Exhibit V

Oregon Department of Consumer and Business Services, Building Codes Division

Rule 918-480-0125
Uniform Alternate Construction Standard for One and Two Family Dwellings

(1)

For lots of record created on or after July 2, 2001, if the building official intends to allow one or more of the Uniform Alternate Construction Standards at the time of building permit application, triggered by fire official determinations of inadequate apparatus access or water supply, the building official must:

(a)

Provide at least a general notification of the intent to allow such Uniform Alternate Construction Standards; and

(b)

Provide such notification in conjunction with the approval of a land use application under ORS 197.522 (Local government to approve subdivision, partition or construction).

(2)

The building official, acting in conformance with these rules, may choose to apply one or more Uniform Alternate Construction Standards after a determination by a fire official with authority over water supply and apparatus access, that the water supply, apparatus access, or both are inadequate at a site. A building official shall give consideration to advice of the State Fire Marshal or local fire official that does not conflict with this rule, but shall retain the authority to make final decisions. Decisions to consider a Uniform Alternate Construction Standard and the selection of one or more Uniform Alternate Construction Standards by a building official are final.

(3)

A Uniform Alternate Construction Standard is not a Statewide Alternate Method.

(4)

Uniform Alternate Construction Standards for One and Two Family Dwellings. Uniform Alternate Construction Standards are limited to one or more of the following fire suppression and fire containment components:

(a)

Installation of an NFPA Standard 13D fire suppression system;

(b)

Installation of additional layers of $^{5}/_{8}$ inch, Type-X gypsum wallboard;

(c)

Installation of fire-resistive compartmentalization of dwellings to limit the spread of fire by use of fire-resistant building elements, components or assemblies. Fire-resistance ratings shall be determined in accordance with the Oregon Structural Specialty Code;

(d)

Installation of fire-resistive exterior wall covering and roofing components; or

(e)

Provide fire separation containment in accordance with the default standards as set forth in the Wildland-Urban Interface rules adopted by the Oregon Department of Forestry (see OAR 629-044-1060 (Default Standards)).

(5)

When unique site conditions exist on a lot or when installation of a full NFPA Standard 13D fire suppression system is impractical due to substantially increased local system development charges, a building official may accept installation of a partial NFPA Standard 13D fire suppression system in conjunction with one or more of the Uniform Alternate Construction Standards listed in subsections (4)(a) through (e) of this rule.

Building Code. All photovoltaic electrical installations shall comply with the *Electrical Code*.

SECTION R325
MEZZANINES

R325.1 General. Mezzanines shall comply with Sections R325 through R325.5. *Habitable attics* shall comply with Section R325.6.

R325.2 Mezzanines. The clear height above and below mezzanine floor construction shall be not less than 7 feet (2134 mm).

R325.3 Area limitation. The aggregate area of a mezzanine or mezzanines shall be not greater than one-third of the floor area of the room or space in which they are located. The enclosed portion of a room shall not be included in a determination of the floor area of the room in which the *mezzanine* is located.

Exception: The aggregate area of a mezzanine located within a dwelling unit equipped with a fire sprinkler system in accordance with NFPA 13D or other approved sprinkler system shall not be greater than one-half of the floor area of the room, provided that the mezzanine meets all of the following requirements:

1. Except for enclosed closets and bathrooms, the mezzanine is open to the room in which such mezzanine is located.
2. The opening to the room is unobstructed except for walls not more than 42 inches (1067 mm) in height, columns and posts.
3. The exceptions to Section R325.5 are not applied.

R325.4 Means of egress. The means of egress for mezzanines shall comply with the applicable provisions of Section R311.

R325.5 Openness. Mezzanines shall be open and unobstructed to the room in which they are located except for walls not more than 36 inches (914 mm) in height, columns and posts.

