REFRIGERANT ACCESS PORTS

During a recent meeting with local Spokane code officials and industry representatives, it became apparent that an “awareness campaign” was in order regarding a code change which occurred during the 2009 I-Code cycle. Both the International Mechanical Code (IMC) and International Residential Code (IRC) were adopted by Washington State, with an effective date of July 1, 2010.

Important life-safety measures were added to the model codes (IMC Section 1101.10 and IRC Section M1411.6) which restrict tampering and access to the potentially deadly refrigerant gases contained in certain HVAC/refrigeration equipment by requiring “locking-type” caps on the refrigerant access ports. As a reminder, the following excerpt was borrowed from the ICC publication: “Significant Changes to the International Mechanical Code – 2009 edition”.

CHANGE SUMMARY

Requires refrigerant access ports that are located outdoors to be equipped with a locking cap to limit unauthorized access.

2009 CODE

IMC Section 1101.10 - Locking Access Port Caps: *Refrigerant circuit access ports located outdoors shall be fitted with locking-type tamper-resistant caps*.

CHANGE SIGNIFICANCE

The purpose of this change is to add a requirement that the existing code does not address. This added requirement will help address the issue of accessibility to lethal chemical chlorofluorocarbons (CFCs/Freon) by untrained and unlicensed individuals, including children.

In a sad reflection upon the times, the use of inhalants as a recreational drug has been on the rise over the past few years. Because of their ease of access, Freon and other dangerous chemicals have expanded in use as inhalants among not only pre-teens and teenagers but adults as well. Freon is highly addictive and it and other inhalants are considered gateway drugs because users often progress from inhalants to other illegal drugs and alcohol.

Where the refrigerant access ports are located outdoors and therefore are easily accessible to anybody, the code will require the installation of a "locking-type tamper-resistant" cap. Such controls are not required if the refrigerant access ports are located within a building or mechanical equipment penthouse.

Although geared primarily toward helping control the access to this inhalant, the change does have the potential to help provide other benefits that can affect the mechanical system and the environment. Some of these include:

- Prevent leaks by sealing service valves
- Prevent excessive energy usage duo to refrigerant loss
- Help prevent illegal venting of refrigerant
- Help prevent accidental mixing of refrigerant
- Deter refrigerant theft at unsecured sites
- Help prevent access by unauthorized persons
- Help prevent loss from cylinders and recovery tanks
- Reduce potential liability for inhalation-induced injury or death

When this proposed code change was submitted, the proponent provided a list of very sobering statistics. Although the statistics are not directly related to the mechanical code or equipment, they do show the dangers of the abuse of inhalants, or "huffing."

These requirements are applicable to new and replacement outdoor equipment installed after July 1, 2010 (State adoption of the 2009 IMC/IRC). Other means of protection are available. For additional information, please contact your local building department, or heating/cooling service representative.