

DESSO

The Floor is Yours

with EcoBase™ backing



AirMaster® Atmos 9092 / 9096

DESSO AirMaster® Elements

The carpet that clears the air

Innovation to improve the quality of everyday life

At Desso, we are always asking ourselves how our carpet solutions can do more for people in their daily lives. The development of products that make a difference is at the heart of our business.

Desso is committed to delivering superior products and developing pioneering solutions through continuous innovation. Our innovation strategy is concentrated in 3 key areas:

Creativity	Spearheaded by Desso's design philosophy CARPETECTURE® and our international concept Circles of Architects®
Functionality	Pioneering solutions that make a difference, such as DESSO SoundMaster®, DESSO AirMaster®, DESSO Light Reflection Master®
Cradle to Cradle®	Developing products and processes that will contribute towards a better environment and indoor quality

Our carpet solutions already contribute to providing outstanding performance qualities for enhanced human well-being. However, we keep looking for improvements to go one step further. DESSO AirMaster® is a key example of an innovative solution that takes design and functionality to the next level. It contributes to better working and living conditions in offices, schools, care centres and other commercial environments.

 Join us on Facebook: www.facebook.com/circlesofarchitects

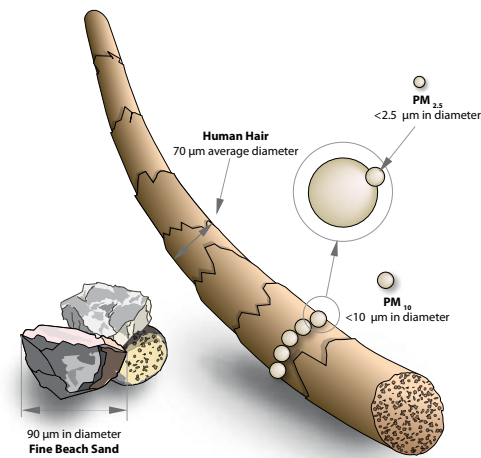
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What is particulate matter?

Particulate matter (PM), also known as particle pollution or fine dust, is a mixture of extremely small particles. The size of particles is directly linked to their potential for causing health problems. The smaller these particles are, the more hazardous they are to your health. Particles of this size cause health problems, because these are the particles that generally pass through the throat and enter the lungs.

Extensive evidence from World Health Organisation indicates that concentrations of fine dust currently found in most cities in developed countries around the world results in a serious health risk²⁾.

Same functionality, extended design options

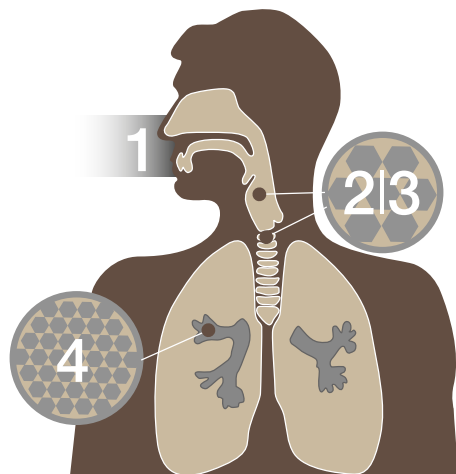
DESSO AirMaster® Elements

Since 2010 DESSO AirMaster® is a key example of an innovative solution that takes design and functionality to the next level. As the most effective flooring solution to capture fine dust from the indoor air¹⁾ it contributes to better working and living environments.

With DESSO AirMaster® Elements, available in a range of four new structures, the creative design options are extended to take the next step in design without compromising on functionality.

Tests performed by the independent German test institute GUI, which specializes in the analysis of indoor and outdoor air quality, have proven that DESSO AirMaster® Elements provides the same performance as its original predecessor.

Based on the test results DESSO AirMaster® Elements is certified with a GUI Gold logo.



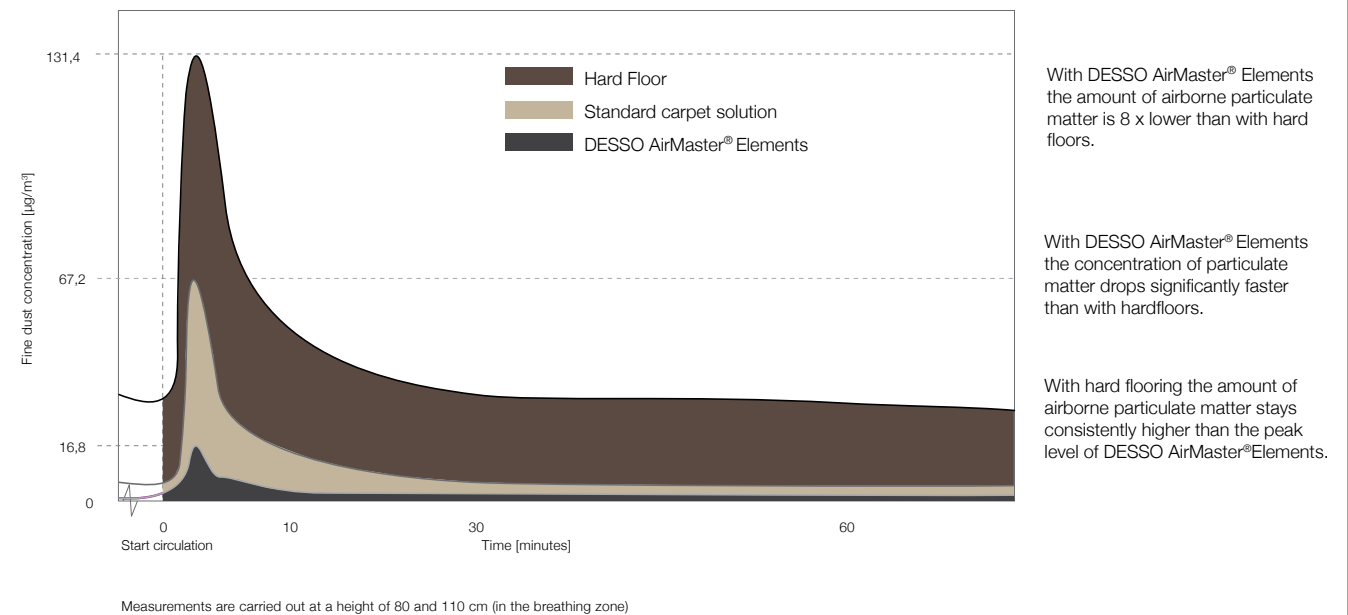
How particulate matter enters your body

- 1 Particulate matter enters our respiratory (lung) system through the nose and throat.
- 2/3 The larger particulate matter is eliminated through coughing, sneezing and swallowing.
- 4 Smaller particulate matter can penetrate deep into the lungs. It can travel all the way to the alveoli, causing lung and heart problems and delivering harmful chemicals to the blood system.

TNO study confirms previous findings

Dutch research agency TNO has rounded off an exploratory study³⁾ into the relationship between particulate matter in the indoor air and the presence of a soft or hard floor covering in the rooms in question. Measurements reported in the literature confirm that the concentration of airborne particulates in buildings and homes with textile floor covering is lower than in comparable locations with smooth floor covering. The study was conducted under the direction of Dr Jan Duyzer of TNO: "To which extent the concentration in specific cases is reduced as a result of the presence of floor covering, depends on the ventilation used. However, in most cases, the reduction appears significant".

GUI Laboratory test DESSO AirMaster® Elements - Particulate Matter (PM₁₀)



With DESSO AirMaster® Elements the fine dust concentration in the indoor air is 8 times lower than with hard flooring solutions (PM₁₀)²⁾

With DESSO AirMaster® Elements the fine dust concentration in the indoor air is 4 times lower than with standard carpet solutions (PM₁₀)²⁾

¹⁾ Based on tests performed by GUI, with DESSO AirMaster® Elements versus standard PVC hardfloor and versus standard structured loop pile carpet.

