



● Implementation Date And Locations For New Electrical Examinations

Beginning on March 1, 2010:

- All electrical examinations will be based on the 2008 National Electrical Code, WAC 296-46B, and 19.28 RCW. This applies for all examination candidates even if they started the examination process before March 1, 2010.
- The examination will be offered at the following Washington PSI testing sites: Spokane, Pasco, Yakima, East Wenatchee, Burlington, Everett, Seattle, Tacoma, Olympia and Vancouver. The examination is also available nationwide at over 200 PSI testing sites.

Safety Tip of the Month!

Daylight is very limited this time of the year. Always wear your reflective clothing so that others can see you. Wearing reflective clothing everyday reduces the possibility of injury from a motor vehicle or other mobile equipment.

Electrical examinations occurring before March 1, 2010, must be scheduled by contacting PSI at: 1-800-211-2754.

If you are planning on taking an electrical examination on or after March 1, 2010, you may schedule for an examination with PSI after mid February, using one of the following methods:

- Via the Internet 24 hours a day at www.psiexams.com
- Using a touch-tone phone, call PSI 24 hours a day at (800) 733-9267
- With a PSI registrar at (800) 733-9267, available Monday through Friday, between 4:30 am and 5:00 pm and Saturday, between 8:00 am and 2:00 pm, Pacific Time.

The next edition of the Electrical Currents will contain more information on the examination process.

● Circuit Extensions Connected By Extension Cords Are Not Allowed

A variety of products are now on the market in response to the demand for providing concealed power to wall mounted flat screen televisions and similar devices. Most of these products consist of a kit that contains a cut-in outlet box for behind the television, a cut-in outlet box for below the television, a length of Type NM used to connect the two boxes and a standard duplex receptacle for behind the TV. Also included in the kit is a male receptacle for the lower cut in box and an extension cord used to connect the male receptacle to a nearby existing outlet. This picture is an example of one manufacturer's system.



NEC 408.4 (1) says that flexible cords and cables must not be used as a substitute for the fixed wiring of a structure. The requirements of the National Electrical Code take precedence over any overall product listing information provided with this type of circuit extension kit.

● Access to Wiring Box Behind Surface Mounted Luminaires

Generally, a surface mounted luminaire, such as a fluorescent strip, must have a hole providing access to the wiring in the luminaire's outlet box. The only exception is when the luminaire is designed to be solely supported by the box. The National Electrical Code is very clear about this requirement.

NEC 410.24(B) states, "Electric-discharge luminaires surface mounted over concealed outlet, pull, or junction boxes and designed not to be supported solely by the outlet box shall be provided with suitable openings in the back of the luminaire to provide access to the wiring in the box."

● Scope-Of-Work Crossover, Proper Supervision And Reporting Training Hours Legally

A specialty electrical contractor's scope of work determines the type of specialty electrician they can employ and dispatch without supervision. If a specialty electrician's certification type is not the same as the contractor's license type, then the individual must have a training certificate and be working under proper supervision. There are three exceptions: **a)** a journeyman (01) electrician can work (as a specialty electrician) for any type of specialty contractor or, **b)** a residential (02) specialty electrician can work for a (07B) residential maintenance contractor and do work within the contractor's scope without supervision or, **c)** an electrician in a specialty that has a "sub-specialty" detailed in WAC 269-46B, Table 920-1 may work for a sub-specialty contractor within the scope of the more limited sub-specialty.

The following is an updated guide, originally printed in the January 2002 and May 2004 editions of this newsletter, to help contractors, electricians, and trainees provide proper personnel and supervision on their jobsites, report training hours in the appropriate categories, and avoid citations for working illegally.

TYPE OF WORK PERFORMED (see scopes in WAC 296-46B-920)	Contractor must be:	Category of Hours Reported	Trainee must be supervised by:
(01) General Electrical: (Including All Types Of Specialty Electrical Work)	01	New Commercial/Industrial (01) Report hours in the specific specialty type(s) of work performed.	01 01 or Appropriate Specialty
(02) Residential Construction	02	Residential (02)	01, 02
(03) Pump and Irrigation	03	Pump and Irrigation (03)	01, 03
(03A) Domestic Well	03 or 03A	Domestic Well (03A)	01, 03, 03A
(04) Sign and Outline Lighting	04	Sign (04)	01, 04
(06) Limited Energy Systems	06	Limited Energy Systems (06)	01, 06
(06A) HVAC/R	06A	HVAC/R (06A)	01, 06A
(06B) HVAC/R-restricted	06A or 06B	HVAC/R-restricted (06B)	01, 06A, 06B
(07) Non-Residential Maintenance	07	Non-Residential Maintenance (07)	01, 07
(07C) Restricted Non-Resid. Maint.	07 or 07C	Restricted Non-Resid. Maintenance (07C)	01, 07, 07C
(07B) Residential Maintenance	02, 07, 07C, or 07B	Residential Maintenance (07B)	01, 02, 07, 07C, 07B
(07A) Non-Resid. Lighting Maint.	07, 07C, or 07A	Non-Resid. Lighting Maintenance (07A)	01, 07, 07C, 07A
(07D) Appliance Repair	07, 07E, or 07D	Appliance Repair (07D)	01, 07, 07E, 07D
(07E) Equipment Repair	07 or 07E	Equipment Repair (07E)	01, 07, 07E
(09) Telecommunications	09	None—WAC 296-46B-945(13)(c)	N/A
(10) Door, Gate, and Similar Systems	10	Door, Gate, and Similar Systems (10)	01, 10

● Electrical Question of the Month

This Month's Question: What is the ampacity of a #2 AWG aluminum Type SE cable used as an apartment unit main feeder installed indoors in an 80 °F environment? **A)** 75 amps, **B)** 95 amps, **C)** 100 amps, **D)** 90 amps.

Last Month's Question: What is the ampacity of a #6 AWG Copper Type SE cable installed indoors in an 86 °F environment? **A)** 40 amps, **B)** 50 amps, **C)** 65 amps, **D)** 55 amps.

The answer is: **D)** 55 Amps. NEC 338.10(B)(4)(a) refers to the requirements of Article 334, Part II (including the temperature limitations in NEC 334.80). Table 310.16 was used to determine conductor ampacity and correction factors.