Exceptions:

1. Mezzanines or portions thereof are not required to be open to the room in which they are located, provided that the aggregate floor area of the enclosed space is not greater than 10 percent of the mezzanine area.
2. In buildings that are not more than two stories above *grade plane* and equipped throughout with an automatic sprinkler system in accordance with Section R313, a mezzanine shall not be required to be open to the room in which the mezzanine is located.

SECTION R326
HABITABLE ATTIC

R326.1 General. *Habitable attics* shall comply with this section.

R326.2 Minimum dimensions. A *habitable attic* shall have a floor area in accordance with Section R304 and a ceiling height in accordance with Section R305.

R326.3 Story above grade plane. A *habitable attic* shall be considered a *story above grade plane*.

Exception: A *habitable attic* shall not be considered to be a *story above grade plane* where the space meets all of the following:

1. The aggregate area of the *habitable attic* is not greater than one-third of the floor area of the story below or, where located in *dwelling units* equipped throughout with an automatic fire sprinkler system in accordance with NFPA 13D, the *habitable attic* is not greater than one-half of the floor area of the story below.
2. The occupiable space is enclosed by the roof assembly above; knee walls, if applicable, on the sides; and the floor-ceiling assembly below.
3. The floor of the *habitable attic* does not extend beyond the exterior walls of the story below.
4. Where the *habitable attic* is located above a third story, the *dwelling unit* or *townhouse* shall be equipped throughout with an automatic fire sprinkler system in accordance with NFPA 13D.

SECTION R327
WILDFIRE HAZARD MITIGATION

R327.1 Purpose. The purpose of this section is to provide minimum standards for *dwellings* and their *accessory structures* located in or adjacent to vegetated areas subject to wildfires, to reduce or eliminate hazards presented by such fires.

R327.2 Scope. The provisions of this section shall apply to all *dwellings* required to be protected against wildfire by a *municipality* that has adopted wildfire zoning regulations. The additional provisions of Section R327.4 shall apply when a local *municipality* has adopted a local ordinance specifically recognizing Section R327.4 and consistent with Sections R327.4 through R327.4.8.

R327.3 Determination. Wildfire hazard zones shall be determined using criteria established by the Oregon Department of Forestry.

R327.3.1 Wildfire hazard zone requirements. *Dwellings* and their *accessory structures* shall be protected against wildfire by the following requirements in addition to other requirements of this code. The provisions of Section R327.4 apply only to qualifying lots identified in Section R327.4.1.

Exception: Nonhabitable detached *accessory structures* with an area of not greater than 400 square feet, (37.2 m^2) located not less than 50 feet (15 240 mm) from all other structures on the *lot* shall be exempt from the requirements of R327.

R327.3.1.1 Roofing. Roofing shall be asphalt shingles in accordance with Section R905.2, slate shingles in accordance with Section R905.6, metal roofing in accordance with Section R905.4, tile, clay or concrete shingles in accordance with Section R905.3 and other approved roofing which is deemed to be equivalent to a

minimum Class C-rated roof covering. Untreated wood shingle and shake roofs are not permitted when the construction site is in a wildfire hazard zone as determined by Section R327.3.

R327.3.1.2 Reroofing or repair of roofing of existing buildings. When 50 percent or more of the roof covering of any building is repaired or replaced within 1 year, the roof covering shall be made to comply with this section and attic ventilation shall be made to comply with this code. Ventilation openings shall be protected with corrosion-resistant wire mesh not greater than $^1/_2$-inch (12.7 mm) or less than $^1/_8$-inch (3.2 mm) in any dimension.

R327.4 Scope of additional wildfire hazard mitigation requirements. The provisions of Section R327.4 shall apply to new *dwellings* and their *accessory structures* located in a wildfire hazard zone on a qualifying lot of record created on or after the effective date in the local adopting ordinance.

