# 

**PURE AIR100** 

FINE DUST WITHOUT

FINE DUST WITHIN

# PARTICULATE MATTER

### When the dust won't settle

While the modern world moves at a breakneck pace, it is also gathering (fine) dust. Particulate matter (PM), a mishmash of microscopic substances, pervades our 21st-century skies, and there is no escaping its impact and effects.

Some types of particulate matter are organic and a fact of nature, like sand or sea salt blown in from distant shores. Other airborne particles are man-made and potentially noxious, the backwash of traffic and industry. These include chemicals, acids, metals, and VOCs, which can take the form of solid particles or tiny droplets of liquid.

### Why pure air matters

Particulate matter comes to us through friction, combustion, emission, evaporation, and molecular migration. When fine dust infiltrates the air, it creates pollution. A rule of thumb when dealing with air pollution is this: the smaller the aerodynamic diameter of the particles, the bigger the risk they pose to our health.

affects people. It hurts the planet. Don't take our word for it. This is raw data from the international guidelines of World Health Organisation, whose findings and admonitions have been corroborated and echoed by researchers around the globe\*.

So, particulate matter is a reality, and a real problem. It

High concentrations of particulate matter can harm:

- → The air, suffering the brunt of the pollution.
- → The climate, growing increasingly hazy and fickle.
- → Our public health, which is taking imperceptible hits.

(\*) World Health Organisation, Global Update of Air Quality Guidelines for Particulate Matter, 2006.

See also, inter alia, Concerted European Research Action (CRA), Particulate Matter: Properties related to Health Effects; EU Focus on Clean Air Programme (Clean Air Policy Package, 2013), Directorate-General Environment, Nuclear Safety and Civil Protection.



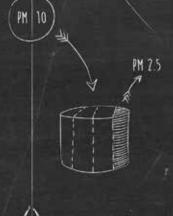
# All about ..... PARTICULATE MATTER (PM)







CEMENT DUST PM 50-90



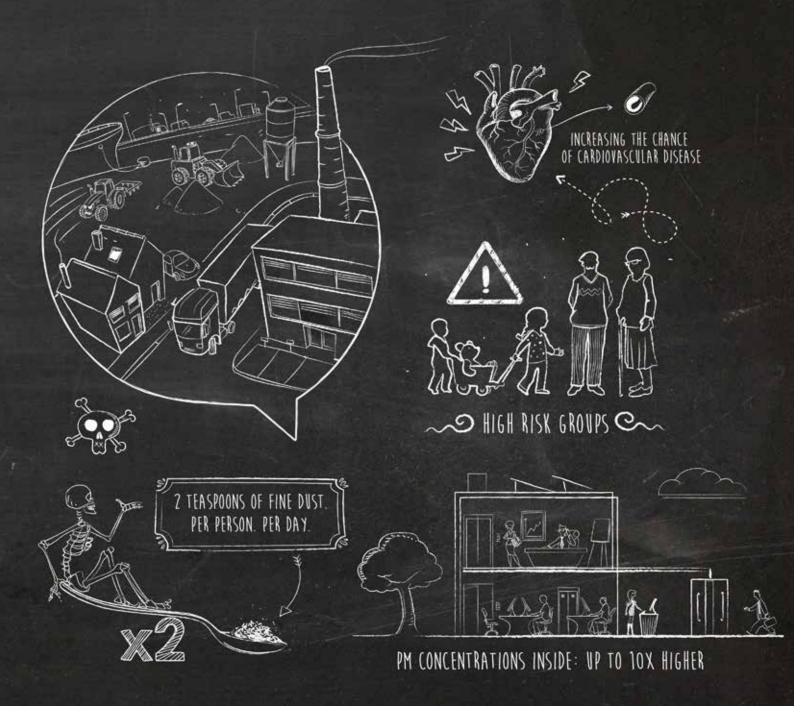
SUPERFICIAL PENETRATION EXPULSED SPONTANEOUSLY







PENETRATES THE ALVEOLI CAN CAUSE LUNG AND HEART PROBLEMS



# INDOOR AIR QUALITY

### What goes around, comes around

All in all, we spend more than **85% of our time indoors**. Inside, however, the air quality is **five to ten times worse** than it is outside, showing an exponential increase in the levels of air pollutants and allergens. Why? More hustle and bustle, less square footage and ventilation. Walls and windows offer surprisingly little protection: unbeknownst to most of us, fine dust has filtered through into our daily lives.

