

ISPSC



2015 GROUP A PUBLIC COMMENT AGENDA

SEPTEMBER 30 – OCTOBER 5, 2015  
LONG BEACH CONVENTION CENTER  
LONG BEACH, CA

*First Printing*

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by

International Code Council, Inc.

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# SP2-15

## 202 (New),

### **Proposed Change as Submitted**

**Proponent :** Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

## **2015 International Swimming Pool and Spa Code**

**Add new definition as follows:**

### **SECTION 202 DEFINITIONS**

**ACCESS (TO).** That which enables a fixture, appliance or equipment to be reached by ready access or by a means that first requires the removal or movement of a panel, door similar obstruction (see "Ready access").

### **SECTION 202 DEFINITIONS**

**READY ACCESS.** That which enables a fixture, appliance or equipment to be directly reached without requiring the removal or movement of any panel, door or similar obstruction and without the use of a portable ladder, step stool or similar device.

**Reason:** There are several locations where these terms are used in the ISPC however, without these definitions, the true meaning of the terms are not clear. These definitions are identical to the IMC definitions for these terms. The IMC has scoping control of these defined terms where they are used in all codes except for the IRC.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 108.

**Cost Impact:** Will not increase the cost of construction

This proposal will not increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

SP2-15 : 202-ACCESS  
(TO) (New)-SNYDER4141

### **Public Hearing Results**

**Committee Action:**

**Disapproved**

**Committee Reason:** These definitions conflict with how these terms are used in the National Electric Code and in APSP-15.

**Assembly Motion:**  
**Online Vote Results:**

**As Submitted**  
**Successful**

Support: 53.57% (75) Oppose: 46.43% (65)

**Assembly Action :**

**Approved as Submitted**

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**Individual Consideration Agenda**

*Public Comment 1:*

**Proponent : Assembly Action  
requests Approve as Submitted.**

**Commenter's Reason:** This code change proposal is on the agenda for individual consideration because the proposal received a successful assembly action. The assembly action for Approve as Submitted was successful by a vote of 53.57% (75) to 46.43% (65) by eligible members online during the period of May 14 - May 28, 2015.

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**SP2-15**

# SP4-15

202

## Proposed Change as Submitted

**Proponent :** Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

## 2015 International Swimming Pool and Spa Code

Revise as follows:

### SECTION 202 DEFINITIONS

**SWIMOUT.** An underwater seat area that is placed completely outside of the ~~perimeter shape~~ diving envelope of the a pool. ~~Where located at the deep end, swimouts are permitted to be used as the deep end means of entry or exit to the pool.~~ \_

**Reason:** A swimout is not required to be outside of the perimeter shape of a pool. Many times they are located on those areas but they are not required to be. This revised wording agrees with Figure 322.2.

The second sentence is a requirement and requirements should not be in code definitions. Requirments belong in the code text (Chapters 3 though 10). There was no need to add this requirement to the code as it is already in Sections 411.1.3 and 809.2

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 13.

**Cost Impact:** Will not increase the cost of construction

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

SP4-15 : 202-SWIMOUT-  
SNYDER4143

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## Public Hearing Results

**Committee Action:**

**Disapproved**

**Committee Reason:** The form of the diving water envelope allows elements such as swimouts to be anywhere in a pool including the deep end , just as long as the element does not encroach on the diving water envelope.

**Assembly Action :**

**None**

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## Individual Consideration Agenda

## *Public Comment 1:*

**Proponent : Janine Snyder, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org) requests Approve as Modified by this Public Comment.**

**Modify as Follows:**

### **2015 International Swimming Pool and Spa Code SECTION 202 DEFINITIONS**

**SWIMOUT.** An underwater seat area that is placed completely outside of the diving envelope of a pool.- Where located at the deep end, swimouts are permitted to be used as the deep-end means of entry or exit to the pool.

**Commenter's Reason:** A swimout can be used for exit and entry into a pool. The public comment brings the deleted last sentence back into this definition.

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SP4-15

# SP9-15

## 305.2.4.1 (New), 305.2.10

### Proposed Change as Submitted

**Proponent :** Jennifer Hatfield, J. Hatfield & Associates, PL,  
representing Association of Pool & Spa Professionals  
(jhatfield@apsp.org)

## 2015 International Swimming Pool and Spa Code

### Add new text as follows:

**305.2.4.1 Setback for mesh fences** The location of a mesh fence from the inside of the fence to the nearest edge of the water of a pool or spa shall be not less than 20 inches (508 mm).

### Delete without substitution:

~~**305.2.10 Poolside barrier setbacks.** The pool or spa side of the required barrier shall be not less than 20 inches (508 mm) from the water's edge.~~

**Reason:** This proposal clarifies the original intent of Section 305.2.10, which was to apply only to mesh fences, which are removable child barriers otherwise known as baby barriers. The setback requirement was never intended to apply to walls, screen enclosures, other types of fencing, etc. The way the code is currently written it could be construed as applying to all types of barriers and not just the mesh fencing as intended. Therefore, this proposal simply deletes Section 305.2.10 and instead places the setback requirement as a subsection of the mesh fencing section, so it is applied to only that type of barrier fence.

**Bibliography:** See 2007 Florida Building Code, Code Commentary for Section R4101.17.1.13 which clearly provides that the intent of the setback is only for mesh fencing.

**Cost Impact:** Will not increase the cost of construction  
This will not increase the cost of construction, as it simply clarifies the original intent of a code provision.

SP9-15 : 305.2.4.1  
(New)-HATFIELD5780

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## Public Hearing Results

**Committee Action:**

**Disapproved**

**Committee Reason:** The intent of these proposals is good but the language needs improved to make it clear that the mesh fence is a baby fence and not the type of temporary mesh fence that a contractor might use for protecting a work area.

**Assembly Action :**

**None**

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## Individual Consideration Agenda

*Public Comment 1:*

**Proponent : Jennifer Hatfield, J. Hatfield & Associates, PL,  
representing Association of Pool & Spa Professionals  
(jhatfield@apsp.org) requests Approve as Submitted.**

**Commenter's Reason:** The committee's concern was that this type of mesh fence would also included the type of plastic fencing used to keep people out of a construction site and not just one that is considered a baby barrier around a swimming pool. However, what was not explained at the first hearing is that possibility does not exist due to the fact this new subsection (which already exists in the ISPSC but is simply being moved to the correct place in the code from where it currently resides, per the reasoning provided in the original proposal) falls under section 305.2.4, titled "Mesh fence as a barrier." Therefore, this new subsection 305.2.4.1 falls within section 305.2.4, which details what requirements the mesh fence must meet in order to be considered a barrier around a pool. Therefore, there is no way for this to be misapplied to a temporary plastic "construction" fence because those type of fences simply would not be able to meet the requirements listed under section 305.2.4.

It is impertative this proposal be adopted because it clarifies the original intent of Section 305.2.10, which was to apply only to mesh fences, which are removable child barriers otherwise known as baby barriers. The setback requirement was never intended to apply to walls, screen enclosures, other types of fencing, etc. The way the code is currently written it could be construed as applying to all types of barriers and not just the mesh fencing as intended. Therefore, this proposal simply deletes Section 305.2.10 and instead places the setback requirement as a subsection of the mesh fencing section, so it is applied to only that type of barrier fence. See 2007 Florida Building Code, Code Commentary for Section R4101.17.1.13 which clearly provides that the intent of the setback is only for mesh fencing.

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**SP9-15**

# SP10-15

## 305.2.10 (New)

### Proposed Change as Submitted

**Proponent :** Jennifer Hatfield, J. Hatfield & Associates, PL  
(jhatfield@apsp.org)

## 2015 International Swimming Pool and Spa Code

**Add new text as follows:**

**305.2.10 Flexible plastic netting** Flexible plastic mesh fencing and netting shall not be used for a required barrier. This section shall not apply to factory-manufactured mesh fence assemblies made and installed in accordance with Section 305.2.4.

**Reason:** This new section is being proposed to clarify that certain plastic fencing is not intended for use as a pool barrier. For example, the plastic fencing one uses at construction sites to warn people to stay out of the area could possibly be argued as meeting the barrier provisions if this new section is not added. This is possible due to the fact the vertical post spacing could be 15 to 20 feet, the "holes" could meet the width maximum and the top edge is supported by a tension wire. However, the "holes" could be widened by a foot being inserted and weight on the top could pull it down to less than 48 inches above grade. Further, the bottom of this type of fence rarely is supported by a tension wire; therefore, it could be possible for someone to push under it and get into the pool. All of these factors represent a safety concern if this type of product were used to meet the barrier requirements, which is why this new section is needed to prevent that from happening. However, the second sentence is needed to clarify this is NOT intended to eliminate the mesh fencing that is manufactured specifically as a "baby barrier" around a pool, under Section 305.2.4.

**Cost Impact:** Will not increase the cost of construction

This will not increase the cost of construction, as it just clarifies that a certain type of plastic netting that was never intended to be a pool barrier and is not, in fact, a pool barrier.

SP10-15 : 305.2.10  
(New)-HATFIELD5487

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### Public Hearing Results

**Committee Action:**

**Disapproved**

**Committee Reason:** The term "netting" could be confusing. This proposal should be coordinated with what proposal SP9 was trying to accomplish and brought back in Public Comment.

**Assembly Action :**

**None**

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### Individual Consideration Agenda

*Public Comment 1:*

**Proponent : Jennifer Hatfield, J. Hatfield & Associates, PL, representing Association of Pool & Spa Professionals (jhatfield@apsp.org) requests Approve as Modified by this Public Comment.**

**Modify as Follows:**

## **2015 International Swimming Pool and Spa Code**

**305.2.10 Flexible plastic ~~netting~~ fencing** Flexible plastic ~~mesh~~-fencing ~~and netting~~ shall not be used for a required barrier. This section shall not apply to factory-manufactured mesh fence assemblies made and installed in accordance with Section 305.2.4.

**Commenter's Reason:** This public comment addresses the committees concerns by removing the wording "netting" and "mesh" to ensure it is not confused with any other type of fencing. This section is being added to make clear that flexible plastic fencing that is used around construction sites are not used to meet the pool barrier requirements. The proposal clearly distinguishes this type of fencing from the mesh fencing that is allowed in Section 305.2.4, the latter must follow a series of requirements laid out within Section 305.2.4 in order to be used as a proper pool barrier.

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SP10-15

# SP11-15

## 305.3

### **Proposed Change as Submitted**

**Proponent :** Timothy Pate, , City and County of Broomfield, representing the Colorado Chapter of ICC Code Change Committee, representing City and County of Broomfield (tpate@broomfield.org)

## **2015 International Swimming Pool and Spa Code**

### **Revise as follows:**

**305.3 Gates.** Access gates shall comply with the requirements of Sections 305.3.1 through 305.3.3 and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool or spa, shall be self-closing and shall have a self-latching device.

Where the combined occupant load of the pool deck area and the pool water area is calculated to be 50 persons or more based on the swimming pool occupant load factors in Table 1004.1.2 of the International Building Code, not less than two pedestrian access gates shall serve as the means of egress gates for the combined area. The means of egress gates shall be separated in accordance with Section 1007.1.1 of the IBC. Where more than one means of egress gate from the area is required, all means of egress gates from the area shall have panic hardware installed in accordance with Section 1010.1.10 of the IBC.

**Reason:** This proposed change is to add language that would require checking the occupant load using IBC Table 1004.1.2 which has pool and pool deck listed as a function of space. Once the space exceeds the 49 it would need exits which would match what is done for a building or space within a building. There has been confusion as to how exterior pools are treated in regards to means of egress since they are not technically an occupancy. I do not believe the best way to solve this is to change language to call these spaces occupancies since you would then have to also use Chapter 29 to determine required numbers of plumbing fixtures. I believe some building departments use IBC section 1004.5 for these outdoor areas but this section says you need means of egress but the definition of means of egress only talks to occupied portions of buildings or structures. This leads to a lot of confusion for building departments and designers. I feel that adding this specific language to the swimming pool barrier section will help clear up this confusion.

**Cost Impact:** Will increase the cost of construction  
This would increase the cost in the jurisdictions that have not interpreted this section to require the panic hardware already.

SP11-15 : 305.3-  
PATE3935

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## **Public Hearing Results**

## Committee Action:

**Disapproved**

**Committee Reason:** With where this section is placed, the new language would apply to both residential and public pools, These requirements are only necessary for public pools. The new language seems to imply that only gates could be used for egress purposes. What about doors? All this might already be covered by the IBC.

## Assembly Action :

**None**

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### **Individual Consideration Agenda**

#### *Public Comment 1:*

**Proponent : Timothy Pate, representing City and County of Broomfield (tpate@broomfield.org) requests Approve as Modified by this Public Comment.**

#### **Replace Proposal as Follows:**

### **2015 International Swimming Pool and Spa Code**

**305.8 Means of egress** Outdoor public pools provided with barriers shall have means of egress as required by Chapter 10 of the *International Building Code*. Where the combined occupant load of the pool deck and the pool water area is calculated to be 50 or more based on the swimming pool occupant load factors in Table 1004.1.2 of the *International Building Code*, the number of exit doors or gates shall comply with the requirements of Section 1006 of the *International Building Code* and shall be separated in accordance with Section 1007.1.1 of the *International Building Code*. Such doors or gates shall comply with the requirements of Section 1010 of the *International Building Code*.

-  
**Commenter's Reason:** I am proposing this modification based on the excellent comments made by the committee. This revision will add a new section which will deal with general means of egress requirements out of the outdoor public pool and pool deck areas.

This new section will only apply to public pools and not for private pools.

This new section will also give requirements for means of egress for either exit paths that extend out through barrier gates or through buildings that are attached to pool deck area and are a part of the barrier.

IBC section 1007.1.1 requires that the required exits be separated by at least 50% of the longest diagonal dimension.

IBC Section is titled "Doors, Gates, and Turnstiles" and has all requirements for sizes (widths), hardware, swings, landings, etc.

# SP12-15

## 305.3, 305.3.3, 305.4

### Proposed Change as Submitted

**Proponent :** Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

## 2015 International Swimming Pool and Spa Code

### Revise as follows:

**305.3 Gates.** Access gates shall comply with the requirements of Sections 305.3.1 through 305.3.3 and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool or spa, shall be self-closing and shall have a self-latching device.

