

# 2021 ISPSC Code and Commentary (Swimming Pool)

## CHAPTER 3: GENERAL COMPLIANCE

### 305.2.1 Barrier height and clearances.

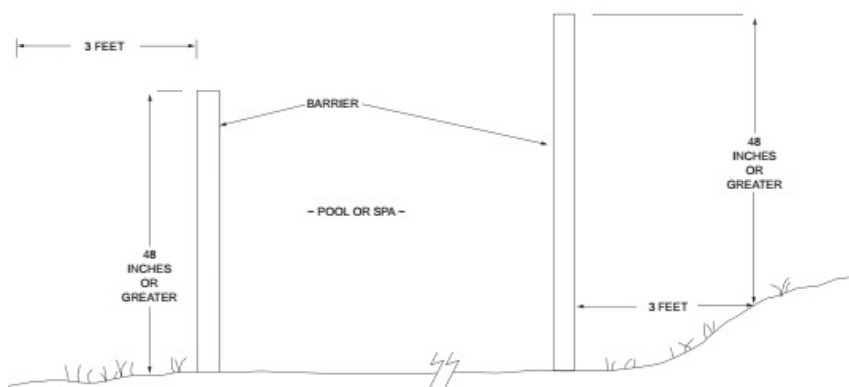
Barrier heights and clearances shall be in accordance with all of the following:

1. The top of the barrier shall be not less than 48 inches (1219 mm) above grade where measured on the side of the barrier that faces away from the pool or spa. Such height shall exist around the entire perimeter of the barrier and for a distance of 3 feet (914 mm) measured horizontally from the outside of the required barrier.
2. The vertical clearance between grade and the bottom of the barrier shall not exceed 2 inches (51 mm) for grade surfaces that are not solid, such as grass or gravel, where measured on the side of the barrier that faces away from the pool or spa.
3. The vertical clearance between a surface below the barrier to a solid surface, such as concrete, and the bottom of the required barrier shall not exceed 4 inches (102 mm) where measured on the side of the required barrier that faces away from the pool or spa.
4. Where the top of the pool or spa structure is above grade, the barrier shall be installed on grade or shall be mounted on top of the pool or spa structure. Where the barrier is mounted on the top of the pool or spa, the vertical clearance between the top of the pool or spa and the bottom of the barrier shall not exceed 4 inches (102 mm).

❖ The barrier height of 48 inches (1219 mm) ensures that smaller children cannot simply hop the fence to gain access to the pool or spa. Those persons who are capable of climbing over a 48-inch-high (1219 mm) barrier are probably of sufficient maturity to avoid the pool if they cannot swim or are uncomfortable with the idea of entering the water of a spa. The height is measured on the outside of the barrier from the highest elevation of grade or concrete slab for a distance of 3 feet (914 mm) away from the outside of the barrier [see Commentary [Figure 305.2.1\(1\)](#)]. This requirement coordinates with [Section 305.2.9](#), which requires a clear zone of 36 inches (914 mm) around the outside of the barrier.

