Introduction
This CodeNotes™ provides an overview of entry/exit requirements of the 2021 International Swimming Pool and Spa Code® (ISPSC®) as they pertain to permanent inground residential swimming pools.

All pools shall have a means of entry and exit in the shallow areas if water depth exceeds 24 inches (610 mm) at the shallowest point. The means of entry and exit shall be located on the shallow side of any first slope change (Ref. Section 809.2 of the 2021 ISPSC).

Entries and exits shall consist of one, or a combination of, the following: steps, stairs, ladders, treads, ramps, beach entries, underwater seats, benches, swimouts, and other approved designs (Ref. Section 809.2 of the 2021 ISPSC). All treads shall have slip resisting surfaces. (Ref. Section 322.3 and 322.4 of the 2021 ISPSC).

A secondary means of entry and exit shall be provided in the deep area of the pool if the water depth exceeds 5 feet (1.52 m) (Ref. Section 809.3 of the 2021 ISPSC). Pools over 30 feet (914 cm) in width at the deep area shall have an entry and exits on both sides of the deep area of the pool (Ref. Section 809.4 of the 2021 ISPSC).

Recessed Treads
Recessed treads shall have a minimum depth of not less than 5 inches (127 mm) and a width of not less than 12 inches (305 mm). The vertical distance between the pool coping edge, deck, or step surface and the uppermost recessed tread shall not be greater than 12 inches (305 mm). A recessed tread is a pocket built into the wall of a pool that is large enough for a foothold. A vertical series of recessed tread provides the user with a ladder effect to climb out of the pool. Slip resistant surfaces on recessed treads are required and especially necessary in a wet environment.

Figure 1 Recessed Treads
Pool Stairs

Section 809.5.1 requires that treads dimension have a minimum unobstructed horizontal depth of 10 inches (254 mm) and a minimum unobstructed surface area of 240 square inches (0.15 m²). The thinking is that a minimum tread depth provides for the entire placement of an adult foot. The minimum area of the step provides for an adult to stand comfortably with both feet on the step.

Handrails are optional for stairs for inground residential pools & spas.

Figure 2 Pool Stairs Side View

This is a reference diagram. Not drawn to scale.

In design water depths exceeding 48 in.(12.19 mm) additional steps shall not be required.

No limitations on depth to floor.
Pool Ladder & Handrail Requirements

Climbing a ladder is nearly impossible without using two hands on separate handhold or handrails. The clear distance between ladder handrails shall be not less than 17 inches (432 mm) and not greater than 24 inches (610 mm). The separation between the handrails is necessary to provide stability for the ladder user. See next page for a side view.

Figure 3 Pool Ladder

Note: Ladder treads shall have a minimum horizontal uniform depth of 2 in./51 mm. Ref Section 322.3
Handrails
(side view)

The outside diameter or width of handrails shall be not less than 1-1/4" (32 mm) and not greater than 2 inches (51 mm) (Section 323.2.5 ISPSC)

Note: Handrails shall be made of corrosion resistance material. (Section 323..2.2 ISPSC)

34 in./864 mm min. & 38 in./965 mm max. (Section 323.2.1 ISPSC)

3 in./76 mm min. & 4 in./152 mm max. (Section 322.3.1 ISPSC)

Ladder treads shall have a uniform horizontal depth of not less than 2 in. min./51 mm. (Section 322.3 ISPSC)

This is a reference diagram. Not drawn to scale.