**305.3.3 Latches.** For residential pools, the operable parts of the latch release for the self-latching device shall be located at 54 inches (1372 mm) maximum above the finished floor or ground. Where the latch release mechanism of the self-latching device is located less than 54 inches (1372 mm) from grade above the finished floor or ground, the latch release mechanism shall be located on the pool or spa side of the gate not less than 3 inches (76 mm) below the top of the gate, and the gate and barrier shall not have openings greater than  $1\frac{1}{2}$  inch (12.7 mm) within 18 inches (457 mm) of the release mechanism. For public pools, for latches on gates along the accessible route, the operable parts of the self-latching devices shall comply with Section 1010.1.9.2 of the International Building Code.

**305.4 Structure wall as a barrier.** Where a wall of a dwelling or structure serves as part of the barrier and where doors or windows provide direct access to the pool or spa through that wall, one of the following shall be required:

1. Operable windows having a sill height of less than 48 inches (1219 mm) above the indoor finished floor and doors shall have an alarm that produces an audible warning when the window, door or their screens are opened. The alarm shall be *listed* and *labeled* as a water hazard entrance alarm in accordance with UL 2017. In ~~dwelling units~~ dwelling units not required to be Accessible units, Type A units or Type B units, the operable parts of the alarm deactivation switches shall be located 54 inches (1372 mm) or more above the finished floor. In ~~dwelling units~~ dwelling units required to be Accessible units, Type A units or Type B units, or in structures where the swimming pool is required to be accessible, the operable parts of the alarm deactivation switches shall be located not greater than 54 inches (1372 mm) and not less than 48 inches (1219 mm) above the finished floor.
2. A *safety cover* that is *listed* and *labeled* in accordance with ASTM F 1346 is installed for the pools and spas.
3. An *approved* means of protection, such as self-closing doors with self-latching devices, is provided. Such means of protection shall provide a degree of protection that is not less than the protection

afforded by Item 1 or 2.

**Reason:** The intent of the changes is to coordinate the locking arrangements on gates and doors for public pools with the allowances worked out in the IBC as part of the coordination with ADA. The definition for public pool and residential pool would determine where accessibility is appropriate.

The 2015 IBC reads as follows:

IBC 1010.1.9.2 Hardware height. Door handles, pulls, latches, locks and other operating devices shall be installed 34 inches (864 mm) minimum and 48 inches (1219 mm) maximum above the finished floor. Locks used only for security purposes and not used for normal operation are permitted at any height.

Exception: Access doors or gates in barrier walls and fences protecting pools, spas and hot tubs shall be permitted to have operable parts of the release of latch on self-latching devices at 54 inches (1370 mm) maximum above the finished floor or ground, provided the self-latching devices are not also self-locking devices operated by means of a key, electronic opener or integral combination lock.

IBC 1109.13 Controls, operating mechanisms and hardware. Controls, operating mechanisms and hardware intended for operation by the occupant, including switches that control lighting and ventilation and electrical convenience outlets, in accessible spaces, along accessible routes or as parts of accessible elements shall be accessible.

**Exceptions:**

1. Operable parts that are intended for use only by service or maintenance personnel shall not be required to be accessible.
2. Electrical or communication receptacles serving a dedicated use shall not be required to be accessible.
3. Where two or more outlets are provided in a kitchen above a length of counter top that is uninterrupted by a sink or appliance, one outlet shall not be required to be accessible.
4. Floor electrical receptacles shall not be required to be accessible.
5. HVAC diffusers shall not be required to be accessible.
6. Except for light switches, where redundant controls are provided for a single element, one control in each space shall not be required to be accessible.
7. Access doors or gates in barrier walls and fences protecting pools, spas and hot tubs shall be permitted to comply with Section 1010.1.9.2.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is CTC/PMG Proposal Item 4.

**Cost Impact:** Will not increase the cost of construction

This proposal will not increase the cost of construction because no additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

SP12-15 : 305.3.3-  
SNYDER4147

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## **Public Hearing Results**

**Committee Action:**

**Disapproved**

**Committee Reason:** The introduction of "residential" and "public" in this section

adds confusion as to the required latch height for gates for pools and spas. Some pools are "residential" such as a pool at an apartment complex. Accessibility requirements really need to be covered in the public pools chapter.

<b>Assembly Motion:</b>	<b>As Submitted</b>
<b>Online Vote Results:</b>	<b>Failed</b>
Support: 42.66% (61) Oppose: 57.34% (82)	
<b>Assembly Action :</b>	<b>None</b>

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### **Individual Consideration Agenda**

#### *Public Comment 1:*

**Proponent : Janine Snyder, representing Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org) requests Approve as Submitted.**

**Commenter's Reason:** The Committee's statement about pools and spas for apartment complexes being *residential* pools is incorrect. Those are *public* pools.

#### *Public Comment 2:*

**Proponent : Jennifer Hatfield, J. Hatfield & Associates, PL, representing Association of Pool & Spa Professionals (jhatfield@apsp.org) requests Approve as Modified by this Public Comment.**

#### **Modify as Follows:**

### **2015 International Swimming Pool and Spa Code**

**305.3.3 Latches.** ~~For residential pools, the operable Operable parts of the latch release for the self-latching device that is located on the side of the gate away from the pool or spa shall be located not less than 54 inches (1372 mm) above the finished floor or ground, whichever is higher. For public pools and public spas, such latch release shall be located at 54 inches (1372 mm) maximum above the finished floor or ground , whichever is higher. Where For residential pools and residential spas, where the latch release of the self-latching device is located on the pool or spa side of the gate and is less than 54 inches (1372) above the finished floor or ground, the latch release shall be located on the pool or spa side of the gate not less than 3 inches (76 mm) below the top of the gate, and the gate and barrier shall not have openings greater than 1/2 inch (12.7 mm) within 18 inches (457 mm) of the latch release mechanism. For public pools, for latches on gates along the accessible route, the operable parts of the self latching devices shall comply with Section 1010.1.9.2 of the International Building Code.~~

**Commenter's Reason:** This public comment makes changes to the latch subsection to ensure that the latch is not under 54 inches, as this should not be permitted for safety reasons. All other existing barrier codes and standards require a minimum 54 inches from the ground or floor to ensure a child cannot access the pool or spa without adult supervision.



# SP18-15

## 311.3, 311.3.1 (New), 311.3.2 (New)

### Proposed Change as Submitted

**Proponent :** Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

## 2015 International Swimming Pool and Spa Code

**Revise as follows:**

**311.3 Water velocity.** The water velocity in suction and return lines piping shall comply with either Section 311.3.1 or 311.3.2. Pool piping sizes shall be chosen so that at the rated flows for the filtering and cleaning equipment, the operating head of the pump is not exceed 8 feet (2.4 m) per second exceeded. The water velocity in suction copper and copper alloy piping shall be as required by Section 310. not exceed 8 fps (2.4 mps).

**311.3.1 Public pool and spas.** For public pools and spas, suction piping water velocity shall not exceed 6 fps (1.8 mps), return piping water velocity shall not exceed 10 fps (3.0 mps) and water velocity through grates shall not exceed 1.5 fps (0.5 mps) except where compliance with Section 310 further limits the water velocities in piping and through grates.

**311.3.2 Residential pool and spas.** For residential pools and spas, the water velocity in suction piping and return piping shall not exceed 8 fps (2.4 mps) except where compliance with Section 310 further limits the water velocities in suction and return piping.

**Reason:** APSP 7-2013 (which is referenced by the 2015 ISPSC) has some different requirements (than the previous edition) with respect to sizing of circulation piping. The ISPSC needs to be updated and clarified so that there is not confusion when comparing the requirements of APSP and the code.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC). The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 8.

**Cost Impact:** Will increase the cost of construction

This proposal will increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code. Specifically, in some cases, the suction piping might have to be larger in order to control the velocity through the suction outlet grate. The requirement for larger piping will have additional cost in both material and labor.

SP18-15 : 311.3-  
SNYDER4154

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## Public Hearing Results

**Committee Action:**

**Disapproved**

**Committee Reason:** Th proposed text would make the code inconsistent with what the APSP standard indicates for maximum flow velocity through grates.

**Assembly Action :**

**None**

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## **Individual Consideration Agenda**

### *Public Comment 1:*

**Proponent : Jennifer Hatfield, J. Hatfield & Associates, PL, representing Association of Pool & Spa Professionals (jhatfield@apsp.org) requests Approve as Modified by this Public Comment.**

**Modify as Follows:**

### **2015 International Swimming Pool and Spa Code**

**311.3 Water velocity.** The water velocity in suction and return piping shall comply with either Section 311.3.1 or 311.3.2. ~~Pool piping sizes shall be chosen so that at the rated flows for the filtering and cleaning equipment, the operating head of the pump is not exceeded.~~ The water velocity in copper and copper alloy piping shall not exceed 8 fps (2.4 mps).

**311.3.1 Public pool and spas.** For *public* pools and spas, suction piping water velocity shall not exceed 6 fps (1.8 mps), return piping water velocity shall not exceed ~~10~~ 8 fps (~~3.0~~ 2.4 mps) and water velocity through grates shall not exceed ~~1.5~~ 1.5 fps (~~0.5~~ 0.5 mps) ~~except where compliance comply with Section 310 further limits the water velocities in piping and through grates APSP-16.~~

**Commenter's Reason:** This public comment addresses the committees concerns with the original proposal by making changes to ensure consistency with APSP standards. Specifically it ensures that 8 fps is provided as the maximum water velocity of the return piping to ensure consistency with energy efficiency standards. Further, the reference to APSP-16 is provided because this is the standard manufacturers of drain covers must test to, which results in the water velocity limit expressed in gallons per minute. Large, public pool grates, in practice, are designed to 1.5 fps, however it is not required within APSP-16 and therefore, should be removed. Section 310 refers you to APSP 7, which then refers you to APSP 16 on water velocity; therefore, this proposal sends the user directly to APSP-16 when addressing water velocity.

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**SP18-15**

# SP19-15

## 313.7, 202 (New)

### Proposed Change as Submitted

**Proponent :** Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

## 2015 International Swimming Pool and Spa Code

**Revise as follows:**

**313.7 Emergency shutoff switch.** An emergency shutoff switch shall be provided to disconnect all power to recirculation and jet system pumps and air blowers. Emergency shutoff switches shall be provided with ready access; be located within sight of the pool or spa; and be located not less than 5 feet (~~1524 mm~~ 1524mm) horizontally from ~~the~~ an inside walls of the pool or spa; that is served by the pumps and blowers controlled by the switch.

**Exception:** *Onground storable pools, permanent inground residential swimming pools, residential spas and residential water features.*

**Add new definition as follows:**

### SECTION 202 DEFINITIONS

**READY ACCESS.** That which enables a fixture, appliance or equipment to be directly reached without requiring the removal or movement of any panel, door or similar obstruction and without the use of a portable ladder, step stool or similar device.

**Reason:** The emergency shutoff switch should be out in the open and not behind a panel so it is obvious where the switch is for fast access. Using the term "ready access" along with the IMC definition, will make this clear.

The definition is identical to the IMC definition for this term. The IMC has scoping control of this defined term where it is used in all codes except for the IRC.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC) The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 107.

**Cost Impact:** Will not increase the cost of construction

This proposal will not increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

SP19-15 : 313.7-  
SNYDER4155

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## Public Hearing Results

**Committee Action:**

**Disapproved**

**Committee Reason:** Exterior (outdoor) switches used for this purpose typically have a protective cover that could be construed as not providing ready access. The new definition indicates that a "panel door" cannot be in the way of the switch. Also, the definition was already disapproved in SP2.

**Assembly Motion:**

**As Submitted**

**Online Vote Results:**

**Failed**

Support: 29.66% (43) Oppose: 70.34% (102)

**Assembly Action :**

**None**

**Individual Consideration Agenda**

*Public Comment 1:*

**Proponent : Jennifer Hatfield, J. Hatfield & Associates, PL, representing Association of Pool & Spa Professionals (jhatfield@apsp.org) requests Approve as Modified by this Public Comment.**

**Modify as Follows:**

**2015 International Swimming Pool and Spa Code**

**313.7 Emergency shutoff switch.** An emergency shutoff switch shall be provided to disconnect all power to recirculation and jet system pumps and air blowers. Emergency shutoff switches shall be provided with ready access, be located within sight of the pool or spa, and be located not less than 5 feet (1524mm) horizontally from an inside wall of the pool or spa that is served by the pumps and blowers controlled by the switch. The ready access for such switches shall not be construed as prohibiting weatherproof covers for the switches as allowed for by NFPA 70.

**Exception:** Onground storable pools, permanent inground residential swimming pools, residential spas and residential water features.

**Commenter's Reason:** This public comment addresses a concern of the committee that outdoor switches that have weatherproof covers could be construed as not providing ready access. The additional language provided makes the necessary clarification to prevent this from occurring, ensuring weatherproof covers over outdoor switches can still be utilized.

**SP19-15**

# SP20-15

**316.2, Table 316.2, 316.4, 316.6 (New), 316.6.1 (New), 316.6.2 (New), Chapter 11**

## **Proposed Change as Submitted**

**Proponent :** Jennifer Hatfield, J. Hatfield & Associates, PL,  
representing Association of Pool & Spa Professionals  
(jhatfield@apsp.org)

## **2015 International Swimming Pool and Spa Code**

**Revise as follows:**

**316.2 Listed and labeled.** Heaters and hot water storage tanks shall be *listed* and *labeled* in accordance with the applicable standard listed in Table 316.2.

**TABLE 316.2  
WATER HEATERS**

<b>DEVICE</b>	<b>STANDARD</b>
Electric water heater	UL 1261, UL 1563 or CSA C22.2 No. 218.1
Gas-fired water heater	ANSI Z21.56/CSA 4.7a
Heat exchanger	<del>NSF 50</del> AHRI 400
Heat pump water heater	UL 1995, AHRI 1160, CSA C22.2 No. 236
Photovoltaic solar water heaters	<del>NSF 50</del>
Thermal radiant solar water heater	<del>NSF 50</del>

**316.4 Installation.** Heaters shall be installed in accordance with the manufacturer's specifications and the *International Fuel Gas Code*, *International Mechanical Code*, *International Energy Conservation Code*, NFPA 70 or *International Residential Code*, as applicable in accordance with Section 102.7.1. Solar thermal water heaters shall be installed in accordance with Section 316.6.

