



Massachusetts Energy Code 9<sup>th</sup> Edition

# Air Barrier and Insulation Installation Checklist

(Based on IECC 2018 Table R402.4.1.1)

## GENERAL REQUIREMENTS

- A continuous air barrier shall be installed in the building envelope.
- The exterior thermal envelope contains a continuous air barrier.
- Breaks or joints in the air barrier shall be sealed.
- Air-permeable insulation shall not be used as a sealing material.
- All insulation shall be installed at a Grade I quality in accordance with ICC/RESNET 301

## FRAMING INSPECTION

<input type="checkbox"/>	<b>Ceiling/attic</b>	<ul style="list-style-type: none"> <li>• The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier shall be sealed.</li> </ul>
<input type="checkbox"/>	<b>Walls</b>	<ul style="list-style-type: none"> <li>• The junction of the foundation and sill plate shall be sealed.</li> <li>• The junction of the top plate and the top of exterior walls shall be sealed.</li> <li>• Knee walls shall be sealed.</li> <li>• Walls are framed to allow the corner to be insulated or continuous insulation is/will be installed.</li> </ul>
<input type="checkbox"/>	<b>Windows, skylights and doors</b>	<ul style="list-style-type: none"> <li>• The space between window/door jambs and framing, and skylights and framing shall be sealed.</li> </ul>
<input type="checkbox"/>	<b>Rim joists</b>	<ul style="list-style-type: none"> <li>• Rim joists shall include the air barrier.</li> </ul>
<input type="checkbox"/>	<b>Floors (including above garage and cantilevered floors)</b>	<ul style="list-style-type: none"> <li>• The air barrier shall be installed at any exposed edge of insulation.</li> </ul>
<input type="checkbox"/>	<b>Crawl space walls</b>	<ul style="list-style-type: none"> <li>• Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder with overlapping joints taped.</li> </ul>
<input type="checkbox"/>	<b>Garage separation</b>	<ul style="list-style-type: none"> <li>• Air sealing shall be provided between the garage and conditioned spaces.</li> </ul>
<input type="checkbox"/>	<b>Shower/tub on exterior wall</b>	<ul style="list-style-type: none"> <li>• Exterior walls adjacent to showers and tubs shall be insulated</li> <li>• The air barrier installed at exterior walls adjacent showers and tubs shall separate them from the showers and tubs.</li> </ul>
<input type="checkbox"/>	<b>Electrical/phone box on exterior walls</b>	<ul style="list-style-type: none"> <li>• The air barrier shall be installed behind electrical or communication boxes or air-sealed boxes shall be installed.</li> </ul>
<input type="checkbox"/>	<b>Concealed sprinklers</b>	<ul style="list-style-type: none"> <li>• When required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.</li> </ul>



INSULATION INSPECTION		
<input type="checkbox"/>	<b>Ceiling/attic</b>	<ul style="list-style-type: none"> <li>The insulation in any dropped ceiling/soffit shall be aligned with the air barrier.</li> </ul>
<input type="checkbox"/>	<b>Walls</b>	<ul style="list-style-type: none"> <li>Cavities within corners and headers of frame walls shall be insulated by completely filling the cavity with a material having a thermal resistance of R-3 per inch minimum.</li> <li>Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier.</li> </ul>
<input type="checkbox"/>	<b>Rim joists</b>	<ul style="list-style-type: none"> <li>Rim joists shall be insulated.</li> </ul>
<input type="checkbox"/>	<b>Floors (including above garage and cantilevered floors)</b>	<ul style="list-style-type: none"> <li>Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of subfloor decking, or floor framing cavity insulation shall be permitted to be in contact with the top side of sheathing, or continuous insulation installed on the underside of floor framing and extends from the bottom to the top of all perimeter floor framing members.</li> </ul>
<input type="checkbox"/>	<b>Crawl space walls</b>	<ul style="list-style-type: none"> <li>Where provided instead of floor insulation, insulation shall be permanently attached to the crawlspace walls.</li> </ul>
<input type="checkbox"/>	<b>Narrow cavities</b>	<ul style="list-style-type: none"> <li>Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to the available cavity space.</li> </ul>
<input type="checkbox"/>	<b>Recessed lighting</b>	<ul style="list-style-type: none"> <li>Recessed lighting fixtures installed in the building thermal envelope shall be air tight and IC rated.</li> </ul>
PLUMBING ROUGH-IN INSPECTION		
<input type="checkbox"/>	<b>Plumbing and wiring</b>	<ul style="list-style-type: none"> <li>Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.</li> </ul>
MECHANICAL ROUGH-IN INSPECTION		
<input type="checkbox"/>	<b>Shafts, penetrations</b>	<ul style="list-style-type: none"> <li>Duct shafts, utility penetrations, and flue shafts opening to exterior or unconditioned space shall be sealed.</li> </ul>
<input type="checkbox"/>	<b>HVAC register boots</b>	<ul style="list-style-type: none"> <li>HVAC register boots that penetrate building thermal envelope shall be sealed to the subfloor, wall covering, or ceiling penetration.</li> </ul>
FINAL INSPECTION		
<input type="checkbox"/>	<b>Recessed lighting</b>	<ul style="list-style-type: none"> <li>Recessed light fixtures installed in the building thermal envelope shall be sealed to the finished surface.</li> </ul>
<input type="checkbox"/>	<b>Ceiling/Attic</b>	<ul style="list-style-type: none"> <li>Access openings, drop down stairs or knee wall doors to unconditioned attic spaces shall be sealed.</li> </ul>

**Notes:**