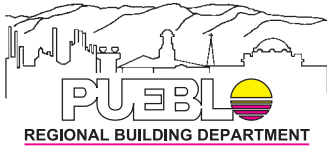


# PRBD CHAT



**Holidays in the Next Quarter:**

Columbus Day	Oct. 11, 2010
National Boss' Day	Oct. 16, 2010
Halloween	Oct. 31, 2010
Election Day	Nov. 2, 2010
Daylight Savings Ends	Nov. 7, 2010
Veterans Day	Nov. 11, 2010
Thanksgiving	Nov. 25, 2010
Winter begins	Dec. 21, 2010
Christmas	Dec. 25, 2010
New Years	Jan. 1, 2011

MARK YOUR CALENDARS FOR THESE HOLIDAYS COMING UP!

**SPECIAL POINTS OF INTEREST:**

- Code Changes
- Pueblo Workshop Information
- Electrical - Reminders and Smoke Alarms
- Mechanical
- Plumbing
- Daylight Saving Time



Dave Vaughn, Building Official

Now available at the front counter and online at [www.prbd.com](http://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](mailto:dvaughn@prbd.com).

- Dave Vaughn -

## CODE CHANGES

Change, Options, and Decisions! This has been the theme in 2010 for all members of the building industry in Pueblo County and throughout Colorado. With the adoption of the 2009 Residential, Building and Energy codes, our world (of construction) has change dramatically.

As the world changes around us, the building industry must change right along with it in order to make the homes we live in and the buildings we work in safer, stronger, and more energy efficient. As with any and all changes to the codes, these issues are addressed in the adoption of these new codes. And, as professionals of the building industry, we (the contractors and code officials) must educate ourselves on these new code changes so that we can better serve our customers. Therefore, it is imperative that construction professionals further their education by taking classes, attending seminars, and/or participating in on the job training sessions in order to bring yourselves up to date on these new code requirements.

If you've worked in the construction industry and dealt with building codes for any length of time, you soon realize the code officials who write the codes have written-in numerous options on how to attack a particular problem. One prime example is how to get a building to comply with the International Energy Conservation Code requirements. The code gives you basically three options: Prescriptive Path (General), Total UA Alternative Path (Res Check), or Simulated Performance Alternative Path (blower door testing). They all have specific requirements that must be met. The requirements are based on the type of exterior wall construction, type of foundation, roof truss design, window and door packages, heating and cooling systems, ect... It is up to you as a builder / designer to decide which testing method will work best for you.

This is only one area of the new building codes that you as a builder will be required to make a decision on in the process of designing and building your specific product. And, as we have all experienced in the construction process, no two buildings will ever be the same, nor will the decisions be the same that will get us to the end result. Dealing with the new codes is a challenge for all of us in the building industry. This learning curve will take time and effort from all of us. We at the building department will do our best to help you in the decision making process.

- Charlie Carty -

Business and Industry Workforce Training

UPCOMING CLASSES

Public Training Events

**Rigging**

(8 hours)

November 8 & 10, 2010 (Wednesday & Monday)

7:30 am – 11:30 am

Cost: \$140/person (Normally \$245/person)

This hands-on class helps participants to discover practical rigging techniques and critical safety protocol when preparing for a lift. Using various hardware including hooks, shackles, links, rings, eyebolts and hoist rings as well as wire rope, chain and synthetic slings, learn the application and inspection of rigging.

**Computer Fundamentals**

(24 hours)

November 15-December 8, 2010 (Mondays & Wednesdays)

7:30 am – 10:30 am

Cost: \$295/person (Normally \$425/person)

This hands-on course focuses on Windows Operating System, Microsoft Word and Microsoft Excel.

**Industrial Motors & Controls**

(28 hours)

October 25-November 24, 2010 (Mondays & Wednesdays)

7:30 am – 10:30 am

Cost: \$395/person (Normally \$630/person)

This is an introduction to motor and control theory, control relays and motors starters, brush theory, single and three-phase motors, and reversing motor control.

**Mechanical Components**

(25 hours)

November 29-December 22, 2010 (Mondays & Wednesdays)

7:30 am – 10:45 am

Cost: \$349/person (Normally \$549/person)

This course provides participants with a basic understanding of measuring bearings, dial indicators, belts, couplings, pulleys, sprockets, chains and shafts.

