



Town of Marana
Building Safety Division
Proposed Amendments to the:
2012 International Residential Code

Table R301.2 (1) Climatic and geographic design criteria. INSERT as follows:

Ground Snow Load	0
Wind Speed	90 mph
Topographic Effect	No
Seismic Design	Category B
Weathering	Up to 4000ft-Negligible
Frost Line Depth	Up to 4000ft-0in
Termite	Moderate to Heavy
Winter Design Temperature	32 degrees less than 4000ft
Flood Hazards	Contact Town of Marana Flood Plain Management

Section R302.1 REVISE section by DELETING text and tables and REPLACING with the following:

Exterior walls with a fire separation distance less than 3 feet (914mm) shall have not less than a one-hour fire resistive rating with exposure from both sides. Projections shall not extend to a point closer than 2 feet (610mm) from the line used to determine the fire separation distance. Projections extending into the fire separation distance shall have not less than one-hour fire-resistive construction on the underside. The above provisions shall not apply to walls which are perpendicular to the line used to determine the fire separation distance.

Exceptions:

1. Detached garage accessory to a dwelling located within 2 feet of a lot line may have roof-eave projections not exceeding 4 inches.
2. Tool and storage sheds, playhouses, ramadas and similar structures exempted from permits are not required to provide wall protection based on location on the lot. Projections beyond the exterior wall shall not extend over the lot line.

ADD New Section R302.1.1 to read:

Section R302.1.1 Openings. Openings shall not be permitted in the exterior wall of a dwelling with a fire separation distance less than 3 feet. This distance shall be measured perpendicular to the line used to determine the fire separation distance.

Exceptions:

1. Penetrations shall be permitted in walls that are perpendicular to the line used to determine the fire separation distance.
2. Foundation vents installed in compliance with this code are permitted.

Section R302.2 Townhouses. REVISE the section exception by DELETING “1-hour”, REPLACING it with “2-hour” and ADDING the following to the end of the first sentence: the common wall may be reduced to 1-hour if the dwellings on both sides of the wall are equipped with an automatic sprinkler system installed in accordance with Section P2904.

Section R303.5.1 Intake Openings. REVISE section by ADDING an exception to read: Exception: Replacement of existing evaporative coolers where the building official determines that the replacement does not constitute a high degree of hazard.

Section R303.9 Required Heating. REVISE section by ADDING an exception to read: Exception: Spaces able to maintain 60 degree Fahrenheit at a point 3 feet above the floor and 2 feet from exterior walls in all habitable rooms over a 48 hour period as demonstrated by section N1105 Simulated performance alternative.

Section R309.5 Fire Sprinklers. DELETE section in its entirety.

Section R313 Automatic Fire Sprinkler Systems. DELETE section in its entirety.

Section R802.11.1 Uplift Resistance. Revise section by **DELETING** both paragraphs and **ADDING** the following:

Uplift resistance to minimize microburst effects shall be determined by either method 1 or 2 below:

1. Design-based wind uplift criteria

Wind uplift requirements shall be determined by using the design wind value of 110mph within Table R802.11 for the continuous load path transmitting the uplift forces from the rafter or truss ties to the foundation.

2. Prescriptive-based wind uplift criteria.

(Please note that the requirements of this section are in addition to those required for the structural connection of wood members).

2.1. Conventionally-framed wood or cold-formed steel structures

All bearing wall vertical connections shall be clipped with either approved structural sheathing or approved clips to provide a continuous load path from the joist or truss through the ledger or top plate to the bottom wall plate. Where clips are used, they shall be minimum Simpson H2.5 (A34 at ledger), or equivalent load capacity, of configuration to match connection and spaced at intervals not to exceed 24". At openings, lower cripple studs do not require clipping but king/trimmer studs require double clips at bottom and upper cripple studs require both full clipping to header as well as header to king stud. All platform framing requires either strapping listed for the purpose or continuous sheathing over rim joist from stud to stud vertically at each floor level. All non-bearing exterior walls shall be clipped as above except that spacing may be extended not exceed every other stud.

2.2. Masonry or concrete structures

If lateral design requires larger anchors or more conservative spacing, these may be used in lieu of those called out in this section.

