

Bureau of Construction Codes & Fire Safety
Michigan Uniform Energy Code
Frequently Asked Questions

1. May compliance with the Michigan Uniform Energy Code (MUEC) be demonstrated by alternative compliance reports such as REScheck?

Answer: Yes, N1101.2.1 (2) of the MUEC provides for a reference to the International Energy Code (IECC) for detached 1-and –2 family dwellings as a means of demonstrating compliance. The IECC allows for alternative design methods such as REScheck. The web address for REScheck is <http://www.energycodes.gov/>.

2. Where the basement wall space is insulated with continuous foam insulation of an R-10 value, may the foam insulation be installed on the exterior basement up to grade, then applied to interior side for the rest of the basement height?

Answer: Yes, the installation described above meets the intent of the MUEC provided there is a minimum 12” horizontal overlap of insulating materials.

3. If a house is altered on the interior and refinished but not reconfigured, is it subject to the requirements of the MUEC?

Answer: No, it would be an alteration, thus it's not subject to MUEC other than installations specifically referenced in the code such as replacement windows and HVAC equipment.

4. If an addition is built on a house does it trigger upgrades to the mechanical systems?

Answer: Only to the extent identified in Rule 1089. Where there is an increase in energy use, separate equipment or upgrades would be required to comply with the MUEC.

5. If a thermal barrier such as drywall is required to cover certain types of insulation in a basement, would the basement then be considered a habitable area for purposes of determining when an architect's or engineer's signature and seal is required for a single family residence?

Answer: No, sealed plans are required for single-family residences when the calculated floor area exceeds 3,500 square feet. When interior finish is put on a wall it is only an indication of potential habitable use. Basements are exempt from 1980 PA 299 definition of habitable space and are only included when it qualifies as a story above grade, and the area or room(s) are defined as habitable and provided with required ceiling height, and minimum light and ventilation required for a habitable use. For further information see the Director's Column in the Bureau of Construction Codes & Fire Safety Bulletin dated 11-2002 on the Bureau website.

6. Is a building permit required for replacement windows and if not does the MUEC and code apply?

Answer: NO, many building departments view replacement windows as ordinary repairs thus exempt from permit requirements unless there is a structural modification to the opening or changing a room into a bedroom. While R105.2 of the Michigan Residential Code (MRC) does not exempt window replacements from building permits, it does require work when exempted from permits to be done in accordance with the code or any other laws or ordinances of the jurisdiction.

7. Is a seasonal cottage subject to the MUEC?

Answer: Yes, provided the intended maximum rate of energy usage is 3.4 Btu/h or more.

8. If a residential group building is designed and constructed to the Michigan Building Code (MBC) what energy code is applicable?

Answer: The Bureau of Construction Codes & Fire Safety will issue a technical bulletin regarding this question?

9. If a home is constructed with the intent of demonstrating compliance with a Home Energy Rating System guidelines with a score of 83 or better and the home fails the rating test, what would happen if the resident was due to move in?

Answer: A home must comply with the code prior to obtaining a permanent certificate of occupancy, since blower door tests are typically conducted close to the homes completion, it could be prudent to issue a temporary certificate of occupancy if the building is safe and only minor upgrades are required, but compliance with the code would need to be demonstrated within a prescribed time period.

10. If installing insulation and furring strips to finish a basement interior or constructing stud walls are permits required?

Answer: Yes. R105.2 of the MRC does not exempt this type of installation from permits. Inspections are necessary insure the structural framing, insulation, thermal barriers, vapor barriers and electrical installations, etc. are installed in compliance with the requirements of the code.

11. Ice Melt Systems in residential driveways. When it is a part of the original permit to build the house, would it be appropriate for the code official to consider that residential Ice Melt systems are a "non-issues" under scoping exception 1, since the driveway is not a portion of a detached 1 & 2 family dwelling in the first place?

Answer: Ice melt systems in residential driveways are not subject to the MUEC.

12. Are heated detached garages / pole barns on residential lots subject to the MUEC?

Answer: Detached accessory structures are not regulated by the MUEC.

13. Are heated attached garages, which part of the original building permit subject to the MUEC?

Answer: An attached garage is subject to the MUEC if it's a conditioned space and mechanically heated in excess of 3.4 Btu/h per square foot of space. Some type of analysis or documentation is required to verify the energy consumption of the conditioned space is less than 3.4 Btu/h.

14. Are attached sunrooms additions subject to the MUEC?

Answer: Sunroom additions are provided with the following exceptions:

- A. Portions of 1 and 2 family dwellings not heated or cooled.
- B. Portions of 1 and 2 family dwellings that have an intended maximum rate of energy usage less than 3.4 Btu/h per square foot of floor space.
- C. Conditioned sunroom additions having thermal isolation and served by a separate heating or cooling system, or which are thermostatically controlled as a separate zone of the existing system.
- D. Reduced U values of Table N1102.5, note e.

15. Interior Basement Insulation, in the event that the new energy code will require basement insulation, if the owner elects to have the applicant fully insulate the interior of the basement with fiberglass insulation with a vapor barrier, and moisture and mold develops on the masonry wall behind the insulation, could the code office be held liable for the mold?

Answer: A code official should not be held liable for installations that comply with the code and the manufacturers installation requirements.

16. What is the passing score for an Energy Star Home?

Answer: N1101.2.1 item 3 allows compliance under the U S EPA Energy Star Program. this will require certification by an individual who is a certified rater and the home must have a minimum score of 86 to pass.

17. The MRC requires crawl spaces to be vented, or ventilated by an approved mechanical means. The new Energy Code states if vents are installed in the crawl spaces, the insulation would have to be in the Joist Cavity. A question arose that if vents are closed in the winter can the crawl space walls be insulated in lieu of the floor cavity?

Answer: Yes.

18. When utilizing the Home Energy Rating or Energy Star compliance methods, what kind of documentation does the builder need to provide to a Building Code Official to obtain a building permit?

Answer: Under section N1102.2.1, eligible compliance options include a Home Energy Rating score of 83 or better, or a Home Energy Rating score of 86-100 (a score that earns the "Energy Star" designation). A Home Energy Rating features a "rating certificate based on plans" provided by the certified rater, and a "rating certificate: site visit" provided by the rater when the home is complete. A "rating certificate based on plans" showing a score of 83 or better needs to be provided to the code official at building permit issuance time.

19. When utilizing the Home Energy Rating or Energy Star compliance methods, what kind of documentation does the builder need to provide to a Building Code Official to obtain an occupancy permit?

Answer: With a home scoring 83 or better, the "rating certificate: site visit" issued from the certified rater serves as compliance documentation. For an Energy Star rated home (score of 86-100), either the "rating certificate: site visit" or the Energy Star Certificate issued by the rater can be used to document compliance.