

Locking Caps Guard Against Huffing

Your air conditioner or heat pump has an indoor unit and an outdoor unit connected by copper refrigerant lines. The refrigerant within these lines is the working fluid that enables the cooling and/or heating of your home. Unfortunately, it was also a contributor to the tragic loss of a young life, which led to recent changes in the model building codes.

What Are Model Building Codes, And What Do They Require

You can think of the model building codes as the rules for how to design, build, and install the systems and components of a building. They cover everything from the framing, electrical, plumbing, and the HVAC system, etc. The purpose of the model codes is to ensure that our buildings are “safe, sustainable, affordable, and resilient.” Local jurisdictions adopt the codes they deem appropriate.

Recognizing the growing danger that is posed by the practice of “huffing” refrigerants, a change to the model codes was proposed to address the problem. The change requires locking caps for these refrigerant access valves, or access ports. These locking caps restrict access to the refrigerant to only the person that has the matching key, and this is generally the service technician. This is a measure of protection against misguided substance abuse. The change was approved and is now included in the current International Residential Code (IRC), International Mechanical Code (IMC), and Uniform Mechanical Code (UMC). The relevant sections are §M1411.6 Locking access port caps for the IRC, and §1106.12 Refrigerant Port Protection for the UMC.

What Is Huffing And Why Is It A Problem?

A growing cause for concern in the U.S. is a behavior known as “huffing.” Stated simply, huffing involves the inhaling of chemicals (e.g., glues, paints, household cleaners) in order to experience a high. Sadly, the practice of huffing has become popular among teenagers and young adults throughout the country. One of the targeted chemicals to huff is the refrigerant used by heating and cooling equipment.

What leads some youths to huff refrigerants? That’s really anyone’s guess, but their choice of targeting air conditioning systems can be explained to a certain extent. Refrigerants are relatively obtainable, especially for the determined teen or young adult.

Think of the sheer number of HVACR (heating, ventilation, air conditioning, refrigeration) systems that have out-door units that are accessible to these kids. The refrigerant is fairly easy to access via the refrigerant line valves.

Why Is Refrigerant Easy To Access?

Professional HVACR technicians use the access valves in order to take pressure readings, add or remove refrigerant to ensure that your system functions correctly (otherwise known as “charging” the system), or for evacuating the system prior to replacement. Historically, refrigerant huffing was not a problem; therefore, little to no attention was paid to prevent non-professionals from accessing the refrigerant. But, as we all know, times change, and the industry has changed as well. And that is why the model codes now require locking caps for refrigerant lines.

Remember, your HVAC technician is licensed and knowledgeable in the safe and proper handling of refrigerants, so look to him or her for guidance.

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