R327.4.1 Qualifying lots of record. Qualifying lots of record shall meet all the following:

1. Be located in a wildfire hazard zone as identified by the local *municipality* using criteria established by the Oregon Department of Forestry. The local *municipality* is not required to include all areas identified by the Oregon Department of Forestry as wildfire hazard zones. The zone shall be detailed in the local adopting ordinance.
2. The local *municipality* shall determine in the adopting ordinance whether qualifying lots of record shall consist of individual lots or whether qualifying lots must be part of a development that contains a minimum number of lots.
3. The local *municipality* shall make a determination that the lot of record is either located within the identified wildfire hazard zone as determined by the *jurisdiction* or that it is located outside of the wildfire hazard zone as determined by the jurisdiction. Notification shall be provided in conjunction with the land use approval under ORS 197.522.
4. Application:
   - 4.1 Lots created prior to the effective date of the local ordinance, that would otherwise qualify under the local adopting ordinance, are exempt from the requirements of the ordinance for a period of 3 years from the creation date of the land use approval under ORS 197.522.
   - 4.2 For a lot created after the effective date of the local ordinance that receives notification under this section, the determination in the notification shall be valid for 3 years from the date of the land use approval under ORS 197.522. At the expiration of the 3 years, a lot of record shall be re-evaluated under the current version of the adopting ordinance prior to the issuance of a building *permit*.

Infill exception: *Dwellings* or *accessory structures* constructed on a lot in a subdivision do not need to comply with Section R327.4 when 50 percent or more of the lots in the subdivision have existing dwellings that were not constructed in accordance with Section R327.4.

Nothing in the code or adopting ordinance prevents a local *municipality* from waiving the requirements of Section R327.4 for any lot, property or *dwelling*, or the remodel, replacement or reconstruction of a *dwelling* within the *jurisdiction*.

The local *municipality* must include a process for resolving disputes related to the applicability of the local ordinance and this section.

R327.4.2 Definitions. The following words and terms shall, for purposes of Section R327.4, have the meanings shown herein. Refer to Chapter 2 for general definitions.

HEAVY TIMBER. For the use in this section, *heavy timber* shall be sawn lumber or glue laminated wood with the smallest minimum nominal dimension of 4 inches (102 mm). *Heavy timber* walls or floors shall be sawn or glue-laminated planks splined, tongue-and-groove or set close together and well spiked.

IGNITION-RESISTANT MATERIAL. A type of building material that resists ignition or sustained flaming combustion sufficiently so as to reduce losses from wildland-urban interface conflagrations under worst-case weather and fuel conditions with *wildfire exposure* of burning embers and small flames. Such materials include any product designed for exterior exposure that, when tested in accordance with ASTM E84 or UL 723 for surface burning characteristics of building materials, extended to a 30-minute duration, exhibits a flame spread index of not more than 25, shows no evidence of significant progressive combustion, and whose flame front does not progress more than $10^1/_2$ feet (3.2 m) beyond the centerline of the burner at any time during the test.

NONCOMBUSTIBLE MATERIAL. Any material that in the form in which it is used and under the conditions anticipated will not ignite, burn, support combustion or release flammable vapors when subjected to fire or heat in accordance with ASTM E136.

WILDFIRE. Any uncontrolled fire spreading through vegetative fuels that threatens to destroy life, property or resources.

WILDFIRE EXPOSURE. One or a combination of circumstances exposing a structure to ignition, including radiant heat, convective heat, direct flame contact and burning embers being projected by a vegetation fire to a structure and its immediate environment.

R327.4.3 Roofing. Roofing shall be asphalt shingles in accordance with Section R905.2, slate shingles in accordance with Section R905.6, metal roofing in accordance with Section R905.4, tile, clay or concrete shingles in accordance with Section R905.3 or other *approved* roofing which is deemed to be equivalent to a minimum Class B-rated roof assembly. Wood shingle and shake roofs are not permitted in a wildfire hazard zone.