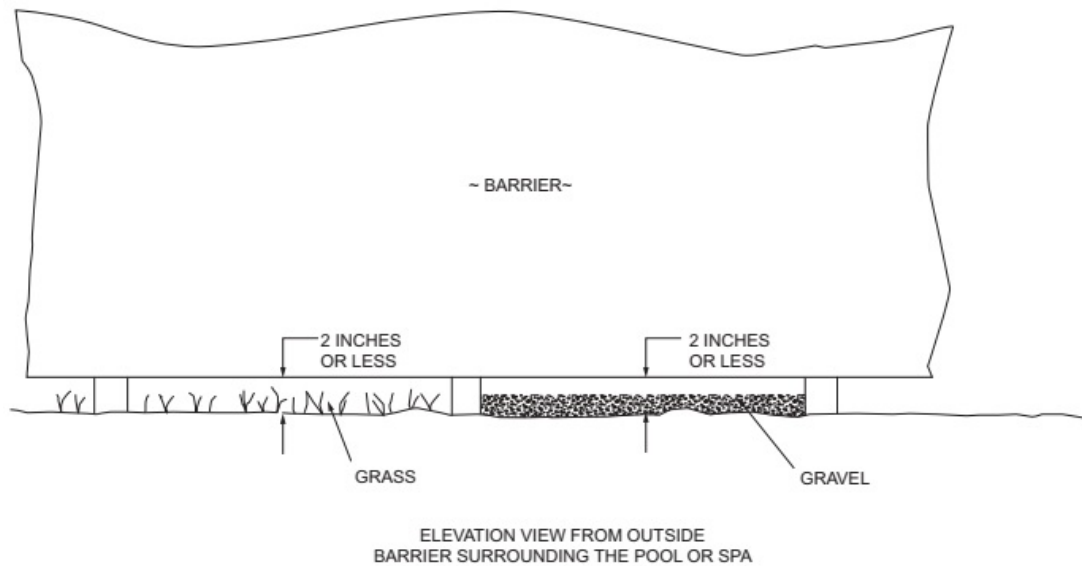
Barriers that are not close to the ground could be bypassed by a child maneuvering under the barrier. Where over grass or gravel, the bottom of the barrier must be within 2 inches (51 mm) of the ground surface from which the grass grows from or onto which the gravel is placed. It is unlikely that a child would be able to dig out more than 2 inches (51 mm) of settled, naturally compacted earth in order to make an opening large enough to gain access to the pool or spa. If the bottom of the barrier is over concrete, the bottom must be within 4 inches (102 mm) of the concrete surface to prevent a child from maneuvering through the opening to gain access to the pool or spa [see Commentary [Figures 305.2.1\(2\)](#) and [\(3\)](#)].

The top of a pool or spa could be above grade. The barrier for this arrangement could be installed at grade or the barrier could be installed on top of the pool or spa [see Commentary [Figure 305.2.1\(4\)](#)]. Where mounted on top of the pool or spa, the vertical clearance from the top of the pool or spa to the underside of the barrier cannot exceed 4 inches (102 mm) [see Commentary [Figure 305.2.1\(5\)](#)] to prevent a child from maneuvering through the opening to gain access to the pool or spa.



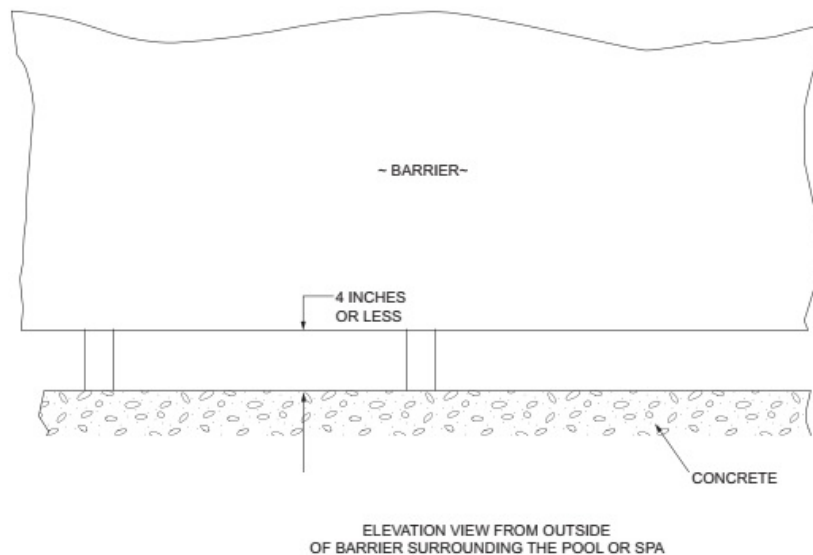
For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

