

# High Performance Attics

## Draft Code Language

Last Updated: March 6, 2017

## 1. INTRODUCTION

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The California Statewide Utility Codes and Standards Team actively supports the California Energy Commission in developing revisions to the 2019 California Building Energy Efficiency Standards (Title 24, Part 6). Our joint intent is to achieve significant energy savings through the development of reasonable, responsible, and cost-effective code change proposals for the 2019 Title 24 code change cycle.

The Statewide Utility Team is proposing code change to expand high performance attic (HPA) prescriptive requirements for single family homes in climate zones 9, and 11 through 16, and for multi-family buildings in climate zones 11, 13, and 15.

The proposed measure will require updating the Roofs/Ceilings section of Table 150.1-A Component Package-A Standard Building Design. In addition, since there are now differences between the HPA requirements for single and multi-family dwellings, it is proposed that there be two tables:

- Table 150.1-A Single-Family Component Package-A Standard Building Design; and
- Table 150.1-B Multi-Family Component Package-A Standard Building Design

Revisions to 150.1-A and 150.1-B are shown below. The proposed modifications only affect HPA Options A and B. Note Option B presents requirements for both box net and batt underdeck configurations.

**The Statewide Utility Team is requesting feedback on the draft code language presented in this document.** Input we receive will inform the code change proposal that the Statewide Utility Team will be proposing to the California Energy Commission in April 2017.

To provide feedback, please email us at [info@title24stakeholders.com](mailto:info@title24stakeholders.com) or contact the measure lead whose contact information is provided below:

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For more information about the California Statewide Utility Codes and Standards Team's 2019 Title 24, Part 6 advocacy efforts, and the latest information on this code change proposal please visit: [www.title24stakeholders.com](http://www.title24stakeholders.com).

## 2. DRAFT CODE LANGUAGE

The proposed changes to the Standards, Reference Appendices, and the ACM Reference Manuals are provided below. Changes to the 2016 documents are marked with underlining (new language) and ~~strikethroughs~~ (deletions).

### 2.1 Standards

#### SECTION 150.1 – PERFORMANCE AND PRESCRIPTIVE COMPLIANCE APPROACHES FOR LOW-RISE RESIDENTIAL BUILDINGS

**Table 150.1-A Single-Family Component Package-A Standard Building Design**

			Climate Zone																
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Option A	Continuous Insulation above roof rafters	Roofing Type																	
		No Air Space	NR	NR	NR	R8	NR	NR	NR	R8	<del>R8</del>	R8	<del>R8</del>	<del>R8</del>	<del>R8</del>	<del>R8</del>	<del>R8</del>	<del>R8</del>	<del>R8</del>
		With Air Space	NR	NR	NR	R6	NR	NR	NR	R6	<del>R6</del>	R6	<del>R6</del>	<del>R6</del>	<del>R6</del>	<del>R6</del>	<del>R6</del>	<del>R6</del>	<del>R6</del>
Option B	Below roof deck insulation <sup>3</sup> (Box Net)	Roofing Type																	
		No Air Space	NR	NR	NR	R18	NR	NR	NR	R18	<del>R18</del>	R18	<del>R18</del>	<del>R18</del>	<del>R18</del>	<del>R18</del>	<del>R18</del>	<del>R18</del>	<del>R18</del>
		With Air Space	NR	NR	NR	R13	NR	NR	NR	R13	<del>R13</del>	R13	<del>R13</del>	<del>R13</del>	<del>R13</del>	<del>R13</del>	<del>R13</del>	<del>R13</del>	<del>R13</del>
Option B	Below roof deck insulation <sup>3</sup> (Batt)	Roofing Type																	
		No Air Space	NR	NR	NR	R18	NR	NR	NR	R18	<del>R18</del>	R18	<del>R18</del>	<del>R18</del>	<del>R18</del>	<del>R18</del>	<del>R18</del>	<del>R18</del>	<del>R18</del>
		With Air Space	NR	NR	NR	R13	NR	NR	NR	R13	<del>R13</del>	R13	<del>R13</del>	<del>R13</del>	<del>R13</del>	<del>R13</del>	<del>R13</del>	<del>R13</del>	<del>R13</del>

**Table 150.1-B Multi-Family Component Package-A Standard Building Design**

			Climate Zone																
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Option A	Continuous Insulation above roof rafters	Roofing Type																	
		No Air Space	NR	NR	NR	R8	NR	NR	NR	R8	R8	R8	<del>R8</del>	R8	<del>R8</del>	<del>R8</del>	<del>R8</del>	<del>R8</del>	<del>R8</del>
		With Air Space	NR	NR	NR	R6	NR	NR	NR	R6	R6	R6	<del>R6</del>	R6	<del>R6</del>	<del>R6</del>	<del>R6</del>	<del>R6</del>	<del>R6</del>
Option B	Below roof deck insulation <sup>3</sup> (Box Net)	Roofing Type																	
		No Air Space	NR	NR	NR	R18	NR	NR	NR	R18	R18	R18	<del>R18</del>	R18	<del>R18</del>	<del>R18</del>	<del>R18</del>	<del>R18</del>	<del>R18</del>
		With Air Space	NR	NR	NR	R13	NR	NR	NR	R13	R13	R13	<del>R13</del>	R13	<del>R13</del>	<del>R13</del>	<del>R13</del>	<del>R13</del>	<del>R13</del>
Option B	Below roof deck insulation <sup>3</sup> (Batt)	Roofing Type																	
		No Air Space	NR	NR	NR	R18	NR	NR	NR	R18	R18	R18	<del>R18</del>	R18	<del>R18</del>	<del>R18</del>	<del>R18</del>	<del>R18</del>	<del>R18</del>
		With Air Space	NR	NR	NR	R13	NR	NR	NR	R13	R13	R13	<del>R13</del>	R13	<del>R13</del>	<del>R13</del>	<del>R13</del>	<del>R13</del>	<del>R13</del>

Footnote requirements to TABLE 150.1-A:

- R-values shown for both below roof deck insulation are for wood-frame construction with insulation installed between the framing members (batt insulation products) and for below deck insulation that extends beyond the framing members but provides full coverage below the truss top chord (box net or similar full-coverage systems).

## **2.2 Reference Appendices**

The proposed measure will impact HERS Quality Insulation Installation (QII) inspection procedures related to Roof Deck Underside insulation (both batt and loose fill). Please refer to QII draft code language for information on the proposed changes.