



Aug 3rd, 2020

RE: **8/3/20 Code Committee Meeting - Residential Solar Ready Provisions**

Dear Technical Model Code Review Committee,

Thank you for receiving my comment. For the record, my name is Zach Snyder and I am Program Manager at Solar Oregon, a statewide nonprofit that has educated consumers and the general public about solar and other forms of clean energy for the past four decades. I am commenting today to urge the committee to include a 'solar-ready zone' in the state's Solar Ready provisions.

Solar Ready is a set of simple requirements for new construction--in this case residential--that ensure that a home is compatible with a rooftop solar installation. There are two main components of Solar Ready: an electrical conduit run from near the home's electrical panel to the attic space, and a 'solar-ready zone' on the roof that ensures sufficient space for a future solar installation. Solar Ready is increasingly common practice around the world, and there are well thought out international standards that are simple, allow for common-sense exceptions, and minimize burden for builders.

Both the conduit and the 'solar-ready zone' on the roof are important, but the 'solar-ready zone' is by far the most important part of Solar Ready. Without the 'solar-ready zone', there may not be sufficient roof space to install a single solar panel. This situation is very commonly encountered by homeowners and solar industry professionals today across Oregon, and so Solar Ready provisions that include a 'solar-ready zone' on the roof represent an easy but significant improvement to code. The International Residential Code (IRC) Appendix U (attached) is a widely accepted international standard for the 'solar-ready zone'.

Appendix T in the resources you were provided for this meeting (attached) outlines highly robust provisions for a 'solar-ready zone' on the roof. Appendix T of your packet is nearly identical to Appendix U of the IRC, except that it has the two additional provisions T103.5 and T103.6.

In addition to existing provisions regarding the conduit run, Solar Oregon recommends adopting Appendix T as written, and expects that it's implementation would not burden builders significantly. However, if the committee is seeking the most simple Solar Ready possible, Solar Oregon recommends adopting a subset of Appendix T that includes at least provisions T103.1 through T103.5. This subset represents a featherweight Solar Ready that ensures a home at least has space on the roof for solar panels. Without these basic roof area requirements, any Solar Ready code will allow for homes to be built and marketed as Solar Ready when they may in fact be fundamentally incompatible with solar.

Thank you for your time, and careful consideration of this topic.

Sincerely,

Zach Snyder

APPENDIXU
**SOLAR-READY PROVISIONS—DETACHED ONE- AND
TWO-FAMILY DWELLINGS, MULTIPLE SINGLE-
FAMILY DWELLINGS (TOWNHOUSES)**

(The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.)

SECTION U101
SCOPE

U101.1 General.

These provisions shall be applicable for new construction where solar-ready provisions are required.

SECTION U102

GENERAL DEFINITIONS

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 U103

SOLAR-READY ZONE

U103.1 General.

New detached one- and two-family dwellings, and multiple single-family dwellings (townhouses) with not less than 600 square feet (55.74 m²) of roof area oriented between 110 degrees and 270 degrees of true north shall comply with sections U103.2 through U103.8.

Exceptions:

1. New residential buildings with a permanently installed on-site renewable energy system.
2. A building with a solar-ready zone that is shaded for more than 70 percent of daylight hours annually.

U103.2 Construction document requirements for solar ready zone.

Construction documents shall indicate the solar-ready *zone*.

U103.3 Solar-ready zone area.

The total solar-ready *zone* area shall be not less than 300 square feet (27.87 m²) exclusive of mandatory access or set back areas as required by the *International Fire Code*. New multiple single-family dwellings (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 (185.8 m²) per dwelling shall have a solar-ready *zone* area of not less than 150 square feet (13.94 m²). The solar-ready *zone* shall be composed of areas not less than 5 feet (1.52 m) in width and not less than 80 square feet (7.44 m²) exclusive of access or set back areas as required by the *International Fire Code*.

U103.4 Obstructions.

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

U103.5 Roof load documentation.

The structural design loads for roof dead load and roof live load shall be clearly indicated on the construction documents.

U103.6 Interconnection pathway.

Construction documents shall indicate pathways for routing of conduit or plumbing from the solar-ready *zone* to the electrical service panel or service hot water system.

U103.7 Electrical service reserved space.

The main electrical service panel shall have a reserved space 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 from the input feeder location or main circuit location.

U103.8 Construction documentation certificate.

A permanent certificate, indicating the solar-ready *zone* and other requirements of this section, shall be posted near the electrical distribution panel, water heater or other conspicuous location by the builder or registered design professional.