

# PURIFIES YOUR HOME

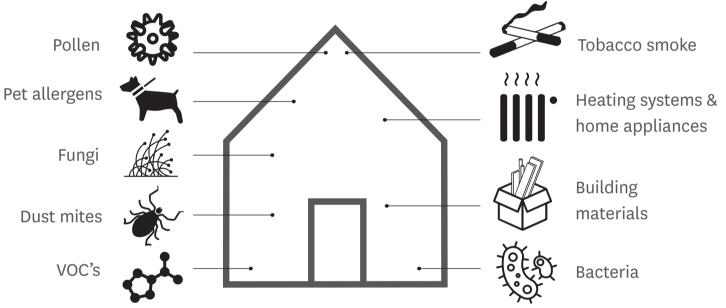
# INDOOR AIR POLLUTION



People now spend around 90% of their lives indoors and indoor air pollution is now of greater importance to human

health than outdoor air pollution. The effects of indoor air pollution on us are varied and can include irritation of the eyes, nose and throat, respiratory illness, headaches, dizziness, and fatigue. Indoor air pollution occurs when harmful gases and particles are released into the air of an interior environment.

When the air circulation is poor, these gases and particles can build up to potentially harmful levels.



# Can wool carpet remove indoor air pollutants effectively?

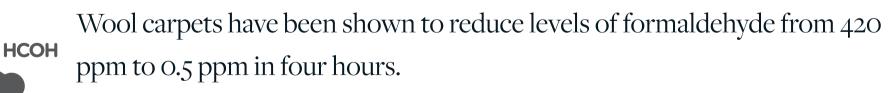
Three common gaseous indoor air pollutants with known adverse health effects on humans are Nitrogen dioxide (NO2), sulphur dioxide (SO2) and formaldehyde (HCOH) – all of which are removed effectively by wool carpet.

#### NITROGEN DIOXIDE ABSORPTION



NO2 removal from indoor air with 35 types of building materials and furnishings found that the highest removal rates were for wallboard, cement block, wool carpet, and brick. Acrylic, polyester and nylon carpets had NO2 removal rates under one third those of 100% wool carpet.

### FORMALDEHYDE ABSORPTION



#### SULPHUR DIOXIDE ABSORPTION

## How does wool carpet help with indoor air pollution?

Interior furnishings and textiles can absorb and neutralise certain particulate and gaseous atmospheric pollutants from the indoor environment. Because of their nature and materials used in their construction, carpets present a much larger area for gas absorption than other interior fixtures and furnishings.

# PAINTED<br/>SURFACEWOOL<br/>CARPET1M21M21M21M2IM2</



# WHAT THIS MEANS FOR YOU

• Wool carpet is an efficient absorber of potentially harmful indoor air pollutants such as formaldehyde, nitrogen dioxide



When wool, nylon, cotton, and viscose rayon fibres are exposed to sulphur dioxide it has been shown nylon became saturated quite quickly; rayon becomes saturated within an hour, but wool and cotton continue to absorb sulphur dioxide after 1 hour.

#### AIR PURIFYING

The complex chemistry of the wool fibre enables it to bind pollutant gases chemically in its structure. It is estimated that wool carpets can continue purifying indoor air for up to 30 years.

#### PARTICULATE AIR POLLUTANTS



Particulate pollutants are also a source of indoor air quality issues, such as allergens (dust mite, cat, cockroach, etc), dust, dirt etc, and contribute to respiratory problems and other allergic reactions.

With soft flooring (specifically wool carpet) the dust is trapped. It stays on the floor and is not stirred up. You simply vacuum it once or twice a week, and it's gone. It does not get airborne, and you do not inhale it, making your home and workplace much healthier for you and your family.

- and sulphur dioxide.
- Interior textiles such a carpeting can act as filters for particulate pollutants. Their ability to be easily cleaned provides a means of managing human exposure to such hazards.
- Wool carpets outperform nylon carpets in their capacity to purify indoor air.
- Particulate pollutants such as mite allergens are no more likely to build up in wool carpet than synthetic carpet and are readily removed by vacuuming.
- Carpet has a much-reduced propensity for disturbance of particulate pollutants than hard flooring.
- Wool's ability to effectively buffer heat and moisture, combined with its propensity to control indoor air pollutants make it ideal for creating safe and healthy interior environments.