



HOW TO PREPARE & INSTALL YOUR HVAC SYSTEM

Homeowners spend a great deal of time fretting over choosing the perfect heating and cooling systems – but installation is just as important as selecting the right equipment! The quality of installation work performed has a drastic impact on the HVAC system and your comfort over its service life.

In this Installation Guide, we'll discuss the importance of quality HVAC installation, what to look for in an HVAC installer, and how you can prepare for a new system installation.

Why is Quality HVAC Installation Important?

When selecting a new HVAC system, features are important – capacity, efficiency, convenience. The truth is, these features will not do you the good you expect if the heating or cooling system is not installed properly. Proper installation allows a new heating or cooling system to function as expected and perform to the levels stated.

Here's how proper installation will improve your new system experience:

- **Efficiency:** If a new heating or cooling system is not installed according to the manufacturer's specifications, it will not perform properly. When the system isn't performing as expected, efficiency levels are impacted. While you purchased your new system based on the high SEER, HSPF, AFUE, and/or EER ratings, the system will not be offering such efficiency when it is not installed properly. The additional investment you made in a higher efficiency unit will not provide the return in energy savings you expect without skilled installation. The unit is forced to consume more energy to get the job done. Poor HVAC installation has the potential to decrease efficiency by up to 30 percent!
- **Comfort:** Without proper installation, your new heating or cooling system cannot perform properly. Performance issues often translate into poor comfort control in the home. When installation is botched, it may be difficult for the system to deliver the appropriate amounts of heating or cooling, or maintain even temperatures throughout the home. While you purchased a new HVAC unit for improved comfort, you'll find it's a struggle to achieve when installation is faulty.
- **Service Life:** A faulty installation is costly in energy waste and poor comfort control, but also service life. A unit not installed to correct specifications is likely to fail earlier than if it had been installed correctly. This is because a faulty installation forces the system to work improperly, consuming more energy to work and stressing the system. Components wear out faster and the stress causes increased breakdowns. HVAC units typically last between 10 to 15 years; one that was installed improperly will be more likely to fail sooner. Improper installation costs you more because you'll be paying to replace the unit sooner than expected.

Choosing a Quality HVAC Installer

Protect your investment in a new heating or cooling system by choosing a quality HVAC installer to install your new unit. Here are a few factors you should consider when selecting a contractor for the job.

NATE-Certified HVAC Installers

North American Technician Excellence (NATE) is an independent certifying organization serving the HVAC industry. Technicians prove their knowledge and capabilities in various industry areas, such as installation, through obtaining certification through rigorous testing. NATE certifications are maintained through continuing education.

NATE-certified HVAC installers have the skills and know-how needed to perform effective heating and cooling installations. They utilize industry best practices and follow manufacturer specifications to guarantee your new system will operate at the efficiency ratings stated.

Factory-Trained Installers

Major HVAC brands such as Carrier, Trane, Lennox, Rheem, and others want to ensure their systems are installed correctly to offer the comfort and performance consumers expect from their equipment. Many HVAC brands offer factory training programs for heating and cooling contractors. These programs provide the knowledge needed to install, repair, and maintain a brand's HVAC equipment according to manufacturer specifications for optimal performance.

When you have decided on the brand of HVAC system you wish to purchase, look for an HVAC installer who is factory-trained by the brand. These contractors have undergone specific training for that make of equipment, and are knowledgeable regarding the ins and outs of the brand. Choosing a factory-trained HVAC installer helps to ensure your installation is performed properly, and that you'll receive the performance and efficiency expected from your new heating or cooling system.

References

Before hiring an HVAC installer, always check their references. Ask the contractor you are considering to provide references for previous installation customers. Get in contact – ask them about their experiences, how their system is performing, and if they've had any issues.

Don't only take the advice of contractor-provided references – seek out other opinions, too. Ask family and friends who have used the company their opinions. Check Yelp, HVAC.com, and other online review sites for previous customer experiences.

Preparing Your Home for HVAC Installation

While the major installation work will be performed by your HVAC technician, there are a few steps homeowners can take to prepare their homes for a new heating or cooling system. Taking these steps before the installation date can help the job be completed quickly and effectively.

- Check with your HVAC installer to learn if they will obtain any necessary permits, or if you must. If you must obtain permits for the installation of your new heating or cooling system, make sure you do so ahead of the date of installation so all is in order when the day comes.
- Clear the area surrounding where your new system will be installed. For exterior air conditioners and heat pumps, remove any outdoor items nearby and clear away vegetation. Make sure the HVAC installer has access to the installation site – remember to unlock or open gates. For furnaces and air handlers installed inside, remove any items stored nearby (items should not be stored in the area immediately surrounding your HVAC equipment) to provide a sufficient worksite for installation. Make sure the HVAC installer has access to the garage, basement, attic, or utility closet where your new system will be installed.