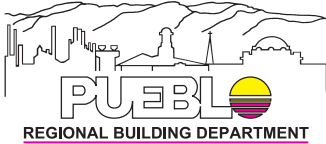


PRBD CHAT

RESIDENTIAL CODES-Smoke Alarms, Carbon Monoxide Alarm and Protected Stairways



Holidays in the Next Quarter:

Palm Sunday	April 17, 2011
Good Friday	April 22, 2011
Easter	April 24, 2011
Administrative	
Professional Day	April 27, 2011
Mother's Day	May 8, 2011
Memorial Day	May 30, 2011
Father's Day	June 19, 2011
Summer Begins	June 21, 2011

MARK YOUR CALENDARS FOR THESE HOLIDAYS COMING UP!

SPECIAL POINTS OF INTEREST:

- Building – Smoke Alarms & Carbon Monoxide p.1
- Pueblo Community College Information p.2
- Mechanical – CSST Gastite p.3
- Smoke Alarms & Carbon Monoxide Continued p.3
- Plumbing –World Plumbing Day p.3
- Building – Protected Stairways p.4
- Electrical – License Renewal Information p.5
- Spring Is Here p.6



Dave Vaughn, Building Official

Now available at the front counter and online at www.prbd.com are "How Are We Doing Customer Survey" forms and "The Customer Complaint" forms for anyone wishing to file a complaint or evaluate the Department's customer service. These forms can be mailed, dropped off or e-mail to Dave at dvaughn@prbd.com.

- Dave Vaughn -

This month we need to revisit a few areas of the residential code that contractors seem to be having problems with in the field. The first item is when do we need to install smoke detectors and carbon monoxide alarms in existing homes? And when do they need to be hard-wired into the system? Code requirements can be found in section R314 Smoke Alarms and R315 Carbon Monoxide Alarms of the 2009 International Residential Code.

R314 Smoke detection and notification.

All smoke alarms shall be listed in accordance with UL 217 and installed in accordance with the provisions of this code and the household fire warning equipment provisions of NFPA 72.

R314.2 Smoke detection systems.

Household fire alarm systems installed in accordance with NFPA 72 that include smoke alarms, or a combination of smoke detector and audible notification device installed as required by this section for smoke alarms, shall be permitted. The household fire alarm system shall provide the same level of smoke detection and alarm as required by this section for smoke alarms. Where a household fire warning system is installed using a combination of smoke detector and audible notification device(s), it shall become a permanent fixture of the occupancy and owned by the homeowner.

R314.3.1 Alterations, repairs and additions.

When alterations, repairs or additions requiring a permit occur, or when one or more sleeping rooms are added or created in existing dwellings, the individual dwelling unit shall be equipped with smoke alarms located as required for new dwellings.

- Exceptions:*
1. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck, are exempt from the requirements of this section.
 2. Installation, alteration or repairs of plumbing or mechanical systems are exempt from the requirements of this section.

R314.4 Power source.

Smoke alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source, and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection. Smoke alarms shall be interconnected.

- Exceptions:*
1. Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power.
 2. Interconnection and hard-wiring of smoke alarms in existing areas shall not be required where the alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for hard wiring and interconnection without the removal of interior finishes.

Economic & Workforce Development

UPCOMING CLASSES

Public Training Events

Safety Training

(7 hours)

New class every Wednesday through May 18, 2011

8:00 am – 4:00 pm

Cost: \$129/person

This course is ideal for anyone with safety and health responsibilities and for employee safety and health awareness. Attendees will be introduced to safety and health principles.

Electrical Safety

(4 hours)

April 5, 2011 - 5:00-9:00 pm (Tuesday)

or

April 8, 2011 7:30-11:30 am (Friday)

Cost: \$79/person

This is an introduction to assist participants with the identification of electrical hazards and provide procedures to work around electricity safely for the non-electrical worker.

AC/DC Electricity for HVAC Workers

(30 hours)

April 12-May 31, 2011 (Tuesdays & Thursdays)

5:00 – 7:30 pm

or

April 15-June 1, 2011 (Wednesdays & Fridays)

7:30-10:00 am

Cost: \$595/person

This course is designed to provide participants with an understanding of basic electricity, electrical print reading, electrical circuits (voltage, current, and resistance), protective devices, and ladder logic.

Combustion Theory

(24 hours)

June 2-30, 2011 (Tuesdays & Thursdays)

5:00 – 8:00 pm

or

June 3-July 1, 2011 (Wednesdays & Fridays)

7:30-10:30 am

Cost: \$495/person

This course provides participants with a basic understanding of gas and combustion, burners, pressures, and monometers.

