

Things To Know About Air Conditioning

[1] Why and How to Change Filters

Dirty filters kill your AC's efficiency, so install a new one every month during the cooling season for central and window units (or clean them if you've got the washable type). Look for the filter's minimum efficiency reporting value, or MERV, which ranges from 1 to 12 for home AC units; the higher the number, the better filtration it provides (and the more energy needed to pull air through it, so balance air-quality concerns with energy costs).

[2] Why and How to Fix Leaks

Ducts can lose up to 30% of airflow through leaks, and window AC units are notoriously tough to seal properly. Find leaks using the old "smoke trick": For window units, light a stick of incense and hold it where the unit and the window frame meet; for central AC, hold the stick near duct connections. If the smoke blows around, you've got leakage. For ductwork, use foil tape to seal small gaps and duct mastic for larger ones; for window AC units, stuff foam between the device and the window frame, taping as needed.

[3] Why and How to Use a Timer

There's no need to blast the AC at full tilt while you're at work. For central units, install a programmable thermostat that lets you set higher temps when you're gone and cooler temps when you're home. Newer window units have built-in timers and adjustable thermostats, or you can buy a timer at any home store for \$10 to \$20; just make sure it matches your device's voltage. Unless you're going on vacation, don't shut off the system; otherwise, the air compressor will need to work harder to cool your house later.

[4] Why and How to Use Insulation

Ducts in hot attics or crawl spaces should be wrapped to keep the air within them cool. You can use spray foam, batt insulation, or rigid-foam insulation. Seal batt and rigid insulation with foil tape (not duct tape). For tight spaces, wraps like Reflectix offer some degree of insulation.

[5] Why and How to Service Compressor/Condenser

A central AC system's air compressor and condenser are usually located outside the house, close to your foundation. It works best when there's about 24 inches of clear space in all directions, so get rid of nearby shrubs, tall grass, leaves, and hanging branches. Install condensers or window units on the north or east side of your house, or build a screen to shield them from the sun. Putting them in direct sunlight reduces their efficiency by as much as 10 percent.

[6] Why and How to Keep Unit Cool

Extend the life of your AC system by keeping blinds or shades down during the day; you can also install awnings to shield south-facing windows from intense sun. Consider running the AC in conjunction with floor or ceiling fans to circulate cooled air more effectively.

[7] Why and How to Maintain Unit

The dealer who installed your central AC (or one you find locally) should put you on a yearly cleaning schedule that goes beyond just cleaning the filters. Schedule this checkup before the cooling season starts (or do it now if you didn't do it earlier this year), and make sure it includes the following tasks: cleaning and inspecting coils; cleaning or replacing filters; adjusting and replacing fan belts; lubricating motors and bearings; cleaning and checking blowers and fans; inspecting controls and safeties; checking refrigerant and pressures; and verifying operating temperatures.

[8] Why and How to Get Airflow

Shutting too many interior doors causes central AC systems to go out of balance, meaning there's less airflow in the entire house. If you want some privacy, keep doors slightly ajar instead.

[9] Why and How to Upgrade

Federal laws require AC units to be a lot more efficient than they were just 10 years ago. For central AC, look for the seasonal energy-efficiency ratio, or SEER; for window units, the measure is simply called the energy-efficiency ratio, or EER. The standards mandate a SEER of 13 and an EER of 8, but devices with higher numbers will cost less to operate.