
Alaska Housing Finance Corporation

Alaska-Specific Amendments to IRC 2018

December 10th, 2018

This document is a list of Alaska-specific amendments to the International Residential Code 2018, First Printing, August 2017 (IRC 2018) adopted by the Alaska Housing Finance Corporation (AHFC) on Wednesday, November 28, 2018. It is meant to be read in conjunction with the IRC 2018 which may be purchased at local bookstores or online. These amendments comprise the Minimum Construction Standards for AHFC-funded residential mortgage loans, energy rebates, and energy retrofits of public buildings. These amendments supplant the Minimum Construction Standard amendments to IRC 2012 for residential projects as adopted on March 9, 2011. These amendments are numbered and organized by the chapter and section numbers found in the IRC 2018 and follow immediately:

R101.1

This code shall be known as the 2018 International Residential Code (IRC) with Alaska-Specific Amendments and shall be cited as such. It is referred to herein as 'the code'.

R101.2 Scope.

The 2018 IRC with Alaska-Specific Amendments shall be the referenced code for residential structures containing four or fewer dwellings and townhouses not more than three stories above grade plane in height and their accessory structures for the Alaska Housing Finance Corporation, notwithstanding appropriate compliance of Authority Having Jurisdiction, as long as the code followed is equal to or exceeds this code.

Certain Group R Division 2 occupancy designated dwelling units must comply with the relevant Code sections listed in the 2018 IBC, IMC as adopted & approved by the Authority Having Jurisdiction.

[THE PROVISIONS OF THIS CODE SHALL APPLY TO THE CONSTRUCTION, ALTERATION, MOVEMENT, ENLARGEMENT, REPLACEMENT, REPAIR, EQUIPMENT, USE AND OCCUPANCY, LOCATION, REMOVAL AND DEMOLITION OF DETACHED ONE- AND TWO-FAMILY DWELLINGS AND TOWNHOUSES NOT MORE THAN THREE STORIES ABOVE GRADE PLANE IN HEIGHT WITH A SEPARATE MEANS OF EGRESS AND THEIR ACCESSORY STRUCTURES NOT MORE THAN THREE STORIES ABOVE GRADE PLANE IN HEIGHT.]

Exception: The following shall be permitted to be constructed in accordance with this code where provided with a residential fire sprinkler system complying with Section P2904:

1. Live/work units located in *townhouses* and complying with the requirements of Section 419 of the *International Building Code*.
2. Owner-occupied lodging houses with five or fewer guestrooms.
3. A care facility with five or fewer persons receiving custodial care within a dwelling unit.
4. A care facility with five or fewer persons receiving medical care within a dwelling unit.
5. A care facility for five or fewer persons receiving care that are within a single-family dwelling.

R102.7.1

Additions, alterations or repairs. **Advisory, Best Building Practices Reference**

Additions, alterations or repairs to any structure shall conform to the requirements for a new structure without requiring the existing structure to comply with the requirements of this code, unless otherwise stated. *Additions, alterations, repairs* and relocations shall not cause an existing structure to become unsafe or adversely affect the performance of the building.

Chapter 1, Part 2 Administration and Enforcement Delete

R302.13 Fire Protection of Floors

[FLOOR ASSEMBLIES, NOT REQUIRED ELSEWHERE IN THIS CODE TO BE FIRE RESISTANCE RATED, SHALL BE PROVIDED WITH A 1/2-INCH GYPSUM WALLBOARD MEMBRANE, 5/8-INCH WOOD STRUCTURAL PANEL MEMBRANE, OR EQUIVALENT ON THE UNDERSIDE OF THE FLOOR FRAMING MEMBER.

EXCEPTIONS:

1. FLOOR ASSEMBLIES LOCATED DIRECTLY OVER A SPACE PROTECTED BY AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION P2904, NFPA13D, OR EQUIVALENT SPRINKLER SYSTEM.
2. FLOOR ASSEMBLIES LOCATED DIRECTLY OVER A CRAWL SPACE CONTAINING A DIRECT-VENT, SEALED COMBUSTION APPLIANCE WITH FORCED DRAFT EXHAUST; COMBUSTION AIR INTAKE MUST TERMINATE TO THE BUILDING EXTERIOR. APPLICATION OF THIS EXCEPTION REQUIRES INSTALLATION OF A SMOKE ALARM IN THE CRAWL SPACE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION R314 SMOKE ALARMS, WITH THE EXCEPTION OF R314.3 LOCATION, AND A CARBON MONOXIDE ALARM IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION R315 CARBON MONOXIDE ALARMS.
3. PORTIONS OF FLOOR ASSEMBLIES CAN BE UNPROTECTED WHEN COMPLYING WITH THE

FOLLOWING:

- 3.1 THE AGGREGATE AREA OF THE UNPROTECTED PORTIONS SHALL NOT EXCEED 80 SQUARE FEET PER STORY
- 3.2 FIRE BLOCKING IN ACCORDANCE WITH SECTION R302.11.1 SHALL BE INSTALLED ALONG THE PERIMETER OF THE UNPROTECTED PORTION TO SEPARATE THE UNPROTECTED PORTION FROM THE REMAINDER OF THE FLOOR ASSEMBLY.
4. WOOD FLOOR ASSEMBLIES USING DIMENSION LUMBER OR STRUCTURAL COMPOSITE LUMBER EQUAL TO OR GREATER THAN 2-INCH BY 10-INCH NOMINAL DIMENSION, OR OTHER APPROVED FLOOR ASSEMBLIES DEMONSTRATING EQUIVALENT FIRE PERFORMANCE.]

Exception 5. If heating appliances are installed in a finished utility room with a self-closing door then the rest of the basement ceiling is not required to be covered.

R 303.3 Bathrooms

Bathrooms, water closet compartments and other similar rooms [WITH AGGREGATE GLAZING AREA IN WINDOWS OF NOT LESS THAN 3 SQUARE FEET (0.3 M²), ONE-HALF OF WHICH SHALL BE OPENABLE.] **shall be provided with exhaust ventilation. The minimum local exhaust rates shall be determined in accordance with Section M1505. Exhaust air from the space shall be mechanically exhausted directly to the outdoors.**

[EXCEPTION: THE GLAZED AREAS SHALL NOT BE REQUIRED WHERE ARTIFICIAL LIGHT AND A LOCAL EXHAUST SYSTEM ARE PROVIDED. THE MINIMUM LOCAL EXHAUST RATES SHALL BE DETERMINED IN ACCORDANCE WITH SECTION M1505. EXHAUST AIR FROM THE SPACE SHALL BE MECHANICALLY EXHAUSTED DIRECTLY TO THE OUTDOORS.]

R303.4 Mechanical Ventilation.

Where the air infiltration rate of a *dwelling unit* is 5 air changes per hour or less where tested with a blower door at a pressure of 0.2 inch w.c (50 Pa) in accordance with Section N1102.4.1.2, the *dwelling unit* shall be provided with whole-house **and spot** mechanical ventilation in accordance with Section M1505.4.

R309.5 Fire sprinklers.

Private garages shall be protected by fire sprinklers where **required by the Department of Public Safety and/or where** the garage wall has been designed based on Table R302.1(2),

Note a. Sprinklers in garages shall be connected to an automatic sprinkler system that complies with Section P2904. Garage sprinklers shall be residential sprinklers or quick-response sprinklers, designed to provide a density of 0.05 gpm/ft². Garage doors shall not be considered obstructions with respect to sprinkler placement.

R310.2.3 Window Well

The horizontal area of the window well shall be not less than 9 square feet (0.9 m²), with a horizontal projection and width of not less than 36 inches (914 mm). The area of the window well shall allow the emergency escape and rescue opening to be fully opened. **Window wells shall be designed to minimize the potential of the well becoming filled with snow and/or standing water which impedes operation of the egress fenestration.**

Exception: The ladder or steps required by Section R310.2.3.1 shall be permitted to encroach not more than 6 inches (152 mm) into the required dimensions of the window well.

R313.1 Townhouse automatic fire sprinkler systems.

[AN AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEM SHALL BE INSTALLED IN TOWNHOUSES] **If installed, automatic residential fire sprinkler systems for townhouses shall be designed and installed in accordance with Section P2904 or NFPA 13D.**

Exception: An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing townhouses that do not have an automatic residential fire sprinkler system installed.

R313.1.1 [DESIGN AND INSTALLATION. AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEMS FOR TOWNHOUSES SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH SECTION P2904 OR NFPA 13D]

R313.2 One- and two-family dwellings automatic fire sprinkler systems.

[AN AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEM SHALL BE INSTALLED IN ONE- AND TWO-FAMILY DWELLINGS.] **If installed, automatic residential fire sprinkler systems for one- and two-family dwelling units shall be designed and installed in accordance with Section P2904 or NFPA 13D.**

Exception: An automatic residential fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with an automatic residential sprinkler system.