2.2.1. Roof bearing on wall top plate

Top plates shall be secured to masonry or concrete walls with minimum ½" anchor bolts embedded minimum 7" and spaced at intervals not to exceed 48". Each joist or truss shall be clipped to the top plate at bearing with a minimum Simpson H2.5 or equivalent load capacity and of

configuration to match connection. Gable end joist or trusses shall also be clipped at intervals not to exceed 48” .

2.2.2. Roof bearing on wall ledger

Joists or trusses both parallel or perpendicular to a wall ledger shall be secured to masonry or concrete walls with minimum Simpson PAI23 purlin anchors or equal with equivalent load capacity listed for the application and embedded into wall per listing at intervals not to exceed 48” .

2.3 Structural steel structures

Structural steel buildings shall have roof members attached by either welds, bolts or other similarly approved connection at intervals not to exceed 48” on all diaphragm sides. If lateral design requires larger anchors or more conservative spacing, these may be used in lieu of those called out in this section.

Section N1101.7 (R102.1.1) Above code programs. **REVISE** section by **ADDING** the following at the end of the paragraph:

Compliance with the Net-Zero Energy Standard shall be deemed to comply with this code.

Table N1102.1.3 (R402.1.3) U-factor alternative. **REVISE** the section by **ADDING** the following to the end of footnote b:

In climate zone 2, an un-insulated earth mass wall with a maximum U-factor of 0.14 shall be deemed in compliance (for computing the U-factor, an R-value of 0.3 per inch shall be used for adobe and rammed earth).

Section N1102.4.1.2 (R402.4.1.2) Testing. **REVISE** section by **DELETING** the third sentence and **REPLACING** with the following:

Testing shall be conducted by individuals holding current certification for such testing from Residential Energy Services Network (RESNET), Building Performance Institute (BPI) or other *approved* agencies.

Section M1411.3 Condensate disposal. **REVISE** section by **ADDING** the following at the end of the paragraph:

Condensate disposal shall be allowed to terminate as follow:

1. Into an approved fixture tailpiece, funnel drain, waste air gap fitting, floor sink, and laundry way.
2. At or below grade outside the building in an area capable of absorbing the condensate flow without surface drainage.
3. Over roof drains, gutters, or downspouts that connect to drainage pipes, provided they terminate at or above grade in an area capable of absorbing the condensate flow without surface drainage.

Section P2603.5.1 Sewer depth. Insert [number] as “12” in both locations.

Section P2801.5.1 Pan Size and drain. REVISE section by ADDING the following at the end of the second sentence: “A drain shall not be required for replacement water heaters in locations where no previously installed drain is available.”

Section P2902.5.4 Connection to automatic fire sprinkler systems. REVISE section by DELETING all text therein and REPLACING it with the follow:
The potable water supply to automatic fire sprinkler and standpipe systems shall be protected against backflow in accordance with ARS § 41-2168.

Section P2904.1.1 Required sprinkler locations. REVISE section by DELETING the first sentence and REPLACING with the following: “Sprinklers are not required within dwelling units. This section serves as a guide for voluntary installations or to allow for a fire separation reduction within sections R302.2 and R302.2.2.”

Section P3003.2 Prohibited joints. REVISE section by DELETING the period at the end of item 5 and ADDING, “unless the solvent-cement is listed for the purpose.”

Section P3008.1 Sewage Backflow. REVISE section by DELETING the entire paragraph and replacing it with the following:
Where the finish elevation is less than 12 inches above the elevation of the next upstream manhole cover in the sewer, a backwater valve shall be installed in the building drain or branch of the building drain serving that floor. Floors discharging from above that reference point shall not discharge through the same back water valve.

Section E3703.1 Branch circuits for heating. REVISE section by ADDING a sentence to the end of the paragraph to read: Evaporative cooler fan and pump motors shall be permitted to be connected to the same branch circuit as central heating.

ADD new section E3703.7 to read:

Section E3703.7. Dishwashing and Garbage Disposal Branch Circuits- Dwelling Units. In residential occupancies, dishwashing and garbage disposer may be on the same 20-ampere branch circuit.

ADD new section E3802.8 to read:

Section E3802.8 Earthen material wiring method. Type UF Cable shall be permitted to be used in mortar joints of adobe construction in occupancies where the use of Nonmetallic Sheathed Cable is permitted by this code.