

LOW-RISE RESIDENTIAL NEW CONSTRUCTION
Massachusetts Energy Code 9th Edition
Permit Application Checklist*



**This checklist guides permit applicants through the main requirements of the energy code prior to permit application*

Applicant Name: _____ Applicant Phone: _____

Project Address: _____ Date: _____

Indicate which Compliance Path is being used (R401.2)

<input type="checkbox"/> Path 1 (Prescriptive)	<input type="checkbox"/> Path 2 (ERI and Stretch Code)	<input 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	Skylight	Ceiling	Wood frame wall	Mass wall	Floor	Basement wall	Slab insulation / depth	Crawlspace Wall	
<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™				
<input type="checkbox"/> Additional Efficiency Packages Projects must comply with one of the following options (R407.1)				<input type="checkbox"/> 1. More Efficient HVAC performance (R407.2) <input type="checkbox"/> 2. Heat or energy recovery ventilation system (R403.6.1) <input type="checkbox"/> 3. 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 COMPLIANCE
Documentation must be submitted prior to issuing building permit. Select one method below.

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

On-site Renewable energy source	Maximum HERS Index	
	New construction	Whole house renovations; additions
None	55	65
DHW	57	67
Solar Electric Generation	60	70
Clean Space Heating	60	70
Solar Electric & DHW	62	72
Solar Electric & Clean Space Heating	65	75
Solar Electric & Clean Space Heating & DHW	67	77

B. Certified ENERGY STAR® homes, version 3.1 certified (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”.

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: APPLIES TO 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 # _____

Mechanical ventilation rate (R403.6): _____ CFM

Method by which ventilation rate was calculated (select one):

- 1. Equation 4-1 (R406.3)
- 2. ENERGY STAR® Homes v3.1
- 3. ASHRAE 62.2-2013
- 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.