On average, we're fed **two teaspoons**\* of fine dust. Per person. Per day. Young children, the elderly, sufferers of asthma or chronic conditions, ... They could really do without those spoons. Finer particles (Ø 10 - 2.5 µm) have no trouble infiltrating the respiratory system. When they do, they can do some serious

damage: headaches, fatigue, shortness of breath, irritation, inflammation, allergies, the list of goes on. Prolonged exposure to ultrafine dust, moreover, can cause severe respiratory and cardiovascular disease, as well as cancer.

So, even indoors, we are under siege from invisible intruders. Short of wearing dust masks, how do we protect our indoor environment against these airborne hazards? Or: how do we close the door on fine dust?

(\*) Both Hyla, IQAir and CleanAir Plus, international manufacturers of highperformance vacuum cleaners and air purifiers respectively, support this claim. See www.hyla-us.com, www.aepoure.be and www.cleanairplus.com.



X.

PURE AND SIMPLE.



# **PURE AIR100**

### Clean-air innovation, breath-taking designs

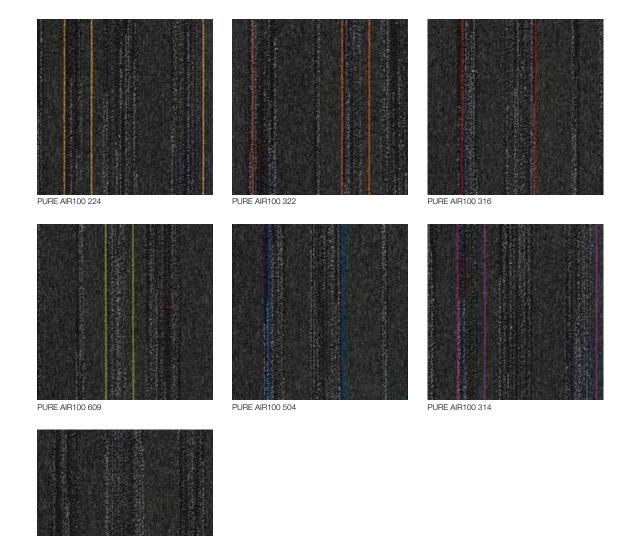
Good riddance to bad dust. modulyss® introduces Pure Air100, the innovative and eco-friendly follow-up to our In-groove range of carpet tiles.

Pure Air100 offers performance-driven solutions that are sustainable, comfortable, functional and stylish to boot. The easy-to-fit carpet tiles come in seven unique variations and looks, begging to be arranged into one show-stopping floor pattern.

All our Pure Air100 applications were engineered to trap dust and purge the indoor air.

Improving the quality of your everyday air / life / work / play / style /projects, Pure Air100 aims for a healthy and happening environment.

Pure and simple.



PURE AIR100 900

7 colour variations, countless opportunities



# **SUSTAINABLE** INNOVATION

Pure Air100 comes equipped with a special blend of high-grade yarns, all in the ECONYL® version, engineered by Aquafil, Europe's premier manufacturer of PA6 carpet fibre. They offer distinct technologies and advantages, developed to meet the exacting standards of today's commercial interiors.

### ECONYL®: champion of sustainability

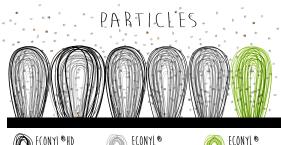
ECONYL® yarns are made from 100% regenerated materials that have been extracted from pre and post consumer waste streams. While the overall quality and performance features of these sturdy yarns are on par with those of conventional nylon, their positive environmental impact is far greater. Redirecting waste streams back into the manufacturing process, Aquafil is able to produce yarns that achieve a significant reduction in our consumption of precious fossil fuels, energy and raw materials.

### ECONYL® HD: dust-defying prowess

HD is a thick, elastic and durable yarn, whose rough and serrated surface effectively acts as a miniature dust trap. When particulate matter traverses HD's sequence of tiny loops, it is ensnared and retained, never to rise again.

### A dynamic duo

Anti-dust technology meets eco-friendly innovation in one breathtaking design? In the flooring business, this is what's known as a clean sweep.













