



City of Apache Junction

Division of Building Safety and Inspection

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Understanding Park Model RVs, Additions to Park Model RVs and the Building Code

Park Model RV

Industry Definition:

“A Park Model RV (PM) (also known as a recreational park trailer) is a trailer-type RV that is designed to provide temporary accommodation for recreation, camping or seasonal use. PMRVs are built on a single chassis, mounted on wheels and have a gross trailer area not exceeding 400 square feet in the set-up mode. They are certified by their manufacturers as complying with the ANSI A119.5 standard for recreational park trailers. (RVIA.org, 2015)” <http://www.rvia.org/?ESID=PMRV>

A Park Model **is not** a one-family dwelling as defined in the adopted building codes (2018 IRC) and it **is not** a HUD approved manufactured home (MH) or factory built building (FBB) per the Arizona Department of Housing (ADOH) Manufactured Housing Division.

A “Park Model Set” building permit is required for the installation of Park Models. Under a “Park Model Set” permit inspections are performed to verify the code compliance of the electrical (EL) connection (must comply with 2017 NEC), the installation of any added mechanical (ME) equipment like air conditioning/heat pumps (must comply with 2018 IMC), the water and sanitary plumbing (PL) connections (must comply with the 2018 IPC) and that the unit has been installed per the manufacturer’s installation instructions.

Please note: Park Models **are not** covered under the AZDOH Manufactured Housing Division rules regarding MH and FBB structures, including the licensing required to install a MH or FBB and associated appurtenances. Properly licensed and classified contractors, per the AZ Registrar of Contractors (ROC), are required to perform any mechanical, plumbing, electrical, awning, and carport work associated with the Park Model. Decks that exceed 120 square feet in area **or** where the deck surface is greater than 30 inches above adjacent grade must have a permit or be included in the Park Model set permit application. The following is a list of acceptable license classifications for various work related to the PM set:

Setting- no license required

Electrical- R-11, C-11, CR-11

Mechanical (A/C) - R-39, R-39R, C-39, C-39R, CR-79

Plumbing Connections- R-37, R-37R, CR-37, CR-77, CR-80, C-37, C-77

Awnings/Carports/Patio Covers- B-01, B-02, B-03, B-04, [R-17, CR-17 and A-11 (steel/aluminum only)], R-62, CR-3.”

There are no restrictions on who can apply for and obtain a “Park Model Set” building permit; this is based on the PM being an RV. The permit application will have to clearly identify which properly licensed contractors are responsible for the electrical, mechanical, plumbing, and other work requested on the permit application, such as awnings and carports.

The following are required to be provided with a completed “Park Model Set” building permit application:

A site/plot plan- this must be a scaled drawing accurately depicting the RV lot shape (lot lines) and dimensions (lengths of lot lines); the PM location, shape and dimensions along with the “setbacks” - dimensions from the exterior wall of the park model to the lot lines; and any other proposed features like awnings, decks, carports, storage sheds, etc. The location of the electrical service, water connection and sanitary connections, and any mechanical equipment (such as the air conditioning unit) shall also be indicated. *(In RV and Mobile Home parks where space lines are non-existent or long since encroached upon provide a site plan that shows the existing structures on both sides and rear, and the proposed structure on a particular lot. Distances from the proposed structure to any adjacent structures including carports and awnings on adjacent lots/spaces need to be shown. Minimum separation distance between structures shall be 6 feet.)*

A written scope of work that identifies the PM manufacturer and model, the type and size of all proposed mechanical equipment, the size/rating of electrical pedestal service and the size/rating of the PM electrical panel.

Metal awnings and carports (pre-engineered) can be included as part of the “Park Model Set” permit or be permitted separately. In either case the following must be provided:

1. For the metal system selected, provide the manufacturer’s name and a current evaluation report number. The evaluation report can be an ICC, IAPMO, or other approved agency report. **The City will not accept any ICBO, BOCA, CABO or legacy reports** (engineering values and related codes have changed from when these reports would have been generated.)
2. If the evaluation report references engineered plans (see ICC ESR 1953P for Metals Building Product) the plans must be provided. Information in the plans applicable to the proposed installation shall be clearly marked/indicated on the plans or no permit will be issued.
3. If the metal awning/carport is going to be attached and structurally supported by the park model, the applicant must provide information from the park model manufacturer showing that an awning or carport can be structurally supported by the Park Model and the conditions/loads allowed.
4. *If permitted separately* provide a site/plot plan as described in Item 1.

