

Residential Stretch Code Permit Application Checklist: Energy Rating Index Path



This checklist is applicable to residential new construction, changes of occupancy to dwelling units, additions greater than 1,000 sqft or 100% of the existing conditioned floor area, and alterations where the work area exceeds 50% of the area of the dwelling unit and is greater than 1,000 sqft or 100% of the existing conditioned floor area.

PROJECT INFORMATION.....

Applicant Name: _____ Applicant Phone: _____

Project Address: _____ Date: _____

Project type:

- New construction Large Addition Extensive Alteration Changes of Occupancy or Use

DOCUMENTATION

- A **Home Energy Rating Certificate - Projected Report - Based on Plans** has been provided.

INFORMATION ON CONSTRUCTION DOCUMENTS (R103.2)

- A note indicating the energy code compliance path is the Energy Rating Index Path
- Insulation materials, depth, and R-values
- Fenestration U-factors and solar heat gain coefficients (SHGC)
- Mechanical system design criteria (Manual J, Manual D, and Manual S reports)
- Mechanical and service water heating systems and equipment types, sizes, and efficiencies
- Equipment and system controls
- Duct sealing, duct and pipe insulation and location
- Air sealing details

SOLAR-READY

- Solar-Ready Zone per Appendix RB is indicated in construction documents on page # _____, or an exception is selected below with applicable documentation provided.

Exceptions - Check one if applicable:

- Additions under 1,000 sqft
- 1- & 2-family dwellings & townhouses with < 600 sqft of roof area oriented between 110 & 270 of true north
- Buildings with a permanently installed onsite renewable energy system
- Buildings with a solar-ready zone that is shaded for more than 70 percent of daylight hours annually
- Buildings and dwelling units complying with Appendix RC Sections RC102 or RC105

ELECTRIC VEHICLE WIRING

- For one- and two-family dwellings and townhouses with on-site parking at least one EV Ready Space is shown. For Group R buildings: At least 20% of installed spaces are shown as EV Ready. Exception: onsite parking is not provided, or parking is separated from the dwelling by a public right of way.
- Electrical site plan shows wiring from the electrical service to within six feet of each EV Ready Space

CLEAN ENERGY APPLICATION (for determining maximum HERS Index requirement)

Fuel type:

- Mixed-fuel building (contains combustion equipment or piping for such equipment)
- All-electric building (does not contain combustion equipment or piping for such equipment)

Solar electric generation

Do the construction documents include provisions for onsite electricity generation rated at 4 kW or higher?

- Yes
- No

Based on the boxes checked above, check the appropriate maximum HERS Index below:

Clean Energy Application	Maximum HERS Index Score		
	New Construction until June 30, 2024	New Construction Permits after July 1, 2024	Major Alterations, Additions, or Change of Use
Mixed-Fuel Building	<input type="checkbox"/> 52	<input type="checkbox"/> 42	<input type="checkbox"/> 52
Solar Electric Generation	<input type="checkbox"/> 55	<input type="checkbox"/> 42	<input type="checkbox"/> 55
All-Electric Building	<input type="checkbox"/> 55	<input type="checkbox"/> 45	<input type="checkbox"/> 55
Solar Electric & All-Electric Building	<input type="checkbox"/> 58	<input type="checkbox"/> 45	<input type="checkbox"/> 58

MANDATORY REQUIREMENTS

Check with AHJ to determine if the following items will be verified by the code official or by the HERS Rater.

Mandatory Requirements per Table R406.2

General

R401.3 Certificate in utility room or approved location to be installed

Building Thermal Envelope

- R402.1.1 Vapor retarders installed per MA Residential Code R702.7
- R402.2.3 Eave baffles to be installed in each bay
- R402.2.4.1 Access hatches and doors to have retainer for loose-fill insulation
- R402.2.10.1 Crawl space wall insulation installation installed per MA Residential Code
- R402.4.1.1 Installation - Air barrier and insulation installation details shown on plans
- R402.4.1.2 Testing - Blower door test to be performed. Max 5 ACH50.

Mechanical

- R403.1
 - Controls - At least one thermostat per heating and cooling system
 - Programmable thermostat is specified
 - Heat pump supplementary heat does not operate when not needed
- R403.3
 - Ducts (except R403.3.2, R403.3.3, and R403.3.6)
 - Ducts outside conditioned space \geq R-8 (\geq R-6 if duct is $<$ 3" diameter)
 - Ducts to be sealed and airtight air handler is specified
 - Duct leakage testing to be conducted
 - No building cavities to be used as ducts
- R403.4 Mechanical system piping insulation - Piping $>$ 105F or $<$ 55F to be insulated to R-3
- R403.5.1 Heated water circulation and temp. maintenance systems have proper controls
- R403.5.3 Drain water heat recovery units (only if present)
- R403.6.1 Heat or energy recovery ventilation (HRV/ERV) - HRV/ERV is specified
- R403.7 Equipment sizing and efficiency rating - Manual J report provided.
- R403.8 System serving multiple dwelling units - Comply with C403 and C404 (commercial)
- R403.9 Snow and ice melt systems - Controls specified
- R403.10 Energy consumption of pools and spas - Heater controls, pool covers
- R403.11 Portable spas meet APSP 14
- R403.12 Residential pools and permanent residential spas meet APSP 15

Electrical Power and Lighting Systems

- R404.1 Lighting equipment - All permanently installed lighting to be LED (except kitchen appliance lights)
- R404.2 Interior lighting controls - Dimmers or occupant sensors specified
- R404.4 Wiring for electric vehicle charging spaces

ENERGY CODE SUPPORT HOTLINE: 855-757-9717 EMAIL: ENERGYCODESMA@PSDCONSULTING.COM

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