²⁾ Source: World Health Organization Air quality guidelines for particulate matter, global update 2005.

³⁾ Source: TNO report / TNO-060-UT-2011-01978.

But how does it work?

The Desso engineered product is able to capture fine dust, without the use of chemical additives. It is the carpet's structure that delivers a mechanical solution, making this functionality permanent and without side effects.

The coarser dust is captured in the thicker yarns of the lower pile (DESSO DustCollectors™). The high pile consists of ultra fine yarn filaments (DESSO AirFilters™), capturing and retaining the smallest particles (< 10 µm).

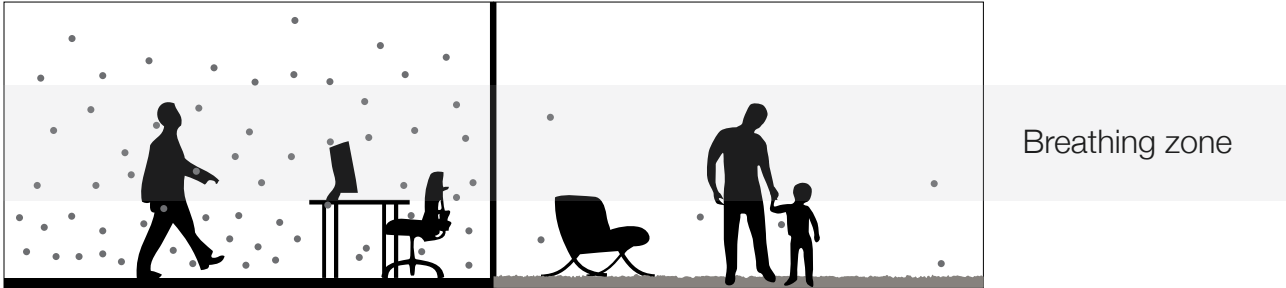
The open product structure ensures that dust is easily released during cleaning, to ensure maximum regeneration of the carpet's filtering capacity.

The size of the particles determines the time they spend in the atmosphere. Particles of PM₁₀ remain airborne for hours. Smaller particles can remain airborne even longer, depending on air circulation⁵⁾. When applying DESSO AirMaster® Elements fine dust is captured and retained, which helps creating a cleaner breathing zone⁶⁾.

Enlarged profile of DESSO AirMaster® Elements



Hard floor DESSO AirMaster® Elements



Measurements are carried out at a height of 80 and 110 cm (in the breathing zone)

PHILIPS

Continuous air filtering capacity

A regular and thorough cleaning and maintenance programme is important for every flooring solution. For DESSO AirMaster® Elements it ensures a maximum regeneration of performance potential to capture and retain fine dust from the indoor air.

The ribbed structure and the open spaces between the thick and fine yarns create optimal air circulation by vacuum cleaners. Tests indicate that over 80% of the dust is released by the carpet during vacuum cleaning. This is a 16% improvement compared to standard carpet⁷⁾. Additional tests indicate that during vacuum cleaning the airspeed at the core of the carpet structure is 55% higher compared to standard carpet⁸⁾, resulting in an improved dust release.

⁵⁾ Source: World Health Organization, Europe fact sheet EURO/04/05

⁶⁾ Measurements are carried out in the breathing zone at a height of 80 and 110 cm (PM₁₀).

⁷⁾ Source: tests performed by Philips Floorcare, applying 350W of airpower and a tri-active nozzle (tested acc. 60312).

⁸⁾ Source: tests performed by BOND Textile Research with DESSO AirMaster® versus standard structured loop pile carpet.

⁹⁾ Optimal cleaning performance when vacuuming in the pile direction.

Desso advises to apply a brush roller nozzle for professional use.