**Add new text as follows:**

**316.6 Solar thermal water heaters.** Solar thermal heaters utilized for pools and spas shall comply with Sections 316.6.1 through 316.6.2.

**316.6.1 Installation.** Solar thermal water heaters shall be installed in accordance with the International Mechanical Code or International Residential Code, as applicable in accordance with Section 102.7.1.

**316.6.2 Collectors and panels.** Solar thermal collectors and panels shall be listed and labeled in accordance with SRCC 100 or SRCC 600. Collectors and panels shall be permanently marked with the manufacturer's name, model number, and serial number. Such markings shall be located on each collector in a position that is readily viewable after installation of the collector or panel.

**Add new standard(s) as follows:**

AHRI 400-01 Liquid to Liquid Heat Exchangers with Addenda 1 and 2

SRCC 100 - 13 Standard 100 for Solar Collectors

SRCC 300 - 13 Standard 100 for Solar Water Heating Systems

**Reason:** This proposal add requirements for solar thermal water heater collectors that appears in the IRC to ensure safety and performance of these devices. It also removes references to NSF 50 for solar thermal and PV water heaters since they are outside the scope of NSF 50. Further, it adds reference to AHRI 400 for heat exchangers to align with an existing requirement in the IECC.

**Cost Impact:** Will not increase the cost of construction  
This proposal will not increase the cost of construction, rather it aligns requirements with what already exists in other codes.

**Analysis:** A review of the standard proposed for inclusion in the code, AHRI 400-01, SRCC 100 - 13, SRCC 300 - 13, with regard to the ICC criteria for referenced standards (Section 3.6 of CP#28) will be posted on the ICC website on or before April 2, 2015.

SP20-15 : 316.2-  
HATFIELD5761

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## **Public Hearing Results**

**Committee Action:**

**Approved as Submitted**

**Committee Reason:** Photovoltaic systems have nothing to do with standard NSF50.

**Assembly Action :**

**None**

**Analysis.** For staff analysis of the content of AHRI 400-01, SRC 100 - 13 and SRCC 300 - 13 with regard to the ICC criteria for referenced standards (Section 3.6 of CP #28), please visit: <http://www.iccsafe.org/wp-content/uploads/2015-Proposed-Standards-Group-A-Final.pdf>

## **Individual Consideration Agenda**

### *Public Comment 1:*

**Proponent : Jeremy Brown, NSF International, representing NSF International (brown@nsf.org) requests Approve as Modified by this Public Comment.**

**Modify as Follows:**

### **2015 International Swimming Pool and Spa Code**

**316.6.2 Collectors and panels.** Solar thermal collectors and panels shall be listed and labeled in accordance with NSF 50, SRCC 100 or SRCC 600. Collectors and panels shall be permanently marked with the manufacturer's name, model number, and serial number. Such markings shall be located on each collector in a position that is readily viewable after installation of the collector or panel.

**Commenter's Reason:** SP-20 would completely remove NSF 50 from the code as it pertains to pool heating. This is unacceptable since NSF has been listing solar panels and collectors to NSF 50 for years. This public comment will bring the standard back where it belongs. There were two main issues brought forth at the committee hearing. 1) NSF 50 should be removed from the heat exchanger table. This is okay since we are adding NSF 50 in the new section on solar panels and collectors. 2) some committee members did not like that NSF 50 did not have a specific section of the standard covering pool heating. This is correct. In the past, NSF certified pool heating equipment such as solar panels and collectors to NSF 50 using a certification specification to house the performance requirements. Since the committee meeting, NSF has brought those requirements to a specific section of the standard.

The updated version of NSF 50 complete with a section on pool heating equipment is available for free at [http://www.nsf.org/media/eneews/documents/nsf\\_50\\_150715.pdf](http://www.nsf.org/media/eneews/documents/nsf_50_150715.pdf) or by emailing brown@nsf.org.

If SP-20 were to pass without this public comment, it would be a problematic because it would be removing viable products and a viable standard that have been previously referenced by this code. NSF 50 is also the only standard that deals with the material health safety issues of pool products. Solar panels used for pool heating probably have the highest surface area to volume ratio of any other pool material and therefore the material safety issues are paramount. I urge your support to help retain NSF 50 where it belongs.

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SP20-15

**SP25-15**

**402.1, 402.2, 402.3, 402.4, 402.5, 402.12, Table 402.12, Figure 402.12, Table 402.12(2) (New), Table 402.12(3) (New), Table 402.12(4) (New), Table 402.12(5) (New), Table 402.12(6) (New), Figure 402.12 (6) (New)**

**Proposed Change as Submitted**

**Proponent :** Donald Leas, representing Self (donleas@hotmail.com)

**2015 International Swimming Pool and Spa Code**

**Revise as follows:**

**402.1 General.** This section covers diving requirements for Class A, Class B, Class C, and Class E pools. Manufactured and fabricated diving equipment and appurtenances shall not be installed on Type O pools.

**402.2 Manufactured and fabricated diving equipment.** Manufactured and fabricated diving equipment shall be in accordance with ~~Section 808~~ this section and shall be designed for swimming pool use.

**402.3 Installation.** The installation of manufactured diving equipment shall be in accordance with Sections 402.3 through 402.14. Manufactured diving equipment shall be located in the deep area of the pool so as to provide the minimum dimensions shown in ~~Table 402.12~~ Tables 402.12(1) through (6) and shall be installed in accordance with the manufacturer's instructions. Installation and use instructions for manufactured diving equipment shall be provided by the manufacturer and shall specify the minimum water dimensions required for each diving board and diving stand combination. The manufacturer's instructions shall refer to the water envelope type by dimensionally relating their products to Point A on the water envelopes shown in ~~Table 402.12~~ Tables 402.12(1) through (6). The diving board manufacturer shall specify which boards fit on the design pool geometry types as indicated in ~~Table 402.12~~ Tables 402.12(1) through (6) as related to Figures 402.12(1), (2), and (6), as applicable.

**402.4 Slip resistance.** Diving equipment shall have slipresistant walking surfaces.

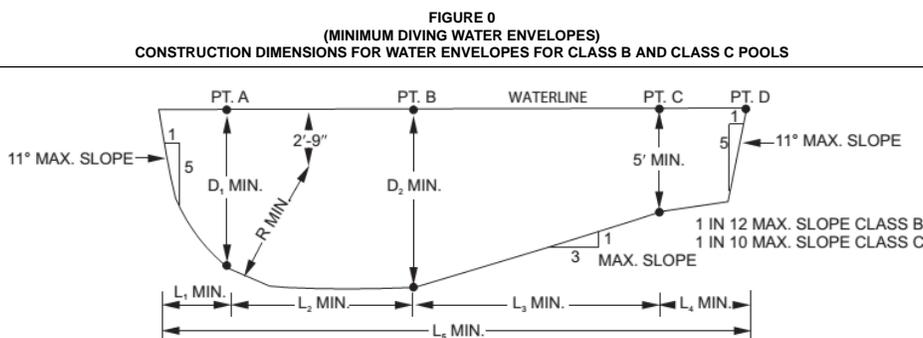
**402.5 Point A.** For the application of ~~Table 402.12~~ Tables 402.12(1) through (6), Point A shall be the point from which dimensions of width, length, depth, and depth height are established for the minimum diving water envelope. If the tip of the diving board or diving platform is located at a distance of WA (see Figure 804.1) or A (see Figure 402.12(2)) or greater from the deep end wall and the water depth at that location is equal to or greater than the water depth requirement at Point A, the point on the water surface directly below the center of the tip of the diving board or diving platform shall be identified as Point A.

**402.12 Water envelopes.** The minimum diving water envelopes shall be in accordance with ~~Table 402.12~~ Tables 402.12(1) through (6).

**TABLE 402.12 402.12(1)**  
**MINIMUM DIVING WATER ENVELOPES FOR CLASS B AND C POOLS**  
 (SEE FIGURE 402.12 402.12(1))

POOL TYPE	MINIMUM DIMENSIONS								MINIMUM WIDTH OF POOL AT:		
	D <sub>1</sub>	D <sub>2</sub>	R	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>4</sub>	L <sub>5</sub>	Pt. A	Pt. B	Pt. C
VI	7'-0"	8'-6"	5'-6"	2'-6"	8'-0"	10'-6"	7'-0"	28'-0"	16'-0"	18'-0"	18'-0"
VII	7'-6"	9'-0"	6'-0"	3'-0"	9'-0"	12'-0"	4'-0"	28'-0"	18'-0"	20'-0"	20'-0"
VIII	8'-6"	10'-0"	7'-0"	4'-0"	10'-0"	15'-0"	2'-0"	31'-0"	20'-0"	22'-0"	22'-0"
IX	11'-0"	12'-0"	8'-6"	6'-0"	10'-6"	21'-0"	0	37'-6"	22'-0"	24'-0"	24'-0"

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.



For SI: 1 degree = 0.017 rad, 1 inch = 25.4 mm, 1 foot = 304.8 mm

**Add new text as follows:**

**TABLE 402.12(2)**  
**MINIMUM DIVING WATER ENVELOPES FOR CLASS A POOLS FOR FINA-SANCTIONED DIVING EVENTS**  
 (meters)

**(SEE FIGURE 402.12(2))**  
**FINA DIVING WATER ENVELOPE IN METRIC DIMENSIONS**  
 FROM FINA HANDBOOK 2013-2017

FINA Dimensions for Diving Facilities	SPRINGBOARD		PLATFORM					
	1 metre	3 metres	1 metre	3 metres	5 metres	7.5 metres	10 metres	
For pools constructed after September 26 <sup>th</sup> , 2013 (see FR 5.3.1)	Length	4.80	4.80	5.00	5.00	6.00	6.00	6.00
	Width	0.50	0.50	1.00 min 2.90 pre	1.00 min 2.90 pre	2.90	2.00	3.00
	Height	1.00	3.00	0.60 min 1.00 pre	2.60 min 3.00 pre	5.00	7.50	10.00

			Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	Horiz	Vert	
A	FROM PLUMMET BACK TO WALL FOR CONCRETE PLATFORM	Designation	A-1		A-3		A-1pl		A-3pl		A-5		A-7.5		A-10		
		Minimum	2.22		2.22												
		Preferred	2.22		2.22												
	FROM PLUMMET BACK TO POOL WALL FOR PEDESTALS AND METAL STANDS	Minimum	1.50		1.50		0.75		1.25		1.25		1.25		1.50		
		Preferred	1.80		1.80		0.75		1.25		1.25		1.25		1.50		
A/A	FROM PLUMMET BACK TO PLATFORM plummet directly below	Designation									A/A5/1		A/A7.5/3.1		A/A 10/5.3.1		
		Minimum									0.75		0.75		0.75		
		Preferred									1.25		1.25		1.25		
B	FROM PLUMMET TO POOL WALL AT SIDE	Designation	B-1		B-3		B-1pl		B-3pl		B-5		B-7.5		B-10		
		Minimum	2.50		3.50		2.50		3.00		4.00		4.50		5.75		
		Preferred	2.50		3.50		3.50		3.60		4.50		4.75		5.75		
C	FROM PLUMMET TO ADJACENT PLUMMET	Designation	C1-1		C-3-3.3-1		C1-1pl		C3-3pl.1pl		C5-3.5-1		C7.5-5.3.1		C10-7.5.5.3.1		
		Minimum	2.00		2.20		1.85		2.20*		2.85*		2.75*		3.00*		
		Preferred	2.00		2.60		2.15		2.35*		2.85*		2.75*		3.00*		
D	FROM PLUMMET TO POOL WALL AHEAD	Designation	D-1		D-3		D-1pl		D-3pl		D-5		D-7.5		D-10		
		Minimum	9.00		10.25		8.00		9.50		10.25		11.00		13.50		
		Preferred	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-1pl		E-3pl		E-5		E-7.5		E-10	
		Minimum		5.00		5.00		3.25		3.25		3.25		3.25		4.00	
		Preferred		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-1pl	E-1pl	F-3pl	E-3pl	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	3.25	2.75	3.25	2.75	3.25	2.75	3.25	2.75	4.00	
		Preferred	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-1pl	E-1pl	G-3pl	E-3pl	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	3.25	5.00	3.25	5.00	3.25	5.00	3.25	6.00	4.00	
		Preferred	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-1pl		H-3pl		H-5		H-7.5		H-10	
		Minimum		3.40		3.70		3.20		3.50		3.70		4.10		4.50	
		Preferred		3.50		3.80		3.30		3.60		3.80		4.50		5.00	
J K	DISTANCE AND DEPTH AHEAD OF PLUMMET FOR ALL STANDS	Designation	J-1	K-1	J-3	K-3	J-1pl	K-1pl	J-3pl	K-3pl	J-5	K-5	J-7.5	K-7.5	J-10	K-10	
		Minimum	5.00	3.30	6.00	3.60	4.50	3.10	5.50	3.40	6.00	3.60	8.00	4.00	11.00	4.25	
		Preferred	5.00	3.40	6.00	3.70	4.50	3.20	5.50	3.50	6.00	3.70	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-1pl	M-1pl	L-3pl	M-3pl	L-5	M-5	L-7.5	M-7.5	L-10	M-10	
		Minimum	1.50	3.30	2.00	3.60	1.40	3.10	1.80	3.40	3.00	3.60	3.75	4.00	4.50	4.25	
		Preferred	2.00	3.40	2.50	3.70	1.90	3.20	2.30	3.50	3.50	3.70	4.50	4.40	5.25	4.75	
N	MAXIMUM SLOPE TO REDUCE DIMENSION BEYOND FULL REQUIREMENTS FOR POOL DEPTH and CEILING HEIGHT						30 DEGREES										

\* Note: The minimum distance between adjacent platforms must be at least 0.25 metres.

