less than twelve (12) inches below the waterline.

(e) Pools with a width over thirty (30) feet shall have bottom inlets.

(f) Inlets shall be designed and installed so as not to provide a hazard to bathers.

(g) Outlet drain covers and grates shall be installed in such a way that they cannot be removed without the use of tools.

(h) All pools shall be provided with a main outlet in the lowest point of the pool floor. All main drains smaller than a twelve (12) inch by twelve (12) inch grate shall be dual main drains with a separation distance of three (3) feet between drains in any dimension. All main drains larger than a twelve (12) inch by twelve (12) inch grate shall be dual main drains with a separation distance three (3) feet or more. The spacing of the main outlets for pool pump suction shall not be greater than twenty (20) feet on centers nor more than fifteen (15) feet from each side wall.

(i) The main outlet sumps shall be covered with suitable protective covers or grates. The total velocity through grate openings shall not exceed one (1) foot per second. The grate opening shall not exceed one-half (½) inch. The main drains shall be of the antivortex design that can only be removed with the use of tools, and velocity shall not exceed six (6) feet per second. (*Fire Prevention and Building Safety Commission; 675 IAC 20-2-20; filed Aug 14, 1989, 9:00 a.m.: 13 IR 56, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530; filed Nov 25, 2002, 9:00 a.m.: 26 IR 1101*)

675 IAC 20-2-21 Surface skimmer systems

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 21. (a) A surface skimming system shall be provided on all public swimming pools and shall be designed and constructed to skim the pool surface when the water level is maintained within the operational parameters of the system's rim or weir device.

(b) When perimeter-type surface skimming systems are provided they shall meet the following:

(1) Overflow gutters shall extend completely around the pool perimeter with the exception of the following:

(A) Where the gutters would interfere with a means of entry and exit.

(B) "Wave pools" and "zero (0) depth pools".

(2) Overflow gutters shall be capable of continuously removing not less than one hundred percent (100%) of the recirculated water or one (1) gallon per minute per lineal foot of pool perimeter, whichever is greater.

(3) The opening into the gutter beneath the coping shall not be less than four (4) inches, and the interior of the gutter shall

not be less than three (3) inches in width or depth.

(4) The overflow edge (lip) shall be rounded and no thicker than two and one-half (2 1/2) inches for the top two (2) inches.

(5) Overflow outlets shall be not less than two (2) inches in diameter and shall be sufficiently spaced so as to maintain the gutters in a self-cleaning and effective state without discharging back into the pool.

(c) Skimmers shall not be installed in pools over thirty (30) feet in width and when installed in pools under thirty (30) feet wide they shall meet the following:

(1) Only be installed where an approved handhold is provided around the perimeter of the pool.

(2) One (1) skimmer shall be provided for every five hundred (500) square feet of pool surface area, or fraction thereof.

(3) Skimming devices shall be installed in the pool wall and shall develop sufficient velocity on the water surface to induce floating oils and wastes into the skimmer(s) from the entire pool area.

(4) The skimmer weir(s) shall be automatically adjustable and shall operate freely with continuous action to variations in water level over a range of at least four (4) inches and shall operate at all flow variations.

(5) No equalizer shall be used nor shall the main outlet be connected to the recirculation system through a skimmer.

(6) The skimmer shall be of sturdy, corrosion-resistant materials with an easily removable and cleanable basket or screen through which all overflow water must pass.

(Fire Prevention and Building Safety Commission; 675 IAC 20-2-21; filed Aug 14, 1989, 9:00 a.m.: 13 IR 57, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)

675 IAC 20-2-22 Electrical, lighting, and mechanical

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 22. (a) The requirements of 675 IAC 17, the Indiana Electrical Code, shall be followed for the wiring, grounding, bonding, and installation of electrical equipment and metallic appurtenances to the pool.

(b) Artificial lighting shall be provided for all pools to be used indoors or pools used during periods of darkness. Such lighting shall be sufficient to make a six (6) inch black disc, placed on a white background clearly visible from the side of the pool when that disc is placed on the floor of the pool.

(c) Mechanical equipment shall be designed and installed in accordance with the requirements of 675 IAC 18, the Indiana Mechanical Code. *(Fire Prevention and Building Safety Commission; 675 IAC 20-2-22; filed Aug 14, 1989, 9:00 a.m.: 13 IR 57, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Aug 11, 1990, 5:00 p.m.: 13 IR 2140; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)*

675 IAC 20-2-23 Waste water disposal

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 23. Waste water shall be discharged to a point in accordance with 327 IAC, the rules of the water pollution control board, through an approved airgap or other means in accordance with 675 IAC 16, the Indiana Plumbing Code. *(Fire Prevention and Building Safety Commission; 675 IAC 20-2-23; filed Aug 14, 1989, 9:00 a.m.: 13 IR 58, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)*

675 IAC 20-2-24 Disinfectant equipment and chemical feeders

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 24. Disinfectant equipment and chemical feeders shall be capable of automatically providing a continuous residual chemical effect in accordance with 410 IAC, the rules of the Indiana state department of health. All such equipment shall be of an approved type and shall be installed downstream from the pump and wired so they will not operate unless the filter pump is operating. Exception: Erosion-type chlorinators may feed their solution to the suction side of the pump. *(Fire Prevention and*

Building Safety Commission; 675 IAC 20-2-24; filed Aug 14, 1989, 9:00 a.m.: 13 IR 58, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Aug 11, 1990, 5:00 p.m.: 13 IR 2140; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530; filed Nov 25, 2002, 9:00 a.m.: 26 IR 1102)

675 IAC 20-2-25 Water supply

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 25. (a) The water supply serving the pool shall meet 327 IAC, the rules of the water pollution control board, before any bather uses the pool.

(b) No direct mechanical connection shall be made between the potable water supply and the pool, disinfectant equipment, chemical feeders, or system piping for the pool unless it is protected against backflow and siphonage in a manner acceptable under 675 IAC 16, the Indiana Plumbing Code, or through an approved airgap meeting that same code.

(c) An over-the-rim spout, if used, shall be under a diving or jump board, diving platform, adjacent to a ladder, or otherwise shielded so as not to create a hazard. Its open end shall have no sharp edges and shall not protrude more than two (2) inches beyond the edge of the pool. (*Fire Prevention and Building Safety Commission; 675 IAC 20-2-25; filed Aug 14, 1989, 9:00 a.m.: 13 IR 58, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)*)

675 IAC 20-2-26 Safety requirements

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 26. (a) Pools shall be provided with a suitable handhold around their perimeter in areas where depths exceed three (3) feet six (6) inches. Handholds shall be provided no farther apart than four (4) feet and may consist of any one (1) or a combination of the following:

(1) Coping, ledge, or deck along the immediate top edge of a pool that provides a slip-resisting surface of at least a four (4) inch minimum horizontal width located not over twelve (12) inches above the waterline.

(2) Ladders, stairs, or seat ledges.

(3) A railing fastened to the wall placed not over twelve (12) inches above the waterline.

(b) A transition line shall be provided between one (1) foot and two (2) feet on the shallow side of the break in grade between the shallow and deep portions of the swimming pools, with its position marked with visible floats at not greater than seven (7) feet intervals. This transition line shall be securely fastened to wall anchors of corrosion-resisting materials and of the type which shall be recessed.

(c) Depth of water in feet shall be plainly and conspicuously marked at or above the water surface on the vertical pool wall and on the top of coping or edge of the deck or walk next to the pool as follows:

(1) Depth markers on the deck shall be within eighteen (18) inches of the water edge and positioned to be read while standing on the deck facing the water.

(2) Depth markers shall be installed at the maximum and minimum water depths and at all points of slope change and at intermediate increments of water depth not to exceed two (2) feet.

(3) Depth numbers shall not be less than four (4) inches minimum height, permanently colored, and in contrast to the background on which they are applied.

(d) Lifeguard chairs are required for all pools over two thousand (2,000) square feet at a rate of one (1) chair per every two thousand (2,000) square feet of water surface.

(e) All Class A, Class B, and Class C pools shall be furnished with not less than the following:

(1) One (1) United States Coast Guard approved ring buoy or rescue tube attached to a one-fourth (¼) inch diameter throwing line equal to the width of the pool but not to exceed forty-five (45) feet in length.

(2) One (1) shepherd's hook with a pole not less than twelve (12) feet long.

(3) One (1) twenty-four (24) unit first aid kit.

(4) Access to a telephone.

(f) All Class A, Class B, and Class C pools shall be enclosed by a fence, wall, building, or other enclosures that are not

less than six (6) feet high, to aid in the control of the movement of bathers and to discourage the entrance of unwanted persons. (*Fire Prevention and Building Safety Commission; 675 IAC 20-2-26; filed Aug 14, 1989, 9:00 a.m.: 13 IR 58, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; filed Nov 5, 1991, 5:00 p.m.: 15 IR 238; errata filed Mar 10, 1992, 11:00 a.m.: 15 IR 1393; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530; filed Nov 25, 2002, 9:00 a.m.: 26 IR 1102*)

675 IAC 20-2-27 Bathhouse construction standards
 Authority: IC 22-13-2-2
 Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 27. (a) Dressing, shower, and sanitary facilities for each sex shall be provided within three hundred (300) feet of all Class A, B, and C pools.

(b) In all Class A and B pools such facilities shall be provided in a separate bathhouse located in such a manner that bathers must pass through the bathhouse to gain entry to the pool. Said bathhouse shall not be required to be a separate building.

(c) Design and construction of bathhouses shall be in accordance with the rules of the fire prevention and building safety commission [*this title*]. Minimum plumbing facilities for bathers shall be in accordance with the following table:

PATRON LOAD	FIXTURES REQUIRED*				FIXTURES REQUIRED*		
	MALE				FEMALE		
	Water Closets	Urinals	Lavatories	Showers	Water Closets	Lavatories	Showers
0-50	1	1	1	1	1	1	1
51-100	1	1	1	1	2	1	1
101-150	1	2	1	2	3	1	2
151-200	1	2	1	2	3	1	2
201-250	2	2	1	3	4	2	3
251-300	2	3	2	4	5	2	4
301-400	2	3	2	5	5	2	5
401-500	3	3	2	6	6	2	6
501-1000	3	4	2	7	7	2	7
1001-1500	4	5	2	10	9	2	10
1501-2000	5	6	2	15	11	2	15
2001 or more	6	7	3	20	13	3	20

* For swimming pools at schools, camps or similar locations where patron loads may reach peaks due to schedules of use, the fixture schedules should be increased.

(d) Hose bibbs with approved nonremovable type backflow prevention devices shall be provided within the bathhouse to enable the entire area to be flushed with a fifty (50) foot hose.

(e) No less than one (1) drinking fountain shall be provided and available to bathers at the pool site. (*Fire Prevention and Building Safety Commission; 675 IAC 20-2-27; filed Aug 14, 1989, 9:00 a.m.: 13 IR 59, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

Rule 3. Public Spas

675 IAC 20-3-1 Materials of construction
 Authority: IC 22-13-2-2
 Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 1. (a) Public spas and all appurtenances thereto shall be constructed of materials which:
 (1) are nontoxic to man and the environment;
 (2) are impervious and enduring;

- (3) are capable of withstanding the stresses that the spas were designed to receive;
- (4) are smooth and easily cleaned;
- (5) will provide a watertight structure;
- (6) are without cracks or joints, excluding structural joints; and
- (7) are corrosion-resistant.

(b) Public spas placed outside building enclosures shall be so designed and constructed as to facilitate protection from damage due to freezing.

(c) Surfaces within the spa that provide footing shall be slip-resistant without presenting an abrasion hazard to bathers.

(d) Surfaces within the spa shall be light colored.

(e) Roofs or canopies over spas shall be so constructed that condensation from the roof or canopy shall not drain into the spa. (*Fire Prevention and Building Safety Commission; 675 IAC 20-3-1; filed Aug 14, 1989, 9:00 a.m.: 13 IR 59, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Nov 15, 1989, 5:00 p.m.: 13 IR 675; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-3-2 Dimensional design; minimum volume

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 2. (a) The maximum water depth in public spas shall be four (4) feet. The maximum water depth at any seat shall be two (2) feet from the waterline.

(b) Approved handholds shall be provided at the perimeter of spas which exceed three (3) feet six (6) inches in depth. Such handholds shall consist of any of the following:

(1) Coping, ledges, or flanges which provide a rounded, slip-resistant surface of one and one-fourth (1 1/4) to two (2) inches in diameter which are not more than twelve (12) inches above the waterline.

(2) Ladders, steps, or seat ledges.

(3) A railing with a diameter between one and one-fourth (1 1/4) and two (2) inches diameter which is not more than twelve (12) inches above the waterline.

(4) A combination of the above.

(c) Public spas shall not be less than one thousand (1,000) gallons in volume.

(d) The slope of the floor of the spa shall not exceed one (1) in twelve (12). (*Fire Prevention and Building Safety Commission; 675 IAC 20-3-2; filed Aug 14, 1989, 9:00 a.m.: 13 IR 59, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-3-3 Means of entry and exit

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 3. (a) Spas shall be provided with not less than one (1) handrail or ladder for every fifty (50) feet of perimeter or portion thereof.

(b) Stairs within the perimeter of the spa shall meet the following requirements:

(1) Treads shall be slip-resistant and not less than ten (10) inches deep and twelve (12) inches wide.

(2) Risers shall be between seven (7) inches and twelve (12) inches high and uniform in height with the following exception: When the bottom tread is part of an underwater bench the rise shall not exceed fourteen (14) inches.

(3) Not less than one (1) handrail that serves all treads shall be provided for each stair.

(4) Handrails shall be installed so they cannot be removed without tools.

(5) The leading edge of handrails shall be within eighteen (18) inches horizontally measured from the vertical plane of the bottom riser.

(6) Handrails shall be between one and one-fourth (1 1/4) inches and two (2) inches in diameter.

(c) Stairs outside the perimeter of the spa shall be in accordance with 675 IAC 13, the Indiana Building Code.

(d) Ladders within the perimeter of the spa shall meet the following requirements:

(1) Treads shall be slip-resistant and not less than one and one-half (1 1/2) inches deep by not less than seventeen (17)

inches wide nor more than twenty-four (24) inches wide.

(2) Handrails shall be between one and one-fourth (1 1/4) inches and two (2) inches in diameter.

(3) Two (2) handrails or handholds are required for each ladder.

(4) The clearance between spa ladders and the spa wall shall be between three (3) inches and six (6) inches.

(e) An exception to subsection (d) is recessed treads not less than five (5) inches deep draining into the spa and uniformly spaced between a minimum of seven (7) inches and a maximum of twelve (12) inches apart. (*Fire Prevention and Building Safety Commission; 675 IAC 20-3-3; filed Aug 14, 1989, 9:00 a.m.: 13 IR 60, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Nov 15, 1989, 5:00 p.m.: 13 IR 675; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-3-4 Decks

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 4. (a) A deck not less than four (4) feet in width shall surround not less than fifty percent (50%) of the perimeter of a spa.

(b) Decks shall meet the following requirements:

(1) Surfaces shall be slip-resistant but not providing an abrasion hazard.

(2) The maximum dimension of any horizontal void shall be three-sixteenths (3/16) of an inch, and the maximum vertical difference in surfaces other than stairs shall be one-fourth (1/4) of an inch.

(3) All corners shall be rounded or relieved.

(4) Decks shall drain away from the spa.

(*Fire Prevention and Building Safety Commission; 675 IAC 20-3-4; filed Aug 14, 1989, 9:00 a.m.: 13 IR 60, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-3-5 Mechanical, electrical, and water supply

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 5. (a) Mechanical equipment shall be installed in accordance with 675 IAC 18, the Indiana Mechanical Code.

(b) Electrical equipment, system wiring, and grounding of all spa equipment and appurtenances shall be in accordance with 675 IAC 17, the Indiana Electrical Code.

(c) An emergency shutdown device shall be installed that will immediately cut power to the pump serving the main drains. This emergency shutdown device shall be readily accessible in the event of an emergency. This device shall be distinctly labeled as EMERGENCY SPA SHUTDOWN DEVICE. This device shall be installed in the same room as the spa and within site of the spa.

(d) The water supply serving the spa shall meet 327 IAC, the rules of the water pollution control board, before any bather uses the spa. (*Fire Prevention and Building Safety Commission; 675 IAC 20-3-5; filed Aug 14, 1989, 9:00 a.m.: 13 IR 61, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530; filed Nov 25, 2002, 9:00 a.m.: 26 IR 1102*)

675 IAC 20-3-6 Inlets and outlets

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 6. (a) Spa inlets and outlets shall be arranged to produce a uniform circulation of water throughout the spa.

(b) Water velocity in the spa piping shall not exceed ten (10) feet per second with the following exceptions:

(1) Suction velocity shall not exceed six (6) feet per second.

(2) Water velocity in existing asbestos cement pipe shall not exceed six (6) feet per second.

(3) Water velocity in copper pipe shall not exceed eight (8) feet per second.

(c) Total velocity through grate openings shall not exceed two (2) feet per second.

