

CHANGE TYPE: Modification

CHANGE SUMMARY: Unless laminated glass is used, structural glass baluster panels in guards now require an attached top rail or handrail.

2018 CODE: R308.4.4 Glazing in guards and railings. Glazing in guards and railings, including structural baluster panels and nonstructural in-fill panels, regardless of area or height above a walking surface shall be considered to be a hazardous location.

R308.4.4.1 Structural glass baluster panels. Guards with structural glass baluster panels shall be installed with an attached top rail or handrail. The top rail or handrail shall be supported by not less than three glass baluster panels, or shall be otherwise supported to remain in place should one glass baluster panel fail.

Exception: An attached top rail or handrail is not required where the glass baluster panels are laminated glass with two or more glass plies of equal thickness and of the same glass type.



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Structural glass baluster panels

CHANGE SIGNIFICANCE: Because of the increased probability of impact, glazing used in guards always requires safety glazing. In addition, a safety factor of 4 applies to glazing used in handrail assemblies and guards in accordance with Table R301.5. Glazing in guards may consist of structural balusters or non-structural in-fill panels. In-fill panels are typically attached to a structural framework of metal posts and rails. Structural glass baluster panels are attached to the structure at the base but typically have no posts for support. This provides a clean, modern look and improves the ability to view through the guard. With this change, structural glass baluster panels require an attached top rail or handrail as an additional safety feature in case the glass should fail. The intent is that the top

R308.4.4 continues

R308.4.4

Glazing in Guards and Railings

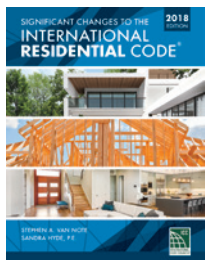
R308.4.4 continued

rail would remain in place to prevent a fall should the glass give way. To ensure that the rail remains in place, the code requires it to be supported by at least three structural baluster panels or otherwise held in place to resist the prescribed loads in case of failure of the glazing. The exception permits laminated glass for the balusters without the installation of a top rail. The new language is similar to the requirements in the IBC.



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Non-structural glass in-fill panels



This excerpt is taken from *Significant Changes to the International Residential Code®*, 2018 Edition.

Significant Changes publications take you directly to the most important changes that impact projects. Key changes are identified then followed by in-depth discussion of how the change affects real-world application. Photos, tables and illustrations are included to further clarify application. Available for the IBC, IRC, IFC and IPC/IMC/IFGC, the Significant Changes publications are very useful training and review tools for transitioning to a new code edition.