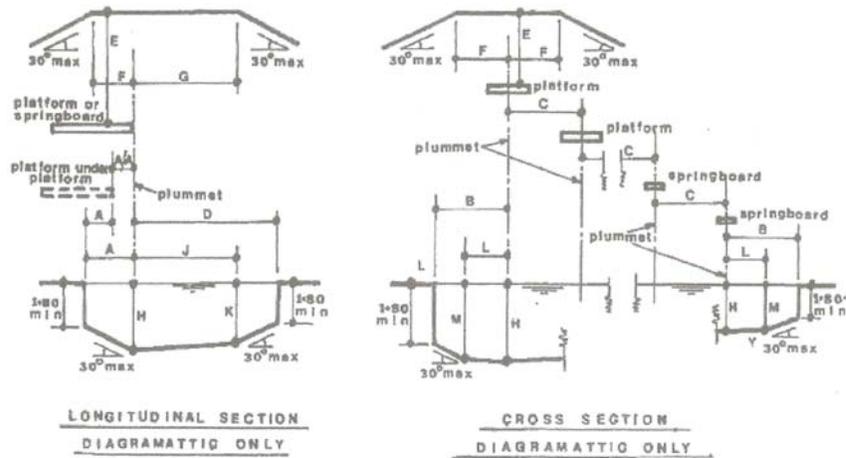
Note: Dimensions B (plummet to pool wall at side) and C (plummet to adjacent plummet) apply to Platforms with widths as detailed. If Platform widths are increased then B and C are to be increased by half the additional width(s).

Note: The 10 Metre Platform must project 0.25 metres beyond any adjacent platform.

Note: All platforms

Note: The leading edge of the concrete platforms for springboards must be at least constructed to be directly above the pool wall or beyond.

FIGURE [Add # Here]  
Figure for Tables 402.12(2) through 402.12(5)



**FINA, USA DIVING, and NCAA DIVING FACILITIES DIAGRAM**

TABLE 402.12(3)  
MINIMUM DIVING WATER ENVELOPES FOR CLASS A POOLS FOR USA DIVING-SANCTIONED DIVING EVENTS  
(feet-decimal inches)  
(SEE FIGURE 401.12(2))

FINA DIVING WATER ENVELOPE CONVERSIONS TO U.S. DIMENSIONS FOR NEW USA DIVING FACILITIES  
FROM FINA HANDBOOK 2013-2017

USA DIVING Dimensions for Diving Facilities	SPRINGBOARD	PLATFORM
---	-------------	----------

		1 meter		3 meters		1 meter		3 meters		5 meters		7.5 meters		10 meters		
		Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	
For pools constructed after September 2013 Extrapolated from FINA HANDBOOK 2013-2017 (See F.R. 5.3.1)	Length	15' - 10.95"		15' - 10.95"		16' - 4.85"		16' - 4.85"		19' - 8.22"		19' - 8.22"		19' - 8.22"		
	Width	1' - 7.69"		1' - 7.69"		3' - 3.37" minimum 9' - 6.18" preferred		3' - 3.37" minimum 9' - 6.18" preferred		9' - 6.18"		6' - 6.74"		9' - 10.11"		
	Height	3' - 3.37"		9' - 10.11"		1' - 11.63" minimum 3' - 3.37" preferred		8' - 6.37" minimum 9' - 10.11" preferred		16' - 4.85"		24' - 7.28"		32' - 9.70"		
A	FROM PLUMMET BACK TO POOL WALL FOR CONCRETE PLATFORM	Designation	A-1	--	A-3	--	A-1pl	--	A-3pl	--	A-5	--	A-7.5	--	A-10	--
		Minimum	7' - 3.40"	--	7' - 3.40"	--	2' - 5.53"	--	4' - 1.22"	--	4' - 1.22"	--	4' - 1.22"	--	4' - 11.06"	--
		Preferred	7' - 3.40"	--	7' - 3.40"	--	2' - 5.53"	--	4' - 1.22"	--	4' - 1.22"	--	4' - 1.22"	--	4' - 11.06"	--
	FROM PLUMMET BACK TO POOL WALL FOR PEDESTALS AND METAL STANDS	Minimum	4' - 11.06"	--	4' - 11.06"	--	--	--	--	--	--	--	--	--	--	--
		Preferred	5' - 10.87"	--	5' - 10.87"	--	--	--	--	--	--	--	--	--	--	--
	A/A	FROM PLUMMET BACK TO PLATFORM PLUMMET DIRECTLY BELOW	Designation	--	--	--	--	--	--	--	--	A/A 5/1		A/A 7.5/3.1		A/A 10/5.3.1
Minimum			--	--	--	--	--	--	--	--	2' - 5.53"	--	2' - 5.53"	--	2' - 5.53"	--
Preferred			--	--	--	--	--	--	--	--	4' - 1.22"	--	4' - 1.22"	--	4' - 1.22"	--
B	FROM PLUMMET TO POOL WALL AT SIDE	Designation	B-1	--	B-3	--	B-1pl	--	B-3pl	--	B-5	--	B-7.5	--	B-10	--
		Minimum	8' - 2.43"	--	11' - 5.80"	--	8' - 2.43"	--	9' - 10.11"	--	13' - 1.48"	--	14' - 9.17"	--	18' - 10.38"	--
		Preferred	8' - 2.43"	--	11' - 5.80"	--	11' - 5.80"	--	11' - 9.74"	--	14' - 9.17"	--	15' - 7.01"	--	18' - 10.38"	--
C	FROM PLUMMET TO ADJACENT PLUMMET	Designation	C1-1		C-3-3.3-1		C1-1pl		C3-3pl.1pl		C5-3.5-1		C7.5-5.3.1		C-10-7.5.5.3.1	
		Minimum	6' - 6.74"	--	7' - 2.62"	--	6' - 0.84"	--	7' - 2.62" *	--	9' - 4.21" *	--	9' - 0.27" *	--	9' - 10.11" *	--

		Preferred	6' - 6.74"	--	8' - 6.37"	--	7' - 0.65"	--	7' - 8.52" *	--	9' - 4.21" *	--	9' - 0.27" *	--	9' - 10.11" *	--
D	FROM PLUMMET TO POOL WALL AHEAD	Designation	D-1		D-3	--	D-1pl	--	D-3pl	--	D-5	--	D-7.5	--	D-10	--
		Minimum	29' - 6.33"	--	33' - 7.55"	--	26' - 2.96"	--	31' - 2.02"	--	33' - 7.55"	--	36' - 1.07"	--	44' - 3.50"	--
		Preferred	29' - 6.33"	--	33' - 7.55"	--	26' - 2.96"	--	31' - 2.02"	--	33' - 7.55"	--	36' - 1.07"	--	44' - 3.50"	--
E	ON PLUMMET FROM BOARD TO CEILING	Designation	--	E-1	--	E-3	--	E-1pl	--	E-3pl	--	E-5	--	E-7.5	--	E-10
		Minimum	--	16' - 4.85"	--	16' - 4.85"	--	10' - 7.96"	--	10' - 7.96"	--	10' - 7.96"	--	10' - 7.96"	--	13' - 1.48"
		Preferred	--	16' - 4.85"	--	16' - 4.85"	--	11' - 5.80"	--	11' - 5.80"	--	11' - 5.80"	--	11' - 5.80"	--	16' - 4.85"
F	CLEAR OVERHEAD BEHIND AND EACH SIDE OF PLUMMET	Designation	F-1	E-1	F-3	E-3	F-1pl	E-1pl	F-3pl	E-3pl	F-5	E-5	F-7.5	E-7.5	F-10	E-10
		Minimum	8' - 2.43"	16' - 4.85"	8' - 2.43"	16' - 4.85"	9' - 0.27"	10' - 7.96"	9' - 0.27"	10' - 7.96"	9' - 0.27"	10' - 7.96"	9' - 0.27"	10' - 7.96"	9' - 0.27"	13' - 1.48"
		Preferred	8' - 2.43"	16' - 4.85"	8' - 2.43"	16' - 4.85"	9' - 0.27"	11' - 5.80"	9' - 0.27"	11' - 5.80"	9' - 0.27"	11' - 5.80"	9' - 0.27"	11' - 5.80"	9' - 0.27"	16' - 4.85"
G	CLEAR OVERHEAD AHEAD OF PLUMMET	Designation	G-1	E-1	G-3	E-3	G-1pl	E-1pl	G-3pl	E-3pl	G-5	E-5	G-7.5	E-7.5	G-10	E-10
		Minimum	16' - 4.85"	16' - 4.85"	16' - 4.85"	16' - 4.85"	16' - 4.85"	10' - 7.96"	16' - 4.85"	10' - 7.96"	16' - 4.85"	10' - 7.96"	16' - 4.85"	10' - 7.96"	19' - 8.22"	13' - 1.48"
		Preferred	16' - 4.85"	16' - 4.85"	16' - 4.85"	16' - 4.85"	16' - 4.85"	11' - 5.80"	16' - 4.85"	11' - 5.80"	16' - 4.85"	11' - 5.80"	16' - 4.85"	11' - 5.80"	19' - 8.22"	16' - 4.85"
H	DEPTH OF WATER AT PLUMMET	Designation	--	H-1	--	H-3	--	H-1pl	--	H-3pl	--	H-5	--	H-7.5	--	H-10
		Minimum	--	11'	--	12'	--	10' - 5.99"	--	11' - 5.80"	--	12'	--	13' - 5.42"	--	14' - 9.17"
		Preferred	--	11' - 5.80"	--	12' - 5.61"	--	10' - 9.92"	--	11' - 9.74"	--	12' - 5.61"	--	14' - 9.17"	--	16' - 4.85"
J K	DISTANCE AND DEPTH AHEAD OF PLUMMET FOR ALL STANDS	Designation	J-1	K-1	J-3	K-3	J-1pl	K-1pl	J-3pl	K-3pl	J-5	K-5	J-7.5	K-7.5	J-10	K-10
		Minimum	16' - 4.85"	10' - 9.92"	19' - 8.22"	11' - 9.74"	14' - 9.17"	10' - 2.05"	18' - 0.54"	11' - 1.86"	19' - 8.22"	11' - 9.74"	26' - 2.96"	13' - 1.48"	36' - 1.07"	13' - 11.33"
		Preferred	16' - 4.85"	11' - 1.86"	19' - 8.22"	12' - 1.67"	14' - 9.17"	10' - 5.99"	18' - 0.54"	11' - 5.80"	19' - 8.22"	12' - 1.67"	26' - 2.96"	14' - 5.23"	36' - 1.07"	15' - 7.01"
L M	DISTANCE AND DEPTH EACH SIDE OF PLUMMET	Designation	L-1	M-1	L-3	M-3	L-1pl	M-1pl	L-3pl	M-3pl	L-5	M-5	L-7.5	M-7.5	L-10	M-10
		Minimum	4' - 11.06"	10' - 9.92"	6' - 6.74"	11' - 9.74"	4' - 7.12"	10' - 2.05"	5' - 10.87"	11' - 1.86"	9' - 10.11"	11' - 9.74"	12' - 3.64"	13' - 1.48"	14' - 9.17"	13' - 11.33"
		Preferred	6' - 6.74"	11' - 1.86"	8' - 2.43"	12' - 1.67"	6' - 2.81"	10' - 5.99"	7' - 6.55"	11' - 5.80"	11' - 5.80"	12' - 1.67"	14' - 9.17"	14' - 5.23"	17' - 2.70"	15' - 7.01"
N	MAXIMUM SLOPE TO REDUCE DIMENSION BEYOND MINIMUM REQUIREMENTS FOR POOL DEPTH and CEILING HEIGHT IS 30 DEGREES.															

Note 1: The leading edge of the concrete platforms for springboards must be at least constructed to be directly above the pool wall or beyond.

Note 2: All platforms must project 2'-5.53" (0.75 meters) beyond any platform directly below.

Note 3: Dimensions B (plummet to pool wall at side) and C (plummet to adjacent plummet) apply to Platforms with widths as detailed. If Platform widths are increased then B and C are to be increased by half the additional width(s).

\* Note 4: The minimum distance between adjacent platforms must be at least 0'-9.84" (0.25 meters).

Note 5: The 10 Metre Platform must project at least 0'-9.84" (0.25 meters) beyond any adjacent platform.  
 Note 6: In dimension H 'Dept of Water at Plummet', USA DIVING has approved 11' for 1m springboard and 12' for 3m springboard and 5m platform as the minimum depth.