Electrical Components of High Efficiency Heating

(8 hours)

July 7-12, 2011 (Tuesdays & Thursdays)

5:00 – 8:00 pm

or

July 6-13, 2011 (Wednesdays & Fridays)

7:30-11:00 am

Cost: \$159/person

This course is designed to cover vent dampers, thermostats, pressure sensors, temperature sensors, and zone control.

Air Distribution

(4 hours)

July 14-19, 2011 (Thursday & Tuesday)

5:00 – 7:00 pm

or

July 15 - 20, 2011 (Friday & Wednesday)

7:30-9:30 am

Cost: \$79/person

This course provides participants with a basic understanding of combustion air-carriers and venting air-carriers.

Visit our website for the latest training events at:

www.pueblocc.edu/tec

Bringing customized workforce training to you...



900 West Orman Avenue
Gorsich Advanced Technology Center, Room 201B
Pueblo, CO 81004

Phone: 719-549-3320

Toll Free: 866-478-3256

Fax: 719-549-3462

E-mail: Technology@pueblocc.edu

MECHANICAL NEWS

CSST Gastite

Per Manufacture's Instructions:

- **Strip Jacket**
"Strip jacket back to the valley of the second corrugation."

Too many contractors are cutting back 2 to 3 inches off the jacket now, which is way too much.

We are going to start enforcing this item per the manufacture's instructions. - Ron Vigil -

Smoke Alarms & Carbon Monoxide Alarms – Continued

R315.1 Carbon monoxide alarms.

For new construction, an approved carbon monoxide alarm shall be installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units within which fuel-fired appliances are installed and in dwelling units that have attached garages.

R315.2 Where required in existing dwellings.

Where work requiring a permit occur in existing dwellings that have attached garages or in existing dwellings within which fuel-fired appliances exist, carbon monoxide alarms shall be provided in accordance with Section R315.1.

R315.3 Alarm requirements.

Single station carbon monoxide alarms shall be listed as complying with UL 2034 and shall be installed in accordance with this code and the manufacturer's installation instructions.

NOTE: House Bill 09-1091 Requires that CARBON MONOXIDE ALARMS be installed in residential properties. "Every single-family dwelling that includes either a fuel-fired appliances or attached garage where, on or after JULY 1, 2009, interior alterations, repairs, fueled-fired appliance replacements, or additions **ANY OF WHICH REQUIRE A BUILDING PERMIT**, occurs or which one or more rooms lawfully used for sleeping purposes are added, shall have an operational carbon monoxide alarm installed. They shall be located within fifteen (15) feet of the entrance to each room used lawfully for sleeping purposes or in a location as specified in any building code adopted by the state or any local government entity."

Residential Codes Continue Page 4 -

WORLD PLUMBING DAY

On Wednesday, March 9, 2011, the United States Senate passed a bipartisan resolution formally designating March, 11, 2011, as World Plumbing Day.

Senate Resolution 100, introduced by Senator Michael Bennet (D-Colo) and co-sponsored by Sens. Orrin Hatch (R-Utah), Jeff Merkley (D-Ore.) and Patty Murray (D-Wash), highlights the role plumbing plays in safeguarding public health in the United States and worldwide, addresses the lack of safe drinking water and sanitation across the globe, declares access to such a vital human right and praises trained plumbing professionals for maintaining, repairing and rebuilding the aging water infrastructure of the United States.

"Whereas Congress and plumbing professionals across the United States and the world are committed to safeguarding public health: Now, therefore, be it resolved that the Senate designates March 11, 2011, as 'World Plumbing Day,' " the resolution concludes.

Senate Resolution 100 can be read in its entirety by directing your Web browser to: <http://www.iapmo.org/Documents?SenateBill100.pdf>

The World Plumbing Council last year established March 11 as World Plumbing Day, an annual celebration to promote appreciation of the plumbing industry's vital work on behalf of the planet and its people.

HOW'S THAT! KIND OF MAKES YOU PROUD DOESN'T IT!

Another message of importance to all. The State of Colorado has passed legislation clarifying who may install residential fire suppression systems. Only those who "meet at least minimum skill training standards that demonstrate competency in the sprinkler fitter trade. This law takes effect on July 1, 2011. I would strongly suggest that all plumbers go to the State website and look up House Bill 10-1241 Fire Sprinklers and read the entire Bill for yourselves.

The Plumbing Inspection Department would like to thank all of you for your continued great work and help in "Protecting the Health Of the Nation".

- Dan Daniels -

Residential Codes – Protected Stairways

The next item we need to touch on is when does the code require stairways to be protected on the underneath side for exiting requirements? These requirements will be found in section R302 Fire-Resistant Construction.

R302.7 Under-stair protection

Enclosed accessible space under stairs shall have walls, under-stair surface and any soffits protected on the enclosed side with 1/2-inch gypsum board.