Where the roof profile allows a space between the roof covering and roof decking, the spaces shall be constructed to prevent the intrusion of flames and embers, be fire-blocked with *approved* materials, or have one layer of minimum 72-pound (32.4 kg) mineral-surfaced nonperforated cap sheet complying with ASTM D3909 installed over the combustible decking.

Where valley flashing is installed, the flashing shall be not less than 0.019-inch (0.48 mm) No. 26 gage galvanized sheet corrosion-resistant metal installed over not less than one layer of minimum 72-pound (32.4 kg) mineral-surfaced nonperforated cap sheet complying with ASTM D3909 not less than 36-inch-wide (914 mm) running the full length of the valley.

R327.4.3.1 Gutters. When required, roof gutters shall be constructed of *noncombustible materials* and be provided with a means to prevent accumulation of leaves and debris in the gutter.

R327.4.4 Ventilation. Where provided, the minimum net area of ventilation openings for enclosed attics, enclosed soffit spaces, enclosed rafter spaces and underfloor spaces shall be in accordance with Sections R806 and R408.

All ventilation openings shall be covered with noncombustible corrosion-resistant metal wire mesh, vents designed to resist the intrusion of burning embers and flame, or other *approved* materials or devices.

Ventilation mesh and screening shall be a minimum of $^1/_{16}$-inch (1.6 mm) and a maximum of $^1/_8$-inch (3.2 mm) in any dimension.

R327.4.4.1 Eaves, soffits, and cornices. Ventilation openings shall not be installed on the underside of eaves, soffits or cornices.

Exceptions:

1. The *building official* may *approve* special eave, soffit or cornice vents that are manufactured to resist the intrusion of flame and burning embers.
2. Ventilation openings complying with the requirements of Section R327.4.4 may be installed on the underside of eaves, soffits or cornices where the opening is located 12 feet (3658 mm) or greater above *grade* or the surface below.

R327.4.5 Exterior walls. The *exterior wall covering* or wall assembly shall comply with one of the following requirements:

1. *Noncombustible material.*
2. *Ignition-resistant* material.
3. *Heavy timber* assembly.
4. Log wall construction assembly.
5. Wall assemblies that have been tested in accordance with the test procedures for a 10-minute direct flame contact exposure test set forth in ASTM E2707, complying with the conditions of acceptance listed in Section R327.4.5.2.

Exception: Any of the following shall be deemed to meet the assembly performance criteria and intent of this section:

1. One layer of $^5/_8$-inch Type X exterior gypsum sheathing applied behind the *exterior wall covering* or cladding on the exterior side of the framing.
2. The exterior portion of a 1-hour fire-resistive *exterior wall* assembly designed for exterior fire exposure including assemblies using exterior gypsum panel and sheathing products listed in the Gypsum Association *Fire Resistance and Sound Control Design Manual.*

R327.4.5.1 Extent of exterior wall covering. *Exterior wall coverings* shall extend from the top of the foundation to the roof and terminate at 2-inch (50.8 mm) nominal solid wood blocking between rafters at all roof overhangs, or in the case of enclosed eaves or soffits, shall terminate at the underside of the enclosure.

R327.4.5.2 Conditions of acceptance. ASTM E2707 tests shall be conducted in triplicate and the conditions of acceptance below shall be met. If any one of the three replicates does not meet the conditions of acceptance, three additional tests shall be conducted. All additional tests shall meet the following conditions of acceptance:

1. Absence of flame penetration through the wall assembly at any time during the test.
2. Absence of evidence of glowing combustion on the interior surface of the assembly at the end of the 70-minute test.

R327.4.6 Overhanging projections. All exterior projections (exterior balconies, carports, decks, patio covers, porch ceilings, unenclosed roofs and floors, overhanging buildings and similar architectural appendages and projections) shall be protected as specified in this section.

