



MEMORANDUM

To: Community Development Department
From: Marc S. Mylott, AICP; Director of Community Development
Date: February 25, 2015
Re: International Residential Code, Guard and Handrail Requirements at Historic Structures

Staff is regularly asked by homeowners and contractors to deviate from the porch handrail and guard requirements at historic houses. According to the U.S. Department of the Interior, National Park Service (hereinafter the NPS), the alteration or removal of a porch from a historic building can cause that building or even the streetscape to lose its “visual integrity and historic authenticity”.ⁱ The NPS suggests that historic porches generally have guards that are between 28 and 30 inches from the porch floor, but raising that railing 30 percent or more to comply with current building codes “can have a major impact” on the overall appearance of the historic porch.ⁱⁱ The purpose of this memorandum is to outline the circumstances where, and to what extent, deviations from the International Residential Code (hereinafter referred to as the IRC) will be supported by staff.

First, section 16.36.020 of the Elgin Municipal Code, 1976, as amended, creates Section 102.8, Historic Buildings, of the 2012 IRC. That section states:

The provisions of this chapter relating to the construction, repair, alteration, addition, restoration and movement of structures, and change of occupancy, shall not be mandatory for exterior architectural features of historic buildings where such exterior architectural features are judged by the building official to not constitute a distinct life safety hazard.

For the purposes of this chapter, "historic building" shall mean a building that is listed in or eligible for listing in the national register of historic places, or that is designated as historic under state or local law, or that is eligible for designation as a landmark or a historically/architecturally significant residential structure under title 20 of the Elgin municipal code, 1976, as amended.

Second, Section R311.7.8 et seq. of the IRC establishes the circumstances where handrails are required and the design of those handrails. Generally, those sections state that a handrail is required along stairs with four or more risers and that that handrail must be between 34 and 38 inches high.ⁱⁱⁱ Section R312.1 of the IRC establishes the circumstances where guards are required and the design of those guards. Generally,

those sections state that a guard is required where the porch floor is more than 30 inches above grade and that that guard must be 36 inches high.

Historically, when requested by the homeowner, the Community Development Department has supported deviations to the IRC where the porch floor was no more than 40 inches above grade. Those reductions were generally limited to allowing the height of the handrails and guards to be reduced to 30 inches high, but some handrails and/or guards were allowed to go as low as 24 inches high or to be removed altogether.

Finally, Section R312.1.3 of the IRC establishes opening limitations in handrails and guards such that spheres of a particular diameter cannot pass through particular locations of the handrails and guards.

As of the date of this memorandum, the information below shall be used to guide staff decisions regarding requests to deviate from the handrail and/or guard requirements on porches of historic houses:

1. Evidence must suggest that the deviation is appropriate. Evidence may be building plans, photographs, documents, or clues from other features on the porch or building, such as the design of existing posts or the height of adjacent window sills. When those sources of evidence are not available, other forms of evidence to suggest that the proposed design is appropriate for the porch and house may include an evaluation of the architectural style of the house.
2. Under no circumstance will the handrail requirement be eliminated where such handrail is required by the IRC. The height of the handrail may be reduced to match a lower guard, but under no circumstance shall the height of the handrail be less than 30 inches, even if the guard height is reduced below 30 inches (see number 3. below).
3. Under no circumstance will the guard requirement be eliminated where such guard is required by the IRC. The height of the guard may be reduced to 30 inches when the height of the porch floor is no greater than 39 inches above grade.^{iv} The height of the guard may be further reduced to no less than 24 inches when the height of the porch floor is no greater than 39 inches above grade and when the resulting height of the guard would match the height of a window sill line of a window(s) overlooking the porch.
4. An increase to the opening limitations requirement of the IRC may be considered only where (a) the proposed design matches existing and original design features of the house or (b) where the proposed design recreates a pattern documented within building plans or photographs.
5. The Design Review Subcommittee of the Heritage Commission shall make an affirmative finding that the installation of a handrail or guard that complies with the building code would be a substantial detriment to historic character of the building.
6. The homeowner must sign a form prepared by the Community Development Department acknowledging the deviation from the IRC.