Comment: This is how the building department is interpreting this issue. If there are walls on both sides of a stairway, whether it be wood or concrete, and there is *access* to the under stair area (in any way, shape, or form), the stairs and enclosing walls (on the inside) will have drywall on them from floor to ceiling. The only exception to this, is to close-off the under stair area completely with walls and drywall (on the outside of them), thus, having no access to this area, period.

Residential Exterior Wall Bracing

Next, allow me to shed some light on the exterior wall bracing requirements for homes in our county. First, there are several basic pieces of information we need to have in order to figure-out bracing requirements. They are as follows: Pueblo County is in a “Wind Design Speed Zone” - “90 mph”, and “Seismic Design Category” - “B”. You can find this information at the beginning of Chapter 3, under Climate and Geographic Design Criteria. Since most of the builders in this county use continuous sheathing to brace their houses, I will concentrate on this form of bracing in this newsletter.

Now, we need to understand the difference between “braced wall lines” and “braced wall panels”, will find this information in sections R602.10.1 and R602.10.1.1 in Chapter 6. To help simplify the wall bracing requirements, here are a few pointers. *Table R602.10.1.2 (1) Bracing Requirements Based on Wind Speed chart (<90 mph)*, will tell you how much bracing this particular exterior wall will need, based on the wall length, the number of stories, and what type of bracing material you use.

Next, we need to know where this bracing should be placed in this braced wall line. Go to section R602.10.1.4 Braced Wall Panel Location. Braced wall panels shall be located in accordance with Figure R602.10.1.4(1). Braced wall panels shall be located not more than 25 feet on center and shall be permitted to begin no more than 12.5 feet from the end of a braced wall line in accordance with Section R602.10.1 and Figure R602.10.1.4(2). The total combined distance from each end of a braced wall line to the outermost braced wall panel or panels in the line shall not exceed 12.5 feet. Braced wall panels may be offset out-of-plane up to 4 feet from the *designated braced wall line* provided that the total out-to-out offset of braced wall panels in a braced wall line is not more than 8 feet in accordance with Figures R602.10.1.4(3) and R602.10.1.4(4). All braced wall panels within a braced wall line shall be permitted to be offset from the designated braced wall line.

The next item to cover is what is the basic minimum length of wall panel allowed. You will find this requirement in the R602.10.3 Minimum length of braced panels section.

For Methods DWB, WSP, SFB, PBS, PCP and HPS, each braced wall panel shall be at least 48 inches in length, covering a minimum of three stud spaces where studs are spaced 16 inches on center and covering a minimum of two stud spaces where studs are spaced 24 inches on center. For Method GB, each braced wall panel shall be at least 96 inches in length where applied to one face of a braced wall line and at least 48 inches where applied to both faces. For Methods DWB, WSP, SFB, PBS, PCP and HPS, for purposes of computing the length of panel bracing required in Tables R602.10.1.2(1) and R602.10.1.2(2), the effective length of the braced wall panel shall be equal to the *actual length* of the panel. When Method GB panels are applied to only one face of a braced wall panel, bracing lengths required in Tables R602.10.1.2(1) and R602.10.1.2(2) for Method GB shall be doubled.

Finally, go to section R602.10.4 Continuous Sheathing, and apply these requirements to your particular situation.

COMMENT: On walls that have *large openings* in them, such as a garage door wall, the code does not address any wall less than sixteen (16”) in width, as far as exterior wall bracing requirements are concerned. Therefore, you will need to get an engineer-designed fix for this wall bracing situation. It is best to keep the wall widths to at least 24 inches minimum to avoid the engineering situation.

*******One last item**, special congratulations go out to Cassie and Victoria at PHBA for another great Home and Garden Show this year! Way to go girls!

- Charlie Carty -

ELECTRICAL NEWS: License Renewal Information

As you know all Electricians are now required to have Professional Development Unit (PDU); this is not a pass or fail test, this is an assessment exam based on the 2011 National Electrical Code. Below is a reprint taken from the Colorado State Electrical web site: www.dora.state.co.us/Electrical/cc/index.htm, for more information.

Renewal Overview

In order to renew a license that expires September 30, 2011, any licensed Residential Wireman, Journeyman Electrician or Master Electrician must:

1. Complete the 2011 Individual Assessment administered by Pearson Vue on or after July 1, 2011.
 - a. The Individual Assessment is divided into four core competency areas.
 - b. You may use the most recent code book to complete the Individual Assessment.
 - c. Your score will be sent to the Board.
2. Renew your license in 2011.
3. Accrue 24 Professional Development Units (PDUs) prior to the expiration of your license in 2014.
 - a. If your Individual Assessment results (Step 1) are at or above the Acceptable Level of Performance (ALP) in all core competency areas, you will be awarded the full 24 PDUs. You do not need to accrue any PDUs.
 - b. Any licensee whose Assessment results are below the ALP in any category must follow a Learning Plan to accrue PDUs.
 - c. If your score falls below the ALP in:
 - i. One core competency area: you must accrue 8 PDUs
 - ii. Two core competency areas: you must accrue 16 PDUs
 - iii. Three or more core competency areas: you must accrue 24 PDUs.
 - d. Access and update your Learning Plan online at the DORA Continuing Competence website.
 - e. You may accrue PDUs by completing approved Continuing Competency Activities: non-credit academic courses; for-credit academic courses; industry training programs.
4. Complete the 2014 Individual Assessment on or after July 1, 2014 (repeat Step 1 with updated Code).
5. Renew your license in 2014.