R327.4.6.1 Enclosed roof eaves, soffits, and cornices. The exposed underside of rafter or truss eaves and enclosed soffits, where any portion of the framing is less than 12 feet (3658 mm) above *grade* or similar surface below, shall be protected by one of the following:

1. *Noncombustible material.*
2. *Ignition-resistant* material.
3. One layer of $^5/_8$-inch Type X exterior gypsum sheathing applied behind an exterior covering on the underside of the rafter tails, truss tails or soffit.
4. The exterior portion of a 1-hour fire-resistive *exterior wall* assembly applied to the underside of the rafter tails or soffit including assemblies using exterior gypsum panel and sheathing prod-

ucts listed in the Gypsum Association *Fire Resistance and Sound Control Design Manual.*

5. Soffit assemblies with an underside surface that meets the performance criteria in Section R327.4.6.5 when tested in accordance ASTM E2957.

Exceptions: The following materials do not require protection required by this section:

1. Eaves and soffits where all portions of the framing members are 12 feet (3658 mm) or greater above *grade*, and 2-inch nominal eave fireblocking is provided between roof framing members from the wall top plate to the underside of the roof sheathing.
2. Gable end overhangs and roof assembly projections beyond an *exterior wall* other than at the lower end of the rafter tails.
3. Fascia and other architectural trim boards.

R327.4.6.2 Exterior patio and porch ceilings. The exposed underside of exterior patio and porch ceilings greater than 200 square feet in area and less than 12 feet (3658 mm) above *grade* shall be protected by one of the following:

1. *Noncombustible material.*
2. *Ignition-resistant* material.
3. One layer of $^5/_8$-inch Type X exterior gypsum sheathing applied behind the exterior covering on the underside of the ceiling.
4. The exterior portion of a 1-hour fire resistive *exterior wall* assembly applied to the underside of the ceiling assembly including assemblies using exterior gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual.
5. Porch ceiling assemblies with a horizontal underside that meet the performance criteria in Section R327.4.6.5 when tested in accordance with the test procedures set forth in ASTM E2957.

Exception: Architectural trim boards.

R327.4.6.3 Floor projections. The exposed underside of cantilevered floor projections less than 12 feet (3658 mm) above *grade* or the surface below shall be protected by one of the following:

1. *Noncombustible material.*
2. *Ignition-resistant* material.
3. One layer of $^5/_8$-inch Type X exterior gypsum sheathing applied behind an exterior covering on the underside of the floor projection.
4. The exterior portion of a 1-hour fire resistive *exterior wall* assembly applied to the underside of the floor projection, including assemblies using exterior gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual.
5. An assembly that meets the performance criteria in Section R327.4.6.5 when tested in accordance with ASTM E2957.

Exception: Architectural trim boards.

R327.4.6.4 Underfloor protection. The underfloor area of elevated structures shall be enclosed to *grade* in accordance with the requirements of Section R327.4, or the underside of the exposed underfloor shall be protected by one of the following:

1. *Noncombustible material.*
2. *Ignition-resistant* material.
3. One layer of $^5/_8$-inch Type X exterior gypsum sheathing applied behind an exterior covering on the underside of the floor assembly.
4. The exterior portion of a 1-hour fire resistive *exterior wall* assembly applied to the underside of the floor, including assemblies using exterior gypsum panel and sheathing products listed in the Gypsum Association Fire Resistance Design Manual.
5. An assembly that meets the performance criteria in Section R327.4.6.5 when tested in accordance with ASTM E2957.

Exception: *Heavy timber* structural columns and beams do not require protection.

R327.4.6.5 Conditions of acceptance. ASTM E2957 tests shall be conducted in triplicate, and the following conditions of acceptance shall be met. If any one of the three replicates does not meet the conditions of acceptance, three additional tests shall be conducted. All additional tests shall meet the following conditions of acceptance:

1. Absence of flame penetration of the eaves or horizontal projection assembly at any time during the test.
2. Absence of structural failure of the eaves or horizontal projection subassembly at any time during the test.
3. Absence of sustained combustion of any kind at the conclusion of the 40-minute test.

