

LOW-RISE RESIDENTIAL NEW CONSTRUCTION

Rhode Island Energy Code SBC-2-2013 (SBC-8-2013) - based on 2012 IECC



Plan Review Checklist (v 04-16-2018)

(To be submitted by Applicant and approved by Code Official before building permit is issued)

Applicant Name _____ Applicant Phone _____

Project Address _____ Application Date _____

Approved by _____ Approval Date _____

Indicate which Compliance Path is being used:

Path 1: Prescriptive
 Path 2: Performance

Path 1: Prescriptive – Sections 1101 thru 1104 (R401 thru R404) Select one option

Assembly	List page numbers where details are found in plans	<input type="checkbox"/> Option A - 1102.1.1 (R402.1.1) Minimum R-Value	<input type="checkbox"/> Option B - 1102.1.3 (R402.1.3) Maximum U-factor (Must include calculations based on R-values in plans)	<input type="checkbox"/> Option C - 1102.1.4 (R402.1.4) (Insert values from REScheck, and attach report)
Windows & Doors		U-0.35 (maximum)	U-0.35	
Skylight		U-0.60 (maximum)	U-0.60	
Ceiling / Roof		R-38	U-0.026	
Wood frame wall		R-20 or R-13+5 c.i.	U-.050 or .077+0.2 c.i.	
Mass wall		R-13 / R-17	U-0.077 / 0.059	
Floor		R-30	U-0.033	
Basement wall		R-10 c.i. or R-13	U-0.10 / 0.077	
Slab insulation / depth		R-10 for 2 ft.	---	
Crawlspace wall		R-10 c.i. or R-13	U-0.10 / 0.077	

c.i. = continuous insulation

Path 2. Simulated Performance Alternative 1105 (R405) and the MANDATORY provisions of Sections 1101 thru 1104 (R401 thru R404)

Annual energy cost of proposed design not greater than annual energy cost of standard reference home per software calculations submitted by designer. Attach Compliance report which includes:

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Building street address or other site identification 2. A statement indicating that the proposed design complies with Section 1105.3 (R405.3) 3. Name of person performing analysis and generating the report 4. The name and version of the compliance software tool | <ol style="list-style-type: none"> 5. An inspection checklist documenting the building component characteristics of the proposed design, the results for both the standard reference design and the proposed design, and the user inputs to the compliance software to generate the results |
|---|--|

General Mandatory Requirements: APPLIES TO ALL PROJECTS

<p><input type="checkbox"/> Mechanical ventilation rate 1103.5 (R403.5): _____ CFM (Use Table M1507.3.3(1) minimum rates below or attach calculations)</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th rowspan="2">Floor Area ft²</th> <th colspan="5">Number of Bedrooms</th> </tr> <tr> <th>0 - 1</th> <th>2 - 3</th> <th>4 - 5</th> <th>6 - 7</th> <th>>7</th> </tr> </thead> <tbody> <tr> <td>< 1,500</td> <td>30</td> <td>45</td> <td>60</td> <td>75</td> <td>90</td> </tr> <tr> <td>1,501 - 3,000</td> <td>45</td> <td>60</td> <td>75</td> <td>90</td> <td>105</td> </tr> <tr> <td>3,001 - 4,500</td> <td>60</td> <td>75</td> <td>90</td> <td>105</td> <td>120</td> </tr> <tr> <td>4,501 - 6,000</td> <td>75</td> <td>90</td> <td>105</td> <td>120</td> <td>135</td> </tr> <tr> <td>6,001 - 7,500</td> <td>90</td> <td>105</td> <td>120</td> <td>135</td> <td>150</td> </tr> <tr> <td>> 7,500</td> <td>105</td> <td>120</td> <td>135</td> <td>150</td> <td>165</td> </tr> </tbody> </table>	Floor Area ft ²	Number of Bedrooms					0 - 1	2 - 3	4 - 5	6 - 7	>7	< 1,500	30	45	60	75	90	1,501 - 3,000	45	60	75	90	105	3,001 - 4,500	60	75	90	105	120	4,501 - 6,000	75	90	105	120	135	6,001 - 7,500	90	105	120	135	150	> 7,500	105	120	135	150	165	<p><input type="checkbox"/> Equipment sizing 1103.6 (R403.6): calculations submitted (Manual J and Manual S) and efficiency ratings for all heating and cooling equipment indicated in specifications.</p> <p>Calculations may be submitted after permit is issued if the installing contractor has not yet been selected, but CERTIFICATE OF OCCUPANCY SHALL NOT BE ISSUED WITHOUT THIS SUPPORTING DOCUMENTATION.</p>
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Final Documentation / Inspection Checklist (v 04-16-2018)