(d) All outlets below the waterline shall be covered with either a protective grate with individual openings of three-eighths (3/8) of an inch or less, or an antivortex cover.

(e) All spas shall have a surface skimming (overflow) system and dual drain outlets at the lowest point on the spa floor. The dual drains shall be spaced at least three (3) feet apart. When skimmers are the sole overflow system, not less than one (1) skimmer shall be provided for each one hundred (100) square feet, or portion thereof, of water surface. (*Fire Prevention and Building Safety Commission; 675 IAC 20-3-6; filed Aug 14, 1989, 9:00 a.m.: 13 IR 61, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530; filed Nov 25, 2002, 9:00 a.m.: 26 IR 1103*)

675 IAC 20-3-7 Circulation systems

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 7. (a) Every spa shall be provided with an approved type circulation system capable of turning over the entire spa water capacity in not less than thirty (30) minutes.

(b) All circulation shall go through the spa filtration system and be chemically treated prior to injection into the spa.

(c) A removable strainer or screen shall be installed upstream from all pumps.

(d) Filters shall meet the following requirements:

(1) They shall be capable of maintaining the standards of turbidity set by the state department of health.

(2) They shall be provided with a means to safely release air which builds up in the filter tank.

(3) Piping furnished with the filter system shall be capable of withstanding three (3) times the designed working pressure.

(4) The suction side of the circulation system shall be tied and split hydraulically equally between the two (2) or more main drains. Both branches shall have the same size pipe as the main drain.

(5) All filters and their components shall be accessible.

(e) Air induction systems, when provided, shall prevent water backup and shall not introduce contaminants into the spa water.

(f) Chemical feeder systems capable of maintaining a chemical residual and pH level in accordance with 410 IAC, the rules of the Indiana state department of health. (*Fire Prevention and Building Safety Commission; 675 IAC 20-3-7; filed Aug 14, 1989, 9:00 a.m.: 13 IR 61, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530; filed Nov 25, 2002, 9:00 a.m.: 26 IR 1103*)

675 IAC 20-3-8 Waste water disposal

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 8. Waste water shall be discharged to a point in accordance with 327 IAC, the rules of the water pollution control board, through an approved airgap or other means in accordance with 675 IAC 16, the Indiana Plumbing Code. (*Fire Prevention and Building Safety Commission; 675 IAC 20-3-8; filed Aug 14, 1989, 9:00 a.m.: 13 IR 61, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-3-9 Enclosure

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 9. All public spas shall be enclosed by a fence, wall, building, or other enclosure that is not less than six (6) feet high to aid in the control of the movement of bathers and to discourage the entrance of unwanted persons. (*Fire Prevention and Building Safety Commission; 675 IAC 20-3-9; filed Aug 14, 1989, 9:00 a.m.: 13 IR 62, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

Rule 4. Residential Swimming Pools

675 IAC 20-4-1 Special provisions

Authority: IC 22-13-2-2

Affected: IC 22-12-1-5; IC 22-13-2-7; IC 22-13-2-11; IC 22-15; IC 36-7

Sec. 1. (a) Residential swimming pools are Class 2 structures according to IC 22-12-1-5. Enforcement of this rule is the responsibility of local units of government.

(b) The provisions of this rule are not intended to restrict the appropriate use of materials, equipment, or methods of design not specifically described in this rule.

(c) The enforcing official may require submission of evidence or proof that substantiates any claims made regarding the appropriate use of materials, equipment, or methods of design.

(d) This section shall not authorize a variance from or modification of any rule of the fire prevention and building safety commission except pursuant to variance authority provided for in IC 22-13-2-7 and IC 22-13-2-11. (*Fire Prevention and Building Safety Commission; 675 IAC 20-4-1; filed Aug 14, 1989, 9:00 a.m.: 13 IR 62, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Nov 15, 1989, 5:00 p.m.: 13 IR 675; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-4-2 Materials of construction

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 2. Swimming pools and all appurtenances thereto shall be constructed of materials which:

(1) are nontoxic to man and the environment;

(2) are impervious and reasonably enduring;

(3) can withstand the stresses that the pool was designed to receive;

(4) will provide a watertight structure with a smooth and easily cleaned surface without cracks or joints, excluding structural joints; or

(5) a smooth, easily cleaned surface finish shall be applied to, attached to, or installed.

(*Fire Prevention and Building Safety Commission; 675 IAC 20-4-2; filed Aug 14, 1989, 9:00 a.m.: 13 IR 62, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Nov 15, 1989, 5:00 p.m.: 13 IR 675; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-4-3 Structural design

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 3. (a) Prior to construction, rehabilitation, or alteration of a permanently installed residential pool, plans and specifications shall be submitted to the local authority for review, approval, and issuance of a permit to construct or rehabilitate, as may be required.

(b) The structural design and materials used shall be in accordance with generally accepted structural engineering practices. Sand or earth shall not be permitted as an interior finish in a swimming pool.

(c) In all outdoor pools, the pool shell and appurtenances, piping, filter system, pump, motor, and other components shall be so designed and constructed to facilitate protection from damage due to freezing.

(d) The surfaces within the pool intended to provide footing for bathers shall be designed to provide a slip-resisting surface. The roughness or irregularity of such surfaces shall not provide an abrasion hazard to the feet during normal use.

(e) The colors, patterns, or finishes of the pool interior shall not obscure the existence or presence of objects or surfaces within the pool. (*Fire Prevention and Building Safety Commission; 675 IAC 20-4-3; filed Aug 14, 1989, 9:00 a.m.: 13 IR 62, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Nov 15, 1989, 5:00 p.m.: 13 IR 675; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-4-4 Dimensional design

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 4. (a) No limits are specified for the shape of swimming pools except that consideration shall be given to the shape from the standpoint of safety and circulation of the swimming pool water.

(b) There shall be no protrusions, extensions, means of entanglement, or other obstructions in the swimming area which can cause the entrapment or injury of the bather.

(c) There shall be construction tolerances allowed on all dimensional designs. Overall length, width, and depth in the deep end may vary plus or minus three (3) inches. All other overall dimensions may vary plus or minus two (2) inches unless otherwise specified. (*Fire Prevention and Building Safety Commission; 675 IAC 20-4-4; filed Aug 14, 1989, 9:00 a.m.: 13 IR 62, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-4-5 Walls

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 5. Walls shall not be greater than eleven (11) degrees from plumb for a minimum depth of two (2) feet nine (9) inches from the waterline in deep areas or two (2) feet three (3) inches in the shallow areas. Below these depths the wall may be curved to join the floor. An exception to this section is walls on Type 1 and special purpose pools shall be plumb as is shown in section 10(d) of this rule, Figure No. 4-5. (*Fire Prevention and Building Safety Commission; 675 IAC 20-4-5; filed Aug 14, 1989, 9:00 a.m.: 13 IR 63, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-4-6 Floor slope

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 6. Floor slopes shall be in compliance with the following:

(1) All slopes shall be uniform.

(2) The slope of the floor from the shallow end wall towards the deep end shall not exceed one (1) foot in seven (7) feet (1:7) to the point of the first slope change.

(3) The point of the first slope change shall be defined as the point at which the floor slope exceeds one (1) foot in seven (7) feet (1:7) and shall be not less than six (6) feet from the shallow end wall.

(4) The slope of the floor from the point of the first slope change to the deep end wall shall not exceed one (1) foot in three (3) feet (1:3).

(*Fire Prevention and Building Safety Commission; 675 IAC 20-4-6; filed Aug 14, 1989, 9:00 a.m.: 13 IR 63, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-4-7 Water depth

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 7. (a) Water depths at the shallow end of the swimming area shall be two (2) feet nine (9) inches minimum and three (3) feet six (6) inches maximum, except for special purpose pools.

(b) No minimum water depth shall be specified in a nonswimming area. The nonswimming area shall be visually set apart.

(c) Pools of the type where manufactured diving equipment is permitted shall have the area and depth of water in compliance with the drawings for Type I through Type V pools.

(d) Where manufactured diving equipment is installed, it shall conform to the specifications set forth in section 15 of this rule and shall be so located in the diving area of the pool so as to provide the minimum dimensions for area and depth of water as shown on drawings of Type I through Type V pools.

