



Central Vacuum System

Watch the video on Central Vacuum Systems.

The Environmental Protection Agency (EPA) reports that the quality of air inside the average home is 2 to 5 times as bad as the air outside. Considering that most people spend over 90% of their time indoors, it's no wonder that Indoor Air Quality (IAQ) is a growing concern among homeowners and homebuilders.

Poor IAQ can lead to asthma issues, allergy complications, dizziness, fever, headaches, bronchitis, and even pneumonia. While many homeowners might think their home looks clean and healthy, what they can't see could be hurting them. Conventional vacuum cleaners, even units with High Efficiency Particulate Air (HEPA) filters, can stir up and circulate dirt, dust, pet dander, and other potentially dangerous allergens around the room, making them more difficult to remove.

To improve IAQ, many homeowners are asking builders to install a central vacuum system. A central vacuum system has a power unit that's located in the basement, garage, or utility closet and is connected to wall inlets throughout the home with a series of PVC pipes. To clean each room, the homeowner simply plugs an adapter hose into one of the inlets, and the system automatically turns on. As the homeowner operates the vacuum, dirt is sucked out of the room and deposited in a storage container near the power unit.

High-quality central vacuum systems usually come with highly effective filters and are vented to the outside. Because they're removing, not circulating, the filtered air, they create a much cleaner, healthier home environment than conventional vacuum cleaners.

Central vacuum systems are easy to install in new homes, but builders should pay attention to inlet placing, system sizing, and venting in order to make the vacuum system safe and easy for the homeowner.

Here are a few suggestions:

- ▶ One inlet should be installed for every 600 square feet of living space. Although some hose attachments can reach up to 36 feet, most are between 24 and 30 feet in length. Builders should keep hose length in mind when installing the inlets and make sure all floor spaces, windowsills, doorframes, staircases, and corners can be cleaned. Inlets should not be installed behind doors, behind furniture, or in places where it would be difficult to attach the cleaning wand.

As an added convenience, homeowners can get retractable hoses that slip into the wall. Installing retractable hoses may increase the cost of the system, and it will require more planning prior to installation.

- ▶ If the cleaning area is larger than 5,000 square feet, a power unit over 20 amps/110 volts will probably be required. Make sure the unit you're installing is sized properly for the home. Maximum Air Watts (MAW) is the standard used to measure how effective a central vacuum cleaner will be.

If the system requires an external exhaust vent, make sure it doesn't interfere with the HVAC vents.

- ▶ Educate homeowners on how to properly use and maintain the system. Homeowners will need to replace filters and dump the storage container on a regular basis.

▶ Having to carry and maneuver a heavy upright vacuum cleaner up and down stairs can be painful and unsafe, especially for older and disabled homeowners. For builders looking to improve profit margins and show customers that they care about health and safety, installing a central vacuum system is an ideal way to provide a high-value option with minimal effort.