

## STATE BUILDING CODE INTERPRETATION NO. I-22-06

October 23, 2006

The following is offered in response to your undated letter, received in this office on October 20, 2006, in which you seek a formal interpretation of Section AG105.2 of the 2003 International Residential Code portion of the 2005 State Building Code, which applies to swimming pools, hot tubs and spas at detached one- and two-family dwellings or which are for the exclusive use of residents and guests at a one-family townhouse. You are particularly interested in items 3 and 4. You have included photographs of two types of PVC fencing, both a minimum of 48 inches in height and containing horizontal elements less than 45 inches apart. One of the fences consists of vertical members with 1  $\frac{3}{4}$  inch spacing between them, the other fence consists of a solid portion, which is not dimensioned but in appearance seems to be solid for a height of about 38 or 40 inches, and is topped with vertical pickets with 1  $\frac{3}{4}$  inch spaces between them.

**Question:** Given that item 3 of the referenced code section permits “normal construction tolerance” protrusions in solid barriers such as masonry or stone walls, doesn’t the code permit the horizontal components of the above two described fences to protrude approximately  $\frac{1}{4}$  inch with a smooth rounded edge on the outside of the pool and be considered a code-compliant pool barrier?

**Answer:** No. The protrusions allowed by item 3 pertain only to pool barriers that are solid, without openings, for the entire minimum height of 48 inches. Since the partially solid fence you depict is not solid for a height of 48 inches, it is governed by item 4, as is the fence which consists entirely of horizontal members less than 45 inches apart and vertical members with a 1  $\frac{3}{4}$  inch spacing. These barriers require that the horizontal members be located entirely on the pool side of the barrier. The PVC fence you depict has a horizontal member that is thicker than the vertical members so that the vertical members protrude through the horizontal member leaving a  $\frac{1}{4}$  inch portion of the horizontal member on the outside of the fence, which is in violation of item 4. The intent of the code requirements is that a person attempting to climb a pool barrier would have to stick their foot entirely through the 1  $\frac{3}{4}$  inch space between vertical members to reach the horizontal member on the other side of the barrier. In the fence you depict one has access to the horizontal member immediately upon encountering the fence from the outside of the pool. Both fences you have submitted do not meet the requirements for a swimming pool barrier and cannot be used for that purpose.

**Note:** The above interpretation also applies to the provisions of Sections 3109.4.1.2 and 3109.4.1.3 of the 2003 International Building Code portion of the 2005 State Building Code, which applies to swimming pools, wading pools, hot tubs and spas at other than detached one- and two-family dwellings and to such pools, etc. when they serve townhouse complexes.