R327.4.7 Walking surfaces. Deck, porch and balcony walking surfaces located greater than 30 inches and less than 12 feet (3658 mm) above *grade* or the surface below shall be constructed with one of the following materials:

1. Materials that comply with the performance requirements of Section R327.4.7.1 when tested in accordance with both ASTM E2632 and ASTM E2726.
2. *Ignition-resistant* materials that comply with the performance requirements of Section R327.4.2 when tested in accordance with ASTM E84 or UL 723.
3. Exterior fire-retardant-treated wood.
4. *Noncombustible material.*

5. Any material that complies with the performance requirements of Section R327.4.7.2 where tested in accordance with ASTM E2632, where the *exterior wall covering* of the structure is noncombustible or *ignition-resistant* material.
6. Any material that complies with the performance requirements of ASTM E2632, where the *exterior wall covering* of the structure is noncombustible or *ignition-resistant* material.

   Exception: *Wall covering* material may be of any material that otherwise complies with this chapter when the decking surface material complies with the performance requirements ASTM E84 with a Class B flame spread rating.

Exception: Walking surfaces of decks, porches and balconies not greater than 200 square feet (18.58 m^2) in area, where the surface is constructed of nominal 2-inch (51 mm) lumber.

R327.4.7.1 Requirements for R327.4.7, Item 1. The material shall be tested in accordance with ASTM E2632 and ASTM E2726, and shall comply with the conditions of acceptance in Sections R327.4.7.1.1 and R327.4.7.1.2. The material shall also comply with the performance requirements of Section R327.4.2 for ignition-resistant material when tested in accordance with ASTM E84 or UL 723.

R327.4.7.1.1 Conditions of acceptance. ASTM E2632 tests shall be conducted in triplicate and the following conditions of acceptance shall be met. If any one of the three replicates does not meet the conditions of acceptance, three additional tests shall be conducted. All additional tests shall meet the following conditions of acceptance:

1. Peak heat release rate of less than or equal to 25 kW/ft^2 (269 kW/m^2).
2. Absence of sustained flaming or glowing combustion of any kind at the conclusion of the 40-minute observation period.
3. Absence of falling particles that are still burning when reaching the burner or floor.

R327.4.7.1.2 Conditions of acceptance. ASTM E2762 tests shall be conducted in triplicate and the following conditions of acceptance shall be met. If any one of the three replicates does not meet the conditions of acceptance, three additional tests shall be conducted. All of the additional tests shall meet the following conditions of acceptance:

1. Absence of sustained flaming or glowing combustion of any kind at the conclusion of the 40-minute observation period.
2. Absence of falling particles that are still burning when reaching the burner or floor.

R327.4.7.2 Requirements for R327.4.7, Item 6. The material shall be tested in accordance with ASTM E2632 and shall comply with the following conditions of acceptance. The test shall be conducted in triplicate and the peak heat release rate shall be less than or equal to 25 kW/ft^2 (269 kW/m^2). If any one of the three replicates does not meet the conditions of acceptance, three additional tests shall be conducted. All of the additional tests shall meet the conditions of acceptance.

R327.4.8 Glazing. Exterior windows, windows within exterior doors, and skylights shall be tempered glass, multilayered glazed panels, glass block or have a fire-resistance rating of not less than 20 minutes.

SECTION R328
DETACHED GROUP R ACCESSORY STRUCTURES (GROUP U)

R328.1 Purpose. The purpose of this section is to provide for tabulated allowable area increases for detached Group R *accessory structures* (Group U) based on the availability of open spaces between adjacent buildings and/or property lines.

R328.2 Scope. The provisions of this section are limited to detached Group R *accessory structures*, which are not more than one story above grade plane in height. Mezzanines may be included within detached *accessory structures* but shall be limited to an aggregate floor area of not more than one-third of the area of the room or space in which the level is located.