(e) The tip of the manufactured diving equipment shall be located at point "A" which is the reference point for all other dimensions. (Fire Prevention and Building Safety Commission; 675 IAC 20-4-7; filed Aug 14, 1989, 9:00 a.m.: 13 IR 63, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)

675 IAC 20-4-8 Minimum vertical clearances
 Authority: IC 22-13-2-2
 Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 8. Minimum unobstructed headroom from the top of the manufactured diving equipment shall be provided for diving in accordance with the following table unless greater dimensions are called for by the manufacturer:

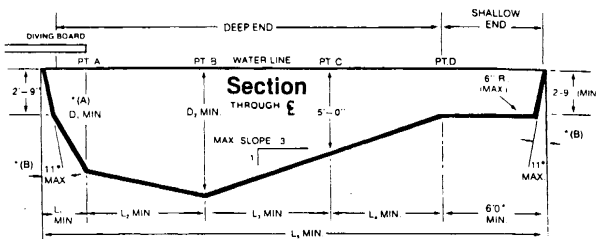
Pool Type	Minimum Headroom Above Board
I	12 feet
II	12 feet
III	12 feet
IV	13 feet
V	14 feet

(Fire Prevention and Building Safety Commission; 675 IAC 20-4-8; filed Aug 14, 1989, 9:00 a.m.: 13 IR 63, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)

675 IAC 20-4-9 Pool types
 Authority: IC 22-13-2-2
 Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 9. (a) Residential pools shall be further classified into types as an indication of the suitability of a pool for use with diving equipment as shown in subsection (b), Figure No. 4-1. Diving equipment classified at a higher type shall not be used on a pool of a lesser type.

(b) This subsection contains Figure No. 4-1, a reference chart of minimum dimensions for residential pools with m a n u f a c t u r e d d i v i n g



*(A) Minimum depth under diving board or jump board.
 *(B) Type I pools shall have plumb walls as shown in section 10(d) of this rule, Figure No. 4-5.

POOL TYPE	MINIMUM DIMENSIONS							MINIMUM WIDTH OF POOL		
	D ₁	D ₂	L ₁ *	L ₂	L ₃	L ₄	L ₅	PT. A	PT. B	PT. C
O	DIVING EQUIPMENT IS PROHIBITED									
I	6'-0"	7'-6"	1'-6"	7'-0"	7'-6"	6'-9"	28'-9"	10'-0"	12'-0"	10'-0"
II	6'-0"	7'-6"	1'-6"	7'-0"	7'-6"	6'-9"	28'-9"	12'-0"	15'-0"	12'-0"
III	6'-10"	8'-0"	2'-0"	7'-6"	9'-0"	6'-9"	31'-3"	12'-0"	15'-0"	12'-0"
IV	7'-8"	8'-6"	2'-6"	8'-0"	10'-6"	6'-9"	33'-9"	15'-0"	18'-0"	15'-0"
V	8'-6"	9'-0"	3'-0"	9'-0"	12'-0"	6'-9"	36'-9"	15'-0"	18'-0"	15'-0"

equipment

(c) The minimum allowable underwater cross sections at B, C, and D shall be as shown on drawings of Type I through Type V pools (section 10(d) through 10(e) of this rule, Figures No. 4-5 through 4-6).

(d) Constant depth and other swimming pools on which diving equipment is prohibited (Type O) with water depths not exceeding four (4) feet shall not be limited in width, length, or depth of water except as provided in sections 4 through 5 of this rule.

(e) Stationary diving platforms built on-site shall be located in the diving area of the pool so as to provide the minimum dimension as shown in subsection (b), Figure No. 4-1, at a maximum height of three (3) feet above the waterline. Point "A" shall be eighteen (18) inches in front of the wall at the platform center line. Stationary diving platforms shall not extend more than eighteen (18) inches horizontally over the water from the wall. (Fire Prevention and Building Safety Commission; 675 IAC 20-4-9; filed Aug 14, 1989, 9:00 a.m.: 13 IR 64, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR

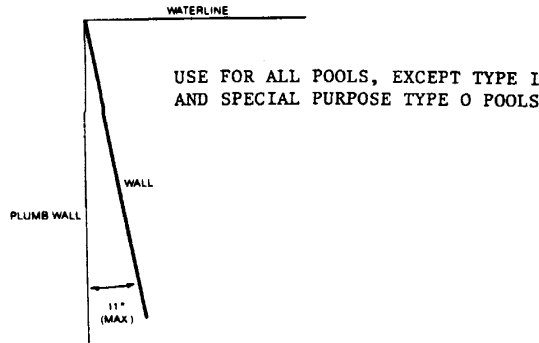
530)

675 IAC 20-4-10 Figures 4-2 through 4-10

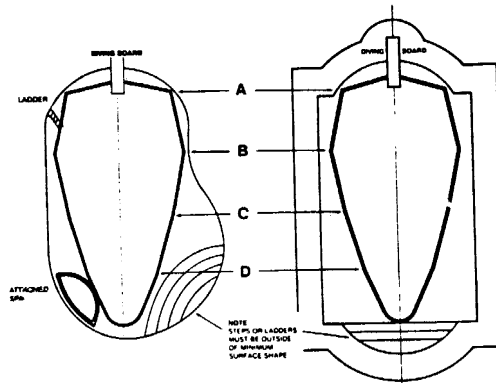
Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

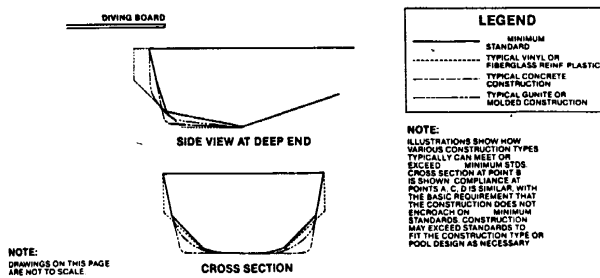
Sec. 10. (a) This subsection contains Figure No. 4-2, maximum allowable wall slope.



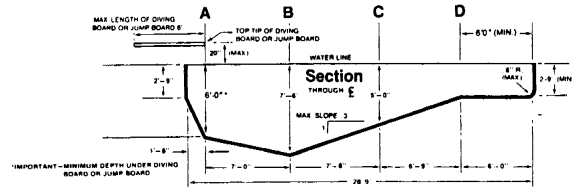
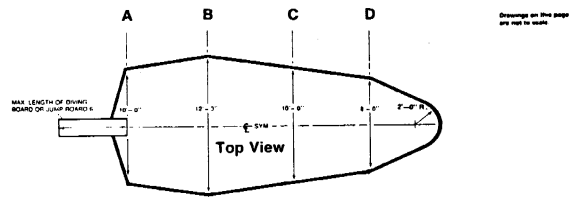
(b) This subsection contains Figure No. 4-3, relationship of minimum top view dimensions to steps or stairs.



(c) This subsection contains Figure No. 4-4, relationship of vinyl, fiberglass, gunite, and concrete construction to minimum requirements.



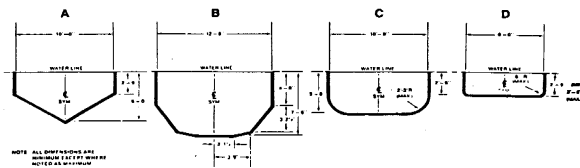
(d) This subsection contains Figure No. 4-5, minimum dimensions for a Type I pool.



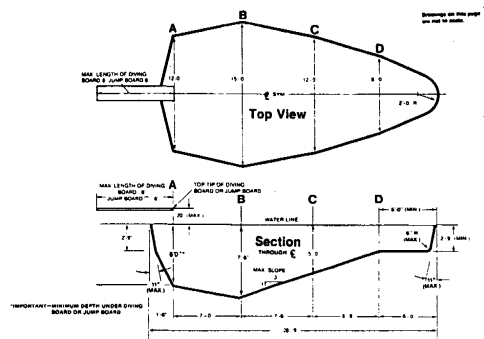
Minimum Water Envelope at Points A, B, C & D.

Pool Type I

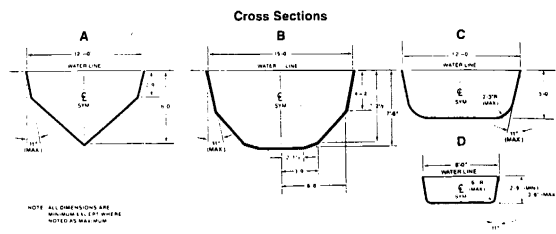
Cross Sections



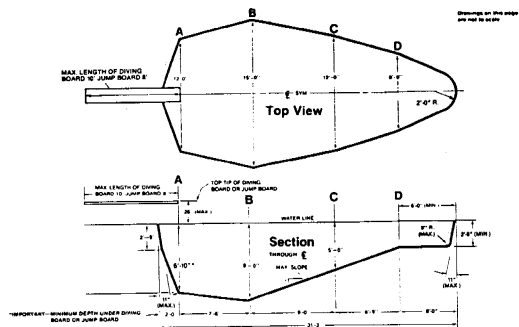
(e) This subsection contains Figure No. 4-6, minimum dimensions for a Type II pool.