Awnings and carports, other than the pre-engineered metal type, will require plans and calculations by an AZ licensed Registered Design Professional (RDP) and a site/plot plan as described in Item 1.

Park Model RV Additions

The Apache Junction Administrative Code addresses Park Model additions in the following:

§ 7-1-11 Construction Standards for Manufactured Home, Mobile Home, Park Model and Recreational Vehicle Standards

(D) Park Models and Park Trailers. Park model installation shall follow the manufacturer's installation instructions or if the installation instructions are not available, the installation requirements for a model similar in length, width and height. The PM shall be secured against overturning. Where temporary electrical, water, and sewer connections are not provided with the unit, hard connections shall be made in accordance with the Technical Codes. PMs will have properly installed skirting along all sides. To obtain a PM set permit, properly licensed electrical, mechanical, plumbing and/or metal structure contractors shall be identified when applying for the permit. PM installation or use is not allowed outside of approved recreational vehicle parks or subdivisions, or manufactured home parks or subdivisions.

(1) Allowable PM attached accessory structures shall be constructed per the following and the Technical Codes.

(a) Metal awnings shall have a current evaluation report and current engineering.

(b) Patio enclosures shall comply with IBC Appendix I (Appendix H of 2018 IRC is also allowed) as adopted by this chapter.

(c) HVAC systems shall be installed per the Technical Codes including the Mechanical Code and Energy Code.

(d) Photovoltaic or solar water heating systems, when the manufacture has designed the PM to support the installation of a photovoltaic or solar water heating system, and has made provisions for connection of such system, the installation shall comply with the manufacturer's instructions and the Technical Codes.

(2) Allowable PM detached accessory structures shall be constructed in compliance with the Technical Codes.

(a) Allowable detached accessory structures include:

(i) storage rooms or sheds

(ii) engineered self-supporting shade structures (porches, carports, metal and non-metal awnings)

(iii) habitable room additions not exceeding the square footage of the PM, and built per the Residential Code or the Building Code

(iv) decks

(v) detached garages

(3) PMs may not be altered from their original layout, and the plumbing, electrical and mechanical systems may not be altered. PMs manufactured with duct work and intended to be connected to a package unit are acceptable. The installation of exterior plaster (stucco), stone veneer, and brick veneer to a PM is prohibited. The original PM manufacturer can alter the exterior of an existing PM model after submitting a letter- for a specific site and specific PM- with specifications showing the PM model will still comply to the standard under which it was built, to the Division of Building Safety and Inspection.

There are four compliance options for the design and construction of additions to Park Model RV's.

Option "A" is to construct the addition in compliance with **Appendix H, Patio Rooms, 2018 International Residential Code (IRC) or Appendix I 2018 International Building Code (IBC)**. Patio Rooms cannot be used as habitable rooms- no living, sleeping, eating or cooking. Cannot be conditioned and must meet glazed area/opening requirements. (See Attachment A)

Option "B" is to build the addition in accordance with the **2018 International Residential Code (IRC)**. The park model can be considered to provide the required toilet facilities and kitchen, however, all other requirements including foundation, structural (wall bracing and roof construction), exterior wall fire-rating, and wall, roof and floor r-values, apply. Plans must clearly show compliance with all the prescriptive requirements of the IRC- footers; foundations; floor, wall, and roof construction; egress from sleeping rooms; smoke detector requirements; and the energy code provisions.

Option "C" is to build it in accordance with the **2018 International Building Code (IBC)**. The use Group will be either a Group R-3 (requires sprinklers) or Group U- no sprinklers but limited to private garages, carports or sheds. The prescriptive requirements of **2018 IBC 2308 Conventional Light-Frame Construction** will govern the design or engineering that will need to be provided.

Option "D" is to build it under **Section 7-1-4 (J) of Article 7-1 Apache Junction Division of Building Safety and Inspection Administrative Code** as an alternate "method of construction".

