

Northerners... Should You Replace Your Furnace Today?

In 2007, the U.S. Congress passed the Energy Security and Independence Act (the "2007 Energy Bill"). This bill set a new precedent by allowing the Department of Energy (DOE) to develop regional standards for the installation location of heating and cooling equipment. In northern states, high-efficiency furnaces are required after May 1, 2013.

Will This Affect You?

Those who will be impacted the most by the new regional standards are people that live in the North Region and have a non-condensing gas furnace. The upcoming regional standards will require that gas furnaces installed in the North Region have at least 90% Annual Fuel Utilization Efficiency (AFUE) rating, compared to the current 78% AFUE, effectively excluding the use of non-condensing furnaces and requiring the installation of condensing furnaces in the North Region. Will you be affected? See for yourself what the DOE considers the North Region:

How Will This Impact You?

If you live in the North Region, you may be looking at costly issues when it comes time to replace your existing furnace. The three main issues likely to arise when replacing a non-condensing furnace with a condensing furnace:

1. Equipment space constraints
2. Exhaust venting requirements
3. Condensate disposal

Many homes have limited space for furnaces, and condensing furnaces and their different space requirements may not fit in your furnace's current location. This could mean renovations, knocking down walls, and losing living space. An alternative would be to relocate the equipment, but this brings other issues.

Requirements for venting the exhaust for condensing furnaces differ from those for non-condensing units. What if the best new venting path for the condensing furnace runs through space that belongs to a neighbor? Also, if the

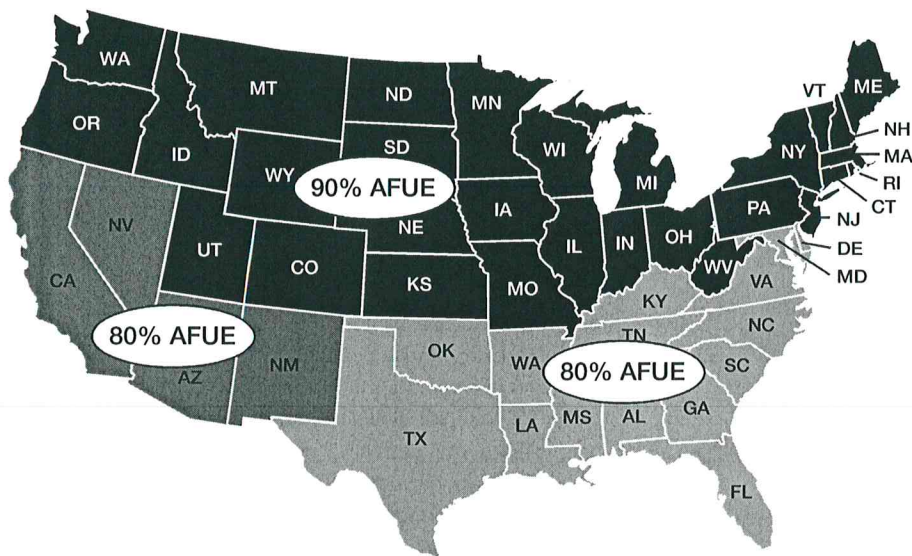
non-condensing unit used a common vent with other appliances, it may be necessary to resize the vent if one of the appliances is removed. Finally, the exiting exhaust is designed to be an appropriate distance dictated by the building code from features like windows, doors, dryers, vented gas regulators, etc. The new furnace must also comply with code, and its venting path may require the unit to be moved, even if there is enough room at the current location!

The third major technical issue would be how to dispose of the water condensate produced by the new furnace. If the current unit is a non-condensing furnace, there was no condensate. A condensing furnace, however, will require attention to collecting and disposing of condensate before it can freeze and lead to water overflow, which can damage the building.

A solution to some of these issues would be to 'simply' move the equipment. Unfortunately, that would necessitate re-designing and re-sizing the duct system, as well as installing new components. Additionally, moving the furnace would also require re-routing the gas piping and electrical power. Are you prepared for all these possible (and likely) issues? Is your wallet?

What Will You Do?

The new regional standards will require the installation of condensing furnaces in the North Region starting on May 1, 2013. It may be wise to upgrade your current, older non-condensing gas furnace for a new non-condensing gas furnace before that date. Otherwise, you will likely be required to install a condensing furnace and deal with the added complications. Your HVAC contractor can provide an estimate that includes both furnace options.



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