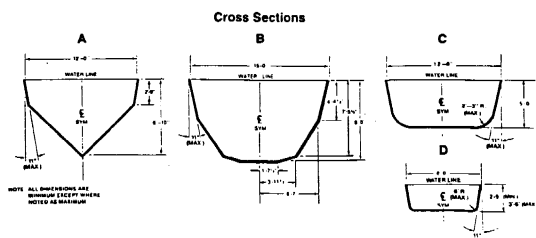
Minimum Water Envelope at Points A, B, C & D.
Pool Type II



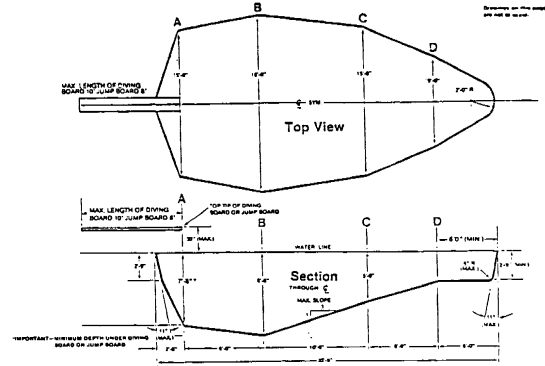
(f) This subsection contains Figure No. 4-7, minimum dimensions for a Type III pool.



Minimum Water Envelope at Points A, B, C & D.
Pool Type III

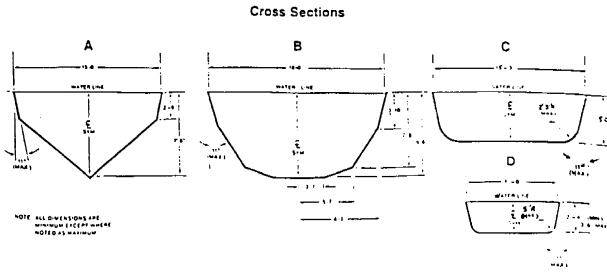


(g) This subsection contains Figure No. 4-8, minimum dimensions for a Type IV pool.

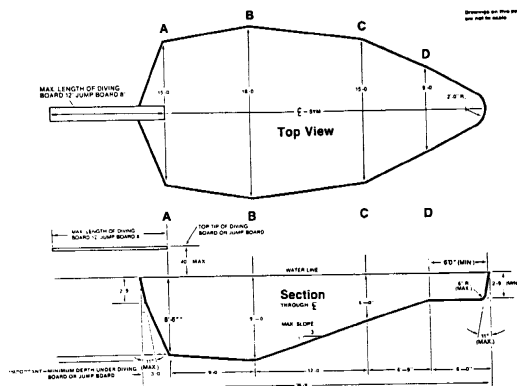


Minimum Water Envelope at Points A, B, C & D.

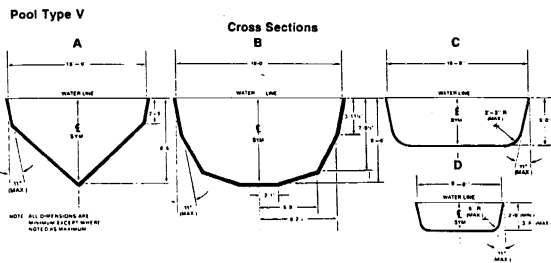
Pool Type IV



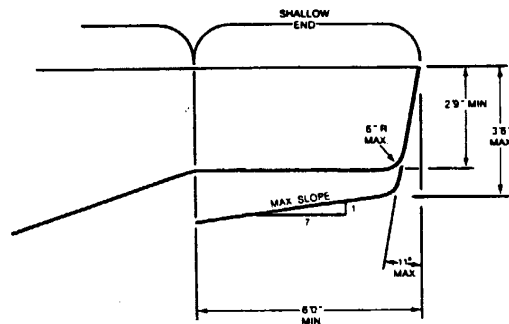
(h) This subsection contains Figure No. 4-9, minimum dimensions for a Type V pool.



Minimum Water Envelope at Points A, B, C & D.



(i) This subsection contains Figure No. 4-10, shallow end detail for pool Types II through V.

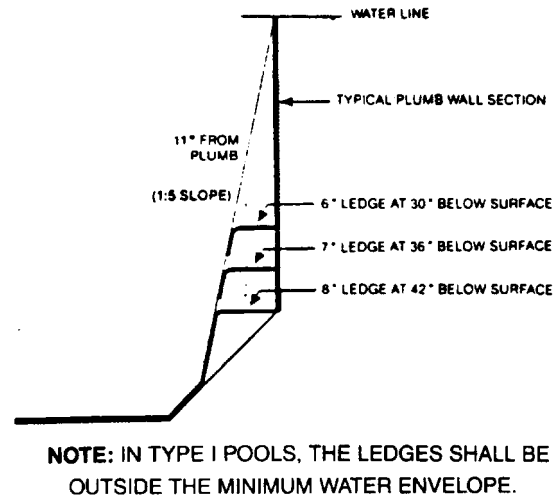


(Fire Prevention and Building Safety Commission; 675 IAC 20-4-10; filed Aug 14, 1989, 9:00 a.m.: 13 IR 65, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Nov 15, 1989, 5:00 p.m.: 13 IR 675; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)

675 IAC 20-4-11 Offset ledges and underwater seat benches
 Authority: IC 22-13-2-2
 Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 11. (a) Offset ledges, when provided, shall fall within eleven (11) degrees from plumb starting at the junction of the pool wall and waterline and shall have a slip-resisting surface. Maximum width shall be eight (8) inches. The typical allowable

dimensions are based on the depths shown below:



(b) Underwater seat benches, where provided, shall have a maximum horizontal seat bench depth of twenty (20) inches below the waterline, be visually set apart, have a slip-resisting surface, and shall be located fully outside of the required minimum diving water envelope if the pool is designed for use with manufactured diving equipment. Underwater seat benches shall be permitted in the deep end of the pool only if they are either completely recessed, shaped to be compatible with the slope of the pool wall, or in a corner of the pool. (*Fire Prevention and Building Safety Commission; 675 IAC 20-4-11; filed Aug 14, 1989, 9:00 a.m.: 13 IR 72, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-4-12 Decks and deck equipment

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 12. (a) Deck work shall be designed and installed so as to include the quality of subbase, concrete mix design, reinforcing, joints, and finishes. Work performed in accordance with the recommended practices of the American Concrete Institute (ACI) Standard 302.1R-80, "Guide for Concrete Floor and Slab Construction", may be deemed acceptable.

(b) Decks, ramps, coping, and similar step surfaces shall be slip-resisting and easily cleanable.

(c) Special features in or on decks such as markers, brand insignias, or similar features shall conform to this section.

(d) Steps outside the pool perimeter shall be in accordance with 675 IAC 14, the Indiana One and Two Family Dwelling Code.

(e) Excavation areas shall be adequately compacted when they support the deck(s).

(f) Decks shall be sloped to effectively drain either to perimeter areas or to deck drains. Drainage shall remove pool splash water, deck cleaning water, and rainwater without leaving standing water.

(g) The minimum slope of decks shall be:

(1) one-eighth (1/8) inch per one (1) foot (1/8:12) for textured, hand-finished concrete decks;

(2) one-fourth (1/4) inch per one (1) foot (1/4:12) for exposed aggregate concrete decks; and

(3) one-half (1/2) inch per one (1) foot (1/2:12) for indoor/outdoor carpeting decks.

(h) The maximum slope for all decks other than wood decks shall be one (1) inch per foot except for ramps. The maximum slope for wood decks shall be one-eighth (1/8) inch per foot except for ramps. Expansion gaps shall be based on good engineering practices with respect to the type of wood used.

(i) The maximum voids between adjoining concrete slabs and/or between concrete slabs and expansion joint material shall be three-sixteenths (3/16) inch of horizontal clearance with a maximum difference in vertical elevation of one-fourth (1/4) inch.

(j) Construction joints where pool coping meets concrete decks shall be watertight and shall not allow water to pass to the ground beneath.

(k) The areas where the decks join pool coping shall be designed and installed so as to protect the coping and its mortar bed

from damage as a result of reasonable movement of adjoining decks.