**Commentary Figure 305.2.1(1)**  
**HEIGHT OF BARRIER ABOVE GRADE**



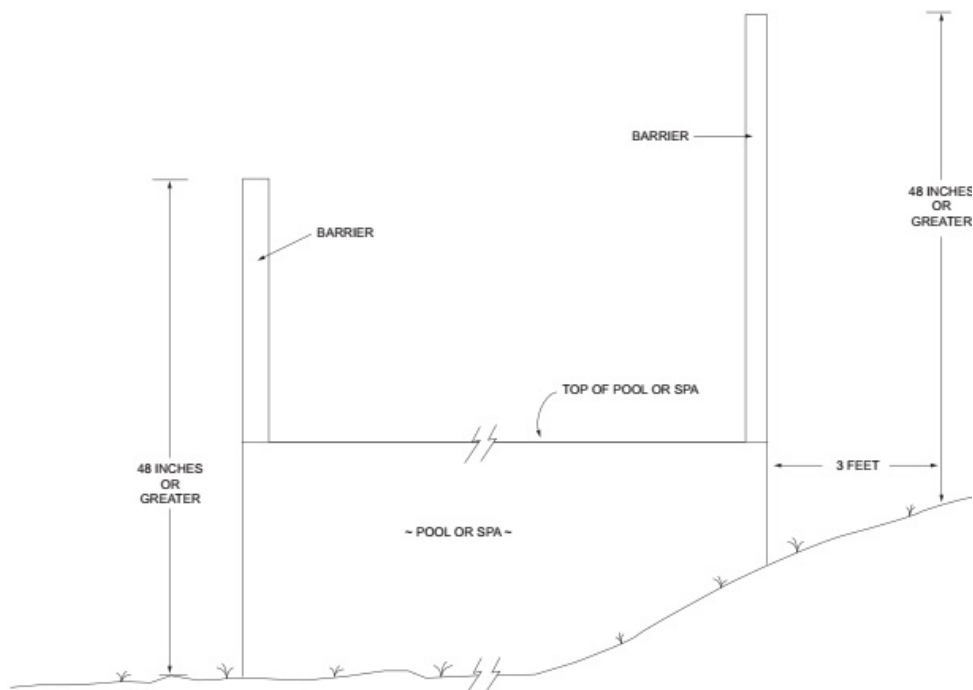
For SI: 1 inch = 25.4 mm.

**Commentary Figure 305.2.1(2)**  
**MAXIMUM CLEARANCE FROM BOTTOM OF BARRIER TO GRADE**



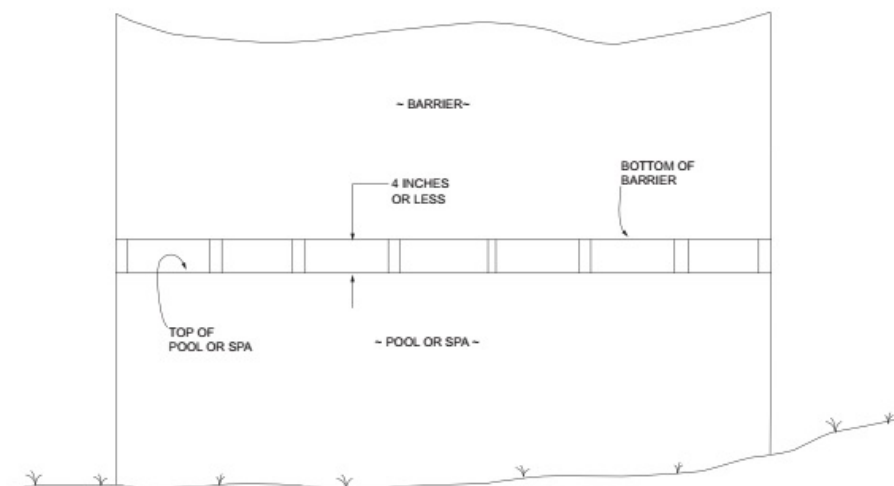
For SI: 1 inch = 25.4 mm.

**Commentary Figure 305.2.1(3)**  
**MAXIMUM CLEARANCE FROM BOTTOM OF BARRIER TO SOLID SURFACE**



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

**Commentary Figure 305.2.1(4)**  
**HEIGHT OF BARRIER WHERE MOUNTED ON TOP OF THE POOL OR SPA**



**Commentary Figure 305.2.1(5)**  
**MAXIMUM CLEARANCE FROM BOTTOM OF BARRIER TO TOP OF THE POOL OR SPA WHERE BARRIER IS MOUNTED ON TOP OF POOL OR SPA**