

Document: Proposed Rule, **Register Page Number:** 25 IR 2566

Source: May 1, 2002, Indiana Register, Volume 25, Number 8

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**TITLE 675 FIRE PREVENTION AND BUILDING
SAFETY COMMISSION**

Proposed Rule
LSA Document #02-52

DIGEST

Amends 675 IAC 20 concerning editorial and technical issues in the 1989 Indiana Swimming Pool Code. Effective 30 days after filing with the secretary of state.

675 IAC 20-2-17	675 IAC 20-3-5
675 IAC 20-2-20	675 IAC 20-3-6
675 IAC 20-2-24	675 IAC 20-3-7
675 IAC 20-2-26	

SECTION 1. 675 IAC 20-2-17, AS READOPTED AT 25 IR 530, IS AMENDED TO READ AS FOLLOWS:

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 ~~which 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.

~~(g)~~ **(h)** Pool piping shall have a uniform slope in one (1) direction equipped with valves for adequate drainage. Pool

pipng shall be supported at sufficient intervals to prevent entrapment of air, water, or dirt. Provision shall be made for expansion or contraction of pipes.

(h) (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.

(h) (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.

(h) (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.

(h) (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*)

SECTION 2. 675 IAC 20-2-20, AS READOPTED AT 25 IR 530, IS AMENDED TO READ AS FOLLOWS:

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. ~~Where only one~~ (h) ~~The main drain is provided, it 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.

(j) The piping shall be designed to carry one hundred percent (100%) of the recirculation rate and shall be equipped with a valve. (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)

SECTION 3. 675 IAC 20-2-24, AS READOPTED AT 25 IR 530, IS AMENDED TO READ AS FOLLOWS:

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 ~~board~~ **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)

SECTION 4. 675 IAC 20-2-26, AS READOPTED AT 25 IR 530, IS AMENDED TO READ AS FOLLOWS:

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) ~~U.S.~~ **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 less than to exceed forty-five (45) feet in long. 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)*

SECTION 5. 675 IAC 20-3-5, AS READOPTED AT 25 IR 530, IS AMENDED TO READ AS FOLLOWS:

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.

(e) **(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)*

SECTION 6. 675 IAC 20-3-6, AS READOPTED AT 25 IR 530, IS AMENDED TO READ AS FOLLOWS:

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 ~~a main outlet~~ **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*

SECTION 7. 675 IAC 20-3-7, AS READOPTED AT 25 IR 530, IS AMENDED TO READ AS FOLLOWS:

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 ~~board~~ **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.

~~(4)~~ **(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 ~~board~~ **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)*

Notice of Public Hearing

Under IC 4-22-2-24, notice is hereby given that on July 15, 2002 at 9:00 a.m., at the Indiana Government Center-South, 402 West Washington Street, Conference Center Room A, Indianapolis, Indiana; AND on September 4, 2002 at 10:00 a.m., at the Indiana Government Center-South, 402 West Washington Street, Conference Center Room B, Indianapolis, Indiana the Fire Prevention and Building Safety Commission will hold a public hearing on proposed amendments to 675 IAC 20 concerning editorial and technical issues in the 1989 Indiana Swimming Pool Code. Copies of these rules are now on file at the Indiana Government Center-South, 402 West Washington Street, Room W246 and Legislative Services Agency, One North Capitol, Suite 325, Indianapolis, Indiana and are open for public inspection.

Patrick Ralston
Secretary
Fire Prevention and Building Safety Commission