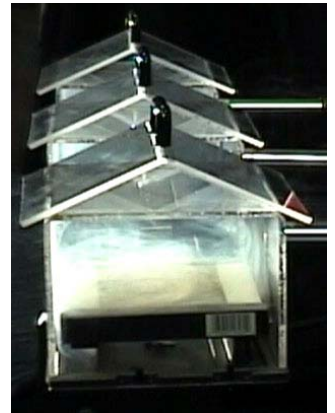


Electronic Air Cleaners

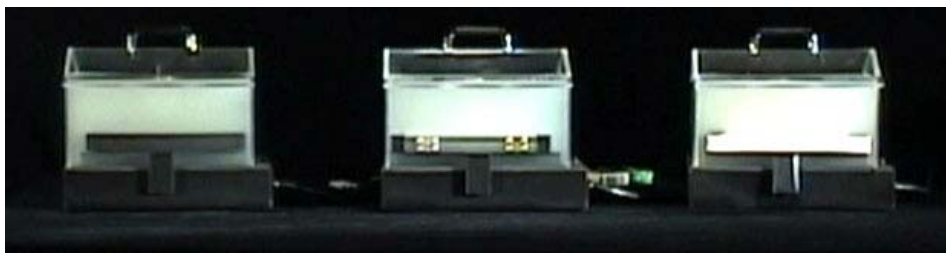
According to the EPA, the quality of the air in our homes can be five times worse than the air outside *on a polluted day!* How is that possible? Modern homes incorporate very tight designs which include membrane enclosures to prevent drafts and air leakage. Insulation is thicker, windows are tighter, doors have seals, and even furnaces prevent drafting after a heating cycle. Tighter home designs are in response to higher energy costs, but unfortunately the result is higher interior pollution as well. Pollutants come from carpets, particle-board furniture, varnish finishes, detergents, shampoo, hair spray, candles, air scent sprays, fire places, cooking, cleaning solvents, deodorants, fabric softeners, smoke, pet dander, plus fumes from the surrounding atmosphere. Small wonder the modern home is more contaminated than a busy city street.

We only have two choices when it comes to household air pollution: live with it or remove it. To *live with it* doesn't make sense when there's a simple and effective alternative. To remove pollution, we need something far more efficient than the standard disposable furnace filter available from the hardware store. Electronic Air Cleaners purify the air in the entire home, not just a single room like expensive ionic cleaners. To determine the best method for removing interior pollution, a remarkable experiment was performed (outlined below).

Three miniature acrylic "homes" were constructed to test each of the three most common filter types: A self-charging electrostatic filter, an Electronic Air Cleaner, and a standard disposable filter. All three filters were a standard one-inch thickness. The three model homes were polluted with smoke (right) to a level far greater than found in the typical home. Smoke was used because it is among the smallest of home contaminants. If a filter can remove smoke, it will easily remove mold, spores, dust, bacteria, pollen, dust mites, and a host of other common allergens. As a side benefit, a filter capable of removing such small contaminants will virtually eliminate dusting around the house.



After filling each model with heavy smoke, internal fans were simultaneously activated to circulate the internal air through the filter and back into each home. The photo below was taken at the start of the test.



As seen below, the "home" with the Electronic Air Cleaner (center) was completely cleared of smoke in only eight seconds! The other two filters failed to remove the smoke and continued to re-circulate the contaminants.



Electronic Air Cleaners require no duct modifications.