



CITY OF CHICAGO

DEPARTMENT OF BUILDINGS

Code Memorandum

To: Department of Buildings Plan Reviewers, Project Managers, Project Administrators and Inspectors

From: Judith Frydland
Commissioner 

Date: February 7, 2017

RE: **Energy Conservation Code Compliance for Work in Existing Buildings**

The Chicago Energy Conservation Code (Chapter 18-13) is designed to promote the effective use and conservation of energy over the useful life of each building. The Energy Conservation Code applies to repairs, alterations, and additions in existing buildings as well as new construction. Because building reuse typically offers greater environmental benefits than demolition and new construction, the provisions of the Energy Conservation Code are to be applied in a flexible manner to promote building reuse.

The following guidelines should be considered when applying the Chicago Energy Conservation Code to work in existing buildings:

- (1) The Energy Conservation Code is drafted to promote a policy of building reuse, and must not be interpreted in a manner that imposes unreasonable practical or financial barriers to reuse. The Energy Conservation Code does not require replacement of existing building features which remain serviceable.
- (2) REPAIRS are "the reconstruction or renewal of any part of an existing building for the purpose of its maintenance or to correct damage."

The Energy Conservation Code only imposes minimal requirements on repairs.

Repairs include:

- (a) one-for-one replacement of existing fixtures or elements in mechanical, electrical and plumbing systems (e.g. replacing an existing light fixture, water heater, or furnace) without reconfiguration of the existing system;
- (b) where the only reconfiguration is mandated by new requirements in the plumbing, electrical, or mechanical code, or to provide greater accessibility; and
- (c) work done to restore, upgrade, or rebuild an existing condition due to age or following damage, such as a fire or flood.

(3) ALTERATIONS are “any construction, retrofit, or renovation to an existing structure other than repair or addition that requires a permit [or] a change in a building, electrical, gas, mechanical, or plumbing system that involves an extension, addition, or change to the arrangement, type, or purpose of the original installation that requires a permit.”

(a) When alterations occur, the Energy Conservation Code only requires existing wall cavities, which are exposed as part of the work, to be filled with insulation. The Code does not require that an existing wall or ceiling cavity, which is exposed during construction, be expanded to accommodate the same amount of insulation required for new construction.

(b) The Code does require walls or ceilings be opened for the purpose of installing insulation. The Code does not require replacement of windows or other elements that are not part of the scope of work.

(c) Insulation is not required to be added to exposed cavities for existing masonry exterior walls when the licensed design professional indicates on the drawings or permit application that the addition of insulation would block air circulation in the cavity, creating moisture problems potentially leading to differential expansion and contraction (cracking) and/or mold.

(4) ADDITIONS to existing buildings may comply in a number of ways, but in general, only the newly-built portion must comply with the new construction requirements of the Energy Conservation Code.

(a) In some circumstances, improvements to the energy efficiency of the pre-existing building may allow relaxed requirements to apply to the addition.

(b) In many cases, the licensed design professional will submit a report generated by compliance software, such as REScheck or COMcheck to demonstrate compliance for additions and new construction.

(5) For more information on the applicability of the Chicago Energy Conservation Code to ROOFING, please see the memo on roofing requirements dated July 20, 2016.

(6) The Chicago Energy Conservation Code is based on the International Energy Conservation Code (2015), which can be viewed at <http://codes.iccsafe.org/>