**TABLE 402.12(4)**  
**MINIMUM DIVING WATER ENVELOPES FOR CLASS A POOLS FOR USA DIVING-SANCTIONED DIVING EVENTS**  
 (feet-fractional inches)  
 (SEE FIGURE 401.12(2))

FINA DIVING WATER ENVELOPE CONVERSIONS TO U.S. DIMENSIONS FOR NEW USA DIVING FACILITIES

FROM FINA HANDBOOK 2013-2017

USA DIVING Dimensions for Diving Facilities		SPRINGBOARD				PLATFORM										
		1 meter		3 meters		1 meter		3 meters		5 meters		7.5 meters		10 meters		
For pools constructed after September 2013 Extrapolated from FINA HANDBOOK 2013-2017 (see F.R. 5.3.1)	Length	15' - 11"		15' - 11"		16' - 4 7/8"		16' - 4 7/8"		19' - 8 1/4"		19' - 8 1/4"		19' - 8 1/4"		
	Width	1' - 7 3/4"		1' - 7 3/4"		3' - 3 3/8" minimum 9' - 6 3/16" preferred		3' - 3 3/8" minimum 9' - 6 3/16" preferred		9' - 6 3/16"		6' - 6 3/4"		9' - 10 1/8"		
	Height	3' - 3 3/8"		9' - 10 1/8"		1' - 11 11/16" minimum 3' - 3 3/8" preferred		8' - 6 3/8" minimum 9' - 10 1/8" preferred		16' - 4 7/8"		24' - 7 5/16"		32' - 9 3/4"		
		Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	
A	FROM PLUMMET BACK TO POOL WALL FOR CONCRETE PLATFORM	Designation	A-1	--	A-3	--	A-1pl	--	A-3pl	--	A-5		A-7.5		A-10	
	Minimum	7' - 3 7/16"	--	7' - 3 7/16"	--	2' - 5 9/16"	--	4' - 1 1/4"	--	4' - 1 1/4"		4' - 1 1/4"		4' - 11 1/16"		
	Preferred	7' - 3 7/16"	--	7' - 3 7/16"	--	2' - 5 9/16"	--	4' - 1 1/4"	--	4' - 1 1/4"		4' - 1 1/4"		4' - 11 1/16"		
	FROM PLUMMET BACK TO POOL WALL FOR PEDESTALS AND METAL STANDS	Minimum	4' - 11 1/16"	--	4' - 11 1/16"	--	--	--	--	--	--					
	Preferred	5' - 10 7/8"	--	5' - 10 7/8"	--	--	--	--	--	--						
A/A	FROM PLUMMET BACK TO PLATFORM PLUMMET DIRECTLY BELOW	Designation									A/A5/1		A/A7.5/3.1		A/A 10/5.3.1	
	Minimum										2' - 5 9/16"		2' - 5 9/16"		2' - 5 9/16"	
	Preferred										4' - 1 1/4"		4' - 1 1/4"		4' - 1 1/4"	
B	FROM PLUMMET TO POOL WALL AT SIDE	Designation	B-1		B-3		B-1pl		B-3pl		B-5		B-7.5		B-10	
	Minimum	8' - 2 7/16"		11' - 5 13/16"		8' - 2 7/16"		9' - 10 1/8"		13' - 1 1/2"		14' - 9 3/16"		18' - 10 7/16"		
	Preferred	8' - 2 7/16"		11' - 5 13/16"		11' - 5 13/16"		11' - 9 3/4"		14' - 9 3/16"		15' - 7 1/16"		18' - 10 7/16"		
C	FROM PLUMMET TO ADJACENT	Designation	C1-1		C-3-3.3-1		C1-1pl		C3-3pl.1pl		C5-3.5-1		C7.5-5.3.1		C-10-7.5.5.3.1	
	Minimum	6' - 6 3/4"		7' - 2 5/8"		6' - 0 7/8"		7' - 2 5/8" *		9' - 4 1/4" *		9' - 0 5/16" *		9' - 10 1/8" *		

	PLUMMET	Preferred	6' - 6 3/4"		8' - 6 3/8"		7' - 0 11/16"		7' - 8 9/16"		9' - 4 1/4"		9' - 0 5/16"		9' - 10 1/8"	
D	FROM PLUMMET TO POOL WALL AHEAD	Designation	D-1		D-3		D-1pl		D-3pl		D-5		D-7.5		D-10	
		Minimum	29' - 6 3/8"		33' - 7 9/16"		26' - 3"		31' - 2 1/16"		33' - 7 9/16"		36' - 1 1/8"		44' - 3 1/2"	
		Preferred	29' - 6 3/8"		33' - 7 9/16"		26' - 3"		31' - 2 1/16"		33' - 7 9/16"		36' - 1 1/8"		44' - 3 1/2"	
E	ON PLUMMET, FROM BOARD TO CEILING	Designation		E-1		E-3		E-1pl		E-3pl		E-5		E-7.5	E-10	
		Minimum		16' - 4 7/8"		16' - 4 7/8"		10' - 8"		10' - 8"		10' - 8"		10' - 8"		13' - 1 1/2"
		Preferred		16' - 4 7/8"		16' - 4 7/8"		11' - 5 13/16"		11' - 5 13/16"		11' - 5 13/16"		11' - 5 13/16"		16' - 4 7/8"
E	CLEAR OVERHEAD BEHIND AND EACH SIDE OF PLUMMET	Designation	F-1	E-1	F-3	E-3	F-1pl	E-1pl	F-3pl	E-3pl	F-5	E-5	F-7.5	E-7.5	F-10	E-10
		Minimum	8' - 2 7/16"	16' - 4 7/8"	8' - 2 7/16"	16' - 4 7/8"	9' - 0 5/16"	10' - 8"	9' - 0 5/16"	10' - 8"	9' - 0 5/16"	10' - 8"	9' - 0 5/16"	10' - 8"	9' - 0 5/16"	13' - 1 1/2"
		Preferred	8' - 2 7/16"	16' - 4 7/8"	8' - 2 7/16"	16' - 4 7/8"	9' - 0 5/16"	11' - 5 13/16"	9' - 0 5/16"	11' - 5 13/16"	9' - 0 5/16"	11' - 5 13/16"	9' - 0 5/16"	11' - 5 13/16"	9' - 0 5/16"	16' - 4 7/8"
G	CLEAR OVERHEAD AHEAD OF PLUMMET	Designation	G-1	E-1	G-3	E-3	G-1pl	E-1pl	G-3pl	E-3pl	G-5	E-5	G-7.5	E-7.5	G-10	E-10
		Minimum	16' - 4 7/8"	16' - 4 7/8"	16' - 4 7/8"	16' - 4 7/8"	16' - 4 7/8"	10' - 8"	16' - 4 7/8"	10' - 8"	16' - 4 7/8"	10' - 8"	16' - 4 7/8"	10' - 8"	19' - 8 1/4"	13' - 1 1/2"
		Preferred	16' - 4 7/8"	16' - 4 7/8"	16' - 4 7/8"	16' - 4 7/8"	16' - 4 7/8"	11' - 5 13/16"	16' - 4 7/8"	11' - 5 13/16"	16' - 4 7/8"	11' - 5 13/16"	16' - 4 7/8"	11' - 5 13/16"	19' - 8 1/4"	16' - 4 7/8"
H	DEPTH OF WATER AT PLUMMET <i>See Note 6</i>	Designation		H-1		H-3		H-1pl		H-3pl		H-5		H-7.5	H-10	
		Minimum		11'		12'		10' - 6"		11' - 5 13/16"		12'		13' - 5 7/16"	14' - 9 3/16"	
		Preferred		11' - 5 13/16"		12' - 5 5/8"		10' - 9 15/16"		11' - 9 3/4"		12' - 5 5/8"		14' - 9 3/16"	16' - 4 7/8"	
J K	DISTANCE AND DEPTH AHEAD OF PLUMMET FOR ALL STANDS	Designation	J-1	K-1	J-3	K-3	J-1pl	K-1pl	J-3pl	K-3pl	J-5	K-5	J-7.5	K-7.5	J-10	K-10
		Minimum	16' - 4 7/8"	10' - 9 15/16"	19' - 8 1/4"	11' - 9 3/4"	14' - 9 3/16"	10' - 2 1/16"	18' - 0 9/16"	11' - 1 7/8"	19' - 8 1/4"	11' - 9 3/4"	26' - 3"	13' - 1 1/2"	36' - 1 1/8"	13' - 11 3/8"
		Preferred	16' - 4 7/8"	11' - 1 7/8"	19' - 8 1/4"	12' - 1 11/16"	14' - 9 3/16"	10' - 6"	18' - 0 9/16"	11' - 5 13/16"	19' - 8 1/4"	12' - 1 11/16"	26' - 3"	14' - 5 1/4"	36' - 1 1/8"	15' - 7 1/16"
L M	DISTANCE AND DEPTH EACH SIDE OF PLUMMET	Designation	L-1	M-1	L-3	M-3	L-1pl	M-1pl	L-3pl	M-3pl	L-5	M-5	L-7.5	M-7.5	L-10	M-10
		Minimum	4' - 11 1/16"	10' - 9 15/16"	6' - 6 3/4"	11' - 9 3/4"	4' - 7 1/8"	10' - 2 1/16"	5' - 10 7/8"	11' - 1 7/8"	9' - 10 1/8"	11' - 9 3/4"	12' - 3 11/16"	13' - 1 1/2"	14' - 9 3/16"	13' - 11 3/8"
		Preferred	6' - 6 3/4"	11' - 1 7/8"	8' - 2 7/16"	12' - 1 11/16"	6' - 2 13/16"	10' - 6"	7' - 6 9/16"	11' - 5 13/16"	11' - 5 13/16"	12' - 1 11/16"	14' - 9 3/16"	14' - 5 1/4"	17' - 2 3/4"	15' - 7 1/16"
N	MAXIMUM SLOPE TO REDUCE DIMENSION BEYOND MINIMUM REQUIREMENTS FOR POOL DEPTH and CEILING HEIGHT IS 30 DEGREES.															
-																

**TABLE 402.12(5)**  
**MINIMUM DIVING ENVELOPES FOR CLASS A POOLS FOR NCAA-SANCTIONED DIVING EVENTS**  
**(feet-inches)**

**(SEE FIGURE 402.12(2))**

**FINA DIVING WATER ENVELOPE CONVERSIONS TO U.S. DIMENSIONS FOR NEW NCAA DIVING FACILITIES**  
**FROM FINA HANDBOOK 2013 - 2017**

NCAA Recommended Dimensions for Diving Facilities		Dimensions are In Feet	SPRINGBOARD				PLATFORM										
			1 meter		3 meters		1 meter		3 meters		5 meters		7.5 meters		10 meters		
LENGTH		16'	16'		16' - 5"		16' - 5"		20'		20'		20'				
WIDTH		1' - 8"	1' - 8"		3' - 4" minimum 9' - 7" preferred		3' - 4" minimum 9' - 7" preferred		9' - 7"		6' - 7" minimum		9' - 10"				
Revised October 1, 2013		HEIGHT	3' - 4"		9' - 11"		2' minimum 3' - 4" preferred		8' - 7" minimum 9' - 11" preferred		16' - 5"		24' - 8"		32' - 10"		
			Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal	Vertical	
A	FROM PLUMMET BACK TO POOL WALL FOR CONCRETE PLATFORM	Designation	A-1		A-3		A-1pl		A-3pl		A-5		A-7.5		A-10		
		Minimum	7' - 4"		7' - 4"		2' - 6"		4' - 2"		4' - 2"		4' - 2"		5'		
		Preferred	7' - 4"		7' - 4"		2' - 6"		4' - 2"		4' - 2"		4' - 2"		5'		
	FROM PLUMMET BACK TO POOL WALL FOR PEDESTALS AND METAL STANDS	Minimum	5'		5'												
		Preferred	5' - 11"		5' - 11"												
A/A	From plummets BACK TO PLATFORM plummets directly below	Designation									A/A5/1		A/A7.5/3,1		A/A 10/5,3,1		
		Minimum										2' - 6"		2' - 6"		2' - 6"	
		Preferred										4' - 2"		4' - 2"		4' - 2"	
B	From plummets to POOL WALL AT SIDE	Designation	B-1		B-3		B-1pl		B-3pl		B-5		B-7.5		B-10		
		Minimum	8' - 3"		11' - 6"		8' - 3"		9' - 11"		3' - 1"		14' - 10"		18' - 11"		
		Preferred	8' - 3"		11' - 6"		11' - 6"		11' - 10"		14' - 10"		15' - 8"		18' - 11"		
C	From plummets to ADJACENT PLUMMET See Note 1	Designation	C1-1		C-3-3,3-1		C1-1pl		C3-3pl,1pl		C5-3,5-1		C7.5-5,3,1		C-10-7.5,5,3,1		
		Minimum	6' - 7"		7' - 3"		6' - 1"		7' - 3" *		9' - 5" *		9' - 1"		9' - 11" *		
		Preferred	6' - 7"		8' - 7"		7' - 1"		7' - 9" *		9' - 5" *		9' - 1"		9' - 11" *		
D	From plummets to POOL WALL AHEAD	Designation	D-1		D-3		D-1pl		D-3pl		D-5		D-7.5		D-10		
		Minimum	29' - 7"		33' - 8"		26' - 3"		31' - 3"		33' - 8"		36' - 2"		44' - 4"		
		Preferred	29' - 7"		33' - 8"		26' - 3"		31' - 3"		33' - 8"		36' - 2"		44' - 4"		
E	On plummets, from BOARD TO CEILING	Designation		E-1		E-3		E-1pl		E-3pl		E-5		E-7.5		E-10	
		Minimum		16' - 5"		16' - 5"		10' - 8"		10' - 8"		10' - 8"		10' - 8"		13' - 2"	
		Preferred		16' - 5"		16' - 5"		11' - 6"		11' - 6"		11' - 6"		11' - 6"		16' - 5"	
F	CLEAR OVERHEAD behind and each side of plummets	Designation	F-1	E-1	F-3	E-3	F-1pl	E-1pl	F-3pl	E-3pl	F-5	E-5	F-7.5	E-7.5	F-10	E-10	
		Minimum	8' - 3"	16' - 5"	8' - 3"	16' - 5"	9' - 1"	10' - 8"	9' - 1"	10' - 8"	9' - 1"	10' - 8"	9' - 1"	10' - 8"	9' - 1"	13' - 2"	
		Preferred	8' - 3"	16' - 5"	8' - 3"	16' - 5"	9' - 1"	11' - 6"	9' - 1"	11' - 6"	9' - 1"	11' - 6"	9' - 1"	11' - 6"	9' - 1"	16' - 5"	

