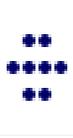
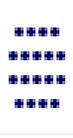
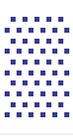


illustration	rel. size	discussion
		1,200 microns. It might be hard to thread it, but a person with good vision can easily see <b>the eye of a needle</b> . Occasionally we see a 1,000-micron flake of ash in the air, but particles this large usually settle to the floor. Even a human skin flake may occasionally be this large.
		<b>Human skin flakes</b> range from invisible up to 1,000 microns and there are millions in every home. We slough off skin all day every day. As the main constituent of house dust, skin flakes cluster together and settle into bundles we call dust bunnies. We also see motes of "skin dust" in sunbeams.
		<b>Human hairs</b> range from 40 to 400 microns in thickness and animal whiskers can be much bigger. A fine blond hair is one of the smallest things humans can easily see. Hairs fall out every day and add to the miscellaneous detritus that lands on our floors as "dust." Dust mites are in this size range, too.
		<b>Tree, weed, crop and flower pollen</b> are an effect of plant reproduction. Pollen ranges from tiny grains of 6-micron dust up to yellow pine pollen that will cover every car in your city. Pollens create a seasonal soup of allergens we humans don't cope with easily. And various plants pollinate year around.
		<b>Mold spores</b> range from 1 to 25 microns. We can't see them but billions are present. A very good—frequently changed—filter can capture up to 90% of mold spores and HEPA's can stop 99%. But when mold-producing conditions are present, new spores are created faster than anyone can clean them.
		<b>Bacteria</b> .3 to 30 microns. The good news about bacteria is that out of the millions of bacteria that share our world, only 90 or so have been identified as harmful to humans. For the most part, bacteria are essential to our existence! Even so, we don't want to breathe in any of those bad ones!
		<b>Viruses</b> .005 to .3 microns. For the most part, we can only see viruses with electron microscopy. It is almost impossible to filter them except when they adhere to larger particles. Silent Night uses ion attraction to move air through the system and to capture particulate in our filter medium.
	trillions that are tinier than a virus	<b>Atmospheric dust</b> .001 to 40 microns. We know the lung damage the clean-up workers and NYC residents suffered in the years after 9/11. Residents in the Pacific Northwest are now being bombarded by microscopic dust from Japan's nuclear reactor crisis. Uncountable trillions!

## Indoor Air Realities

No matter how carefully we clean, every home contains hundreds of millions of airborne specks, flecks and nasties. This can't be resolved completely because new mold spores, skin flakes, pet dander, pollen and other pollutants are constantly being introduced.

We know that many infections originate in hospitals. It's not that they aren't trying! Hospitals process emergency room air with enhanced filtration and UV to reduce the chance that pathogens will float into open wounds. Exotic air treatment does not extend to patient rooms and administrative spaces because it is cost prohibitive to purify such enormous volumes of air.

***People are polluters! Cats, birds and other pets are even worse. Upwind trees, weeds, fires and factories add pollutants to homes. Not to overlook atmospheric dust and even radioactivity.***

Standard air filtration methods can help maintain a clean home at 5 to 10,000 particles per cubic foot of air. A 2,000 square foot home with 10-foot ceilings may have 100 million 1-micron sized particles floating in its air (50x more of virus-sized stuff—see photos at left). Now, thanks to **ZEPA™** technology, this can be affordably changed.

HEPA—with H—was developed seventy years ago during World War II. The H-E letters stand for High Efficiency. The new **ZEPA™** technology is more effective, less expensive and more efficient to operate!

**ZEPA** stands for zero **Z**ero **E**missions **P**article **A**rrestment. When we measure the pollution in a home (1-micron scale), the starting point in a clean home is typically at 10,000 invisible particles per cubic foot. If we switch to the scale that sees virus-sized particles (.3-micron), the count jumps to 150,000 or more.

Now turn on **Silent Night®** with **ZEPA™**. Three words tell the story. The first is **WOW!** The particle counter goes to **ZERO...with a Z** as in **ZEPA™**. The output air is totally clean. And **Silent Night®** does not sound like a vacuum cleaner or HEPA machine. Two more words complete your impression: it's **TOTALLY SILENT**.

One **Silent Night®** can do wonders in a room up to 800 square feet. Several **Silent Nights®** can be used in bedrooms and main living areas to serve a whole home.

**Silent Night Technology: Provable...Effective...Inexpensive**

**Call Diane Barrette 906-221-7680 for an in-home air analysis.**