**REPI-7 Solar-Ready Requirement**

**SECTION R103**

**CONSTRUCTION DOCUMENTS**

**Add new text as follows:**

**R103.2.3 Solar-ready system**. The construction documents shall provide details for dedicated roof area, structural design for roof dead and live load, and routing of conduit or pre-wiring from *solar-ready zone* to electrical service panel or plumbing from *solar-ready zone* to *service water heating* system. ~~for the~~ *~~solar-ready zone~~* ~~shall be represented on the construction documents~~.

**SECTION R105**

**INSPECTIONS**

**Revise text as follows:**

**R105.2.3 Plumbing rough-in inspection.** Inspections at plumbing rough-in shall verify compliance as required by the code and approved plans and specifications as to types of insulation and corresponding R-values and protection and required controls. Where required, ~~Where the solar-ready zone is installed for solar water heating,~~ inspections shall verify pathways for routing of plumbing from solar-ready zone to service water heating system.

**Add new text as follows:**

**R105.2.5 Electrical rough-in inspection.** Inspections at electrical rough-in shall verify compliance as required by the code and the approved plans and specifications as to the locations, distribution, and capacity of the electrical system. Where the solar-ready zone is installed for electricity generation, inspections shall verify conduit or pre-wiring from solar-ready zone to electrical panel.

**Revise numbering as follows:**

**~~R105.2.5~~ R105.2.6 Final inspection.**

**SECTION R202**

**GENERAL DEFINITIONS**

**Add new definition as follows:**

**SOLAR-READY ZONE.** A section or sections of the roof or building overhang designated and reserved for the future installation of a solar photovoltaic or solar thermal system.

**SECTION R401**

**GENERAL**

**Revise text as follows:**

**R401.3 Certificate.** A permanent certificate shall be completed by the builder or other approved party and posted on a wall in the space where the furnace is located, a utility room or an approved location inside the building. Where located on an electrical panel, the certificate shall not cover or obstruct the visibility of the circuit directory label, service disconnect label or other required labels. The certification shall indicate the following:

8. Where a *solar-ready zone* is provided, the certificate shall indicate the location anddimensions. ~~, and capacity reserved on the electrical service panel.~~

**SECTION R404**

**ELECTRICAL POWER AND LIGHTING SYSTEMS**

**Add new text as follows:**

**R404.4 Renewable energy infrastructure.** The building shall comply with the requirements of R404.4.1 or R404.4.2

**R404.4.1 One- and two- family dwellings and townhouses.** *Dwelling units* inone- and two-family dwellings and townhouses shall comply with Sections R404.4.1.1 through R404.4.1.4.

**Exceptions:**

1. A *~~building~~ dwelling unit* with a permanently installed on-site renewable energy system.

3. A*~~building~~**dwelling unit* with ~~a solar-ready zone area that is~~ less than ~~6~~500 square feet (~~55~~46 m2) of roof area oriented between 110 degrees and 270 degrees of true north.

4. A *~~building~~* *dwelling unit* with a solar-ready zone area that is shaded for more than 70 percent of daylight hours annually.

5. A *~~building~~ dwelling unit* that complies with Appendix RC

**R404.4.1.1 Solar-ready zone area.** The total area of the *solar-ready zone* shall not be less than ~~300 square feet (28 m~~~~2~~~~)~~250 square feet (23.2 m2) and shall be composed of areas not less than 5.5 feet (1676 mm) in one direction ~~width~~ and not less than 80 square feet (7.4 m2) exclusive of access or set back areas as required by the International Fire Code.

**Exception:** Dwelling units in townhouses three stories or less in height above grade plane and with a total floor area less than or equal to 2,000 square feet (186 m2) per dwelling shall be permitted to have a solar-ready zone area of not less than 150 square feet (14 m2).

**R404.4.1.2 Obstructions**. Solar-ready zones shall be free from obstructions, including but not limited to vents, chimneys, and roof-mounted equipment.

**R404.4.1.3 Electrical service reserved space**. The main electrical service panel shall have a reserved space for ~~to allow installation of~~ a dual pole circuit breaker ~~for future solar electric installation~~ and shall be labeled “For Future Solar Electric.” The reserved space shall be ~~positioned~~ at the opposite (load) end of the busbar from the primary energy source.

**R404.4.1.4 Electrical interconnection.** An electrical junction box shall be installed within 24 inches (610 mm) of the main electrical service panel and shall be connected to a capped roof penetration sleeve or a location in the attic that is within 3 feet (914 mm) of the *solar ready zone* by a ~~one of the following~~ ~~1.~~ ~~M~~minimum 1-inch nonflexible metallic conduit or permanently installed wire as approved by the code official.~~2. Minimum #10 Metal copper 3-wire~~

Where the interconnection terminates in the attic, location shall beno less than 12” (35 mm) above ceiling insulation. Both ends of the interconnection shall be labeled “For Future Solar Electric”.

**R404.4.2 Group R occupancies.** Buildings in Group R-2, R-3 and R-4 shall comply with Section C405.13.

**SECTION R405**

**TOTAL BUILDING PERFORMANCE**

**Revise table as follows:**

**TABLE R405.2 REQUIREMENTS FOR TOTAL BUILDING PERFORMANCE**

|  |  |
| --- | --- |
| **SECTION** | **TITLE** |
| Electrical Power and Lighting Systems |
| R404.1 | Lighting equipment |
| R404.2 | Interior lighting controls |
| R404.4 | Renewable energy infrastructure |

**SECTION R406**

**ENERGY RATING INDEX COMPLIANCE ALTERNATIVE**

**Revise table as follows:**

**TABLE R406.2 REQUIREMENTS FOR ENERGY RATING INDEX**

|  |  |
| --- | --- |
| **SECTION** | **TITLE** |
| Electrical Power and Lighting Systems |
| R404.1 | Lighting equipment |
| R404.2 | Interior lighting controls |
| R404.4 | Renewable energy infrastructure |
| R406.3 | Building thermal envelope |