

THE CITY OF MAYFIELD HEIGHTS BUILDING DEPARTMENT

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Mayfield Heights, OH 44124
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CHANGES TO THE RESIDENTIAL CODE OF OHIO (RCO)

*Effective
July 1, 2019*



As of July 1, 2019, the 2019 Residential Code of Ohio (RCO) went into effect. This bulletin contains some of the requirements that will go into effect for permit applications made on or after July 1, 2019. **Please note that this is not a comprehensive list of effective code changes**, but a list of those that would appear to most affect applications made to this Building Department.

RCO 101.2 Scope, Exceptions: 14. Retaining walls, bridges, walkways or site stairs unless associated with or necessary for the building or the building egress are now excepted from the provisions of the RCO. Previously, retaining walls were exempt from approval if less than 4' in height from the bottom of the footing to the top of the wall.

RCO 102.10 Work exempt from approval: It is now specifically noted that work exempt from approval is still required to comply with all applicable provisions of the code. This includes foundation requirements for accessory structures under 200 square feet.

RCO Table 301.2(1), Mayfield Heights, Climatic and Geographic Design Criteria: One, Two and Three-Family Dwellings, Section R301, the following local design criteria is established for Mayfield Heights, and shall be used in Table R301.2(1). Wind loading has changed, and other design criteria categories are now prescriptively set.

GROUND SNOW LOAD: 20 Pounds per square foot.

WIND DESIGN SPEED: 115 Miles per hour, Exposure Category: B.

SEISMIC DESIGN CATEGORY: A.

SUBJECT TO DAMAGE FROM WEATHERING: SEVERE.

FROST LINE DEPTH: Forty-two inches (42") minimum depth of footing below finish grade, except when the code specifically permits a shallower depth.

SUBJECT TO DAMAGE FROM TERMITES: MODERATE to HEAVY

WINTER DESIGN TEMPERATURE: 5°F. 6,351 Heating Degree Days.

ICE BARRIER UNDERLAYMENT REQUIRED: YES

FLOOD HAZARDS: By Mayfield Heights Ordinance.

AIR FREEZING INDEX: 1500-Degree days below 32°F.

MEAN ANNUAL TEMPERATURE: 50°F.

RCO 302.5.1 Opening Protection: Doors between a garage and a dwelling no longer must be self-closing.

RCO 314.1.2 Smoke alarms: On each level within each dwelling unit smoke alarms utilizing photoelectric and ionization technologies shall be installed. Separate or dual-sensing smoke alarms may be used. A smoke alarm located in accordance with section 314.3(2) shall include photoelectric technology (outside the bedrooms). This provides specifics on the type of smoke alarms required.

RCO 405.1 Concrete or masonry foundations: Perforated foundation drains shall be surrounded with an approved filter membrane or the filter membrane shall cover the washed gravel or crushed rock covering the drain.

RCO 502.6.3 Beams ending on an open pocket: Beams placed in a foundation pocket require stabilization with bolted clip angles.

RCO 502.9.1 Column to beam fastening: Steel beams now require stabilization with specific connections at pockets, columns, and footings by bolts or welding.

RCO 507 Exterior Decks: Most of the deck information has been relocated to this section. More deck specific details are provided.

RCO 802.4 Rafters and 802.5 Ceiling Joists: Span tables have been revised.

RCO 802.11 Roof Tie-down: Expanded uplift tables.

RCO 1101.2.1 Compliance paths: Paths for compliance with the energy code have been expanded and most requirements are more stringent. They are:

1. RCO 1101.14 through 1104. This is a series of prescriptive tables and other requirements.
2. RCO 1105. Simulated Performance Alternative. Performance based compliance is demonstrated.
3. RCO 1106 The Energy Rating Index (ERI) approach.
4. RCO 1112 The Ohio Home Builders Association (OHBA) Alternative Energy Code Option- Available only to new buildings/homes. This is used by most new home builders. Note that Table 1112.2.1 requires R49 at ceilings and R13 or R15/13+3 depending on the compliance path at wood framed walls. RCO 1112.2.4.2.1 will limit air leakage to 5 ACH, which will require whole house ventilation for fresh air introduction.
5. The International Energy Conservation Code (IECC-18).

RCO 1101.5 requires that details be provided for insulation, fenestration, mechanical equipment, duct and air sealing.

RCO 1108 Additions: Additions must comply with a prescriptive requirement of RCO 1102.1.2 as well as other requirements or the Simulated Performance Alternative. Note that Table 1102.1.2 requires R49 at ceilings and R20/13+5 at wood framed walls.

RCO 1109 Alterations: Alterations must comply with a prescriptive requirement of RCO 1102.1.2 as well as other requirements. Note that Table 1102.1.2 requires R49 at ceilings and R20/13+5 at wood framed walls.

RCO 1401.3. Equipment and appliance sizing: Heating and cooling equipment and appliances shall be sized in accordance with ACCA Manual S or other approved sizing methodologies based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies.

RCO 1601.1 Duct design: Duct installation shall be in accordance with ACCA Manual D. Although not a change, these calculations and duct size descriptions need to be submitted for review and approval per other sections of the RCO.

I would be happy to answer any questions you may have about these changes, and we look forward to working with you for a smooth transition.

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For a complete list of changes and specific wording of these changes, refer to the 2019 RCO:

https://com.ohio.gov/documents/bbst_ResidentialCodeofOhioEffectiveJuly1,2019.pdf

Reason for Changes: The Ohio Board of Building Standards amended the Ohio Administrative Code (OAC) Chapters 4101:8-1 to 4101:8-44 (rescind and adopt new) to comply with the five-year rule review and to update the current Residential Code of Ohio to reflect the 2018 edition of the “International Residential Code” with Ohio amendments.

If you should have any questions regarding these rule changes, please call the Board of Building Standards staff at 614-644-2613.