In order for the "method of construction" to be approved and authorized the following must be provided (*plans, letters and/or information for items 1, 2, and 3 shall be stamped and signed by a Registered Design Professional*)

1. Details and calculations showing that the proposed foundation and connections/anchors meet or exceed the requirements of **2018 IRC Sections R301.1, R301.1.2, R301.1.3, Table R301.2(1) [wind speed 105 mph Exp C; Seismic Design Category B], Table 301.5, Table 301.6, Table 301.7, R401.2, R403.1, R403.1.6 (see also 2018 IBC 1604.4, 1605, and 1609)**. Alternative materials such as post-pour installed anchors (wedge anchors, "red-heads," etc.) must have evaluation reports that show compliance with the **2018 IRC or IBC**. Any calculations and special inspections required per the evaluation report shall be noted and addressed in the details and calculations.
2. Details and calculations showing that floors meet the minimum requirements of **2018 IRC R501.2 and R502.2**.
3. Details and calculations showing that walls will comply with **2018 IRC R601.2, R602.3, Table R602.3 (1), Table R602.3 (3), R602.10, Table R602.10.1.3, R602.10.3 (1) and R602.10.4**.
4. Details and calculations showing that the roof/ceiling construction will comply with **2018 IRC R801.2, R802.2, and R802.3.1**. Alternative materials such as aluminum or steel w-panels, insulated roof panels, etc. must have evaluation reports that show

compliance with the **2018 IRC or IBC**. Any calculations, engineered plans and/or special inspections required per the evaluation report shall be noted and addressed in the details and calculations.

5. Plans must show compliance with other applicable requirements found in **Chapter 3** of the **2018 IRC**, including **R308 Glazing, R311.7 Stairways, R312 Guards and R314 Smoke Alarms**.
6. Plans must show whether space is to be fully conditioned (heated and cooled) if fully conditioned show compliance with the prescriptive energy code requirements found in the **2018 IRC Chapter 11**.
7. Plans must clearly indicate that addition will impose no structural loads on the existing or proposed Park Model RV.

In order to obtain a building permit for a room addition to a Park Model RV, where the property- space or lot- is **not** owned by the park model owner, the applying contractor, in accordance with A.R.S. § 32-1101, et seq., and Arizona Administrative Code, TITLE 4. PROFESSIONS AND OCCUPATIONS CHAPTER 9. REGISTRAR OF CONTRACTORS, (<http://azroc.gov/Statutes.html>), must be licensed in at least one of the categories listed below:

B- GENERAL RESIDENTIAL CONTRACTOR- Construction of all or any part of a residential structure or appurtenance. Also included are the scopes of work allowed by the B-3 and CR-2 through CR- 80 license classifications. Work related to electrical, plumbing, air conditioning systems, boilers, swimming pools, spas and water wells must be subcontracted to an appropriately licensed contractor. This classification does not include work authorized by the A-, B-1, or B-2 scopes.

KB-1 DUAL BUILDING CONTRACTOR- This classification allows the scope of work permitted by the B-1 General Commercial Contractor and the B- General Residential Contractor licenses.

KB-2 DUAL RESIDENTIAL AND SMALL COMMERCIAL- This classification allows the scope of work permitted by the B-2 General Small Commercial and the B- General Residential Contractor licenses.

***Check with City for exceptions where an awning or roof already exists. (Definition of exists is permitted and final inspection approved.)*

In order to obtain a building permit for a room addition to a Park Model RV as an owner/builder, the property (space or lot) **must be** owned by the owner of the Park Model RV and intended for occupancy by the owner. Additionally, **the property owner** will have to fill out the City of Apache Junction "EXEMPTION FROM ARIZONA REGISTRAR OF CONTRACTORS LICENSING," form, available at the Development Service Department counter or here- <http://www.ajcity.net/index.aspx?NID=302>

Referenced Code Section: (Option D)

§ 7-1-4

(J) Alternative Materials, Design, and Methods of Construction and Equipment. The provisions of this Chapter and the Technical Codes are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this Chapter or the Technical Codes, provided any such alternative is approved by the Building and Safety Manager. An alternative material, design, or method of construction may be approved where the Building and Safety Manager finds the proposed design is satisfactory and complies with the intent of the provisions of this Chapter and the Technical Codes, and the material, method, or work offered is, for the purpose intended, at least the equivalent of that prescribed in this Chapter and the Technical Codes in quality, strength, effectiveness, fire resistance, durability, and safety. Records of alternative materials, design, and methods of construction approvals shall be recorded and entered in the files of the division. Appeals of such determinations shall be to the Construction Building Board of Appeals, in accordance with § 7-1-5 of this Chapter.