G	CLEAR OVERHEAD ahead of plummet	Designation	G-1	E-1	G-3	E-3	G-1pl	E-1pl	G-3pl	E-3pl	G-5	E-5	G-7.5	E-7.5	G-10	E-10
		Minimum	16' - 5"	16' - 5"	16' - 5"	16' - 5"	16' - 5"	10' - 8"	16' - 5"	10' - 8"	16' - 5"	10' - 8"	16' - 5"	10' - 8"	19' - 9"	13' - 2"
		Preferred	16' - 5"	16' - 5"	16' - 5"	16' - 5"	16' - 5"	11' - 6"	16' - 5"	11' - 6"	16' - 5"	11' - 6"	16' - 5"	11' - 6"	19' - 9"	16' - 5"
H	DEPTH OF WATER at plummet (minimum required)	Designation		H-1		H-3		H-1pl		H-3pl		H-5		H-7.5		H-10
		Minimum		11' - 2"		12' - 2"		10' - 6"		11' - 6"		12' - 2"		13' - 6"		14' - 10"
		Preferred		11' - 6"		12' - 6"		10' - 10"		11' - 10"		12' - 6"		14' - 10"		16' - 5"
J K	DISTANCE AND DEPTH ahead of plummet	Designation	J-1	K-1	J-3	K-3	J-1pl	K-1pl	J-3pl	K-3pl	J-5	K-5	J-7.5	K-7.5	J-10	K-10
		Minimum	16' - 5"	10' - 10"	19' - 9"	11' - 10"	14' - 10"	10' - 3"	18' - 1"	11' - 2"	19' - 9"	11' - 10"	26' - 3"	13' - 2"	36' - 2"	14'
		Preferred	16' - 5"	11' - 2"	19' - 9"	12' - 2"	14' - 10"	10' - 6"	18' - 1"	11' - 6"	19' - 9"	12' - 9"	26' - 3"	14' - 6"	36' - 2"	15' - 8"
L M	DISTANCE AND DEPTH each side of plummet	Designation	L-1	M-1	L-3	M-3	L-1pl	M-1pl	L-3pl	M-3pl	L-5	M-5	L-7.5	M-7.5	L-10	M-10
		Minimum	5'	10' - 10"	6' - 7"	11' - 10"	4' - 8"	10' - 3"	5' - 11"	11' - 2"	9' - 11"	11' - 10"	12' - 4"	13' - 2"	14' - 10"	14'
		Preferred	6' - 7"	11' - 2"	8' - 3"	12' - 2"	6' - 3"	10' - 6"	7' - 7"	11' - 6"	11' - 6"	12' - 2"	14' - 10"	14' - 6"	17' - 3"	15' - 8"
N	MAXIMUM SLOPE TO REDUCE DIMENSION beyond full requirements	Pool depth Ceiling Ht	30 degrees 30 degrees	<p>Note 1: Dimensions C (plummet to adjacent plummet) apply for platforms with width as detailed. For wider platforms increase C by half the additional width(s).</p> <p>Note 2: All dimensions rounded up, even if only fractionally greater than the next lowest inch.</p>												

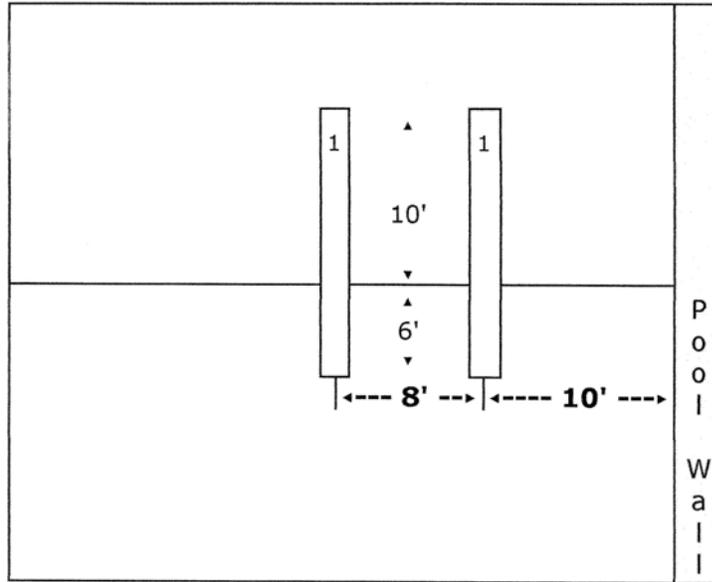
**TABLE 402.12(6)**  
**Matrix of Springboard Dimensions for High School Competitive Diving**

<b>NATIONAL FEDERATION OF STATE HIGH SCHOOL ASSOCIATIONS (NFHS)</b>				
	<b>Rule 9, Section 1, Article 1</b>	<b>Board Height</b>	<b>U.S. Dimensions</b>	<b>Metric Dimensions</b>
	<u>Length of Board</u>	<u>1m</u>	<u>16'</u>	<u>4.877m</u>
	<u>Width of Board</u>	<u>1m</u>	<u>20"</u>	<u>.508m</u>
a.	<u>End of springboard Back to Pool Wall</u>	<u>1m</u>	<u>6'</u>	<u>1.829m</u>
b.	<u>Center of board to center of another board</u>	<u>1m</u>	<u>8'</u>	<u>2.438m</u>
c.	<u>Center of board to pool side wall</u>	<u>1m</u>	<u>10'</u>	<u>3.048m</u>
d.	<u>End of springboard to forward pool wall</u>	<u>1m</u>	<u>29'</u>	<u>8.839m</u>
e.	<u>Top of springboard to ceiling overhead</u>	<u>1m</u>	<u>16'</u>	<u>4.877m</u>
f.	<u>Water depth at any point 2' to 5' in front of the end of the board, must be 12' (3.658m) or more, except for pools constructed prior to January 1987, where water depth 2 to 5 feet in front of the end of the board must be a minimum of 10 feet (3.045m).</u>	<u>1m</u>	<u>12' /10'</u>	<u>3.658 / 3.048m</u>

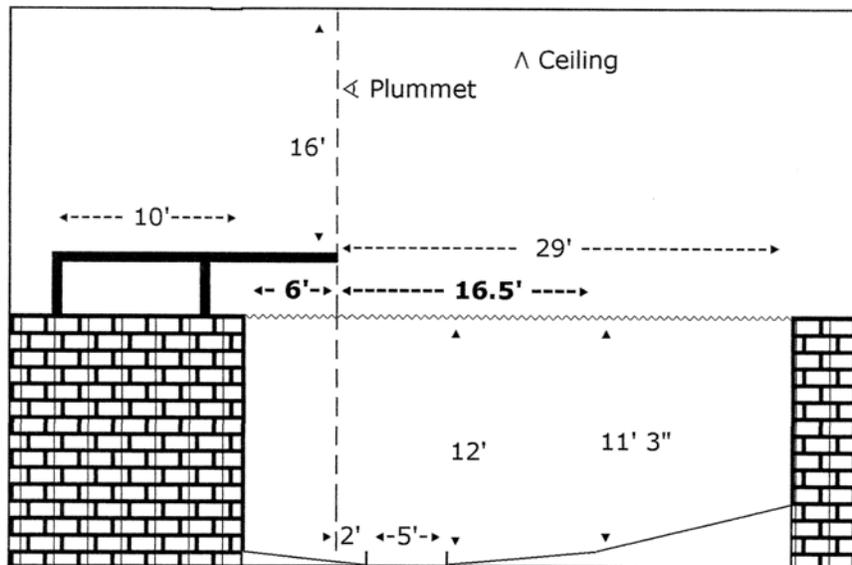
g.	Maximum depth reduction rate of diving pools which do not exceed minimum depth requirement shall be 6 1/4% for a distance of 16.5' (5.0m) forward (6.096m) from the end of the board and 6' (1.829m) back and to the sides. Deeper pools may have proportionally steeper depth reduction rates.	1m	..	..
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FIGURE [Add # Here]  
 FIGURE FOR TABLE 402.12(6)

**MINIMUM DIVING WATER ENVELOPE FOR HIGH SCHOOL POOLS WITH TWO 1 METER SPRINGBOARDS**



**Overhead View**



**Side View**

**Reason:** Architects, contractors, and zoning officers have often asked for a conversion table of the FINA dimensions to U. S. dimensions. The three national governing bodies have different diemnsional conversion standards. This information needs to be in this publication so that there is not misinterpretation of what is required in USA Diving, NCAA, and high school diving facilities to guard against a facility not being able to a sanction for competition.

**Cost Impact:** Will not increase the cost of construction  
These dimensions are already a requirement for competition pools and therefore, there is no change in the cost of construction. Having this information all in one place might eliminate rework costs and lower the cost of installing these pools.

SP25-15 : 402.1-LEAS5115

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### **Public Hearing Results**

**Committee Action:**

**Disapproved**

**Committee Reason:** The proponent wanted to present a floor modification to eliminate much of the proposal, however, the modification was ruled out of order by the committee chair. Therefore, the committee did not want to consider the proposal as submitted as the proponent wanted to make major changes.

**Assembly Action :**

None

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### **Individual Consideration Agenda**

**Public Comment 1:**

Proponent : **Jennifer Hatfield, J. Hatfield & Associates, PL, representing Association of Pool & Spa Professionals (jhatfield@apsp.org) requests Approve as Modified by this Public Comment.**

**Replace Proposal as Follows:**

**2015 International Swimming Pool and Spa Code**

**402.2 Manufactured and fabricated diving equipment.** Manufactured and fabricated diving equipment shall be in accordance with ~~Section 808~~ this section and shall be designed for swimming pool use.

**402.3 Installation.** The installation of manufactured diving equipment shall be in accordance with Sections 402.3 through 402-12 402.14. Manufactured diving equipment shall be located in the deep area of the pool so as to provide the minimum dimensions shown in Table 402.12 and shall be installed in accordance with the manufacturer's instructions. Installation and use instructions for manufactured diving equipment shall be provided by the manufacturer and shall specify the minimum water dimensions required for each diving board and diving stand combination. The manufacturer's instructions shall refer to the water envelope type by dimensionally relating their products to Point A on the water envelopes shown in Table 402.12. The diving board manufacturer shall specify which boards fit on the design pool geometry types as indicated in Table 402.12.

**Commenter's Reason:** This public comment removes most of the original proposal but leaves two changes that are necessary. First, it removes the reference to Section 808, which is residential inground pool diving requirements and correctly references the public pool diving section, which is Section 402 (the section being addressed in this public comment). Second, it changes 402.12 to 402.14 to capture all of the subsections within 402, to ensure that manufactured diving equipment is installed per all the requirements found within Section 402.

SP25-15

A	<u>WALL FOR CONCRETE PLATFORM</u>	<u>Preferred</u>	<u>7' - 3 7/16"</u>	--	<u>7' - 3 7/16"</u>	-
	<u>FROM PLUMMET BACK TO POOL WALL FOR PEDESTALS AND METAL STANDS</u>	<u>Minimum</u>	<u>4' - 11 1/16"</u>	--	<u>4' - 11 1/16"</u>	
		<u>Preferred</u>	<u>5' - 10 7/8"</u>	--	<u>5' - 10 7/8"</u>	
A/A	<u>FROM PLUMMET BACK TO PLATFORM PLUMMET DIRECTLY BELOW</u>	<u>Designation</u>				
		<u>Minimum</u>				
		<u>Preferred</u>				
B	<u>FROM PLUMMET TO POOL WALL AT SIDE</u>	<u>Designation</u>	<u>B-1</u>		<u>B-3</u>	
		<u>Minimum</u>	<u>8' - 2 7/16"</u>		<u>11' - 5 13/16"</u>	
		<u>Preferred</u>	<u>8' - 2 7/16"</u>		<u>11' - 5 13/16"</u>	
C	<u>FROM PLUMMET TO ADJACENT PLUMMET</u>	<u>Designation</u>	<u>C1-1</u>		<u>C-3-3,3-1</u>	
		<u>Minimum</u>	<u>6' - 6 3/4"</u>		<u>7' - 2 5/8"</u>	
		<u>Preferred</u>	<u>6' - 6 3/4"</u>		<u>8' - 6 3/8"</u>	

<u>D</u>	<u>FROM PLUMMET TO POOL WALL AHEAD</u>	<u>Designation</u>	<u>D-1</u>		<u>D-3</u>	
		<u>Minimum</u>	<u>29' - 6 3/8"</u>		<u>33' - 7 9/16"</u>	
		<u>Preferred</u>	<u>29' - 6 3/8"</u>		<u>33' - 7 9/16"</u>	
<u>E</u>	<u>ON PLUMMET, FROM BOARD TO CEILING</u>	<u>Designation</u>		<u>E-1</u>		<u>E</u>
		<u>Minimum</u>		<u>16' - 4 7/8"</u>		<u>16 7/8"</u>
		<u>Preferred</u>		<u>16' - 4 7/8"</u>		<u>16 7/8"</u>
<u>F</u>	<u>CLEAR OVERHEAD BEHIND AND EACH SIDE OF PLUMMET</u>	<u>Designation</u>	<u>F-1</u>	<u>E-1</u>	<u>F-3</u>	<u>E</u>
		<u>Minimum</u>	<u>8' - 2 7/16"</u>	<u>16' - 4 7/8"</u>	<u>8' - 2 7/16"</u>	<u>16 7/8"</u>
		<u>Preferred</u>	<u>8' - 2 7/16"</u>	<u>16' - 4 7/8"</u>	<u>8' - 2 7/16"</u>	<u>16 7/8"</u>
<u>G</u>	<u>CLEAR OVERHEAD AHEAD OF PLUMMET</u>	<u>Designation</u>	<u>G-1</u>	<u>E-1</u>	<u>G-3</u>	<u>E</u>
		<u>Minimum</u>	<u>16' - 4 7/8"</u>	<u>16' - 4 7/8"</u>	<u>16' - 4 7/8"</u>	<u>16 7/8"</u>
		<u>Preferred</u>	<u>16' - 4 7/8"</u>	<u>16' - 4 7/8"</u>	<u>16' - 4 7/8"</u>	<u>16 7/8"</u>
		<u>Designation</u>		<u>H-1</u>		<u>H</u>

<u>H</u>	<u>DEPTH OF WATER AT PLUMMET</u> <i>See Note 6</i>	<u>Minimum</u>		<u>11'</u>		<u>1</u>
		<u>Preferred</u>		<u>11' - 5</u> <u>13/16"</u>		<u>12</u> <u>5</u>
<u>J</u> <u>K</u>	<u>DISTANCE AND DEPTH AHEAD OF PLUMMET FOR ALL STANDS</u>	<u>Designation</u>	<u>J-1</u>	<u>K-1</u>	<u>J-3</u>	<u>K</u>
		<u>Minimum</u>	<u>16' - 4</u> <u>7/8"</u>	<u>10' - 9</u> <u>15/16"</u>	<u>19' - 8</u> <u>1/4"</u>	<u>11</u> <u>3</u>
		<u>Preferred</u>	<u>16' - 4</u> <u>7/8"</u>	<u>11' - 1</u> <u>7/8"</u>	<u>19' - 8</u> <u>1/4"</u>	<u>12</u> <u>11</u>
<u>L</u> <u>M</u>	<u>DISTANCE AND DEPTH EACH SIDE OF PLUMMET</u>	<u>Designation</u>	<u>L-1</u>	<u>M-1</u>	<u>L-3</u>	<u>M</u>
		<u>Minimum</u>	<u>4' - 11</u> <u>1/16"</u>	<u>10' - 9</u> <u>15/16"</u>	<u>6' - 6</u> <u>3/4"</u>	<u>11</u> <u>3</u>
		<u>Preferred</u>	<u>6' - 6</u> <u>3/4"</u>	<u>11' - 1</u> <u>7/8"</u>	<u>8' - 2</u> <u>7/16"</u>	<u>12</u> <u>11</u>
<u>N</u>	<u>MAXIMUM SLOPE TO REDUCE DIMENSION BEYOND MINIMUM REQUIREM</u>					
-						

