

**INTERNATIONAL CODE COUNCIL (ICC)
Code Technology Committee (CTC)**

Area of Study – Climbable Guards

October 19, 2006

**Draft Interim Report No. 2 of CTC Recommendations and
Public Hearing Announcement**

In accordance with ICC Council Policy No. 5, the CTC held meetings to evaluate the ICC Board-approved area of study entitled Climbable Guards. The CTC will hold a public hearing on October 19, 2006 at the Hilton Kansas City Airport [(816) 891-8900] to allow interested and affected parties to comment on the CTC interim recommendations. It should be noted that as an interim report this does not complete this area of study. Other aspects of this area of study are still under investigation.

Scope: As noted in the CTC approved Scope & Objectives Statement, the scope of this activity is:

The study of climbable guards will focus on determining the need for appropriate measures to prevent or inhibit an individual from utilizing the elements of a guard system, including rails, balusters and ornamental patterns, to climb the guard, thereby subjecting that person to the falling hazard which the guard system is intended to prevent.

Recommendation: The CTC Interim Recommendation Number 2 is to review a specific code change submitted in the 2006/2007 Code Development Cycle:

Code Change E97-06/07 with modifications developed by CTC [Page 2]

E97-06/07

1013.1 (IFC [B] 1013.1); IRC R312.1

Proponent: Thomas B. Zuzik, Jr., Artistic Railings, Inc., representing himself

PART I – IBC

Revise as follows:

1013.1 Where required. Guards shall be located along open-sided walking surfaces, mezzanines, industrial equipment platforms, stairways, ramps and landings which are located more than 30 inches (762 mm) measured vertically to the floor or grade below at any point within 36" horizontal to the edge of the open side above the floor or grade below. Guards shall be adequate in strength and attachment in accordance with Section 1607.7. Where glass is used to provide a guard or as a portion of the guard system, the guard shall also comply with Section 2407. Guards shall also be located along glazed sides of stairways, ramps and landings that are located more than 30 inches (762 mm) above the floor or grade below. Where the glazing provided does not meet the strength and attachment requirements in Section 1607.7.

Exception: Guards are not required for the following locations:

1. On the loading side of loading docks or piers.
2. On the audience side of stages and raised platforms, including steps leading up to the stage and raised platforms.
3. On raised stage and platform floor areas such as runways, ramps and side stages used for entertainment or presentations.
4. At vertical openings in the performance area of stages and platforms
5. At elevated walking surfaces appurtenant to stages and platforms for access to and utilization of special lighting or equipment.
6. Along vehicle service pits not accessible to the public
7. In assembly seating where guards in accordance with Section 1025.14 are permitted and provided.

PART II – IRC

R312.1 Guards. Porches, balconies, ramps or raised floor surfaces located more than 30 inches (762 mm) above the floor or grade below shall have guards not less than 36 inches (914 mm) in height. Open sides of stairs with a total rise of more than 30 inches (762 mm) measured vertically to the floor or grade below at any point within 36" horizontal to the edge of the open side above the floor or grade below. shall have guards not less than 34 inches (864 mm) in height measured vertically from the nosing of the treads.

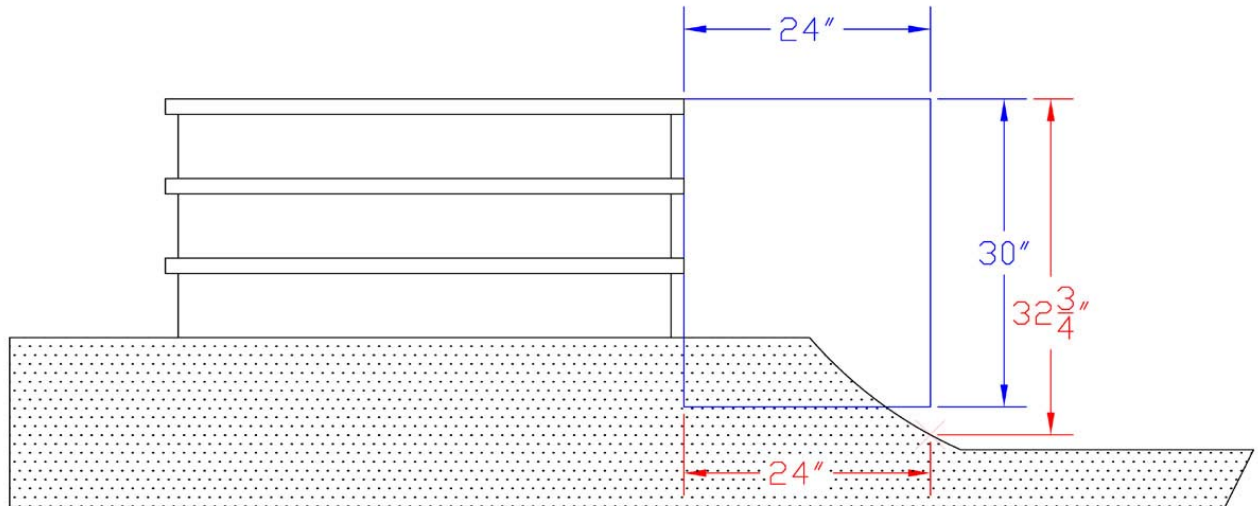
Porches and decks which are enclosed with insect screening shall be equipped with guards where the walking surface is located more than 30 inches (762 mm) above the floor or grade below.

Reason: The purpose of the code change is to provide fixed points for measuring the 30 inch vertical riser height of elevated surfaces to determine if guards are required.

Though Sections 1013.1 and R312.1 state that guards are required when the walking surface is 30 inches or more above the walking surface below. it does not define clearly were to measure that vertical measurement. This proposed code change gives a set of parameters as to where to make the measurements. The author used the 24 inch

measurement that is published in the BOCA 1996 building code, section 1825.0 retaining walls, section 1825.5 guards, as the determining distance or point of reference for when retaining walls where required to have guards.

The diagram below was drawn by the author and is shown as a visual guide or technical drawing. The drawing shows a 3 riser front entry stoop with 7-3/4" risers from a front elevation. The ground is detailed in outlined dots. The 24" horizontal with 30" vertical box shows the area in which the code change submits the measurements should be taken. The 32-3/4" vertical point shows the deepest point within the 24" horizontal edge measurement.



Staff note: *In order to reflect the proposed CTC modification, the horizontal distance of 24" should be revised to 36".*

Thus if this stoop was on a home it would require a guard be installed on the right side only as the left side is not 30 inches or more deep.

Cost Impact: The code change proposal will not increase the cost of construction.