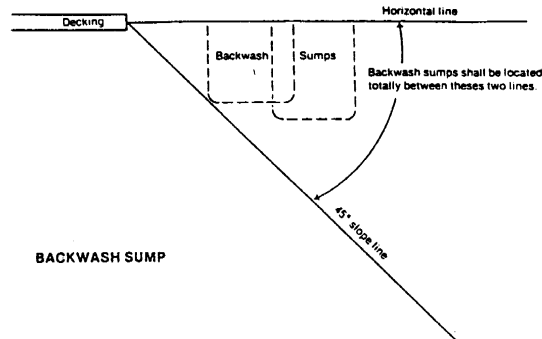
(l) Joints in decks shall be provided to minimize the potential for cracks due to a change in elevations, separation of surfaces, or movement of the slab.

(m) The areas where decks join concrete work shall be protected by expansion joints to protect the pool adequately from the pressures of relative movements.

(n) Decks shall be edged, have a radius, or be otherwise relieved to eliminate sharp corners.

(o) Site drainage shall be provided so as to direct all perimeter deck drainage as well as general site and roof drainage away from the pool.

(p) If used, an open pit or leaching design for backwash sump purposes shall be located so that it falls completely below adjacent decks and fully outside a line projected forty-five degrees (45°) downward and away from such decks as shown below.



(Fire Prevention and Building Safety Commission; 675 IAC 20-4-12; filed Aug 14, 1989, 9:00 a.m.: 13 IR 73, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Aug 11, 1990, 5:00 p.m.: 13 IR 2140; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)

675 IAC 20-4-13 Circulation piping

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 13. (a) Circulation system piping, other than that integrally included in the manufacture of the pool, shall be subject to an induced static hydraulic pressure test (sealed system) at twenty-five (25) pounds per square inch for thirty (30) minutes. This test shall be performed before the deck is poured, and the pressure shall be maintained through the deck pour.

(b) Valves installed in or under any decks shall provide a minimum ten (10) inches diameter access cover and valve pit to facilitate servicing.

(c) A hose bibb with a vacuum breaker shall be provided for washing down the entire deck area. *(Fire Prevention and Building Safety Commission; 675 IAC 20-4-13; filed Aug 14, 1989, 9:00 a.m.: 13 IR 74, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)*

675 IAC 20-4-14 Pool egress

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 14. (a) All pools shall have a means of entry/exit in the shallow end consisting of one (1) ladder, stairs, or recessed treads. Where two (2) or more entries/exits are used, the ladders, stairs, or recessed treads may be used in combination. All treads shall have slip-resisting surfaces.

(b) Where water depths are twenty-four (24) inches or less at the pool wall, such areas shall be considered as providing their own natural mode for entry/exit.

(c) For pools over thirty (30) feet in width, both sides of the deep portions of the pool shall have entries/exits provided.

(d) A means of entry/exit for the shallow end shall be located between the shallow end wall and the cross section at point "D". Where required, entry/exit for the deep end shall be between the deep end wall and the cross section at point "B". (Refer to

section 9(b) of this rule, Figure No. 4-1.)

(e) Ladders, stairs, recessed treads, or underwater seat benches/swimouts shall be provided at the deep end of the pool if the water depth is over five (5) feet.

(f) The design and construction of protruding and recessed pool stairs shall conform to the following:

(1) Step treads shall have a minimum unobstructed horizontal depth of ten (10) inches and a minimum unobstructed surface area of two hundred forty (240) square inches.

(2) Risers at the center line of the treads shall have a maximum uniform height of twelve (12) inches with the bottom riser height allowed to vary plus or minus two (2) inches from the uniform riser height.

(3) The vertical distance between the pool coping edge, deck, or step surface, which shall be slip-resisting, and the uppermost step tread shall be a maximum of twelve (12) inches.

(g) If handrails are used with stairs, they shall conform to the following:

(1) Handrails, if removable, shall be installed in such a way that they cannot be removed without the use of tools.

(2) The leading edge of handrails facilitating stairs and pool entry/exit shall be no more than eighteen (18) inches plus or minus three (3) inches horizontally from the vertical plane of the bottom riser, where applicable.

(3) The outside diameter of handrails shall be between one (1) inch and two (2) inches.

(h) Underwater seats, benches, or swimouts may be provided as part of the stairs or recessed treads.

(i) The design and construction of pool ladders shall conform to the following:

(1) Pool ladders shall be made entirely of corrosion-resisting materials.

(2) Ladders shall provide two (2) handholds or two (2) handrails.

(3) Below the water level, there shall be a clearance of not more than six (6) nor less than three (3) inches between any ladder tread edge measured from the pool wall side of the tread and the pool wall.

(4) The clear distance between ladder handrails shall be a minimum of seventeen (17) inches and a maximum of twenty-four (24) inches.

(5) There shall be a uniform height between ladder treads with a seven (7) inch minimum distance and a twelve (12) inch maximum distance.

(6) Ladder treads shall have a minimum horizontal depth of one and one-half (1 1/2) inches.

(7) The vertical distance between the top tread and the pool coping or deck shall be a maximum of twelve (12) inches.

(j) The design and construction of recessed treads in the pool wall shall conform to the following:

(1) Recessed treads at the center line shall have a uniform vertical spacing of twelve (12) inches maximum and seven (7) inches minimum.

(2) The vertical distance between the pool coping edge, deck, or step surface and the uppermost recessed tread shall be a maximum of twelve (12) inches.

(3) Recessed treads shall have a minimum depth of five (5) inches and a minimum width of twelve (12) inches.

(4) Recessed treads shall drain into the pool to prevent accumulation of dirt.

(5) Each set of recessed treads shall be provided with a pair of handrails/grabrails/handholds to serve all treads and risers.

(Fire Prevention and Building Safety Commission; 675 IAC 20-4-14; filed Aug 14, 1989, 9:00 a.m.: 13 IR 74, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)

675 IAC 20-4-15 Diving equipment

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 15. (a) Supports, platforms, stairs, and ladders for manufactured diving equipment shall be designed to carry the anticipated loads. Stairs and ladders shall be of corrosion-resisting material, easily cleanable, and with slip-resisting tread. All manufactured diving stands higher than twenty-one (21) inches measured from the deck to the top butt end of the board shall be provided with stairs and/or a ladder. Step treads shall be self-draining.

(b) Platforms and manufactured diving equipment of one (1) meter or higher shall be protected with guard rails which shall be at least thirty (30) inches above the diving board and extend to the edge of the pool wall.

(c) Manufactured diving equipment shall be designed for swimming pool use and shall be installed in accordance with the manufacturer's recommendations provided with the equipment.

(d) A label shall be permanently affixed to the manufactured diving equipment or jump board and shall include not less than:

(1) manufacturer's name and address;

- (2) board equipment length;
- (3) identification as to diving or jump board;
- (4) fulcrum setting specifications, if applicable;
- (5) date of manufacture; and
- (6) reference to manufacturer's safety standard, if any, that the board will meet.

(e) Manufactured diving equipment suitable for installation on a lower pool type may be installed on any higher pool type providing no less a water envelope is provided from the tip of the board than called for in the lower type. Manufactured diving equipment of a greater type, e.g., Type III, shall not be installed on a pool of lesser type, e.g., Type II. In addition, the following provisions apply:

- (1) Manufactured diving equipment shall have slip-resisting tread surfaces.
- (2) Manufactured diving equipment shall be permanently anchored to the pool deck. The edge of the board at the tip end shall be level with the water surface. The tip end of the board over the pool water surface may be higher than the butt end of the board. Refer to manufacturer's recommendations.

(Fire Prevention and Building Safety Commission; 675 IAC 20-4-15; filed Aug 14, 1989, 9:00 a.m.: 13 IR 75, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)

675 IAC 20-4-16 Swimming pool slides

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 16. (a) The requirements of the U.S. Consumer Product Safety Commission (CPSC) Standard for Swimming Pool Slides as published in 16 C.F.R. 1207, shall be used for standards relating to swimming pool slides.

(b) Swimming pool slides in residential swimming pools shall terminate such that the following applies:

- (1) The end of the slide is not more than twelve (12) inches above the pool deck.
- (2) The depth of the water at the end of the slide meets the manufacturer's recommendations or thirty-six (36) inches, whichever is greater.
- (3) The distance from the end of the slide is not less than twenty (20) feet measured along the axis of travel.
- (4) The depth of water described in subdivision (2) or a gradually increasing depth shall be maintained for not less than ten (10) feet beyond the end of the slide. This depth of water may gradually decrease beyond that point to a minimum water depth of twenty-four (24) inches. For this requirement a maximum slope of one (1) in seven (7) (1:7) shall be considered "gradual".

(c) Swimming pool slides shall be installed in accordance with the manufacturer's installation instructions and specifications.