# GOLD STANDARD(S) IN CLEAN AIR

### Rigorous tests

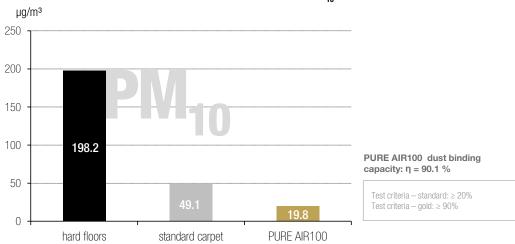
The **GUI** is an independent research institute in Germany that tests different floor coverings, analysing their immediate impact on the quality of the indoor air. GUI also put our Pure Air100 carpet tiles through their paces: simulating day-to-day use, the GUI testers release a cloud of dust into a closed environment, allowing the particles to settle on the floor. The dust is then fanned by a controlled current of air, a process that is intermittently repeated. Readings of the air quality are taken to determine the reduction in airborne particles, arriving at the dust-binding potential of the floor under scrutiny.

### Remarkable results

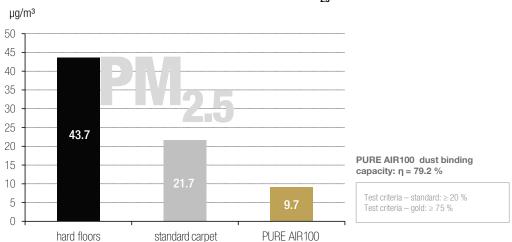
What did GUI engineers record? The test showed an impressive **90%** and **75%** drop in the concentration of fine dust (for  $\mathrm{PM}_{10}$  and  $\mathrm{PM}_{2.5}$  respectively), resulting in a marked improvement of the indoor air quality. In fact, the highest measured score of Pure Air100 trumped that of hard floors by a factor of 10 and 4 respectively\*. Compared to conventional carpets, moreover, the dust binding capacity of Pure Air100 was found to be twice as effective. The result? A certified winner and proud recipient of the **GUI Gold Certificate\*\*\***  $(\mathbf{PM}_{10}$  and  $\mathbf{PM}_{2.5})$  in indoor air excellence!

(\*) See graphs p. 15, based on data acquired from one test performed by GUI. (\*\*) The GUI Gold Certificate is awarded to products with a fine dust retention efficiency score of ≥ 90% and ≥75% (PM₁₀ and PM₂ø) after sedimentation of 3 hours.

## Pure Air100 carpet tiles are up to 10 times more effective in capturing and retaining fine dust than hard floors $(PM_{10})$ .



# Pure Air100 carpet tiles are up to 4 times more effective in capturing and retaining fine dust than hard floors ( $PM_{2.5}$ ).





# PURE AIR100 ACROSS THE BOARD

Our trendy collection of Pure Air100 carpet tiles is perfectly suited to places and spaces that are highly vulnerable or sensitive to the negative effects of particulate pollution. Heavily trafficked areas in public and professional sectors, in particular, will greatly benefit from a floorcovering that can deliver a breath of pure air.

Pure Air100 safeguards the indoor air quality and makes for an elegant and informed choice in:

- → Offices
- → Schools and education
- → Airports
- → Hospitals and health services
- → Social housing
- → Hospitality sector
- → Retail (lobbies, corridors, entrance halls, ...)

# BEAUTY & FUNCTION. SQUARED.

### Mix & match

A breeze of pure air caressing pure aesthetic delights. Catching dust. Mixing and matching colours and designs. modulyss® specialises in stylish carpet tiles, combining the down-to-earth elegance of classic tones with the go-getting playfulness of vibrant colours.

Pure Air100 carpet tiles offer a choice of seven trendy and subtle designs, which can be combined and coordinated to suit any style of interior design.

Mix in the character, charm and colours of our complementary In-groove, Millennium100 or Xtra Cambridge collections and you get a spectacular and dust-free plane of design possibilities, stretching towards infinity.

It really is hip to be square.





# **KEEPING IT FRESH**

### Sustaining the performance

Pure Air100 not only improves the indoor air quality. It also inspires confidence and boosts productivity.

To keep the momentum of fashion and function going at full speed, however, we recommend **a regular cleaning regime** for our Pure Air100 products.

Hoovering the carpet tiles with a conventional vacuum cleaner will create optimal air circulation thanks to the corrugated microstructure and spatial distribution of the HD yarns. This maximised flow will extract the captured particles, wipe the slate clean, and free up the carpet's real estate for another round of unbridled air-filtering.

This simple routine ensures long-lasting beauty and optimum performance, while keeping our carpet tiles in pristine condition and at the top of their pure-air game.







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www.modulyss-pureair100.com