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BUBBLE COVERS

By: David H. Kendall

The 2002 National Electrical Code (NEC) will be a learning experience for everybody. Articles and Sections will be renumbered and products that shared Articles will be assigned their own Article numbers. Also there may be some code changes that might go unnoticed. An example of one of these revisions would be for the covers used with outdoor receptacles.

Currently the 1999 NEC, Section 410-57(b), requires outdoor receptacles to be covered with a weatherproof cover listed for a Wet Location with the plug inserted or removed where product that will be used is unattended. Such products are landscape lighting, sprinkler systems and holiday lights (410-57(b)(1)). If the receptacle is attended for temporary use, when product that is attended, such as drills and landscaping tools are used, than the cover is only required to be listed for a Wet Location when the plug is removed (410-57(b)(2)).

The majority of new homes built today utilizes only the cover listed for a Wet Location when the plug is removed. Contractors will install this standard weatherproof cover indicating to the inspector that the receptacle is to be used strictly for attended, temporary use. It is the home owners responsibilities to change the cover if they ever attend to use holiday lights.

NEC Code Making Panel 18 Accepted in Principle and Part a proposal to revise this section and to read as follows:

406.8 Receptacles in Damp or Wet Locations

(A) Damp Locations.

A receptacle installed outdoors in a location protected from the weather or in a 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).

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 be a beating rain or water runoff.

(B) Wet Locations.

(1) 15- and 20-Ampere outdoor Receptacles. 15- and 20-ampere, 125- and 250-volts receptacles installed outdoors in a wet location shall have an enclosure that is weatherproofed whether or not the attachment plug cap is inserted.

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

(a) A receptacle installed in a wet location where the product intended to be plugged into it is not attended while in use (e.g., sprinkler system controller, landscape lighting, holiday lights, and so fourth) shall have an enclosure that is weatherproofed with the attachment plug cap inserted or removed.

(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, and so forth) shall have an enclosure that is weatherproofed when the attachment plug is removed. (ROP 18-43)

Note: A new Article 406 Receptacles, Cord Connectors, and Attachment Plugs (Caps), has been added to the 2002 NEC.

Per Article 100, a Wet Location is defined as: Installations underground or in concrete slabs or masonry in direct contact with earth; in locations subject to saturation with water or other liquids, such as vehicle washing areas; and in unprotected locations exposed to weather.

If the receptacle is either a 15 or 20 amp, 125 or 250 volt receptacle, exposed to the weather, an in-use weatherproof cover, also know as a bubble cover or hood cover, must be used. A roofed open porch or under a canopy would be considered a Damp Location if it protects the outlet from the elements. A Damp Location is a location not normally subject to the effects of the weather.

GFCI receptacle manufacturers have required that their devices have adequate protection from exposure to moisture to prevent the corrosion of internal components. The result of prolong exposure to moisture could compromise the ability of the GFCI to provide personnel protection. Since it was nearly impossible to predict that an outdoor receptacle was to be attended or unattended Code Making Panel 18 decided it was safer to require an in-use weatherproof cover to be installed for all outdoor application regardless if it is a GFCI or a standard receptacle or whether or not it is attended.

This change to the 2002 NEC may go unnoticed at first, but as contractors and inspectors become educated of the new requirement, it will probably have a very large impact on both the residential and commercial construction world.