(Fire Prevention and Building Safety Commission; 675 IAC 20-4-16; filed Aug 14, 1989, 9:00 a.m.: 13 IR 76, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)

675 IAC 20-4-17 Circulation system

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 17. (a) A circulation system consisting of pumps, piping, return inlets and suction outlets, filters, and other necessary equipment shall be provided for complete circulation of water through all parts of the pool. This circulation system shall be capable of maintaining water clarity and chemistry requirements.

(b) The equipment shall be of adequate size to turn over the entire pool water capacity at least once every twelve (12) hours. Water clarity shall be maintained. When standing at the pool's edge at the deep end, the deepest portion of the pool floor shall be visible.

(c) Circulation system components which require replacement or servicing shall be accessible for inspection, repair, or replacement and shall be installed according to the manufacturer's instructions.

(d) Pool equipment shall be properly supported to prevent damage from misalignment, settlement, etc. The equipment shall be mounted so as to minimize the potential for the accumulation of debris and moisture following manufacturer's instructions.

(e) The water velocity in the pool piping shall not exceed ten (10) feet per second for discharge piping and eight (8) feet per second for suction piping, unless summary calculations are provided to show that the greater flow is possible with the pump and

pipng provided. In copper pipes, the velocity shall not exceed eight (8) feet per second for suction and discharge piping. Pool piping shall be sized to permit the rated flows for filtering.

(f) The circulation system piping and fittings shall be nontoxic, shall be considered to be process piping, and shall be of material able to withstand operating pressures and operating conditions.

(g) Equipment shall be designed and fabricated to drain the pool water from the equipment, together with exposed face piping, by removal of drain plugs and manipulating valves, or by other methods. Refer to manufacturer's recommendations for specific information on draining the system.

(h) A pressure or vacuum gauge or other means of indicating system condition shall be provided in the circulation system in an easily readable location.

(i) Time clocks may be used to set the operating period of the circulation system. When time clocks are used, they shall also govern the operating time of appurtenant devices such as chemical/disinfectant feeders, slurry feeders, heaters, etc., that are dependent upon circulation pump flow.

(j) Written operation and maintenance instructions shall be provided for the circulation system. (*Fire Prevention and Building Safety Commission; 675 IAC 20-4-17; filed Aug 14, 1989, 9:00 a.m.: 13 IR 76, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-4-18 Filters

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 18. (a) Filters shall be designed so that after cleaning per manufacturer's instructions the system can provide the water clarity noted in section 17(a) of this rule.

(b) Filters shall be designed so that filtration surfaces can be inspected and serviced.

(c) On pressure-type filters, a means shall be provided to permit the release of internal pressure.

(d) Any filter incorporating an automatic internal air release as its principal means of air release shall have lids which provide a slow and safe release of pressure as a part of its design.

(e) Any separation tank used in conjunction with any filter tank shall have a manual means of air release or a lid which provides a slow and safe release of pressure as it is opened as a part of its design.

(f) Pressure filters and separation tanks shall have operation and maintenance instructions permanently installed on the filter or separation tank and shall include a precautionary statement warning not to start up the system after maintenance without first opening the air release and proper reassembly of the filter and separation tank. The statement shall be visible and noticeable within the area of the air release.

(g) Piping furnished with the filter shall be of suitable material capable of withstanding one and one-half (1 1/2) times the working pressure. The suction piping shall not collapse when there is a complete shutoff of flow on the suction side of the pump. (*Fire Prevention and Building Safety Commission; 675 IAC 20-4-18; filed Aug 14, 1989, 9:00 a.m.: 13 IR 77, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Nov 15, 1989, 5:00 p.m.: 13 IR 677; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-4-19 Pumps

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 19. (a) A pump and motor shall be provided for circulation of the pool water. Performance of all pumps shall meet or exceed the conditions of flow required for filtering; cleaning, if applicable; and the filters against the total dynamic head developed by the complete system.

(b) With all pressure filter systems a cleanable strainer or screen shall be provided upstream of the circulation pumps to remove solids, debris, hair, lint, etc.

(c) Pumps and motors shall be accessible for inspection and service.

(d) The design and construction of the pumps and component parts shall provide safe operation that is not hazardous to the operator or maintenance personnel.

(e) Where a mechanical pump seal is provided, components of the seal shall be corrosion-resisting and capable of operating

under conditions normally encountered in pool operation.

(f) Proper direction of rotation for the pump shall be clearly indicated on the pump.

(g) All motors shall have as a minimum an open drip-proof enclosure and be constructed electrically and mechanically to perform satisfactorily and safely under the conditions of load and environment normally encountered in swimming pool installations.

(h) Motors shall be capable of operating the pumps under full load with a voltage variation of plus or minus ten percent (10%) from the nameplate rating. If the maximum service factor of the motor is exceeded (at full voltage), the manufacturer shall indicate this on the pump curve.

(i) All motors shall have thermal or current overload protection, either built in or in the line starter, to provide locked rotor and running protection.

(j) Where the pump is below the waterline, valves shall be installed on permanently connected suction and discharge lines, located in an accessible place outside the walls of the pool, where they shall be readily and easily accessible for maintenance and removal of the pump. (*Fire Prevention and Building Safety Commission; 675 IAC 20-4-19; filed Aug 14, 1989, 9:00 a.m.: 13 IR 77, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Nov 15, 1989, 5:00 p.m.: 13 IR 677; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-4-20 Return inlets and suction outlets

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 20. (a) Return inlets and suction outlets shall be provided and arranged to produce a uniform circulation of water and maintain a uniform disinfectant residual throughout the entire pool. Where skimmers are used, the return inlets shall be located so as to help bring floating particles within range of the skimmers.

(b) The number of return inlets shall be based on a minimum of one (1) return inlet per six hundred (600) square feet of pool surface area, or fraction thereof. Return inlet fittings shall be installed of sufficient pipe size or quantity to allow a full design turnover rate of the circulation system in accordance with the manufacturer's recommendations for return inlets.

(c) Return inlets from the circulation system shall be designed so as not to constitute a hazard to the bather.

(d) The pool shall not be operated if the suction outlet grate is missing, broken, or secured in such a way that it can be removed without the use of tools.

(e) If the suction outlet system, such as a filtration system, booster system, automatic cleaning system, solar system, etc., has a single suction outlet, or multiple suction outlets which can be isolated by valves, each suction outlet shall protect against bather entrapment by:

(1) an antivortex cover;

(2) a twelve (12) inch by twelve (12) inch (12x12) grate or larger; or

(3) other means acceptable to the local authority.

(f) Where provided, the vacuum cleaner fittings shall be located in accessible positions at least six (6) inches and no greater than eighteen (18) inches below the minimum operating water level or as an attachment to the skimmers. (*Fire Prevention and Building Safety Commission; 675 IAC 20-4-20; filed Aug 14, 1989, 9:00 a.m.: 13 IR 78, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530*)

675 IAC 20-4-21 Surface skimmer systems

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 21. (a) A surface skimming system shall be provided on all residential swimming pools and shall be designed and constructed to skim the pool surface when the water level is maintained within the operational parameters of the system's rim or weir device.

(b) Skimming devices shall be designed and installed so as not to constitute a hazard to the bather.

(c) Where automatic surface skimmers are used as the sole overflow system, at least one (1) surface skimmer shall be provided for each eight hundred (800) square feet or fraction thereof of the water surface area. Nominal recessed areas such as stairs, swimouts, spas, etc., shall not be considered in the calculation. Where skimmers are used, they shall be located to maintain effective skimming action over the entire surface of the pool. (*Fire Prevention and Building Safety Commission; 675 IAC 20-4-21; filed Aug*

14, 1989, 9:00 a.m.: 13 IR 78, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)

675 IAC 20-4-22 Electrical requirements

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 22. The requirements of 675 IAC 17, the Indiana Electrical Code, shall be followed in the installation of all electrical equipment wiring or appliances in the pool area or vicinity of the pool's circulation system. (*Fire Prevention and Building Safety Commission; 675 IAC 20-4-22; filed Aug 14, 1989, 9:00 a.m.: 13 IR 78, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)*)

675 IAC 20-4-23 Heaters

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 23. (a) Swimming pool heaters shall be of an "approved" type.

(b) Heaters shall be properly sized.

(c) The heaters shall be installed according to the manufacturer's recommendations, but not less than the following:

(1) The heater shall be installed on a concrete (or equivalent) base unless it is specifically designed for installation on a combustible surface.

(2) When installing the heater, adequate clearances shall be maintained on all sides and over the top of the unit. Consult manufacturer's instructions for proper clearances.

