



# Building Department Newsletter

October 2010

## Special points of interest:

- Cold Weather Concrete
- Duct Systems
- Address Numbering
- Whole House Ventilation

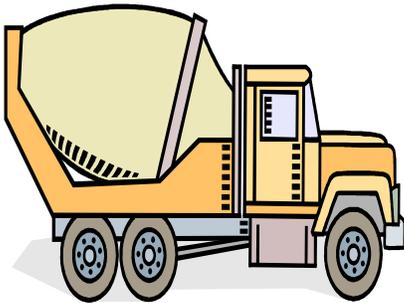
## COLD WEATHER CONCRETE

It's that time of year again when we would like to remind you about cold weather concrete protection. Concrete that is allowed to freeze, especially in the first three days after placement, has its ultimate strength substantially reduced and is more likely to spall. The City's concern is that no concrete be allowed to freeze or be structurally loaded before reaching acceptable strength.

There are several ways to protect "winter concrete." To allow contractors as much flexibility as possible, you may consult with the building inspector as to the protection methods. These will vary on a case-by-case basis in the field, depending on specific site and weather conditions. Following are some general guidelines:

- If temperatures are expected to fall to 30°F, unformed faces should be covered with visqueen. You will get better protection if it doesn't rest directly on the concrete surface.
- If temperatures are regularly falling to 28°F and remaining there at least four hours per day, flatwork should be insulated with blankets or visqueen and straw. Forms for structural concrete should be left in place 48 hours.
- If temperatures are remaining at 30°F or lower, for 12 hours in 24, or if the temperature drops to 25°F, the concrete should be heated by an artificial heat source.
- All concrete materials and all reinforcement, forms, and ground with which concrete is to come in contact shall be free from frost, snow & slush. Remove snow, ice and slush prior to placement of concrete.

Given the unpredictability of Palouse weather, we urge you to be prepared to provide concrete protection in the event of sudden weather changes. Frozen concrete may require removal.



Please contact the Building Department with any questions, or obtain a copy of ACI 306 Cold Weather Concreting.

## DUCT SYSTEMS

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 ★ Attention to anyone installing new duct systems. The 2009 International Residential Code (IRC),  
 ★ Chapter 16 Duct Systems, Section M1601.1.1, Above Ground Duct Systems (subsection 7) has  
 ★ been amended by Washington State (WAC 51-51). The area of interest states that stud wall cavi-  
 ★ ties and the area between the floor joists can not be used as a duct or air plenum in **new construc-**  
 ★ **tion.**  
 ★  
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## HEY, WHERE ARE YOU!

Address numbering is kind of boring until you need emergency services. The International Residential Code (IRC), Section R319.1, has introduced address numbering to coincide with the requirements of the International Building Code (IBC) and International Fire Code (IFC). Buildings are now required to have approved address numbers, building numbers or building identification plainly legible and visible from the street or road way fronting the property. All approved address numbering is assigned by the Public Works Engineering Department. Numbers shall also contrast with the background coloring. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be at least 4 inches high and ½ inch in width. Where an address can't be viewed from the public way, such as on a private road, then a monument, pole or other signage shall identify the structure.



## WHOLE HOUSE VENTILATION

The old Washington State Ventilation and Indoor Air Quality Code has now become a Washington State Amendment (WAC 51-51) to the 2009 International Residential Code (IRC) in Chapter 15, Exhaust Systems under Whole House Ventilation, Section M1508. This section now specifies four prescriptive design methods that meet the minimum requirements for whole house ventilation. The Whole House Ventilation, Section M1508, appears to have been rewritten from the previous code and should be read, studied and understood.

One noted change that will impact the installation of the mechanical systems in our area is the **deletion** of the "exception" in the previous code under Exhaust Only Ventilation Systems.

This section allowed for exhaust only ventilation systems to forgo the induction of outdoor air if the home had a forced air duct heating system that communicated with all habitable areas and the interior doors were undercut by ½" to allow for circulation.

The whole house ventilation can be installed by using either one of the minimum prescriptive methods listed in the IRC, Section M1508, state amendments or demonstrate compliance with the International Mechanical Code.

