Public Pool Resurface Guidelines

California Health & Safety Code requires the issuance of written approval from the local enforcement agency prior to modification of a public swimming pool or placing back into operation a modified public swimming pool. This document is provided as a guide to the plan check specifications required when resurfacing a public swimming pool.

Written Approval 3103B

A person proposing to construct, reconstruct or alter a swimming pool or auxiliary structure or equipment shall submit legible plans and/or specifications to the enforcing agent for review and written approval prior to commencing the work and in advance of the issuance of any building, plumbing, or electrical permit. When plans are required, they shall be drawn to ¼ inch = 1 foot scale.

Plan Compliance Inspections 3105B

The pool owner, operator, contractor or designated agent shall notify the enforcing agent prior to applying the final surface to the pool shell and at the completion of construction prior to placing the pool into use. No pool shall be opened to the public without the written approval of the enforcing agent. Ladders, steps, stairs, handrails, depth markers, slope lines, inlet fittings, and suction outlet sumps (when applicable) shall be installed and compliant for the pre-plaster inspection. Pool water shall be clear and water chemistry balanced for the final inspection.

Pool (Shell) Construction 3108B

Finish: The finished pool shell shall be lined with a smooth waterproof interior finish that will withstand repeated brushing, scrubbing, and cleaning procedures. The interior pool finish shall completely line the pool to the tile lines, coping, or cantilevered deck.

Finish Color: The finish color shall be white, except for the following which shall be of contrasting color: lane and other required pool markings; the top surfaces of benches in spa pools; the edge of pool steps; tiles installed at the water line; the tiles installed at the 4 ½ foot depth line. Exception: A spa pool shall be permitted to be finished in a light color other than white when approved by the enforcing agent.

Permanent Markings 3110B

General: No markings, designs or lettering shall be permitted on the pool shell except for slip resistance lane markings, depth marking lines and safety markings.

Lane markings: Slip resistance lane lines at the bottom of the pool shall not exceed 12 inches in width.
**Depth marking line:** There shall be installed a straight line of slip resistant tile a minimum of 4 inches and greater than 6 inches wide of a color contrasting with the backgrounds of the pool shell across the bottom of the pool where water depth is 4 ½ feet. Exception: Pools having a maximum water depth of 5 feet or less shall not be required to have a depth marking line.

**Water depth markers:** The water depths shall be clearly marked at the following locations: maximum depth, minimum depth, each end, both sides at each end, at the break in bottom slope between the shallow and deep portions of the pool, and along the perimeter of the pool at the distances not to exceed 25 feet. Exception: A spa or wading pool shall have a minimum of two depth markers indicating the maximum depth.

**Size of Markers:** Depth markers shall:

1. Have numerals a minimum of 4 inches in height and of a color contrasting with the background and be marked in units of feet and inches. Abbreviations of FT and IN may be used in lieu of feet and inches; and
2. Be made of a durable material that is resistant to weathering; and
3. Be slip-resistant when they are located on the pool deck.

**Tolerance:** Depth markers shall be positioned to indicate the water depth accurate to the nearest 6 inches as measured at the waterline.

**Steps, Recessed Steps, Ladders and Stairs 3111B**

**Ladders:** Ladders shall be corrosion-resistant and shall be equipped with slip-resistant tread surfaces. Ladders shall be rigidly installed and shall provide a clearance of not less than 3 inches nor more than 5 inches between any part of the ladder and the pool wall.

**Stairs:** Stairs shall be provided in the shallowest portion of a pool. In pools with more than one shallow end stairs shall be provided at each shallow end. Each step of a stair shall have a tread in accordance with Figure 31B-7. Risers shall conform to Figure 31B-7. At least one handrail shall be provided extending from the deck to not less than a point above the top of the lowest step installed in accordance with Figure 31B-7.

**Recessed steps and step risers:** Ladder treads and recessed steps shall have a minimum tread of 5 inches and a width of 14 inches and shall be designed to be readily cleaned. Step risers shall be uniform and shall not exceed 12 inches in height. The first riser is measured from the deck.

**Hand rails:** Hand railings shall be provided at the top of both sides of each ladder and recessed steps and shall extend over the coping or edge of the deck.

**Stairs for a Spa Pool:** Each step of a spa pool stair shall have a tread dimension in accordance with Figure 31B-7. Risers shall not exceed 12 inches in height. Two hand rails shall be provided extending from the deck to not less than a point above the top of the lowest step in accordance with Figure 31B-7. The steps shall be located where the deck is at least 4 feet wide.

**NOTE:** Pool or Spa stairs that were approved at the time of original construction will not be required to meet current standards unless the stairs are demolished and reconstructed. Pre-existing non-conforming conditions that present environmental health and safety concerns will be evaluated on a case-by-case basis.
**Handholds 3112B.3**

Where perimeter overflow systems are not provided, a bull-nosed coping or cantilevered decking of reinforced concrete, or material equivalent in strength and durability, with rounded slip resistant edges shall be provided. The overhand for either bull-nose coping or cantilevered decking shall not exceed 2 inches or be less that 1 inch and shall not exceed 2½ inches in thickness). See Coping Detail on page 4.

**Pool Fittings 3137B**

**Outlets:** All suction outlets shall be equipped with suction fittings that meet ANSI/APSP-16 2011 or successor performance standards. All covers shall be installed according to manufacture specifications. Field fabricated sumps shall be constructed according to the sump detail on page 4 of this document and formed for verification by the pre-plaster inspection.

**Inlets:** Inlet fittings shall not protrude greater than 1 ¼ inches into the pool and shall be shaped, rounded and smooth. Wall inlets shall be capable of adjusting the direction of flow. When achievable Inlet fittings shall be installed on pre-existing non-conforming pools upon resurfacing. Floor inlets shall be installed flush with the surface of the pool bottom.

**Projections and Recessed Areas:** The pool shell shall not have any projections or recessed areas except for pool inlets and outlets as specified in Section 3137B. Exception: This section shall not apply to handholds, recessed steps, ladders, stairs, handrails, skimmers or perimeter overflow systems.

**Pool Lighting 3115B**

Pools shall have underwater and deck lighting such that lifeguards or other persons may observe, without interference from direct and reflected glare from the lighting source, every part of the underwater area and pools surface. Pools used at night shall be equipped with underwater lighting fixtures that will provide complete illumination to all underwater areas of the pool with no blinds spots. Exception: Pools provided with a system of overhead lighting fixtures where it can be demonstrated to the enforcing agency that the system is equivalent to the underwater lighting fixture system.
### Constructed after 9/1/2012

<table>
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<th>DIMENSIONS</th>
<th>T-1 STANDARD</th>
<th>T-1 TRIANGULAR, CONCAVE, CONVEX</th>
<th>T-2</th>
<th>T-3</th>
<th>W-1</th>
<th>H-1</th>
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<tbody>
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<td>12”</td>
<td>3”</td>
<td>24”</td>
<td>6”</td>
<td>28”</td>
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<tr>
<td>Maximum</td>
<td>18”</td>
<td>24”</td>
<td>16”</td>
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<td>12”</td>
<td>36”</td>
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Fig. 2  Field Built Sump

GENERAL NOTES:
(1) $D$ = inside diameter of pipe.
(2) All dimensions shown are minimums.
(3) A broken line (---) indicates suggested sump configuration.