DAMP AND WET LOCATION RECEPTACLES

What are the requirements for installing covers on receptacles in damp and wet locations?

PER NEC 408.8
(A) Damp Locations. A receptacle installed outdoors in a location protected from the weather or in other damp locations shall have an enclosure for the receptacle that is weatherproof when the receptacle is covered (attachment plug cap not inserted and receptacle covers closed). (Exhibit B)

An installation suitable for wet locations shall also be considered suitable for damp locations.

A receptacle shall be considered to be in a location protected from the weather where located under roofed open porches, canopies, marquees, and the like, and will not be subjected to a beating rain or water runoff. All 15- and 20-ampere, 125- and 250-volt nonlocking receptacles shall be a listed weather-resistant type.

(B) Wet Locations.
(1) 15- and 20-Ampere Receptacles in a Wet Location. 15- and 20-ampere, 125- and 250-volt receptacles installed in a wet location shall have an enclosure that is weatherproof whether or not the attachment plug cap is inserted. All 15- and 20-ampere, 125- and 250-volt nonlocking receptacles shall be listed weather-resistant type. (Exhibit A)

Exception: 15- and 20-ampere, 125- through 250-volt receptacles installed in a wet location and subject to routine high-pressure spray washing shall be permitted to have an enclosure that is weatherproof when the attachment plug is removed.

(2) Other Receptacles. All other receptacles installed in a wet location shall comply with (B)(2)(a) or (B)(2)(b).

(a) A receptacle installed in a wet location, where the product intended to be plugged into it is not attended while in use, shall have an enclosure that is weatherproof with the attachment plug cap inserted or removed. (Exhibit A)

(b) A receptacle installed in a wet location where the product intended to be plugged into it will be attended while in use (e.g., portable tools) shall have an enclosure that is weatherproof when the attachment plug is removed. (Exhibit B)
Receptacles in a damp location can use a cover that is weather-proof only when the attachment plug is removed and the cover closed (Exhibit B) or it can have a cover that is weather-proof when the attachment cap is inserted (Exhibit A)

Receptacles in wet locations:
If the receptacle is 15 or 20 amp, 125 or 250 volt rated it MUST have a cover that is weather-proof when the attachment cap is inserted (Exhibit A)

If the receptacle is NOT 15 or 20 amp, 125 or 250 volt rated:
If the load intended to be plugged in is NOT attended while in use it MUST have a cover that is weather-proof when the attachment cap is inserted (Exhibit A)

If the load intended to be plugged in is attended while in use it can use a cover that is weather-proof only when the attachment plug is removed and the cover closed (Exhibit B) or it can have a cover that is weather-proof when the attachment cap is inserted (Exhibit A)

A new code change for 2008 requires that all 15- and 20-ampere, 125- and 250-volt nonlocking receptacles shall be listed weather-resistant type receptacles and not standard devices.

Exhibit A
Cover that is weatherproof with the cord plugged in.

Exhibit B
Cover that is only weatherproof without the cord plugged in and the cover closed.

All code references are from NFPA 70 National Electrical Code 2008 Edition

The interpretations expressed are those of the author and are intended to be a guideline only. They are based on the references listed. It is the responsibility of the reader to be sure this complies with the codes, standards, and specifications applicable to any given situation. Compliance with codes, standards, and specifications is the responsibility of the installer. Final interpretation is up to the local authority having jurisdiction.