

POOL STEPS, RECESSED STEPS, LADDERS, STAIRS, AND HAND RAILS REQUIREMENTS

Section 3111B, Title 24, California Code of Regulations

Section 3111B.1 Construction. A means of entry and exit to and from the pool shall consist of steps, recessed steps, ladders, stairs, ramps, or a combination of these. One means of entry and exit shall be provided in the shallowest portion of a pool if the vertical distance from the bottom of the pool to the deck is over 1 foot. A second means of entry and exit shall be provided in the deep portion of a pool having a depth greater than 4½ feet. Where the width of the pool exceeds 30 feet, such means of entry and exit shall be provided at each side, not more than 100 feet apart.

Note: For illustrated diagrams pertaining to this section see **Figures 31B-6 and 31B-7.**

Section 3111B.2 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 or more than 5 inches** between any part of the ladder and the pool wall.

Section 3111B.3 Stairs. Stairs shall be provided in the shallowest portion of the 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 hand rail 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**.

Note: All treads (T-2) shall be uniform.

Section 3111B.4 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 shall be measured from the deck.

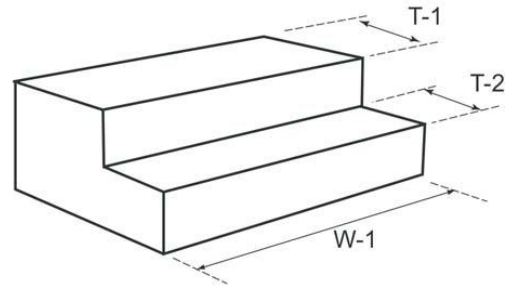
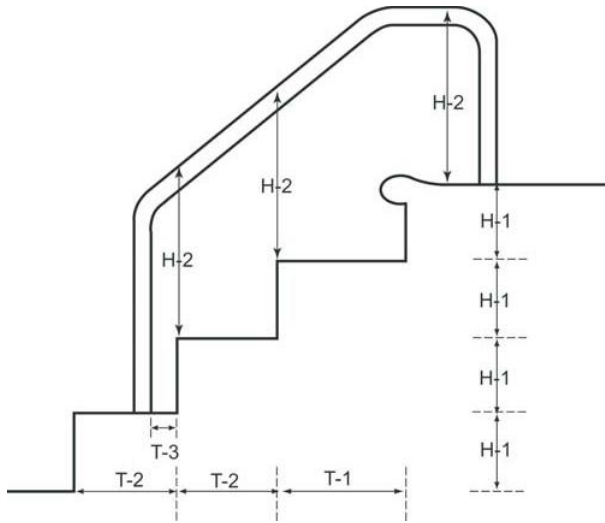
Section 3111B.5 Hand rails. Hand rails shall be provided at the top of both sides of each ladder and recessed steps and shall extend over the coping or edge of the deck.

Note: Hand rails, ladders, and grab rails must be electrically bonded as per the requirement of the local building inspection authority, and the bonding must be approved by the local building inspection authority.

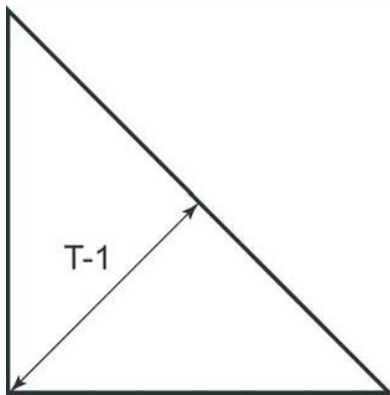
Section 3111B.6 Stairs of a spa pool. Each step of a spa pool stair shall have a tread dimension in accordance with **Figure 31B-7**. Risers shall not exceed 12 inches in height. **Two hand rails shall be provided extending from the deck to not less than a point above the top of the lowest step in accordance with Figure 31B -7.** The steps shall be located where the deck is at least 4 feet wide.

PUBLIC POOLS

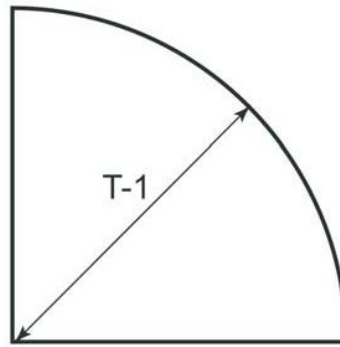
| DIMENSIONS | T-1 STANDARD | T-1 TRIANGULAR, CONCAVE, CONVEX | T-2 | T-3 | W-1 | H-1 | H-2 |
|------------|-----------------|--|-----|------|------|-----|-----|
| Minimum | 14" | 21" | 12" | 3" | 24" | 6" | 28" |
| Maximum | 18" | 24" | 16" | ---- | ---- | 12" | 36" |



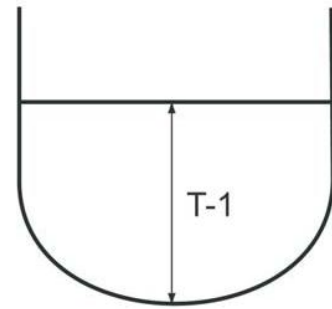
Standard Step



Triangular Step



Convex Step



Concave Step

**Figure 31B-7
STAIR AND HANDRAIL DIMENSIONS**

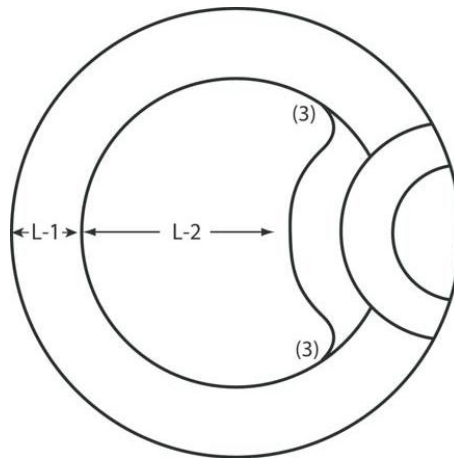
TABLE 31B-6

| DIMENSION | DEPTH OF WATER | | LENGTH OF SECTIONS | |
|-----------|----------------|-----|--------------------|------|
| | D1 | D2 | L1 | L2 |
| MINIMUM | ---- | 24" | 12" | 24" |
| MAXIMUM | 24" | 42" | 24" | ---- |

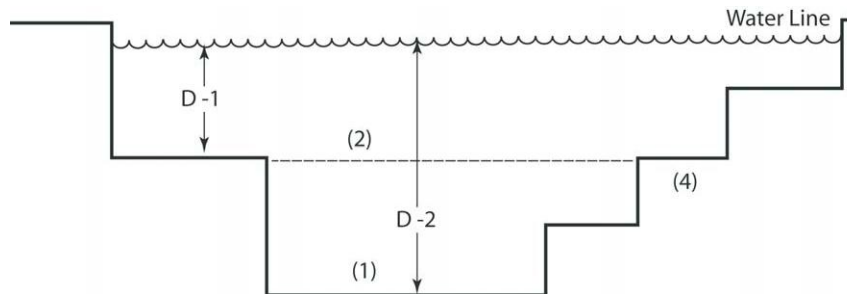
Notes for Figure 31B-6 and Table 31B-6:

1. Bottom slope shall not exceed 1:10 and must be uniform.
2. Bench ramping shall not exceed 1:10 uniform slope, measured at the inner circumference of the bench.
3. Six inch minimum radius at "pinch points."
4. See Sections 3111B and 3112B for step and handrail dimensions.

TOP VIEW



TRANSVERSE SECTION



**Figure 31B-6
DEPTHS AND DIMENSIONS FOR SPA POOLS**