

Plants that Filter/Remove Indoor Air Pollution

Bring the Outdoors in and Improve Air Quality

The EPA rates indoor air pollution as one of the top five threats to public health. Fortunately, NASA, in studies designed to find ways of improving indoor air quality in closed environments such as space capsules and space stations found a solution.

NASA learned that indoor plants were effective in removing the volatile organic compounds (VOC's) emitted, or off gassed, from the synthetic materials used in the construction of the space capsules.

Due to a change in the composition of products commonly brought into our homes these same synthetic materials and fabricated wood products are major contributors to indoor air pollution in our homes. In addition, in the name of energy efficiency, our homes and offices have become more and more sealed environments.

The result? Polluted air trapped in our homes. We now have the same indoor air pollution issues in our homes and offices that NASA faces with space capsules and space stations.

Dr. Bill Wolverton, NASA research scientist, and author of the book "How to Grow Fresh Air — 50 Houseplants that Purify Your Home or Office" suggests the inclusion of 2-3 plants in 8-10 inch containers, for each 100 square feet of living space to improve indoor air pollution problems.

Air Filtering Plants

Plants not only improve indoor air quality by removing chemical toxins that contribute to indoor air pollution, they have also been shown to reduce stress, raise humidity and filter dust from the air. What they ask for in return is water and occasional fertilizing.

Here are some recommendations of plants that are effective in absorbing VOC's:

Aglaonema (Chinese Evergreen) removes benzene and formaldehyde.

Chamaedorea (Bamboo Palm) adds moisture to dry air while removing benzene, trichloroethylene and formaldehyde.

Chlorophytum comosum (Spider Plant) removes formaldehyde, xylene and toluene.

Plants that Filter/Remove Indoor Air Pollution (continued)

Chrysalidocarpus (Areca Palm) is an excellent air purifier. It removes acetone, formaldehyde and xylene from indoor air.

Dracaena fragrans/deremensis (Janet Craig, Warneckii, Massangeana) remove benzene, formaldehyde, xylene and toluene.

Ficus benjamina & Ficus Alii (Weeping Fig) are easy to grow, insect resistant and known for its braided trunk. It is effective at filtering formaldehyde.

Ficus elastica (Rubber Plant) excels at removing formaldehyde, but be warned rubber plant leaves may be toxic if swallowed.

Nephrolepis (Boston Fern) absorbs formaldehyde, xylene and toluene.

Philodendron (Arrowhead Vine) is a climber that removes formaldehyde, toluene, trichloroethylene and xylene from the surrounding atmosphere. Cuttings grow easily in a moist environment.

Phoenix roebelinii (Dwarf Date Palm) removes formaldehyde and xylene from surrounding indoor air.

Rhapis excelsa (Lady Palm) is very resistant to plant insects and will tolerate a wide range of indoor environments – besides absorbing volatile organic compounds.

Sansevieria (Snake Plant) removes benzene, formaldehyde, xylene and toluene.

Scindapsus (Pothos) is a low growing vine that is very easy to grow. It removes benzene and formaldehyde from the air.

Spathiphyllum (Peace Lily) has long dark green leaves and a unique white flower. It thrives in low light and breaks down benzene and trichloroethylene.