Pearson Vue Reservations

Reservations for the Individual Assessment for the CC program can be made at any Pearson Vue site in the United States. Reservations will not be accepted until June 15, 2011 in preparation for the opening of Assessment window which begins on July 1, 2011 and concludes on November 30, 2011. Information on how to make reservations will be made available on the Pearson Vue website after June 15, 2011 and may be made online or via telephone. Please continue to check this website for additional information on the Assessment as it is made available.

Make your reservations early! Assessment fees are calculated on a sliding scale:

Assess between July 1 and August 15	\$30 (\$5 reduction in fee)
Assess between August 16 and October 15	\$45 (\$15 increase in fee)
Assess between October 16 and November 30	\$60 (\$25 increase in fee)

Please visit the Colorado State web site for more information, thank you.

- Arnold Montoya, Chief Electrical Inspector -

SPRING IS HERE...

In spring, the axis of the Earth is increasing its tilt toward the Sun and the length of daylight rapidly increases for the relevant hemisphere. The hemisphere begins to warm significantly causing new plant growth to "spring forth," giving the season its name. Snow, if a normal part of winter, begins to melt, and streams swell with runoff. Frosts, if a normal part of winter, become less severe. Temperate climates have no snow and rare frosts, the air and ground temperature increases more rapidly.

Many flowering plants bloom this time of year, in a long succession sometimes beginning even if snow is still on the ground, continuing into early summer. In normally snowless areas "spring" may begin as early as February (Northern Hemisphere) heralded by the blooming of deciduous magnolias, cherries, and quince, or August (Southern Hemisphere) in the same way. Subtropical and tropical areas have climates better described in terms of other seasons, e.g. dry or wet, or monsoonal, or cyclonic. Often the cultures have locally defined names for seasons which have little equivalence to the terms originating in Europe. Many temperate areas have a dry spring, and wet autumn (fall), which brings about flowering in this season more consistent with the need for water as well as warmth. Subarctic areas may not experience "spring" at all until May or even June, or December in the outer Antarctic.

While spring is a result of the warmth caused by the turning of the Earth's axis, the weather in many parts of the world is overlain by events which appear very erratic taken on a year-to-year basis. The rainfall in spring (or any season) follows trends more related to longer cycles or events created by ocean currents and ocean temperatures. Good and well-researched examples are the El Niño effect and the Southern Oscillation Index.

Unstable weather may more often occur during spring, when warm air begins on occasions to invade from lower latitudes, while cold air is still pushing on occasions from the Polar regions. Flooding is also most common in and near mountainous areas during this time of year because of snowmelt, accelerated by warm rains. In the United States, Tornado Alley is most active this time of year, especially since the Rocky Mountains prevent the surging hot and cold air masses from spreading eastward and instead force them into direct conflict. Besides tornadoes, supercell thunderstorms can also produce dangerously large hail and very high winds, for which a severe thunderstorm warning or tornado warning is usually issued. Even more so than in winter, the jet streams play an important role in unstable and severe weather in the springtime in the Northern Hemisphere.

In recent decades season creep has been observed, which means that many phenological signs of spring are occurring earlier in many regions by a couple of days per decade.

Spring is seen as a time of growth, renewal, of new life (both plant and animal) being born. The term is also used more generally as a metaphor for the start of better times, as in the Prague Spring. Spring in the Southern Hemisphere is different in several significant ways to that of the Northern Hemisphere. This is because: there is no land bridge between Southern Hemisphere countries and the Antarctic zone capable of bringing in cold air without the temperature-mitigating effects of extensive tracts of water; the vastly greater amount of ocean in the Southern Hemisphere at all latitudes; at this time in Earth's geologic history the Earth has an orbit which brings it in closer to the Southern Hemisphere for its warmer seasons; there is a circumpolar flow of air (the roaring 40s and 50s) uninterrupted by large land masses; no equivalent jet streams; and the peculiarities of the reversing ocean currents in the Pacific.

- internet -

Pueblo Regional Building Dept.
316 W. 15th Street
Pueblo, CO 81003



Phone: 719-543-0002
Fax: 719-543-0062
Email: prbd@prbd.com


Prbdchat graphics, computer
imaging and set up by Mark
Gurule and Joyce Bergemann