Pueblo Regional Building Department

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Summer 2012

PRBD Chat

Labor Day!

Summer is almost over! Our office will be closed on Monday, September 3rd for Labor Day. Please plan your inspection and permit needs accordingly.

INSIDE THIS ISSUE:

Perimeter Drains – Major Change!!!

Charlie Carty

The department will be changing the way we do *perimeter drain* inspections. This has been an on-going issue within the building division for some time now and we feel the inspection process needs to be changed. Therefore, starting now, we will be inspecting the *drain pipe* before it gets covered-up with rock and fabric. We want to see the location of the pipe in reference to the foundation/footing, the size and type of pipe, all the connecting fittings, the slope or grade of the pipe from the highest elevation to the lowest elevation, and the location where the pipe enters the sump pit or is daylighted beyond the foundation. Upon passing this inspection, you can complete the installation process (cover with rock and fabric) and backfill. Also, PLEASE have the soils report and drain details on the jobsite for the inspector.

Signature Lists

Mike Krasovic

Attention all Contractors:
Please update your list of people who may sign for permits for your company. It is important to maintain this list so that only people you designate can pull permits.
The link to the form is located here:
http://www.prbd.com/pubs/licensing/add_signatures.pdf

Colorado State Fair
August 24th thru
September 3rd

E-Gov… E-Inspections

Mike Colucci

Over the next few months, we will be putting in place a new inspection system based on using Android tablets. Inspectors will be able to complete electronic inspection forms while on the job site which will be quickly sent into the office.

What this means for you is that inspection results will be available on the internet within a short time of them being completed. In addition, down the road a little ways we will have the ability to email you results as they are recorded.

Several changes to our system will occur as part of this process. One is that we will ask you if the job is ready for inspection when you call it in. Also, the online system will post inspections directly as well.

This system will result in less phone calls being needed to check on the status of inspections.

Upcoming Holidays:

- Labor Day: Sept. 3rd
- Columbus Day: Oct 13th
- Election Day: May 28th
- Veteran's Day: Nov. 11th
- Thanksgiving: Nov. 22nd
- Nov. 23rd
- Christmas: Dec. 25th

Our office is closed for holidays in red

Dave Vaughn

Building Official

Education Corner

Pueblo Community College

Fall 2012

Economic & Workforce Development

UPCOMING CLASSES

Public Training Events

Use of Special Measuring Tools
(24 hours)
September 5 – October 1, 2012 (Mondays & Wednesdays)
7:30 am – 10:30 am
Cost: $495/person

This course provides participants with a basic understanding and use of torque wrenches, dial indicators, micrometers, calipers and filler gauges.

Screw Threads
(8 hours)
September 25 & 27, 2012 (Tuesday & Thursday)
7:30 am – 11:30 am
Cost: $195/person

This course provides the participant with the principles of Unified standard threads, series, thread classes, and thread design as well as screw thread terms, double depth of screw threads, translation threads, square, acme and buttress threads, metric M-profile threads, metric thread design, metric thread series, metric tap drill size and thread tapping.

Packing and Seals
(16 hours)
October 2 – 11, 2012 (Tuesdays & Thursdays)
7:30 – 11:30 am
Cost: $295/person

This course will provide the participants with the skills to: gain a more in-depth understanding of packing and sealing systems and material for the industry, develop troubleshooting skills at the fluid transfer system level, and understand sizing, calculations and reference data

Hydraulics
(24 hours)
October 3 – 29, 2012 (Mondays & Wednesdays)
7:30-10:30 am
Cost: $495/person

This course teaches new maintenance technicians the principles of hydraulic systems as well as the theory behind the applications. This course is a prerequisite for Hydraulics Level II and Level III.

Pumps
(32 hours)
October 16 – November 8, 2012 (Tuesday & Thursday)
7:30 – 11:30 am
Cost: $595/person

This course describes different types of pumps and explains their operation and maintenance. The course covers both positive and non-positive displacement pumps as commonly used in the industrial as well as other markets. Students will learn the differences between and advantages of various pumps. Practical applications will be discussed.

Medium Voltage Circuits
(8 hours)
October 30 & November 1, 2012 (Tuesdays & Thursdays)
7:30 – 11:30 am
Cost: $195/person

This course covers principles of medium voltage circuits including theory and safety.