R328.3 Definitions. The following words and terms shall, for the purposes of this section, have the meanings shown herein.

SEPARATION DISTANCE. The distance measured from the detached *accessory structure* exterior face to one of the following:

1. The closest interior lot line.
2. The centerline of a street, an alley or a public way.
3. Residences or other *accessory structures* on the same property.

The distance shall be measured at right angles from the face of the wall.

R328.4 Allowable area. The 3,000-square-foot (279 m^2) area limitation imposed by definition for residential *accessory structures* shall be permitted to be increased where separation distances are provided on all sides of a detached *accessory structure* in accordance with Table R328.4.

Exceptions: Where a separation distance of 10 feet (3048 mm) or more is provided, 1-hour fire-resistance-rated construction may be substituted for the separation distance noted in Table R328.4 for one side of a detached *accessory structure* subject to the following conditions:

1. A minimum separation distance of 10 feet (3048 mm) must be provided adjacent to the 1-hour fire-resistance-rated exterior wall.
2. Openings in the 1-hour fire-resistance-rated exterior wall are limited to 15 percent of the area of the wall.

R328.4.1 Residential accessory structures on same lot. For the purposes of this section, two or more detached residential *accessory structures* on the same lot shall be regulated as separate buildings or shall be considered as

portions of one building if the aggregate area of the buildings is within the limitations of Table R328.4.

Where aggregate building areas are being considered as portions of one building, the separation distances specified in Table R328.4 shall be applicable to all exterior building faces which establish the aggregate building perimeter.

R328.4.2 Projections. Projections of exterior walls shall comply with Table R302.1 of this code.

TABLE R328.4
ALLOWABLE AREA INCREASE
DETACHED GROUP R ACCESSORY BUILDINGS

SEPARATION DISTANCE (feet)	ALLOWABLE AREA (square feet)
5	3,500
10	4,000
15	4,500
20	5,000
25	5,500
30	6,000
35	7,000
40	8,000
45	9,000
50	10,000
55	11,000
60 or greater	12,000

For SI: 1 foot = 308.4 mm, 1 square foot = 0.0929 m^2.

SECTION R329
SWIMMING POOLS, SPAS AND HOT TUBS

R329.1 General. The design and construction of barriers for residential *swimming pools* which are accessory to four or fewer *dwelling units* shall comply with the applicable provisions of the *International Swimming Pool and Spa Code*.

SECTION R330
STATIONARY STORAGE BATTERY SYSTEMS

R330.1 General. *Stationary storage battery system* shall comply with the provisions of this section.

R330.2 Equipment listings. *Stationary storage battery systems* shall be *listed* and *labeled* for residential use in accordance with UL 9540.

Exceptions:

1. Where *approved*, repurposed unlisted battery systems from electric vehicles are allowed to be installed outdoors or in detached sheds located not less than 5 feet (1524 mm) from exterior walls, property lines and public ways.
2. *Battery systems* that are an integral part of an electric vehicle are allowed provided that the installation complies with Section 625.48 of the *Electrical Code*.
3. Battery systems less than 1 kWh (3.6 megajoules).

R330.3 Installation. *Stationary storage battery systems* shall be installed in accordance with the manufacturer's instructions and their *listing*, if applicable, and shall not be installed within the habitable space of a dwelling unit.

R330.4 Electrical installation. *Stationary storage battery systems* shall be installed in accordance with the *Electrical Code*. Inverters shall be *listed* and *labeled* in accordance with UL 1741 or provided as part of the UL 9540 listing. Systems connected to the utility grid shall use inverters listed for utility interaction.

R330.5 Ventilation. Indoor installations of *stationary storage battery systems* that include batteries that produce hydrogen or other flammable gases during charging shall be provided with ventilation in accordance with Section M1307.4.

R330.6 Protection from impact. *Stationary storage battery systems* installed in a location subject to vehicle damage shall be protected by approved barriers.