The above guidance is based upon the following findings:

The U.S. Secretary of the Interior has put forth Standards for Rehabilitation of historic buildings, and five of the ten standards speak either directly or indirectly to the importance of appropriate porches on historic buildings.^v

No preponderance of evidence suggests that guard heights as low as 24 inches constitute a distinct hazard to life, especially when the grade of the adjacent ground is 39 inches or less. Similarly, no pattern of events has presented itself in which guard heights as low as 24 inches contribute to persons falling from porches and sustaining any injuries, much less ending with the loss of life.

The climate in Elgin creates circumstances in which stairs may become slippery. As such, when the IRC requires a handrail, one must be provided, and the height of that handrail cannot be so reduced as to reduce its functionality to serve as a brace for people needing same.

Section 3409.1 of the model 2012 International Building Code includes similar allowances for non-residential buildings, stating, "The provisions of this code relating to the construction, repair, alteration, addition, restoration and movement of structures, and changes of occupancy shall not be mandatory for historic buildings where such buildings are judged by the building official to not constitute a distinct life safety hazard."

Other states in the adoption of state-wide building codes, and other jurisdictions in the adoption of local building codes, have included allowances for reductions of similar building features that do not constitute a distinct life safety hazard, including the states of California^{vi}, North Carolina^{vii}, and Ohio^{viii} and the cities of Chicago, Illinois^{ix} and Port Huron, Michigan^x.

Finally, I have directed the historic preservation staff to amend the homeowner acknowledgement form to conform to the guidance contained within this memorandum, and, to provide greater clarity, to illustrate the concepts within this memorandum. It is my intention that this memorandum with those illustrations will be made available to the general public but the production of the illustrations should not delay the implementation of this guidance.

Respectfully Submitted,



Marc S. Mylott, AICP
Director of Community Development

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- ⁱ U.S. Department of Interior, National Park Service, Preservation Brief 45, Preserving Historic Wood Porches, page 1.
 - ⁱⁱ *Ibid.*, page 19.
 - ⁱⁱⁱ The IRC considers the top of the porch as one riser so a porch with three steps has four risers.
 - ^{iv} By its requirement of a handrail along one side of any and all stairs that consist of four or more risers, the IRC has established that a porch with a floor 31 inches or more above grade warrants additional consideration (31 inches equals four risers multiplied by the maximum height of any one riser, which is 7 ¾ inches). As such, 39 inches, which is five risers, gives homeowners one more step (riser) after which no deviations will be permitted, and under no circumstances can a handrail or guard be eliminated where such feature is required by the IRC.
 - ^v U.S. Department of Interior, National Park Service, *The Secretary of the Interior's Standards for Rehabilitation & Illustrated Guidelines for Rehabilitating Historic Buildings*, reprinted 1997; numbers 2, Retention of Historic Character; 3, Recognition of Historic Character; 5, Preservation of Distinctive Features, Finishes and Craftsmanship; 6, Repair/Replacement of Deteriorated or Missing Features Based on Evidence; and 9, Compatible New Additions/Alterations. Also U.S. Department of Interior, National Park Service, ITS Number 9, Interpreting the Secretary of the Interior's Standards for Rehabilitation, "Inappropriate Porch Alterations" and ITS Number 38, Interpreting the Secretary of the Interior's Standards for Rehabilitation, "Alterations Without Historical Basis".
 - ^{vi} 2010 California Historical Building Code, California Code of Regulations, Title 24, Part 8. This code also defines a "distinct life safety hazard" as, "[a]ny clear and evident condition that exists as an immediate danger to the safety of the occupants or public right of way. Conditions that do not meet the requirements of current regular codes and ordinances do not, of themselves, constitute a distinct hazard" (Section 8-201).
 - ^{vii} 2012 North Carolina Rehab Code, Section 1.33, Historic Buildings.
 - ^{viii} 2011 Ohio Building Code, Including March 2012 Updates, Section 3409.1, Historic Buildings.
 - ^{ix} Municipal Code of Chicago, Title 13, Chapter 200, Rehabilitation Code, Section 100, Historic Preservation.
 - ^x City of Port Huron, Minimum Standards for Existing Rental Housing, Section 1.2 (C), Guardrails.