Visit our website for the latest training events at:
www.pueblocc.edu/tec

Bringing customized workforce training to you…

Pueblo Economic & WORKFORCE Development Division
Community College

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Gorsich Advanced Technology Center, Room 201B
Pueblo, CO 81004

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Bits from the Building Division

By Charlie Carty

The next issue we need cover is the application of stucco wire lath products. There seems to be some confusion on when light gage lath can be used and when heavy gauge wire must be used. Let's clarify light gage and heavy gage wire. According to the ICC-ES Evaluation Report ERS-1194, *light gage* is defined as no. 20 gage – 1 inch galvanized steel woven-wire fabric lath. *Heavy gage* is no. 17 gage 1-1/2 woven-wire fabric lath.

Light-wire (no. 20 gage) can be used with stucco that has a maximum total thickness of ½ inch thick or less, such as in synthetic coatings, topcoat refinishes, ect…

Heavy-wire (no. 17 gage) will be used in all applications with a thickness of greater-than ½ inch, such as in portland cement applications, multi-thickness applications, act... Refer to Chapter 7 Exterior wall coverings, Section R703.6 Exterior Plaster for more information on the application process.

The next issue we need to address is the *notching and boring* of studs in non-bearing and bearing walls. The following are specific code requirements dealing with this issue.

Chapter 6 – Wall Construction, Section R602 Wood Wall Framing

R602.6 Drilling and notching-studs.

Drilling and notching of studs shall be in accordance with the following:

Notching: Any stud in an exterior wall or bearing partition may be cut or notched to a depth not exceeding *25 percent* of its width. Studs in nonbearing partitions may be notched to a depth not to exceed *40 percent* of a single stud width.

Drilling: Any stud may be bored or drilled, provided that the diameter of the resulting hole is no more than *60 percent* of the stud width, the edge of the hole is no more than 5/8 inch to the edge of the stud, and the hole is not located in the same section as a cut or notch. Studs located in exterior walls or bearing partitions drilled over *40 percent* and up to *60 percent* shall also be doubled with *no more than two successive doubled studs bored. See Figures* R602.6(1) and R602.6(2) in the code book.

Exception: Use of approved stud shoes is permitted when they are installed in accordance with the manufacturer's recommendations.

R602.6.1 Drilling and notching of top plate

When piping or ductwork is placed in or partly in an exterior wall or interior load-bearing wall, necessitating cutting, drilling or notching of *the top plate* by more than *50 percent* of its width, a galvanized metal tie not less than 0.054 inch thick (16 gauge) and 1-1/2 inches wide shall be fastened across and to the plate at each side of the opening with not less than eight 10d (0.148 inch diameter) having a minimum length of 11/2 inches at each side or equivalent. The metal tie must extend a minimum of 6 inches past the opening, *see figure* R602.6.1 in the code book.

Exception: When the *entire side of the wall* with the notch or cut is covered by wood structural panel sheathing.

The final issue we need to address is steel column thickness. The 11 gauge thickness pipes that are currently being used are not acceptable according to the building code. According to the "American National Standards Institute", 11 gauge steel pipe thickness measures out to be 0.1495. The code required Schedule 40 - steel pipe thickness measures out to be 0.22 thick (for a 3 inch pipe). Contractor's need to be aware of what they are buying from the locate supply shops and *specify* Schedule 40 steel pipe. The following are specific requirements from the code book.

Chapter 4 - Foundations, Section 407 Columns.

R407.3 Structural requirements

The columns shall be restrained to prevent lateral displacement at the bottom end. Wood columns shall not be less in nominal size than 4 inches by 4 inches. Steel columns shall not be less than 3-inch-diameter *Schedule 40 pipe* manufactured in accordance with ASTM A 53 Grade B or approved equivalent.

R407.2 Steel column protection

All surfaces (inside and outside) of steel columns shall be given a shop coat of rust-inhibitive paint, except for corrosion-resistant steel and steel treated with coatings to provide corrosion resistance.

This concludes my section of this month's newsletter. If there is an issue you would like me to cover in a future newsletter, you can email me at cbcarty@prbd.com.

2012 Parade of Homes

2012 Parade of Homes is September 7th-16th!

Pueblo in 1929…

This Safeway store was located at 815 N Main St, approximately across the street from our present location.