1. Research Reports: Supporting data, where deemed necessary to assist in the approval of materials or assemblies not specifically provided for in this Chapter or the Technical Codes shall be provided and shall consist of valid research reports from approved sources.
2. Tests: Whenever there is insufficient evidence of compliance with the provisions of this Chapter or the Technical Codes, or evidence of material or method does not conform to the requirements of this Chapter or the Technical Codes, or in order to substantiate claims for alternative materials or methods, the Building and Safety Manager shall have the authority to require tests as evidence of compliance to be made at no expense to the City. Test methods shall be as specified in this Chapter or the Technical Codes or by other recognized test standards. In the absence of recognized and accepted test methods, the Building and Safety Manager may approve the testing procedures. Tests shall be performed by an approved agency. Reports of such tests shall be retained by the Building and Safety Manager for the period required in the division's approved record retention schedule.

Attachment A

PATIO ROOMS

Appendix H

2018 International Residential Code
Including Apache Junction Amendments

SECTION AH101 GENERAL

AH101.1 Scope. Patio-~~covers~~ rooms shall conform to the requirements of Sections AH101 through AH106.

AH101.2 Permitted uses. Patio-~~covers~~ rooms detached from or attached to dwelling units shall be used only for recreational, outdoor living purposes and not as carports, garages, storage rooms or habitable rooms.

SECTION AH102 DEFINITIONS

AH102.1 General. The following word and term shall, for the purposes of this appendix, have the meaning shown herein. Refer to Chapter 2 of this code for general definitions.

PATIO ~~COVERS~~ ROOM. A structure with open or glazed walls that is used for recreational, outdoor living purposes associated with a dwelling unit.

SECTION AH103 EXTERIOR WALLS AND OPENINGS

AH103.1 Enclosure walls. Enclosure walls shall be permitted to be of any configuration, provided that the open or glazed area of the longer wall and one additional wall is not less than 65 percent of the area below 6 feet 8 inches of each wall, measured from the floor. Openings shall be enclosed with any of the following:

1. Insect screening.
2. Approved translucent or transparent plastic not more than 0.125 inch (1/8 inch) in thickness.
3. Glass conforming to the provisions of Section R308.
4. Any combination of the foregoing.

AH103.2 Light, ventilation and emergency egress. Exterior openings required for light and ventilation into a patio structure conforming to Section AH101 shall be unenclosed where such openings serve as emergency egress or rescue openings from sleeping rooms. Where such exterior openings serve as an exit from the dwelling unit, the patio structure, unless unenclosed, shall be provided with exits conforming to the provision of Section R311 of this code.

SECTION AH104 HEIGHT

AH104.1 Height. Patio rooms are limited to one-story structures not exceeding 12 feet in height.

SECTION AH105 STRUCTURAL PROVISIONS

AH105.1 Design loads. Patio ~~eovers~~ rooms shall be designed and constructed to sustain, within the stress limits of this code, all dead loads plus a vertical live load of not less than 10 pounds per square foot (0.48 kN/m²) except that snow loads shall be used where such snow loads exceed this minimum. Such patio ~~eovers~~ rooms shall be designed to resist the minimum wind and seismic loads set forth in this Section R301.2.1.

AH105.2 Footings. In areas with a frost depth of zero as specified in Table R301.2(1), for patio ~~eovers~~ rooms supported on a concrete slab-on-grade without footings, the slab shall conform to the provisions of Section R506, shall not be less than 3.5 inches (89 mm) thick and the columns shall not support live and dead loads in excess of 750 pounds (3.36 kN) per column.