

Massachusetts Energy Code
Residential New Construction Permit Application and Plan Review Checklist

Version 1.0

*This page is to be completed by the permit applicant and submitted to the local building department with other required permit application documents.

Applicant Name: _____ Applicant Phone: _____

Project Address: _____ Date: _____

Select a compliance path (R401.2)

<input type="checkbox"/> Path 1 (Prescriptive)	<input type="checkbox"/> Path 2 (ERI and Stretch Code)	<input checked="" type="checkbox"/> Mandatory Requirements (All projects)
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Path 1. Prescriptive: Sections R401 – R404 & R407: Indicate page number in plans & specifications where details are found:

	Windows & Doors	Skylights	Ceilings	Wood frame walls	Mass walls	Floors	Basement walls	Slab insulation / depth	Crawlspace walls
<input type="checkbox"/> Option A: R-value (R402.1.2)	Maximum value			Minimum value					
	U-0.30	U-0.55	R-49	R-20 or R-13+5	R-13 / R-17	R-30	R-15 / R-19	R-10 / 2 ft.	R-15 / R-19
<input type="checkbox"/> Option B: Equivalent U-factor (R402.1.4): Must include calculations	Maximum value								
	U-0.30	U-0.55	U-0.026	U-0.060	U-0.082	U-0.033	U-0.050	U-0.1 / 2 ft.	U-0.055
<input type="checkbox"/> Option C: Total UA alternative (R402.1.5 plus MA amendment R402.1.5.1)							<input type="checkbox"/> REScheck™ version 4.6.5 or later		
							<input type="checkbox"/> REScheck-Web™		
+ Additional Efficiency Packages (R407.1) All prescriptive projects must comply with one of the options to the right. Select one.	<input type="checkbox"/> More Efficient HVAC performance (R407.2)								
	<input type="checkbox"/> Heat or energy recovery ventilation system (R403.6.1)								
	<input type="checkbox"/> High efficiency water heating or solar thermal hot water heating (R407.3)								

Path 2. Energy rating index (ERI) and Approved Alternatives (R406): MANDATORY FOR STRETCH CODE (optional path in non-stretch communities). Documentation must be submitted prior to issuing building permit. Select one method below.

- ☐ **Option A. RESNET HERS rating with MA amendments: Submittal must include:** Preliminary HERS rating with Index score less than or equal to Table R406.4, description of energy features, and a statement that the rating index score is "based on plans".

Table R406.4

Maximum HERS Index	
New construction	Whole house renovations; additions
55	65

Note: Higher HERS Index scores are permitted for projects that include renewable energy generation. See MA 780 CMR Chapter 11 Table R406.4

- ☐ **Option B. Certified ENERGY STAR® homes, version 3.1 (R406.1.1): Submittal must include:** Preliminary HERS rating, description of energy features, and a statement that the rating index score is "based on plans".
- ☐ **Option C. Passive House Institute US or Passive House Institute certification: Submittal must include:** WUFI or PHPP compliance report which demonstrates compliance with PHIUS+2018 (or newer) or PHI performance requirements, a statement that the WUFI or PHPP results are "based on plans", and evidence of PHIUS or PHI precertification approval.

General Mandatory Requirements (ALL PROJECTS):

- ☐ **Air sealing and insulation to be installed per Table R402.4.1.1**
- ☐ **Blower door test to be completed (R402.4.1.2)** Building envelope leakage must be ≤ 3 ACH50
- ☐ **Ducts to be pressure tested** by a HERS Rater, HERS RFI, or BPI Certified Pro. Exception: All ducts/air handlers are inside (R403.3.3.)
- ☐ **Boiler temperature setback control indicated in specifications (R403.2) on page #** _____

- | | |
|---|---|
| <input type="checkbox"/> Mechanical ventilation rate (R403.6): _____ CFM | Method by which ventilation rate was calculated (select one):
<input type="checkbox"/> 1. Equation 4-1 (R406.3)
<input type="checkbox"/> 2. ENERGY STAR® Homes v3.1
<input type="checkbox"/> 3. ASHRAE 62.2-2013
<input type="checkbox"/> 4. MA amendment formula |
|---|---|

- ☐ **Heating and cooling load calculations (Manual J) and Equipment Selection report (Manual S) to be submitted (R403.7)**

- ☐ **Solar Ready Zone indicated in construction documents on page #** _____ (RA101.1 through 103.6 and RA103.8) Note: This requirement applies only to new construction of one- and two-family dwellings and townhouses, excluding additions, and has the following exceptions:
1. less than 600 square feet of roof area is oriented between 110° and 270° of true north;
 2. buildings with a permanently installed on-site renewable energy system;
 3. buildings with a solar-ready zone that is shaded for more than 70 percent of daylight hours annually.

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- ☐ Path 1 (Prescriptive) ☐ Path 2 (ERI and Stretch Code) ☒ **Mandatory Requirements (All projects)**

Path 1. Prescriptive: Sections R401 – R404 & R407: Indicate page number in plans & specifications where details are found:

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<div style="display: flex; align-items: center;"><div style="font-size: 2em; margin-right: 10px;">+</div><div>Additional Efficiency Packages (R407.1) All prescriptive projects must comply with one of the options to the right. Select one.</div></div>	<input type="checkbox"/> More Efficient HVAC performance (R407.2)								
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- | | |
|---|--|
| <input type="checkbox"/> Mechanical ventilation rate (R403.6): _____ CFM | <div>Method by which ventilation rate was calculated (select one):</div> <div style="display: flex; flex-direction: column; gap: 5px;"><input type="checkbox"/> 1. Equation 4-1 (R406.3)</div> <div style="display: flex; flex-direction: column; gap: 5px;"><input type="checkbox"/> 2. ENERGY STAR® Homes v3.1</div> <div style="display: flex; flex-direction: column; gap: 5px;"><input type="checkbox"/> 3. ASHRAE 62.2-2013</div> <div style="display: flex; flex-direction: column; gap: 5px;"><input type="checkbox"/> 4. MA amendment formula</div> |
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