Complete with the seemingly required police officer on the beat.

(From Pueblo County Historical Society, http://www.pueblohistory.org)

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We're on the Web!

See us at:

www.prbd.com

Our New Location at 8th & Main

Electrical Bright Ideas

by Arnold Montoya

Electrical FAQ'S

1. Q. Who needs an electrical license?
   A. Anyone who performs new construction and rewiring of existing structures; installs electrical wiring equipment devices, light fixtures, services and meter bases.

2. Q. How high should the meter be?
   A. The current City/County ordinance requires the meter be between 4' and 5 ½' to the bottom of the meter can.

3. Q. Can I run a water line and an electrical line in the same trench?
   A. Yes. As long as the minimum depth requirements is maintained for each line. We suggest that a separation be kept between the lines to allow for repair of one without affecting the other.

4. Q. What time is my inspection?
   A. The best way is to talk to the inspector between 8:00am and 8:30am, the inspector can give a call approximately 30 min before arrival. The inspectors will normally leave for the field between 9:00am and 9:30am.

5. Q. Who can answer code/ installation questions?
   A. Electrical inspectors are available in the office or by phone (543-0002) from 8:00 a.m. to 9:00 a.m. on Mon., Tues., Thur. & Fri.

10. Q. Where are Arc Fault required residentially?
   A. 210.12 Arc- Fault Circuit-Interrupter Protection.
Definition: Arc- Fault Circuit-Interrupter Protection (AFCI). A device intended to provide protection from the effects of arc faults by recognizing characteristics unique to arcing and by functioning to de-energize the circuit when an arc fault is detected. 2011 National Electrical code NFPA 70 210.12 requires the following areas to have arc fault protection: all 15 and 20 ampere branch circuits supplying outlets installed in dwelling units. In family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, or similar rooms or areas. This include the lights, outlets, and smoke detectors. Areas that don't require arc fault protection: kitchens, bathrooms, outdoors, unfinished basements. Basically any area that requires GFCI protection does not require arc fault protection.

Deep Thoughts

from the plumbing department

By Dan Daniels

Air Admittance Valves

The use of Air Admittance valves in the City/County of Pueblo has been approved by the Plumbing Board of Appeals. This decision was made using Section 301.2, Alternate Materials and Methods of Construction Equivalency, of the 2009 Uniform Plumbing Code. This decision covers the use of all brands of Air Admittance Vales. All installations shall comply with the Studor Valve Installation Manual. This is the most extensive Manual available and may be obtained from your supplier. The one additional requirement is that one vent to atmosphere, which meets the required cross sectional area, is required. It is important that you educate your contractors and customers on these devices.

Boring of Studs

There is a tremendous amount of misunderstanding out there with regards to the boring of studs in wood frame construction. I would ask that all Plumbers read the article in the Building Department section of this newsletter for a better understanding of the requirements. If you have any questions please contact one of the Building Inspectors for further clarification.

Mechanical Update

By Terry Nothaft

SECTION 1002 WATER HEATERS

1002.1 GENERAL . Portable water heaters and hot water heater storage tanks shall be listed and labeled and installed in accordance with the manufactures's installation instructions.

RINNAI WATER HEATER INSTALLATION INSTRUCTIONS REQUIRE ON THE CONDENSATE COLLECTOR TO BE PIPED PER PUEBLO COLORADO ELEVATION FOR ALL INSTALLATIONS.

PRBD Chat is published quarterly.

Please submit article ideas or questions to:

mcolucci@prbd.com

Mike Colucci

Pueblo Fire Department History

In 1901 there were 20 Fire Department Regulations in accordance with Chief P.B. Bradford. Some examples of these regulations are:

#17. At 6am, 12 noon, and 6pm, all members will report promptly to apparatus floor, horses will be hitched to apparatus, and drivers and tillermen mount to their places.

#19. Members shall have 24 hours off duty each week, commencing at noon.

#20. One-half hour will be the time allowed for members three times daily for obtaining meals.

Today there are over 900 different rules and sub-rules in our book of Standard Operating Procedures (S.O.P.'s) which was formerly known as the Fire Department Regulations. This same book of Standard Operating Procedures covers most situations that can occur on the fireground, EMS situations, and in the fire stations. The S.O.P. book is around 3 inches thick.

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