(To be completed by Code Official before Certificate of Occupancy is issued)

Applicant Name _____ Applicant Phone _____

Project Address _____

Approved by _____ Approval Date _____

1. Insulation, windows, doors, skylights: One of the following alternatives must be checked									
	Windows & Doors	Skylight	Ceiling	Wood frame wall	Mass wall	Floor	Basement wall	Slab R-value / depth	Crawlspace wall
	Maximum value			Minimum value					
<input type="checkbox"/> A. Prescriptive	U-0.35	U-0.60	R-38	R-20 or R-13+5	R-13 / R-17	R-30	R-10 / R-13	R-10 for 2 ft.	R-10 / R-13
<input type="checkbox"/> B. UA Equivalent	Installed materials match values submitted per Option 1B on opposite side of this form, OR match Option 1C REScheck submittal								
<input type="checkbox"/> 2. Air barrier - Mandatory Table 1102.4.1.1 (R402.4.1.1) – Continuous air barrier is properly installed, and connections between components are properly sealed									
<input type="checkbox"/> 3. Air leakage testing - Mandatory 1102.4.1.2 (R402.4.1.2) – Blower door test results received									
<input type="checkbox"/> 4. Equipment sizing 1103.6 (R403.6) – Calculations submitted (Manual J and Manual S) and efficiency ratings for all heating and cooling equipment indicated in specifications.									
<input type="checkbox"/> 5. Duct sealing - Mandatory 1103.2.2 (R403.2.2) – All ducts, air handlers and filter boxes are sealed									
<input type="checkbox"/> 6. Duct testing and leakage - Mandatory 1103.2.2 (R403.2.2) – Duct leakage test results received. Exception if all ducts and air handlers are within the building envelope. Total leakage is not over 8 cubic ft. per 100 sq. ft. of conditioned floor area. (6 cubic ft. if test was performed at rough-in if air handler is installed, or 4 cubic ft. if performed at rough-in if air handler is not installed.)									
<input type="checkbox"/> 7. Duct insulation 1103.2.1 (R403.2.1) – Heating and/or cooling supply ducts in vented attics must have at least R-8. Heating and/or cooling supply ducts in all other areas, and all return ducts must have at least R-6. Exception: ducts or portions thereof located completely inside the building thermal envelope.									
<input type="checkbox"/> 8. Controls - Mandatory 1103.1 (R403.1) – At least one thermostat is provided for each separate heating and cooling system. Forced air furnaces must have a programmable thermostat.									
<input type="checkbox"/> 9. Mechanical ventilation - Mandatory 1103.5 (R403.5) – System is installed and operational, with automatic controls.									
<input type="checkbox"/> 10. Lighting - Mandatory 1104.1 (R404.1) – Minimum 75% of light bulbs in permanent fixtures must be high efficacy (e.g., fluorescent or LED) or minimum 75% of permanently installed fixtures must contain only high-efficacy lamps.									
<input type="checkbox"/> 11. Certificate - Mandatory 1101.3 (R401.3) – Permanent certificate listing site address; insulation R-values for ceiling/roof, walls, and ducts; fenestration U-factors; blower door and duct leakage test results; type and efficiency rating of heating, cooling, and hot water systems; and the name and signature of the contractor or design professional is attached to or near the electrical panel board.									

Notes: