

Arizona Rooms, Sunrooms, and Enclosed Patios, a What's What

Arizona Room is the local vernacular for an enclosed patio used for recreational, outdoor living purposes associated with a dwelling unit. It is a common local practice to enclose existing patios and convert them to an Arizona Room. All Arizona Rooms are Sunrooms; Sunrooms being any one-story structure attached to a dwelling with a glazing area in excess of 40 percent of the gross area of the structure's exterior walls and roof.

What classifies as an Arizona Room?

Arizona Rooms, being a subset of Sunrooms, have enclosing walls that are generally open, or have screening or windows that make up at least 65% of the wall area. These spaces cannot be heated/cooled by fixed mechanical equipment, and in accordance with Appendix H of the IRC, are intended for use as *recreational, outdoor living purposes, and not as carports, garages, storage rooms or habitable rooms* (i.e. not for living, sleeping, eating, or cooking).

Notice Regarding Aluminum Patio Covers:

All aluminum patio covers are engineered or listed structures. This means that the original construction was non-prescriptive and was designed by a registered design professional. When this design was performed, it was most likely designed "as-is" and did not account for loads resulting from adding walls or otherwise enclosing openings. As such, any aluminum, or other non-prescriptive framed patio cover, will require engineering review of the existing framing to verify the capacity to support the appropriate loading, including wind loads (115mph, Exposure C).

Plans, Building Permit and Inspections Required: In order to enclose a new or existing patio with walls to create an Arizona Room, design documents and permitting are required.

Design Requirements:

- ☐ Supporting slab-on-grade must be a minimum of 3.5-inches thick.
- ☐ Where columns support live and dead loads in excess of 750-lbs per column, perimeter footings are required
- ☐ Structure must be designed for all dead loads plus a vertical live load of not less than 10-psf.
- ☐ Walls shall be braced in accordance with IRC Section R602.10 or shall comply with AAMA/NPEA/NSA 2100
 - Note: Where using brace walls, a thickened edge, continuous perimeter footing is required.
- ☐ Must meet zoning and setback requirements.
- ☐ Must be built to all applicable framing and building codes.
- ☐ Space shall be for recreational or outdoor living purposes only.
- ☐ All existing house windows and doors must remain in place.
- ☐ Open or glazed area of longest wall and one additional wall must be not less than 65% of the wall area below 6'-8" of each wall. Openings can be enclosed with insect screen, approved translucent plastic, glass (meeting R308), or a combination thereof.
- ☐ Cannot enclose any emergency egress or rescue openings when attaching to existing structure.
- ☐ Cannot reduce ventilation or natural light to dwelling.
- ☐ Space shall not be heated or cooled by fixed mechanical equipment.
- ☐ Bathrooms/laundry areas are allowed because they are excluded from habitable space definition.
- ☐ The minimum ceiling height is 7 feet.
- ☐ Arizona rooms created next to Park Models, manufactured or mobile homes must NOT be attached and must be self-supporting. (**Exception:** With structural engineer approval)

What if the Space is for Habitable Use, Includes HVAC, etc.

If the proposed space is intended for use other than recreational, outdoor living purposes, is used as a storage room or garage, or is intended for habitable use (i.e. living, sleeping, eating, or cooking), then the space would generally be treated as an addition.

If the proposed space will have a glazing area in excess of 40-percent of the gross area of the structures exterior walls and roof, it may be classified as a sunroom. Sunrooms, as classified below, shall comply with AAMA/NPEA/NS 2100. Whereas the permit applicant, you elect to classify the proposed as a sunroom and utilize AAMA/NPEA/NS 2100, the design shall demonstrate that the design of elements assigned to provide support and stability for the overall sunroom comply with the main windforce-resisting system pressures. Please note that AAMA/NPEA/NS 2100 does not provide prescriptive instructions, and therefore, a design professional or pre-engineered systems is required.

Alternatively, the proposed space may be permitted as an addition, following the typical construction requirements for single-family residential construction available through the IRC (i.e. footings, framed walls, brace walls, truss or rafter framed roofs, etc.).

Classification of Sunrooms

Category I: A thermally isolated sunroom with walls that are open or enclosed with insect screening or 0.5 mm (20 mil) maximum thickness plastic film. The space is nonhabitable and unconditioned.

Category II: A thermally isolated sunroom with enclosed walls. The openings are enclosed with translucent or transparent plastic or glass. The space is nonhabitable and unconditioned.

Category III: A thermally isolated sunroom with enclosed walls. The openings are enclosed with translucent or transparent plastic or glass. The sunroom fenestration complies with additional requirements for air infiltration resistance and water penetration resistance. The space is nonhabitable and unconditioned.

Category IV: A thermally isolated sunroom with enclosed walls. The sunroom is designed to be heated or cooled by a separate temperature control or system and is thermally isolated from the primary structure. The sunroom fenestration complies with additional requirements for water penetration resistance, air infiltration resistance and thermal performance. The space is nonhabitable and conditioned.

Category V: A sunroom with enclosed walls. The sunroom is designed to be heated or cooled and is open to the main structure. The sunroom fenestration complies with additional requirements for water penetration resistance, air infiltration resistance and thermal performance. The space is habitable and conditioned.