**Electrical Theory**

(24 hours)

December 15-January 24, 2011 (Mondays & Wednesdays)

7:30 am – 10:30 am

Cost: \$295/person (Normally \$495/person)

This course covers the theory of basic electricity, electronics, electrical components, and basic circuitry.

**Mechanical Blueprint Reading**

(16 hours)

December 15-January 10, 2011 (Mondays & Wednesdays)

7:30 am – 11:30 am

Cost: \$195/person (Normally \$295/person)

This course provides participants with an analysis of the general layout of a blueprint and shows them where to look for information.

**Mechanical Drawing**

(16 hours)

January 12-24, 2011 (Mondays & Wednesdays)

7:30 am – 11:30 am

Cost: \$195/person (Normally \$295/person)

This introductory course provides an overview of mechanical drawing concepts including lines, orthographic projections, views and dimensions.

**Introduction to Hydraulics**

(32 hours)

February 14-March 9, 2011 (Mondays & Wednesdays)

7:30 am – 11:30 am

Cost: \$395/person (Normally \$595/person)

This course teaches new maintenance technicians the principles of maintaining pneumatic systems as well as the theory behind the applications.

Visit our website for the latest training events

at: [www.pueblocc.edu/tec](http://www.pueblocc.edu/tec).

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Community  
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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](mailto:Technology@pueblocc.edu)

## MECHANICAL NEWS

### INTERNATIONAL FUEL GAS CODE 2009

**ELECTRICAL BONDING CSST.** Corrugated stainless steel tubing (csst) gas piping systems shall be bonded to the electrical service grounding electrode system at the point where the gas service enters the building. the bond jumper shall not be smaller than # 6 AWG copper wire or equivalent. section 310.1.1 section 408 .4 (IFGC)

**SEDIMENT TRAPS** Where a sediment trap is not incorporated as a part of the appliance, a sediment trap shall be installed downstream of the appliance shutoff valve as close to the inlet of the appliance as practical. The sediment trap shall be either a tee fitting having a capped nipple of any length installed vertically in the bottommost opening of the tee or other device APPROVED as an effective sediment trap. Illuminating appliances, ranges, clothes dryers, and outdoor grills need not be so equipped.

## DEEP THOUGHTS FROM THE PLUMBING DEPARTMENT

It seems that we are seeing more and more fixtures ( be it faucets, lavs, kitchen sinks, etc.) that have no listings. Per section 401.0 of the 2009 Uniform Plumbing Code; ...

*Except as permitted elsewhere in this code, fixtures shall conform in quality and design to nationally recognized standards included in table 14-1.*

We do understand that many homeowners are buying these "Pretty" items either from one of the large chain hardware stores or online but, if there are no listings we cannot allow them to be installed. You as plumbing contractor/permittee are the responsible party. Standards are developed to protect the end user. We can't stop anyone from selling these items but, we can and will stop the installation. So be warned.

On a lighter note I have to say how nice it is to be part of a trade that not only has very few problems from an enforcement standpoint but, are proud of their craft and understand how important their work is to PROTECTING THE HEALTH OF THE WORLD.

- Dan Daniels -

## PERMITS & INSPECTIONS

When you sign for a permit from this department, part of what you sign states: "This Permit will become null and void after 180 days unless a final inspection has been approved or unless inspections have been continually performed by the Pueblo Regional Building Department every 180 days. Upon expiration, additional fees may be assessed to enable further inspections and to allow the permitted work to legally continue."

We have voluntarily been sending out "6 Month Notices" warning of your of permits about to expire. Unfortunately, several contractors are using those letters as a basis to call in permits for inspection rather than when the job is completed. This results in this department getting many calls from homeowners inquiring on the status of their permit. This is the contractor's responsibility.

We will continue to mail "6 Month Letters" to contractors, but at the end of each month we will create a list of those permits which expired in that month and now must be renewed to be inspected. As this is a violation of our ordinances, you may be subject to disciplinary actions as a result.