R313.2.1 [DESIGN AND INSTALLATION. AUTOMATIC RESIDENTIAL FIRE SPRINKLER SYSTEMS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH SECTION P2904 OR NFPA 13D]

R905.2.8.5 Drip Edge

A drip edge shall be provided at eaves and rake edges of shingle roofs. Adjacent segments of drip edge shall be overlapped not less than 2 inches (51 mm). Drip edges shall extend not less than 1/4 inch (6.4 mm) below the roof sheathing and extend up back onto the roof deck not less than 2 inches (51 mm). Drip edges shall be mechanically fastened to the roof deck at not more than 12 inches (305 mm) o.c. with fasteners as specified in Section R905.2.5. *Underlayment* shall be installed over the drip edge along eaves and under the drip edge along rake edges

Exception: Allowing for best practices in covering all plywood edges on roofs with a slope equal or greater than four (4) units vertical in twelve (12) units horizontal (4:12) a full length fascia or a 1" by 2" continuous cedar block may be used as a drip edge (See appendix 1). Sheathing, underlayment and roofing materials shall be installed per the manufactures recommendations. (see Appendix 1.1 and Appendix 1.2)

Chapter 11 Energy Efficiency

The 2018 Building Energy Efficiency Standard (BEES), being comprised of the 2018 IECC with Alaska-Specific Amendments, is the AHFC energy standard for all residential projects.

Chapter 12 Mechanical Administration

M1504.3.2 Exhaust openings

Air exhaust openings shall terminate not less than 3 feet (914mm) from property lines; 3 feet (914mm) from operable and non-operable openings into the building and 10 feet (3048mm) from mechanical air intakes except where the opening is located 3 feet (914 mm) above the air intake **and 3 feet (914 mm) horizontally from the air intake.** Openings shall comply with Sections R303.5.2 and R303.6.

Exception: **Exhaust and intake openings that are part of a system engineered to prevent entrainment of exhaust air are exempt; the exemption applies only to the exhaust and intake that is part of the engineered system only, adjacent exhaust and inlet openings are not exempt.**

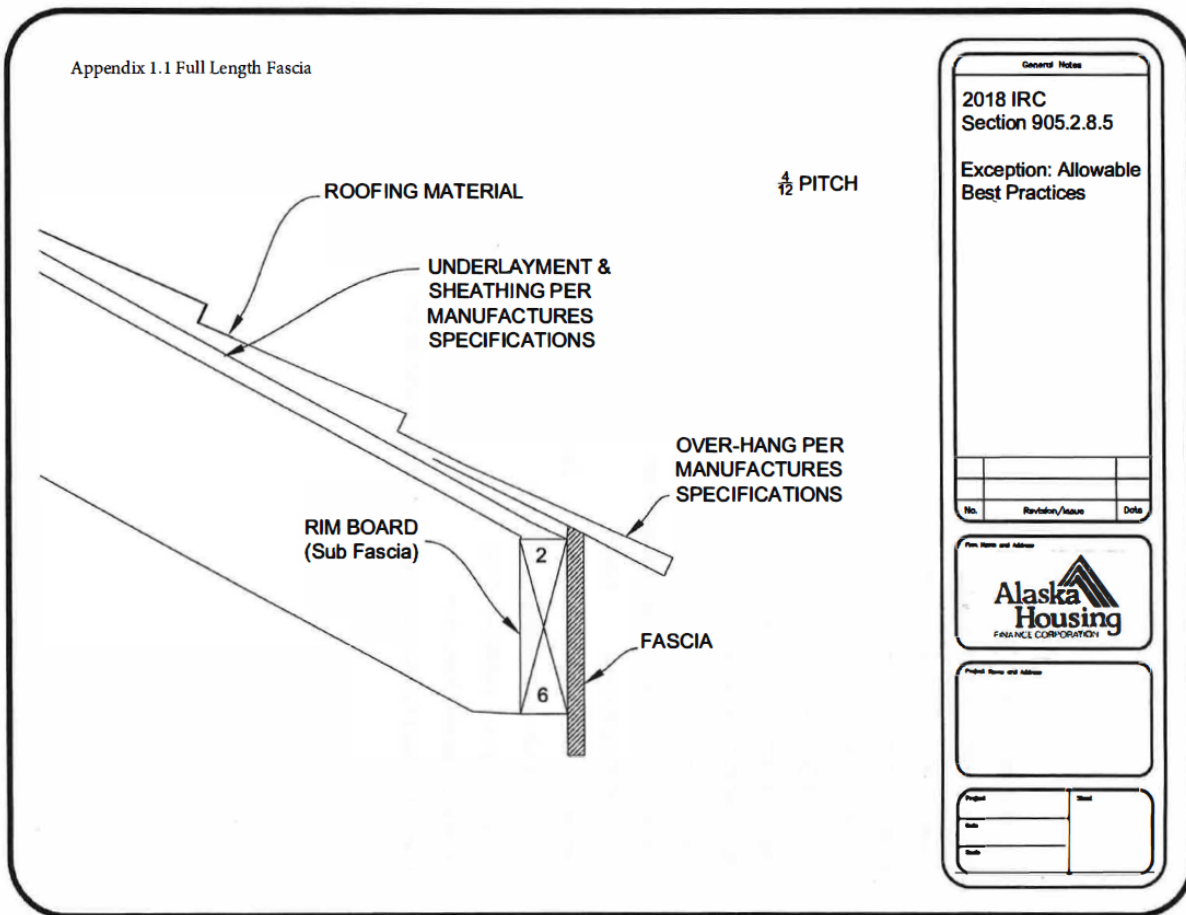
M1505.4.3 Mechanical ventilation rate.

