

# Public Code Change Proposal Form

## To Amend the 2018 Illinois Energy Conservation Code

Code Section: C503.1

Office Use Only	
Proposal Number:	C01-01
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Date: March 19, 2018  
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### Related Sections Impacted by this Amendment:

#### Revise as Follow (in strike-thru / underline format):

**C503.1 General.** *Alterations* to any *building* or structure shall comply with the requirements of Section C503 and the code for new construction. *Alterations* shall be such that the existing *building* or structure is not less conforming to the provisions of this code than the existing *building* or structure was prior to the *alteration*. *Alterations* to an existing *building*, *building* system or portion thereof shall conform to the provisions of this code as those provisions relate to new construction without requiring the unaltered portions of the existing *building* or *building* system to comply with this code.

*Alterations* shall not create an unsafe or hazardous condition or overload existing *building* systems.

*Alterations* complying with ANSI/ASHRAE/IESNA 90.1. need not comply with Sections C402, C403, C404 and C405.

**Exception:** The following *alterations* need not comply with the requirements for new construction, provided that the energy use of the building is not increased:

1. Storm windows installed over existing *fenestration*.
2. Surface-applied window film installed on existing single-pane *fenestration* assemblies reducing solar heat gain, provided that the code does not require the glazing or *fenestration* to be replaced.
3. Existing ceiling, wall or floor cavities exposed during construction, provided that these cavities are filled with insulation.
4. Construction where the existing roof, wall or floor cavity is not exposed.
5. *Roof recover*.

Original proposal

6. For roof replacement on existing buildings with for a roof slope of less than 2 units vertical in 12 units horizontal (2:12), and where the roof covering is removed and insulation might or might not remain, and where the required thickness of insulation to attain R value required for new construction cannot be provided due to flashing height limitations presented by existing rooftop conditions, (including but not limited to heating, ventilating and air conditioning equipment, low door or glazing heights, parapet heights, weep holes, and roof flashing heights not meeting the manufacturer's specifications), the maximum thickness of insulation compatible with the available space and existing uses shall be installed. Insulation used shall be minimum R 3.5 per inch.

**NEW Proposal Version 1 – Code Official involved in technical infeasibility decision.**

6. Roof replacements for roof systems 2:12 slope or less shall comply with the low slope roof insulation requirement unless the installation of insulation above the structural roof deck, and necessary to achieve the code-required R-value, is deemed infeasible by the code official to accommodate the added thickness. Conditions of infeasibility presented by existing rooftop conditions, include, but are not limited to HVAC or skylight curbs, low door or glazing heights, parapet heights, weep holes, drainage patterns, or flashing height limitations due to cricket or saddle construction, subject to manufacturer's specifications and code official approval.

**NEW Proposal Version 2 – Code official not involved in technical infeasibility decision.**

6. Roof replacements for roof systems 2:12 slope or less shall comply with the low slope roof insulation requirement unless the installation of insulation above the structural roof deck, and necessary to achieve the code-required R-value, are deemed technically infeasible to accommodate the added thickness. Conditions of infeasibility presented by existing rooftop conditions, include, but are not limited to HVAC or skylight curbs, low door or glazing heights, parapet height, weep holes, drainage patterns, or flashing heights limitations due to cricket or saddle construction subject to manufacturer's specifications.

**ROOF REPLACEMENT.** The process of removing the existing *roof covering*, repairing any damaged substrate and installing a new *roof covering*. Must comply with the minimum flat roof insulation requirement unless the code official determines that the installation of insulation above the structural roof deck, and necessary to achieve a code-required R-value is deemed "technically infeasible" to accommodate the added thickness or any one or more of the following conditions: HVAC or skylight curbs, flashing heights, vents-through-roof, drainage patterns, parapets.

**Reason:**

The purpose of this code proposal is to provide the code official clear guidance when roofing work takes place on existing buildings. When the scope of work is to replace the roof covering – defined in the International Energy Conservation Code – (IECC) - as the roof membrane and roof insulation - and the flashing heights are too low, the building owner and manager should not have to rebuild the rooftop to accommodate thick roofing components such as insulation.

This is codifying the 'interpretation' that the State of Illinois has on it's FAQ website, #14 C503, Roof Alterations, to provide the building official solid guidance to make decisions for when these types of applications take place.

The City of Chicago published a Chicago Roofing Memorandum that clarifies the scope issue. In their opinion, the IECC does not dictate that when replacing the roof membrane that the insulation now needs to conform to

new construction roof insulation thicknesses. The City of Chicago's Paradigm is that the scope of work is to replace the roof, not rebuild the top of the building to accommodate insulation. In fact, the City of Chicago only requires a letter stating that the flashing heights won't accommodate the additional thickness of insulation to gain permission to not comply with the new construction requirements. The building official does not need to verify, grant permission nor review the question.

**Cost Impact:**

The code change proposal will decrease the cost of construction significantly for older buildings that are having roof replacement or roof recover operations performed.

This code proposal will provide the building owner and manager with the option to not have to rebuild the roof assembly and in some cases, reducing costs. In other cases, it does not provide cost savings.

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A handwritten signature in blue ink, appearing to be 'W. J. M.', is written above a horizontal line.

A proponent shall not submit multiple amendments to the same code section. When a proponent submits multiple amendments to the same section, the proposals shall be considered as incomplete proposals. The proponent of the proposal shall be notified and the proposal shall be held until the deficiencies are corrected, with a final date set for receipt of a corrected submittal. If the corrected amendment is received after the final date, the proposal shall not be considered by the ILECAC. This restriction shall not apply to amendments that attempt to address differing subject matter within a code section.