

# 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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<b>Path 1. Prescriptive: Sections R401 – R404 &amp; R407: Indicate page number in plans &amp; specifications where details are found:</b>									
	Windows & Doors	Skylights	Ceilings	Wood frame walls	Mass walls	Floors	Basement walls	Slab insulation / depth	Crawlspace walls
<input type="checkbox"/> <b>Option A:</b> 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"/> <b>Option B:</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"/> <b>Option C:</b> 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™			
<b>+</b>	<b>Additional Efficiency Packages (R407.1)</b> 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)					

<b>Path 2. Energy rating index (ERI) and Approved Alternatives (R406): MANDATORY FOR STRETCH CODE</b> (optional path in non-stretch communities). Documentation must be submitted prior to issuing building permit. Select one method below.							
<input type="checkbox"/> <b>Option A. RESNET HERS rating with MA amendments: Submittal must include:</b> 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".							
<b>Table R406.4</b> <table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center;">Maximum HERS Index</th> </tr> <tr> <th style="text-align: center;">New construction</th> <th style="text-align: center;">Whole house renovations; additions</th> </tr> <tr> <td style="text-align: center;">55</td> <td style="text-align: center;">65</td> </tr> </table>		Maximum HERS Index		New construction	Whole house renovations; additions	55	65
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							
<input type="checkbox"/> <b>Option B. Certified ENERGY STAR® homes, version 3.1 (R406.1.1): Submittal must include:</b> Preliminary HERS rating, description of energy features, and a statement that the rating index score is "based on plans".							
<input type="checkbox"/> <b>Option C. Passive House Institute US or Passive House Institute certification: Submittal must include:</b> 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.							

<b>General Mandatory Requirements (ALL PROJECTS):</b>	
<input type="checkbox"/> Air sealing and insulation to be installed per Table R402.4.1.1	
<input type="checkbox"/> Blower door test to be completed (R402.4.1.2) Building envelope leakage must be ≤ 3 ACH50	
<input type="checkbox"/> 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.)	
<input type="checkbox"/> 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
<input type="checkbox"/> Heating and cooling load calculations (Manual J) and Equipment Selection report (Manual S) to be submitted (R403.7)	
<input type="checkbox"/> <b>Solar Ready Zone indicated in construction documents on page # _____ (RA101.1 through 103.6 and RA103.8)</b> 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.	