**TABLE 402.12(5)**  
**MINIMUM DIVING ENVELOPES FOR CLASS A POOLS FOR NCAA-**  
**SANCTIONED DIVING EVENTS**  
**(feet-inches)**

**(SEE FIGURE 402.12(2))**

**FINA DIVING WATER ENVELOPE CONVERSIONS TO U.S. DIMENSIONS FOR**  
**NEW NCAA DIVING FACILITIES**  
**FROM FINA HANDBOOK 2013 - 2017**

<b>NCAA Recommended Dimensions for Diving Facilities</b>		<u>Dimensions are In Feet</u>	<b><u>SPRINGBOARD</u></b>			
			1 meter		3 meters	
		LENGTH	16'	16'		16'
WIDTH	1' - 8"	1' - 8"		1' - 8"		
<b><u>Revised October 1, 2013</u></b>		HEIGHT	3' - 4"		9' - 11"	
			Horizontal	Vertical	Horizontal	Vertical
A	FROM PLUMMET BACK TO POOL WALL FOR <b>CONCRETE PLATFORM</b>	Designation	A-1		A-3	
		Minimum	7' - 4"		7' - 4"	
		Preferred	7' - 4"		7' - 4"	
	FROM PLUMMET BACK TO POOL WALL FOR <b>PEDESTALS AND METAL STANDS</b>	Minimum	5'		5'	
Preferred		5' - 11"		5' - 11"		
A/A	From plummet BACK TO PLATFORM plummet directly below	Designation				
		Minimum				
		Preferred				

B	From plummet to POOL WALL AT SIDE	Designation	B-1		B-3	
		Minimum	8' - 3"		11' - 6"	
		Preferred	8' - 3"		11' - 6"	
C	From plummet to ADJACENT PLUMMET <i>See Note 1</i>	Designation	C1-1		C-3-3,3-1	
		Minimum	6' - 7"		7' - 3"	
		Preferred	6' - 7"		8' - 7"	
D	From plummet to POOL WALL AHEAD	Designation	D-1		D-3	
		Minimum	29' - 7"		33' - 8"	
		Preferred	29' - 7"		33' - 8"	
E	On plummet, from BOARD TO CEILING	Designation		E-1		E-3
		Minimum		16' - 5"		16' - 5"
		Preferred		16' - 5"		16' - 5"
F	CLEAR OVERHEAD behind and each side of plummet	Designation	F-1	E-1	F-3	E-3
		Minimum	8' - 3"	16' - 5"	8' - 3"	16' - 5"
		Preferred	8' - 3"	16' - 5"	8' - 3"	16' - 5"
G	CLEAR OVERHEAD ahead of plummet	Designation	G-1	E-1	G-3	E-3
		Minimum	16' - 5"	16' - 5"	16' - 5"	16' - 5"
		Preferred	16' - 5"	16' - 5"	16' - 5"	16' - 5"
	DEPTH OF	Designation		H-1		H-3

H	WATER at plummet (minimum required)	Minimum		11' - 2"		12' - 2"
		Preferred		11' - 6"		12' - 6"
J K	DISTANCE AND DEPTH ahead of plummet	Designation	J-1	K-1	J-3	K-3
		Minimum	16' - 5"	10' - 10"	19' - 9"	11' - 10"
		Preferred	16' - 5"	11' - 2"	19' - 9"	12' - 2"
L M	DISTANCE AND DEPTH each side of plummet	Designation	L-1	M-1	L-3	M-3
		Minimum	5'	10' - 10"	6' - 7"	11' - 10"
		Preferred	6' - 7"	11' - 2"	8' - 3"	12' - 2"
N	MAXIMUM SLOPE TO REDUCE DIMENSION beyond full requirements	Pool depth Ceiling Ht	30 degrees 30 degrees	Note 1: Dimensions C (plummet to additional width(s). Note 2: All dimensions rounded u		

**TABLE 402.12(6)**

**Matrix of Springboard Dimensions for High School Competitive Diving**

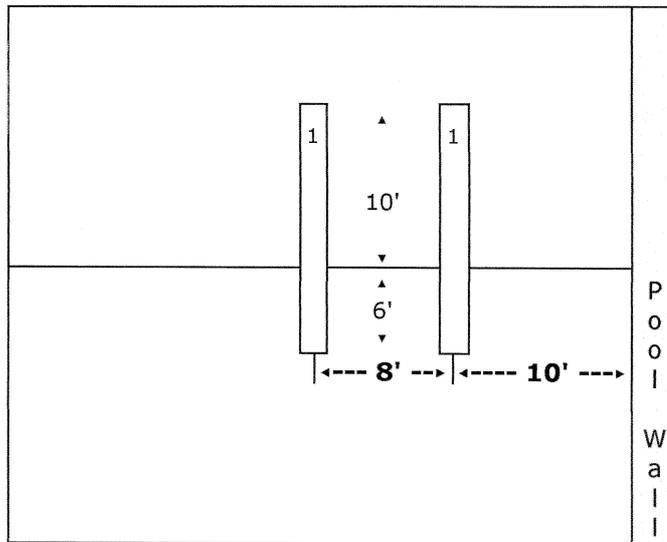
<b><u>NATIONAL FEDERATION OF STATE HIGH SCHOOL ASSOCIATIONS (NFHS)</u></b>				
	<b><u>Rule 9, Section 1, Article 1</u></b>	<b><u>Board Height</u></b>	<b><u>U.S Dimensions</u></b>	<b><u>Metric Dimensions</u></b>
	<u>Length of Board</u>	<u>1m</u>	<u>16'</u>	<u>4.877m</u>

	<u>Width of Board</u>	<u>1m</u>	<u>20"</u>	<u>.508m</u>
a.	<u>End of springboard Back to Pool Wall</u>	<u>1m</u>	<u>6'</u>	<u>1.829m</u>
b.	<u>Center of board to center of another board</u>	<u>1m</u>	<u>8'</u>	<u>2.438m</u>
c.	<u>Center of board to pool side wall</u>	<u>1m</u>	<u>10'</u>	<u>3.048m</u>
d.	<u>End of springboard to forward pool wall</u>	<u>1m</u>	<u>29'</u>	<u>8.839m</u>
e.	<u>Top of springboard to ceiling overhead</u>	<u>1m</u>	<u>16'</u>	<u>4.877m</u>
f.	<u>Water depth at any point 2' to 5' in front of the end of the board, must be 12' (3.658m) or more, except for pools constructed prior to January 1987, where water depth 2 to 5 feet in front of the end of the board must be a minimum of 10 feet (3.045m).</u>	<u>1m</u>	<u>12' /10'</u>	<u>3.658 / 3.048m</u>

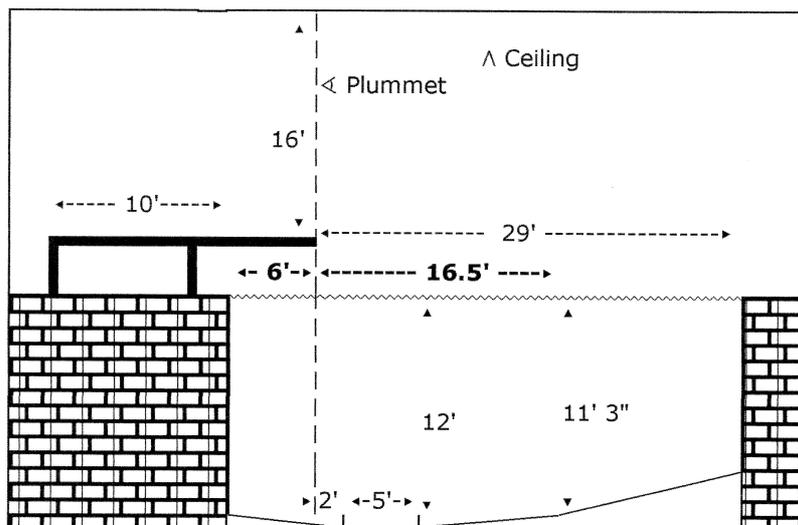
g.	<u>Maximum depth reduction rate of diving pools which do not exceed minimum depth requirement shall be 6 1/4% for a distance of 16.5' (5.0m) forward (6.096m) from the end of the board and 6' (1.829m) back and to the sides. Deeper pools may have proportionally steeper depth reduction rates.</u>	<u>1m</u>	<u>**</u>	<u>**</u>

**FIGURE [Add # Here]  
**FIGURE FOR TABLE 402.12(6)****

**MINIMUM DIVING WATER ENVELOPE FOR HIGH SCHOOL POOLS  
WITH TWO 1 METER SPRINGBOARDS**



**Overhead View**



**Side View**

**Reason:** Architects, contractors, and zoning officers have often asked for a conversion table of the FINA dimensions to U. S. dimensions. The three national governing bodies have different diemnsional conversion standards. This information needs to be in this publication so that there is not misinterpretation of what is required in USA Diving, NCAA, and high school diving facilities to guard against a facility not being able to a sanction for competition.

**Cost Impact:** Will not increase the cost of construction  
 These dimensions are already a requirement for competition pools and therefore, there is no change in the cost of construction. Having this information all in one place might eliminate rework costs and lower the cost of installing these pools.

## **Public Hearing Results**

**Committee Action:**

**Disapproved**

**Committee Reason:** The proponent wanted to present a floor modification to eliminate much of the proposal, however, the modification was ruled out of order by the committee chair. Therefore, the committee did not want to consider the proposal as submitted as the proponent wanted to make major changes.

**Assembly Action :**

**None**

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## **Individual Consideration Agenda**

### *Public Comment 1:*

**Proponent : Jennifer Hatfield, J. Hatfield & Associates, PL, representing Association of Pool & Spa Professionals (jhatfield@apsp.org) requests Approve as Modified by this Public Comment.**

**Replace Proposal as Follows:**

### **2015 International Swimming Pool and Spa Code**

#### **402.2 Manufactured and fabricated diving**

**equipment.** Manufactured and fabricated diving equipment shall be in accordance with ~~Section 808~~ this section and shall be designed for swimming pool use.

**402.3 Installation.** The installation of manufactured diving equipment shall be in accordance with Sections 402.3 through ~~402.12~~ 402.14. Manufactured diving equipment shall be located in the deep area of the pool so as to provide the minimum dimensions shown in Table 402.12 and shall be installed in accordance with the manufacturer's instructions. Installation and use instructions for manufactured diving equipment shall be provided by the manufacturer and shall specify the minimum water dimensions required for each diving board and diving stand combination. The manufacturer's instructions shall refer to the water envelope type by dimensionally relating their products to Point A on the water envelopes shown in Table 402.12. The diving board manufacturer shall specify which boards fit on the design pool geometry types as indicated in Table 402.12.

**Commenter's Reason:** This public comment removes most of the original proposal but leaves two changes that are necessary. First, it removes the reference to Section 808, which is residential inground pool diving requirements and correctly references the public pool diving section, which is Section 402 (the section being addressed in this public comment). Second, it changes 402.12 to 402.14 to capture all of the subsections within 402, to ensure that manufactured diving equipment is installed per all the requirements found within Section 402.

# SP30-15

## SECTION 612 (New)

### *Proposed Change as Submitted*

**Proponent :** Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

## 2015 International Swimming Pool and Spa Code

Add new text as follows:

### SECTION 612 SPRAY PADS

**612.1 General.** Spray pads shall comply with this section.

**612.2 Safety hazards.** Parts of the spray pad that can be accessed by the users of the spray pad shall be designed and constructed to not present safety hazards to the users.

**612.3 Walking surface at perimeter.** A walking surface of not less than 4 foot (1296 mm) in width shall be provided around the perimeter of the splash zone. The walking surface shall be sloped away from the splash zone. The drainage from the perimeter walking surface shall be directed to deck drains or other surface water disposal systems. Walking surfaces shall not drain to the surge basin for the spray pad.

**612.4 Splash zone.** The splash zone shall comply with Sections 612.4.2 through 612.4.5.

**612.4.1 Absence of standing water.** Surfaces in the splash zone shall be designed to not have standing water.

**612.4.2 Slope to drain.** The surfaces of the splash zone shall slope to drain water to the surge basin of the circulation system for the spray pad.

**612.4.3 Nozzles on walking surfaces.** Water nozzles that spray from walking surfaces shall be flush with those surfaces. Openings in such nozzles shall not exceed ½ inch (12.7 mm).

**612.4.4 Other nozzles.** Nozzles, other than those on walking surfaces, shall be designed to be clearly visible.

**612.4.5 Potable water for foggers and misters.** Foggers and misters that produce finely atomized water mists shall be supplied only with potable water. Foggers and misters shall not be supplied with water from the surge basin.

**612.5 Circulation system.** The circulation system shall consist of the equipment covered in Sections 612.5.1 through 612.5.3

**612.5.1 Catch screen.** A catch screen or basket shall be provided for splash zone drainage piping connections to the surge basin. The screen or basket shall be designed to prevent larger debris from entering the surge basin.

### **612.5.2 Surge basin.**

A surge basin shall be provided having a capacity of not less than 4000 gallons or the number of gallons that can be pumped in one minute by the combination of all spray pad and recirculation pumps, whichever is greater.

**612.5.2.1 Basin materials and design.** The basin shall be constructed of materials which are inert, corrosion resistant and non toxic. Basins shall be constructed of concrete, fiberglass, high density polyethylene, stainless steel or other approved materials. The design of basins shall anticipate all anticipated loadings under full and empty conditions. Such loading conditions shall be determined by a design professional who has experience with the design of public pools.

**612.5.2.2 Basin access.** The basin shall be designed for access for cleaning and inspection. Not less than one access of opening of not less than 3 foot by 3 foot (914mm by 914 mm) shall be provided for placement of a ladder into the basin. All access opening covers shall be locked or shall require tools to open.