(3) In order to assure proper combustion, the heater shall have adequate ventilation installed as follows:

(A) When installing a heater indoors, proper openings to the room are required. The heater shall be installed in accordance with 675 IAC 18, the Indiana Mechanical Code, and the manufacturer's recommendations for properly sized air openings to the enclosure.

(B) All fossil fuel heaters shall be supplied with some type of venting system for either indoor or outdoor installation. These draft or venting devices shall be installed according to the manufacturer's recommendations and shall not be modified.

(C) When installing a heater that will be using propane gas, special precautions shall be noted. Propane gas is heavier than air and, therefore, can create special problems when the heater is installed in a pit or in an enclosed area. Whenever installing a heater with propane gas, the manufacturer's ventilation recommendations shall be followed.

(d) The heater gas supply and pipe sizing shall be adequate and shall comply with manufacturer's recommendations. When installing a gas-fired heater, the gas line shall be run from the gas meter as directly as practical.

(e) The heater circulation system shall comply with the manufacturer's recommendations. Precautions shall be taken to avoid siphonage of hot water into the pump or filter. When manufacturers recommend metal pipe, i.e., copper, heat sinks, they shall be installed vertically connected to the heater to prevent heat damage to plastic circulation pipe. Heater piping shall be designed to avoid excessive friction losses through the pipe and/or bypass valves required. When installing bypass valves, caution shall be taken to insure adequate flow through the heater at all times.

(f) The water piping system shall be installed according to the manufacturer's recommendations. When manufacturers recommend precautions to eliminate siphonage so that the heater does not destroy the filter or any plastic pipe that is being used, the manufacturer's recommendations shall be followed. NOTE: When installing a heater and a filter system, adequate provisions shall be made so that the heater does not cause excessive pressure drop to the filter system. Refer to manufacturer's requirements and/or recommendations for installation of bypass valves. Excessive flow that causes pressure drop can be eliminated by the installation of an external or an automatic bypass valve. When installing a bypass valve, caution shall be noted so that there is always adequate flow through the heater.

(g) A time clock is recommended, and when used it shall be set long enough to properly filter the water and allow enough time for proper heating of the pool. It is recommended that a dual time clock or fireman's switch be used in conjunction with the heater to shut the heater off approximately one-half (1/2) hour before the filter system shuts down. (*Fire Prevention and Building*

Safety Commission; 675 IAC 20-4-23; filed Aug 14, 1989, 9:00 a.m.: 13 IR 79, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)

675 IAC 20-4-24 Water supply

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 24. (a) The water supply serving the pool, which may come from a variety of sources, shall meet 327 IAC, the rules of the water pollution control board, before the bather uses the pool.

(b) No direct mechanical connection shall be made between the potable water supply and the swimming pool, chlorinating equipment, or the system of piping for the pool unless it is protected against backflow and siphonage in a manner approved by 675 IAC 16, the Indiana Plumbing Code, or through an airgap meeting that same code.

(c) An over-the-rim spout, if used, shall be located under a diving board, adjacent to a ladder, or otherwise properly shielded so as not to create a hazard. Its open end shall have no sharp edges and shall not protrude more than two (2) inches beyond the edge of the pool. *(Fire Prevention and Building Safety Commission; 675 IAC 20-4-24; filed Aug 14, 1989, 9:00 a.m.: 13 IR 79, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)*

675 IAC 20-4-25 Waste water disposal

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 25. Backwash water shall be discharged into a sanitary sewer through an approved airgap or into an approved subsurface disposal system or by other means in accordance with 675 IAC 16, the Indiana Plumbing Code, and 327 IAC, the rules of the water pollution control board. *(Fire Prevention and Building Safety Commission; 675 IAC 20-4-25; filed Aug 14, 1989, 9:00 a.m.: 13 IR 80, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)*

675 IAC 20-4-26 Disinfectant; oxidation; chemical feeder equipment

Authority: IC 22-13-2-2

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 26. (a) Disinfectant equipment, oxidation equipment, and chemical feeders, hereafter referred to jointly as "equipment", shall be capable of precisely introducing a sufficient quantity of an approved disinfecting agent or other chemical to maintain one (1) milligram per liter of free chlorine residual.

(b) Manufacturer's instructions shall be used in installing chemical feeders. The installation and use of chemical feeders shall conform to the following:

(1) Where using chemical feeders, it is extremely important that they be installed downstream from the filter and heater. An exception is equipment specifically labeled for feeding to the suction side of the pump.

(2) If the chemical feeder is equipped with its own pump, it shall be installed so it introduces the gas or solution downstream from the heater and, if possible, at a position lower than the heater outlet fitting.

(3) Chemical feed pumps shall be wired so they cannot operate unless the filter pump is running. If the chlorinator has an independent timer, the filter and chemical feed pump timers shall be interlocked.

(c) The installation of ozone generating equipment shall be limited to low ozone output generating equipment. The installation and use of ozone generating equipment shall conform to the following:

(1) Installation of ozone generating equipment shall allow for indications of operation or malfunction to be easily observed. The equipment shall be installed in a manner such that a malfunction will not endanger operators or pool users.

(2) Ozone generating equipment shall be used in conjunction with other chemical treatments to meet the chemical operating parameters in this section of this rule. Normal maintenance and monitoring of water chemistry shall be followed.

(3) If the equipment is capable of exposing maintenance or service personnel to ozone concentrations exceeding five hundred (500) parts per million, a self-contained breathing apparatus approved for ozone usage shall be provided. If a distinct, pungent odor is smelled when the ozone generating equipment is operating, the equipment shall be shut down, and

the area shall be ventilated. The equipment shall be inspected and repaired as necessary by qualified service personnel.

(4) Manufacturer's recommendations shall be used to determine where and how ozone shall be injected.

(Fire Prevention and Building Safety Commission; 675 IAC 20-4-26; filed Aug 14, 1989, 9:00 a.m.: 13 IR 80, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)

675 IAC 20-4-27 Safety features

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-15; IC 36-7

Sec. 27. (a) A residential pool shall be provided with a suitable handhold around its perimeter in areas where depths exceed three (3) feet six (6) inches. Handholds shall be provided no further apart than four (4) feet and shall consist of any one (1) or a combination of items listed as follows:

(1) Coping, ledge, or deck along the immediate top edge of the pool which provides a slip-resisting surface of at least four (4) inches minimum horizontal width and located at or not more than twelve (12) inches above the waterline.

(2) Ladders, stairs, or seat ledges.

(3) A secured rope or railing placed at or not more than twelve (12) inches above the waterline.

(b) Rope anchor devices shall be installed at a minimum of one (1) foot and a maximum of two (2) feet on the shallow end side of a point of change in floor slope. In pools where the slope change occurs in water depths less than four (4) feet six (6) inches, a transition rope supported by buoys shall be installed.

(c) Access to residential pools shall be restricted by one (1) of the following means:

(1) Walls or fencing not less than five (5) feet high and completely surrounding the pool and deck area with the exception of self-closing and latching gates and doors, both capable of being locked.

(2) Other means not less than five (5) feet high and deemed impenetrable by the enforcing authority at the time of construction and completely surrounding the pool and deck area when the pool is not in use.

(3) A combination of subdivisions (1) and (2) that completely surrounds the pool and deck with the exception of self-closing and latching gates and doors which are capable of being locked. This applies to subdivisions (1) and (2) and this subdivision only.

(4) A power safety pool cover which shall:

(A) provide a continuous connection between the cover and the deck, so as to prohibit access to the pool when the cover is completely drawn over the pool;

(B) be mechanically operated by a key or key and switch such that the cover cannot be drawn open or retracted without the use of a key;

(C) is installed with track, rollers, rails, guides, or other accessories necessary to accomplish clauses (A) and (B), in accordance with the manufacturer's instructions; and

(D) bear an identification tag indicating that the cover satisfies the requirements of ASTM F1346 for power safety pool covers.

(d) Not less than the following lifesaving equipment shall be installed with each residential swimming pool:

(1) A ring or throwing buoy fitted with forty (40) feet of one-fourth (1/4) inch diameter line.

(2) A pole not less than twelve (12) feet in length.

(3) Access to a telephone.

(Fire Prevention and Building Safety Commission; 675 IAC 20-4-27; filed Aug 14, 1989, 9:00 a.m.: 13 IR 80, eff Sep 1, 1989 [IC 4-22-2-36 suspends the effectiveness of a rule document for thirty (30) days after filing with the secretary of state. LSA Document #89-17 was filed Aug 14, 1989.]; errata filed Aug 11, 1990, 5:00 p.m.: 13 IR 2140; filed Dec 11, 1992, 5:00 p.m.: 16 IR 1390; readopted filed Sep 11, 2001, 2:49 p.m.: 25 IR 530)

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