# Rental Housing Design and Construction Building Design Standards FAQ



## 2016 Rental Housing Design/Construction Standards

- **Q:** Chapter 2 General Occupancy New Construction Minimum Standards requires all new windows and doors to be Energy Star (ES) qualified. Can the windows or doors be non-ES qualified if the energy model shows overall building energy performance is met?
- **A:** Yes, it is acceptable to use non-ES qualified windows or doors if the energy models demonstrates overall performance. However, the energy characteristic (U-factor) of the windows or doors used on the project must be clearly indicated in the energy model.

## **Low Income Housing Tax Credits (HTC)**

- Q: Under the 2017 QAP and Self-scoring Worksheet, a Universal Design Optional Feature (if selected) requires closet storage to be adjustable in a majority of the closets provided. What constitutes a majority?
- **A:** A majority must be at least 51 percent of the storage within each dwelling of the dwelling units required to comply with Universal Design. This must include entry closets, bedroom closets, and linen closets. This is applicable to 100 percent of the DUs for elevator equipped buildings or 10 percent of the DUs for non-elevator equipped buildings.
- Q: Under the 2017 QAP and Self-scoring Worksheet, a Universal Design Minimum Essential Feature requires kitchen and laundry appliances to have controls within a maximum height of 48". Does this mean combination microwave/exhaust hood appliances cannot be used?
- **A:** Combination microwave/exhaust hood appliances (with non-compliant reach ranges) may be provided at non-Type A Accessible units, with the understanding that a countertop microwave will be provided upon the request of a resident.
- **Q:** If a project is only receiving 4% HTC allocation from Minnesota Housing, are the full Design and Sustainability Standards required?
- A: Yes. All projects receiving any HTC allocation or any other capital improvement funding must meet all applicable requirements noted in Minnesota Housing's Rental Housing Design Constructions Standards and the current applicable MN Overlay and Guide to Green Communities. Submission to Minnesota Housing will vary depending on type of allowance. Consult with a Minnesota Housing staff architect.

## **Radon Mitigation**

Q: Is a sub-slab depressurization system required for a new, detached community building?

**A:** No. Radon mitigation is only applicable to Residential Occupancies, so if the detached community building is classified other than "R" Occupancy, it does not require a sub-slab depressurization system. However, if the new community space is attached to a new or existing "R" classified building, it may be required to meet Minnesota Housing's radon mitigation requirements.

## 2015 MN Overlay to 2011 Enterprise Green Communities Criteria

#### Criteria 5.1a, Building Performance Standard, New Construction, Three Stories or Fewer

- Q: Does a building under these criteria require a HERS Rater?
- **A:** Yes. Buildings under these criteria must be certified under ENERGY STAR (ES) for Homes. A RESNET Certified HERS Rater provides all modeling, testing/verification and final certification.
- **Q:** What if the owner wants to install an HVAC system that does not carry the ENERGY STAR certification such as Magicpaks?
- **A:** Minnesota Housing does not waive ES requirements for HOMES. All systems and assemblies must be per the current applicable version of ES. Consult with your project's HERS Rater.
- Q: With the HERS Rater involved, is the design engineer required to run a building energy model?
- **A:** No. Minnesota Housing relies on the HERS Rater. The design engineer reconciles their plans to meet the requirements of the HERS Rater.
- Q: Which ENERGY STAR for Homes version is to be used? 3.0 or 3.1?
- **A:** Minnesota Housing understands that v3.1 is required for projects permitted (building permit issuance) after April 1, 2016. Consult with your HERS Rater. Projects approved for funding before this date may request a waiver from Minnesota Housing to use the 3.0 version with the understanding that the use of this version may not result in ENERGY STAR Certification.
- **Q:** What energy code is to be followed?
- **A:** Building type and number of stories will indicate what code to follow. The highest, most restrictive requirement of the building code, MN Overlay, or Green Communities applies if there's a conflict.
- Q: Are we required to design a certain percent better than the applicable energy code?
- **A:** Projects receiving funds from Minnesota Housing before April 2015 may be 15 percent better than 90.1-2007. After April 2015, Minnesota Housing will require 15 percent better than 90.1-2010.
- Q: Can this type of building (three stories or fewer) have a heated garage?
- **A:** Three stories or fewer with a heated garage can be certified under ES for Homes and Green Communities. Four or more stories with garage cannot be certified by ES MFHR or Green Communities. Exception: Four and five stories with separated space heating and water heating allowed to certify under ES for Homes.

#### Criteria 5.1b, Building Performance Standard, New Construction, Four Stories or More

- **Q:** Does this type of building (four or more stories) require a HERS Rater?
- **A:** No. New four or more story buildings must follow the MN Overlay, which requires the project's design (mechanical) engineer to provide energy modeling. A third party commissioning authority may be required based upon which pathway is chosen per the MN Overlay.
- **Q:** Is the design engineer required to run a building energy model?
- **A:** Since there is no prescriptive path for 90.1-2010 under ES MFHR, all four story or more buildings must provide an energy model at the beginning and again as an as-built model at the end. Exception: Four and five stories with separated space heating and water heating allowed to certify under ES for Homes.

**Q:** What ASHRAE standard is to be followed for the model?

**A:** Minnesota Housing projects funded prior to April 2015 may choose between:

- ASHRAE 90.1 2007, demonstrating 15 percent better with the garage heat penalty, or
- ASHRAE 90.1 2010, demonstrating 15 percent better without the garage heat penalty. After April 2015, all projects must use ASHRAE 90.1 2010, demonstrating 15 percent better without the garage heat penalty.

**Q:** Is a third party commissioning agent required for systems verification?

**A:** This depends on which pathway is chosen. If the project certifies under ES MFHR, there's no third party commissioning. If you use the recently updated Alternative Compliance Path by Green Communities or if you use the Minnesota Housing Alternative Compliance Pathway in the MN Overlay, a third party commissioning agent is required.

#### Criteria 5.1c, Building Performance Standard, Substantial and Moderate Rehab, Three Stories or Fewer

**Q:** Is a building energy model required by the design engineer for a moderate rehab?

**A:** As per the MN Overlay, an energy model will be required under the Performance Pathway. If the project team chooses the Prescriptive Pathway, an energy model is not required; however, some blower door testing may be required for air-sealing verification.

**Q:** Is a building energy model required by the design engineer for a substantial rehab?

A: Yes; however, the threshold to be categorized as a "substantial" rehab is relatively high. Most rehab projects we fund do not meet the definition of "substantial" as noted in the MN Overlay (v April 2016), Chapter 2.