### **612.5.2.3 Circulation pump.**

The circulation pump shall be sized to turnover the surge basin capacity in ½ hour or less. The intake for the pump shall be located at the lowest elevation of the surge basin. Where separate pumps are installed for the circulation system and the spray nozzles system, the suction intakes for those pumps shall be located on opposite ends of the basin.

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**612.5.2.4 Spray nozzles and water feature pumps.** Spray nozzles and water feature systems shall be supplied water from the discharge of the recirculation pump or from separate pumps. Where separate pumps are installed for the recirculation system and a spray nozzles or water feature system, the suction intakes for spray nozzles and water feature pump systems shall be located adjacent to the recirculation pump discharge point in the basin.

**612.5.2.5 Pump control.** The controls for spray nozzles and water feature pump systems shall prevent operation of those pumps when the recirculation pump is not operating.

**612.5.2.6 Disinfection system.** In addition to filtration and sanitizing equipment required by Chapter 3 and this chapter, the recirculation system shall be equipped with an ultraviolet light disinfection unit. The unit shall listed and labeled to NSF 50. Where a method other than ultraviolet disinfection is being considered as an alternative method in accordance with Section 104.9, such method shall provide a reduction in the level of cryptosporidium that is equal to or greater than the ultraviolet light method. The alternative method's cryptosporidium reduction capability shall be determined by a nationally recognized testing laboratory.

### **612.5.2.6.1 UV unit location.**

The ultraviolet light disinfection unit shall be located on the recirculation system and upstream of any water connection for, or separate pump intake for, supplying spray nozzles or water features.

**612.5.2.6.2 UV intensity meter.** The chamber of the ultraviolet light disinfection unit shall be equipped with a ultraviolet light intensity meter that is located opposite and at the greatest water depth from the ultraviolet light

source. The meter shall be filtered to restrict its sensitivity to the disinfection spectrum.

#### **612.5.2.7 Control of pumps by UV meter.**

The ultraviolet light intensity meter shall interlock with the controls for pumps that supply water for the spray nozzles and water features systems. Where the ultraviolet light intensity meter senses an ultraviolet dosage rate of less than 40 mJ/cm<sup>2</sup>, the interlock shall lock out those pumps from operation.

#### **612.5.2.8 Make-up water system.**

The surge basin shall be provided with a make-up water system that is supplied with potable water. The potable water supply shall be protected against backflow in accordance with the *International Plumbing Code*.

**612.5.3 Diverter valve.** The drainage piping for the splash zone shall have a diverter valve to divert splash zone drainage away from the surge basin when the spray pad is not in operation. The diverted drainage shall be to an approved place of disposal.

**612.6 Operating instructions.** Operating instructions for spray pads shall require that the circulation system be operated continuously for not less than 4 turnovers prior to the pumps for the spray nozzles and water features systems being turned on for use of the spray pad.

**612.7 Lighting.** Where a spray pad will be in operation at night or during periods of inadequate natural lighting, artificial lighting shall be provided. Such lighting shall be installed in accordance with the manufacturer's instructions and NFPA 70.

**Reason:** In the last cycle, the APSP organization proposed similar language for these highly popular water play areas that are rapidly becoming an alternative for some public swimming pools in many jurisdictions across the country. The technical committee disapproved the proposal because the term that was used in the proposed language for naming these attractions was a trademarked term. (The proposed SPRAY PADS is not, to our knowledge, a trademarked term.) There was no disagreement by the committee that this information was needed for the code but the trademarked term just had to be changed. Unfortunately, the proposal was disapproved by the membership at final action hearing.

Waterparks have included these attractions in their array of fun things to do at the park for many years. As large waterparks are highly focused on the safety and cleanliness of all water used at the park, regulations didn't seem to be necessary for these attractions - the waterparks knew what to do, how to do it and have an excellent track record. However, as these types of attractions move into the public sector, many people who are responsible for choosing and operating this equipment might be lacking the (waterparks') knowledge about what is critical for a safe installation. Those involved in the pool and spa industry and those involved in operating public pools in jurisdictions across the country are well aware of a water contamination occurrence in one of these attractions at a Traverse City, MI city park not so long ago.

The ISPSC is the best place to install these requirements within the I-code family of codes as these attractions involve circulated and filtered water (similar to what a pool or spa uses) for recreational use even though such attractions do not involve users "bathing" (immersing themselves) in bodies of water.

The most recent edition of the California Building Code is reflective of many of the proposed concepts and details of the language of this proposal.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC). The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International

Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 10.

**Cost Impact:** Will increase the cost of construction

This proposal will increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code. Specifically, the code is currently silent about these types of attractions which means that any supplier of these attractions could provide any kind of equipment (of safe design or not). In some cases, having these regulations in code will make the cost of some suppliers' attraction packages be more than if they did not have to comply with these minimum safety requirements. For other suppliers, these requirements are already included in their standard packages.

SP30-15 : 612 (New)-  
SNYDER4164

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## **Public Hearing Results**

**Committee Action:**

**Disapproved**

**Committee Reason:** Play areas such as these might be covered under amusement device regulations. Having a minimum surge tank size of the 4000 gallons might be excessive for a small spray pad area. However, this proposal is heading in the right direction.

**Assembly Action :**

**None**

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## **Individual Consideration Agenda**

### *Public Comment 1:*

**Proponent : Jennifer Hatfield, J. Hatfield & Associates, PL, representing Association of Pool & Spa Professionals (jhatfield@apsp.org) requests Approve as Modified by this Public Comment.**

**Modify as Follows:**

### **2015 International Swimming Pool and Spa Code**

**612.4 Splash zone.** The splash zone shall comply with Sections 612.4.2 through ~~612.4.5~~ 612.4.4.

**612.4.3 Nozzles on walking surfaces within the spray pad splash zone.** Water nozzles that spray from walking surfaces within the spray pad splash zone shall be flush with those surfaces. Openings in such nozzles shall not exceed ½ inch (12.7 mm).

**612.4.4 Other nozzles.** Nozzles, other than those on walking surfaces within the spray pad splash zone, shall be designed to be clearly visible.

**612.5.1 Catch screen.** A catch screen, filter or basket shall be provided for splash zone ~~drainage piping connections to the surge basin~~ recirculation and feature pumps. The screen, filter or basket shall be designed with

openings that do not exceed No. 20 United States standard mesh (0.0331 inches) [0.841 mm]. The screen, filter or basket assembly shall have the capacity to prevent larger debris from entering the surge basin. that is not less than would be expected to accumulate in a 24 hour period.

**612.5.2 Surge basin.** A surge basin shall be provided ~~having~~ . The basin shall have a capacity of not less than 4000 1000 gallons or ten times the maximum number of gallons that can be pumped to water features in one minute by the combination of all spray pad and recirculation pumps, whichever is greater. The surge basin shall be configured to limit the basin water level drop to not more than 15 percent of the basin's maximum water depth when all pumps are operating and the pump discharge piping is completely filled with water.

**612.5.2.1 Basin materials and design.** The basin shall be constructed of materials which are inert, corrosion resistant and non toxic. Basins shall be constructed of concrete, fiberglass, high density polyethylene, stainless steel or other *approved* materials. ~~The design of basins~~ Basin materials in contact with the water shall anticipate comply with material standards for potable water tanks. Basins shall be designed for all anticipated loadings under full and empty conditions. Such loading conditions shall be determined by a design professional who has experience with the design of public pools.

**612.5.2.3 Circulation pump.** The circulation pump shall be sized to turnover the surge basin capacity in ~~1/2 hour~~ 30 minutes or less. The intake for the pump shall be located at the lowest elevation of the surge basin. Where separate pumps are installed for the circulation system and the spray nozzles system, the suction intakes for those pumps shall be located ~~on opposite ends of~~ as recommended by the basin manufacturer or design professional.

~~**612.4.5 Potable water for foggers and misters.** Foggers and misters that produce finely atomized water mists shall be supplied only with potable water. Foggers and misters shall not be supplied with water from the surge basin.~~

~~**612.5.2.6.2 UV intensity meter.** The chamber of the ultraviolet light disinfection unit shall be equipped with a ultraviolet light intensity meter that is located opposite and at the greatest water depth from the ultraviolet light source. The meter shall be filtered to restrict its sensitivity to the disinfection spectrum.~~

~~**612.5.2.7 Control of pumps by UV meter.** he ultraviolet light intensity meter shall interlock with the controls for pumps that supply water for the spray nozzles and water features systems. Where the ultraviolet light intensity meter senses an ultraviolet dosage rate of less than 40 mJ/cm<sup>2</sup>, the interlock shall lock out those pumps from operation.~~

~~**612.5.3 Diverter valve.** The drainage piping for the splash zone shall have a diverter valve to divert splash zone drainage away from the surge basin when the spray pad is not in operation. The diverted drainage shall be to an approved place of disposal.~~

**Commenter's Reason:** Spray pads are currently not addressed in the ISPSC, but they are a type of water containment system used for aquatic recreation across the

country. Therefore, it is imperative this type of feature be added to the ISPC to ensure minimum standards exist to safeguard the public who uses them. Various standards exist across the country and in some places no standards exist. This public comment addresses concerns of the committee by making changes to certain sections of the original proposal to better align with industry best practices in the area of spray pads. Specifically this public comment provides the following:

- 612.4.3 & 612.4.4 - clarity that the nozzles are within the spray pad splash zone; without this addition the terminology is vague and could be misinterpreted.
- 612.5.1 - includes filter as another alternative device to keep debris from surge tank and allows design professionals to size debris collection device to anticipated debris loads for each spray pad installation.
- 612.5.2 - changes the minimum surge tank from 4000 to 1000 gallons due to the fact 4000 gallons is more than needed in small spray pads; the goal is to have enough water not to allow the tank level to drop and cause cavitation or lose prime.
- 612.5.2.1 - provides for consistency with water tower standards in regard to surface standard.
- 612.5.2.3 - changes hours to minutes to be consistent with what is used elsewhere in the code when timeframes are less than 1 hour and refers one to either the manufacturers recommendations or design professional in regard to placement of suction intakes due to the fact multiple options exist; the original language boxed one in to only one acceptable means of placement.
- 612.4.5 - removes this section because it is not needed, as all features must run through a UV system.
- 612.5.2.6.2 & 612.5.2.7 — removes sections that restrict design professionals to a single method of determining UV disinfection levels that has proven unreliable in prior installations.
- 612.5.3 - removes section that adds design complexity by requiring automated valving or that relies on daily operation of manual valves to ensure proper splash zone drainage in favor of design professionals properly sizing surge tanks.

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**SP30-15**

# SP32-15

809.3

## **Proposed Change as Submitted**

**Proponent :** Janine Snyder, representing Plumbing, Mechanical, and Fuel Gas Code Action Committee (PMGCAC@iccsafe.org)

## **2015 International Swimming Pool and Spa Code**

**Revise as follows:**

**809.3 Secondary entries and exits.** Where water depth in the deep area of a pool exceeds 5 feet (1524 mm), a means of entry and exit shall be provided in the deep area of the pool.

**Exception:** Where a means of exit from the deep end of a pool would present a potential hazard, handholds shall be provided for the means of exit.

**Reason:** Since the APSP-5 2011 standard was published, several calls have been received from builders and fiberglass pool manufacturers expressing concern that the language in Section 6.1 of APSP-5 is creating problems both in construction and for fiberglass pool manufacturers with existing molds. According to the language in the 2011 edition of APSP-5, these existing molds can no longer be used. The existing language has been modified to help clarify and remedy this section. Hopefully, it will eliminate the problems encountered by builders and manufacturers, while at the same time, eliminate the misperception of a shallow end being the deep end based on the assumption that a ladder signifies the deep end.

This proposal is submitted by the ICC Plumbing, Mechanical and Fuel Gas Code Action Committee (PMGCAC). The PMGCAC was established by the ICC Board of Directors to pursue opportunities to improve and enhance assigned International Codes or portions thereof. This includes both the technical aspects of the codes and the code content in terms of scope and application of referenced standards. The PMGCAC has held one open meeting and multiple conference calls which included members of the PMGCAC. Interested parties also participated in all conference calls to discuss and debate the proposed changes. This is PMGCAC Item 9.

**Cost Impact:** Will not increase the cost of construction

This proposal will not increase the cost of construction because additional labor, materials, equipment, appliances or devices are mandated beyond what is currently required by the code.

SP32-15 : 809.3-  
SNYDER4171

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## **Public Hearing Results**

**Committee Action:**

**Approved as Submitted**

**Committee Reason:** The language aligns the code with the APSP 5 standard.

**Assembly Action :**

**None**

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## **Individual Consideration Agenda**

## Public Comment 1:

**Proponent : Jennifer Hatfield, J. Hatfield & Associates, PL, representing Association of Pool & Spa Professionals (jhatfield@apsp.org) requests Approve as Modified by this Public Comment.**

**Modify as Follows:**

### **2015 International Swimming Pool and Spa Code**

**809.3 Secondary entries and exits.** Where water depth in the deep area of a pool exceeds 5 feet (1524 mm), a means of entry and exit as indicated in Section 809.2 shall be provided in the deep area of the pool.

**Exception:** Where the required placement of a means of exit from the deep end of a pool would present a potential hazard, handholds shall be provided as an alternative for the means of exit.

**Commenter's Reason:** The original proposal addressed concerns that certain types of pools would not be allowed if this exception were not added (which was consistent with this also having been addressed in the ANSI/APSP/ICC 5 Residential Inground Standard). However, an additional modification to the proposal needs to be made due to the fact a handhold is not a means of exit under the ISPSC, but the way the proposal is currently written would suggest it is; therefore, we are suggesting the public comment to address this concern.

The public comment ensures that a handhold can be utilized in lieu of a means of exit, at the same time clarifying that a handhold is not a means of exit. If, for example, a vanishing edge pool on a mountainside was being built, if a means of exit were provided it would constitute a potential hazard as the user could end up over the side of the mountain if they exited on the vanishing end of the pool. Without the public comment it would imply a handhold is a means of exit, meaning a handhold could be used to exit over a mountainside, which we believe is not the intent.

Rather, the public comment defines the handhold as an alternative to exiting; allowing the bather to "hand-walk" along the edge to safety.

**SP32-15**