So, if you want to avoid any problems, all you need to do is call in permits when they are completed. You may also enter requests online at our website <http://www.prbd.com>

- Mike Colucci -

## GROUNDING/BONDING

Hello everyone, I would like to touch on one code violation issue that the inspectors are encountering during inspections. When a bonding jumper is required to bond a service raceway by using grounding or bonding bushing (REF. 250.92(B) (4)), the size of conductor from the Neutral bar to the grounding bushing or bonding bushing is sized according to table 250.66 ( SIZING GROUNDING ELECTRODE CONDUCTOR). This is based on the size of the service conductors within the raceway. Why table 250.66 and not 250.122 (SIZING EQUIPMENT GROUNDING CONDUCTORS), the service entrance conductors are on the supply side of the main service overcurrent device, grounding or bonding conductors on the load side would be based on table 250.122.

I will be contributing to the newsletter by writing short articles referring to code violations that the inspectors are encountering during there inspections, as while as other important issues. Please bear with me as I will do my best to make these articles as informative as I can, while trying to maintain a level of technical expertise that is understandable for all, including yours truly, please keep in mind that I am not a writer by any stretch of the imagination, but I will do my best. If there is an issue that you would like addressed or would like more information about, please fill free to contact Mr. Montoya or Mr. Dent, or myself.

Thanks and work safe!

- Aaron Bartolo -

## CHAPTER 6 WALL CONSTRUCTION

Let's talk about exterior wall bracing requirements. There are a number of changes/additions to this chapter of the 2010 International Residential Code. Some of these changes were addressed in the 2006 IRC, but because we did not adopt the 2006 code version, we need to bring ourselves up to speed on the changes.

**Chapter 6 Wall Construction:** This chapter deals with framing of exterior walls, bracing of exterior walls, when to install vapor retarder on exterior walls, and any number of items related to exterior wall construction. This has become a very important and somewhat confusing chapter to deal with. In this newsletter I want to touch on the subject of exterior wall bracing. First, the majority of builders in Pueblo are applying continuous bracing on the exterior walls of their buildings; thus we can eliminate most of the pages in this chapter and focus on the continuous wall bracing sections only. *Of course*, the code does give us numerous options on how to brace exterior walls, but continuous sheathing is used most in our jurisdiction so let's focus on that. **Note:** When you are trying to determine what wall bracing system to use, remember that Pueblo County is in **Seismic Design Category –A**, and **Wind Design speed of 90mph**.

Continuous sheathing requirements are in sections **R602.10.4 through R602.10.5.4**. The following are only a few paragraphs of the in continuous bracing sections.

**R602.10.4 Continuous Sheathing:** Braced wall lines with *continuous* sheathing shall be constructed in accordance with this section. All braced wall lines along exterior walls on the same story shall be continuously sheathed.

Exception: Within Seismic Design Categories A, B and C or in regions where the basic wind speed is less than or equal to 100 mph, other bracing methods prescribed by this code shall be permitted on other braced wall lines on the same story level or on any braced wall line on different story levels of the building.

**R602.10.4.1 Continuous sheathing braced wall panels:** Continuous sheathing methods require structural panel sheathing to be used on all sheathable surfaces on one side of a braced wall line including areas above and below openings and gable end walls. Braced wall panels shall be constructed in accordance with one of the methods listed in Table R602.10.4.1. Different bracing methods, other than those listed in Table R602.10.4.1, shall not be permitted along a braced wall line with continuous sheathing.

**R602.10.4.1.1 Continuous portal frame:** Continuous portal frame braced wall panels shall be constructed in accordance with Figure R602.10.4.1.1. The number of continuous portal frame panels in a single braced wall line shall not exceed four. For purposes of resisting wind pressures acting perpendicular to the wall, the requirements of Figure R602.10.4.1.1 and Table R602.10.4.1.1 shall be met. There shall be a maximum of two braced wall segments per header and header length shall not exceed 22 feet. Tension straps shall be installed in accordance with the manufacturer's recommendations. R602.10.4.2 Length of braced wall panels with continuous sheathing:

Braced wall panels along a braced wall line with continuous sheathing shall be full-height with a length based on the adjacent clear opening height in accordance with Table R602.10.4.2 and Figure R602.10.4.2. Within a braced wall line when a panel has an opening on either side of differing heights, the taller opening height shall be used to determine the panel length from Table R602.10.4.2. For Method CS-PF, wall height shall be measured from the top of the header to the bottom of the bottom plate as shown in Figure R602.10.4.1.1.