The whole house mechanical ventilation system shall provide outdoor air at a continuous rate as determined in accordance with [TABLE M1505.4.3(1) OR] Equation 15-1.

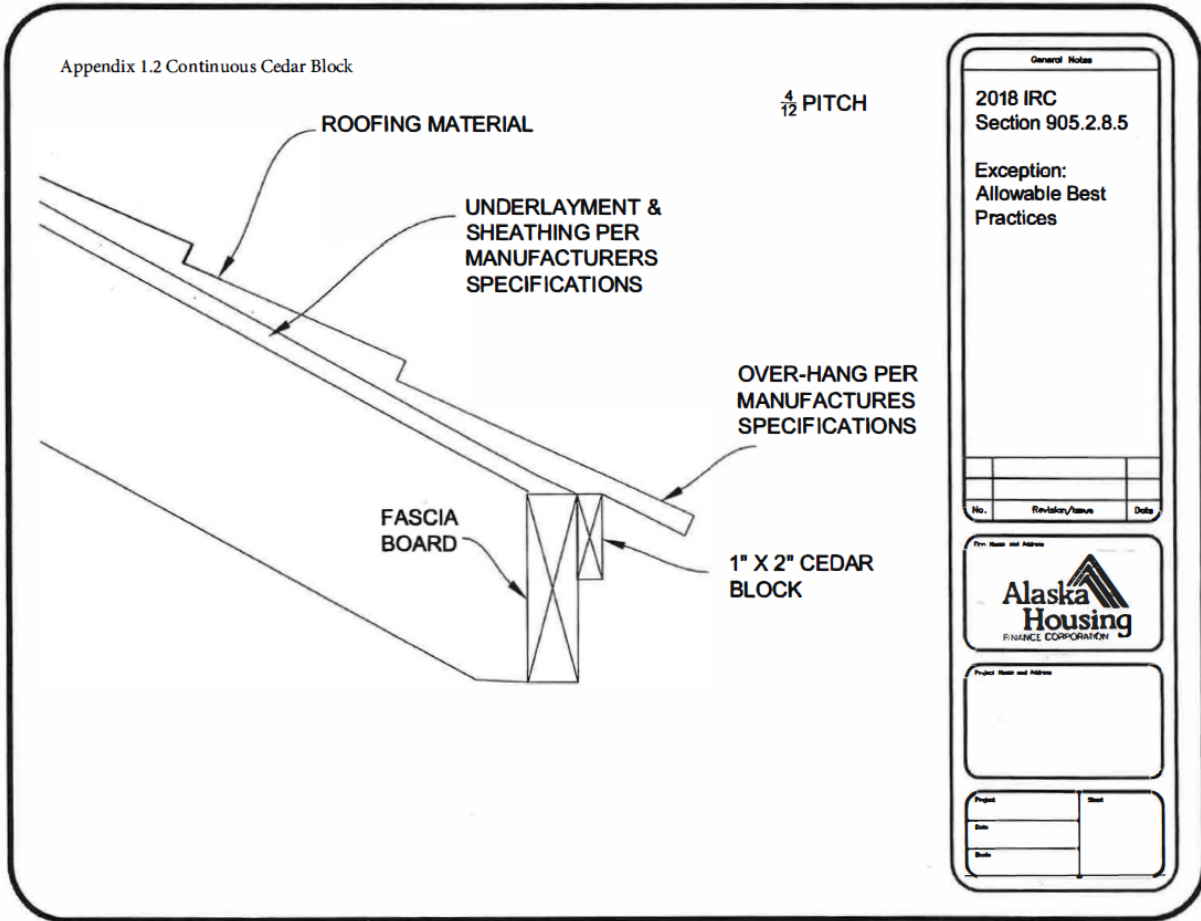
(Equation 15-1) Ventilation rate in cubic feet per minute = **(0.03** [0.01] x total square foot area of house) + **10** [7.5] x (number of bedrooms +1)

Exception: The whole-house mechanical ventilation system is permitted to operate intermittently where the system has controls that enable operation for not less than 25 percent of each 4-hour segment and the ventilation rate prescribed in Table M1505.4.3(1) is multiplied by the factor determined in accordance with Table M1505.4.3(2).

Appendix



Appendix I.2 Continuous Cedar Block



General Notes

2018 IRC
Section 905.2.8.5

Exception:
Allowable Best Practices

No.	Revisory/Issue	Date

Draw Name and Address

Alaska Housing
FINANCE CORPORATION

Project Name and Address

Project	Sheet
Date	
Date	