**R602.10.4.4 Continuously sheathed braced wall panel location and corner construction:** For all continuous sheathing methods, full-height braced wall panels complying with the length requirements of Table R602.10.4.2 shall be located at each end of a braced wall line with continuous sheathing and at least every 25 feet on center. A minimum 24-inch wood structural panel corner return shall be provided at both ends of a braced wall line with continuous sheathing in accordance with Figures R602.10.4.4(1) and R602.10.4.4(2). In lieu of the corner return, a hold-down device with a minimum uplift design value of 800 pounds shall be fastened to the corner stud and to the foundation or framing below in accordance with Figure R602.10.4.4(3). Exception: The first braced wall panel shall be permitted to begin 12.5 feet from each end of the braced wall line in Seismic Design Categories A, B and C and 8 feet in Seismic Design Categories D0, D1 and D2 provided one of the following is satisfied:

1. A minimum 24 inch long, full-height wood structural panel is provided at both sides of a corner constructed in accordance with Figure R602.10.4.4(1) at the braced wall line ends in accordance with Figure R602.10.4.4(4), or
2. The braced wall panel closest to the corner shall have a hold-down device with a minimum uplift design value of 800 pounds fastened to the stud at the edge of the braced wall panel closest to the corner and to the foundation or framing below in accordance with Figure R602.10.4.4(5).

You will find additional requirements to the continuous bracing chapter that may help you put together a bracing system for your particular application. Remember that this is a learning curve for all of us in the construction industry, and education is the key to understanding these new code requirements.

- Charlie Carty -

# DAYLIGHT SAVING TIME

**On Sunday, November 7, 2010 at 2 a.m., Daylight Saving Time ends in the United States.**

Every Spring we move our clocks one hour ahead and "lose" an hour during the night and each Fall we move our clocks back one hour and "gain" an extra hour. But Daylight Saving Time (and not Daylight Savings Time with an "s") wasn't just created to confuse our schedules.

The phrase "Spring forward, Fall back" helps people remember how Daylight Saving Time affects their clocks. At 2 a.m. on the second Sunday in March, we set our clocks forward one hour ahead of Standard Time ("Spring forward"). We "Fall back" at 2 a.m. on the first Sunday in November by setting our clock back one hour and thus returning to Standard Time.

The change to Daylight Saving Time allows us to use less energy in lighting our homes by taking advantage of the longer and later daylight hours. During the eight-month period of Daylight Saving Time, the names of time in each of the time zones in the U.S. (map) change as well. Eastern Standard Time (EST) becomes Eastern Daylight Time, Central Standard Time (CST) becomes Central Daylight Time (CDT), Mountain Standard Time (MST) becomes Mountain Daylight Time (MDT), Pacific Standard Time becomes Pacific Daylight Time (PDT), and so forth.

Daylight Saving Time was instituted in the United States during World War I in order to save energy for war production by taking advantage of the later hours of daylight between April and October. During World War II the federal government again required the states to observe the time change. Between the wars and after World War II, states and communities chose whether or not to observe Daylight Saving Time. In 1966, Congress passed the Uniform Time Act, which standardized the length of Daylight Saving Time.

Daylight Saving Time is four weeks longer since 2007 due to the passage of the Energy Policy Act in 2005. The Act extended Daylight Saving Time by four weeks from the second Sunday of March to the first Sunday of November, with the hope that it would save 10,000 barrels of oil each day through reduced use of power by businesses during daylight hours. Unfortunately, it is exceedingly difficult to determine energy savings from Daylight Saving Time and based on a variety of factors, it is possible that little or no energy is saved by Daylight Saving Time.

Arizona (except some Indian Reservations), Hawaii, Puerto Rico, the U.S. Virgin Islands, and American Samoa have chosen not to observe Daylight Saving Time. This choice does make sense for the areas closer to the equator because the days are more consistent in length throughout the year.

- internet -

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



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