A variety of structures
for creative floorplans



DESSO AirMaster®

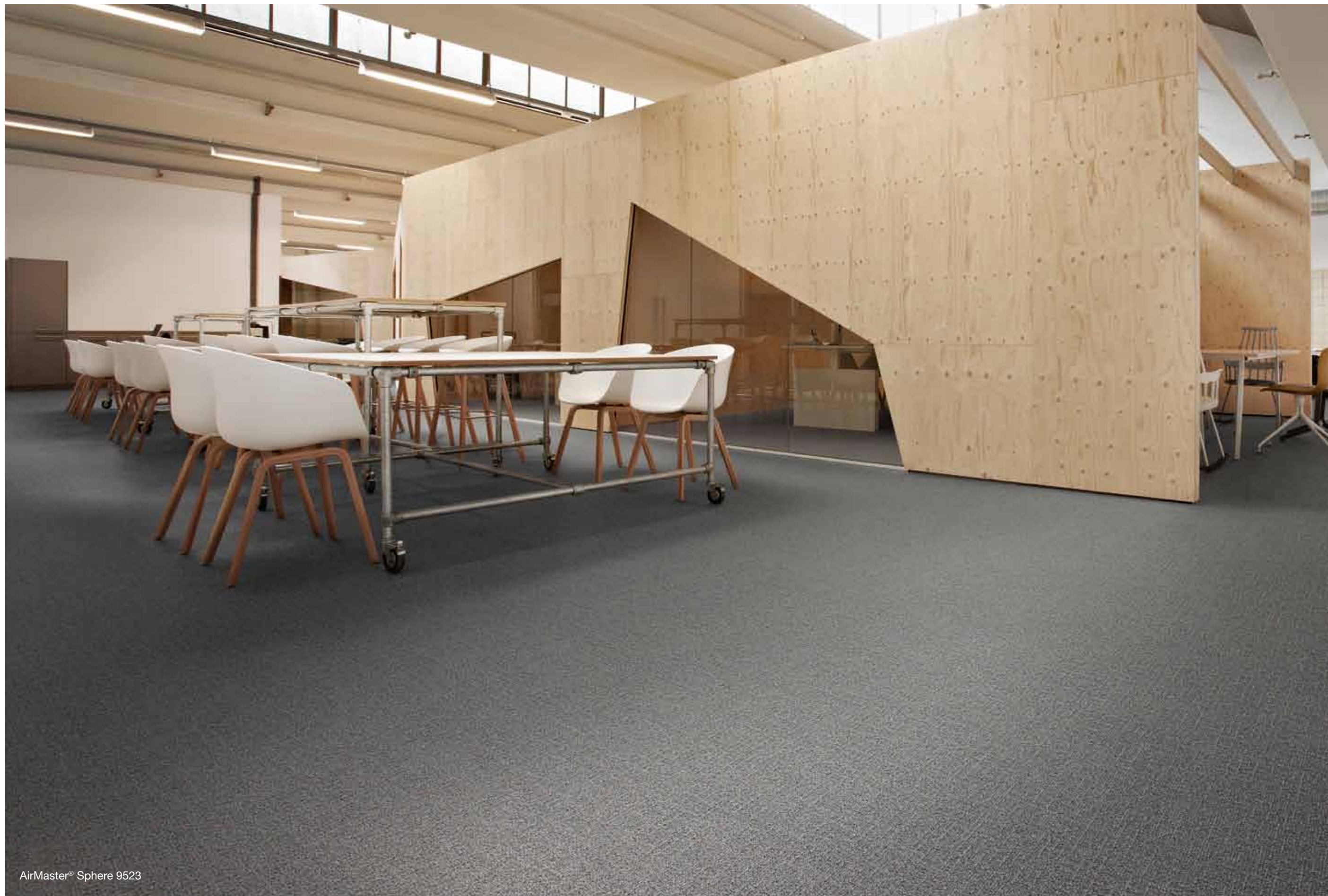
Elements is a Cradle
to Cradle® product and
contributes to a better
indoor air quality

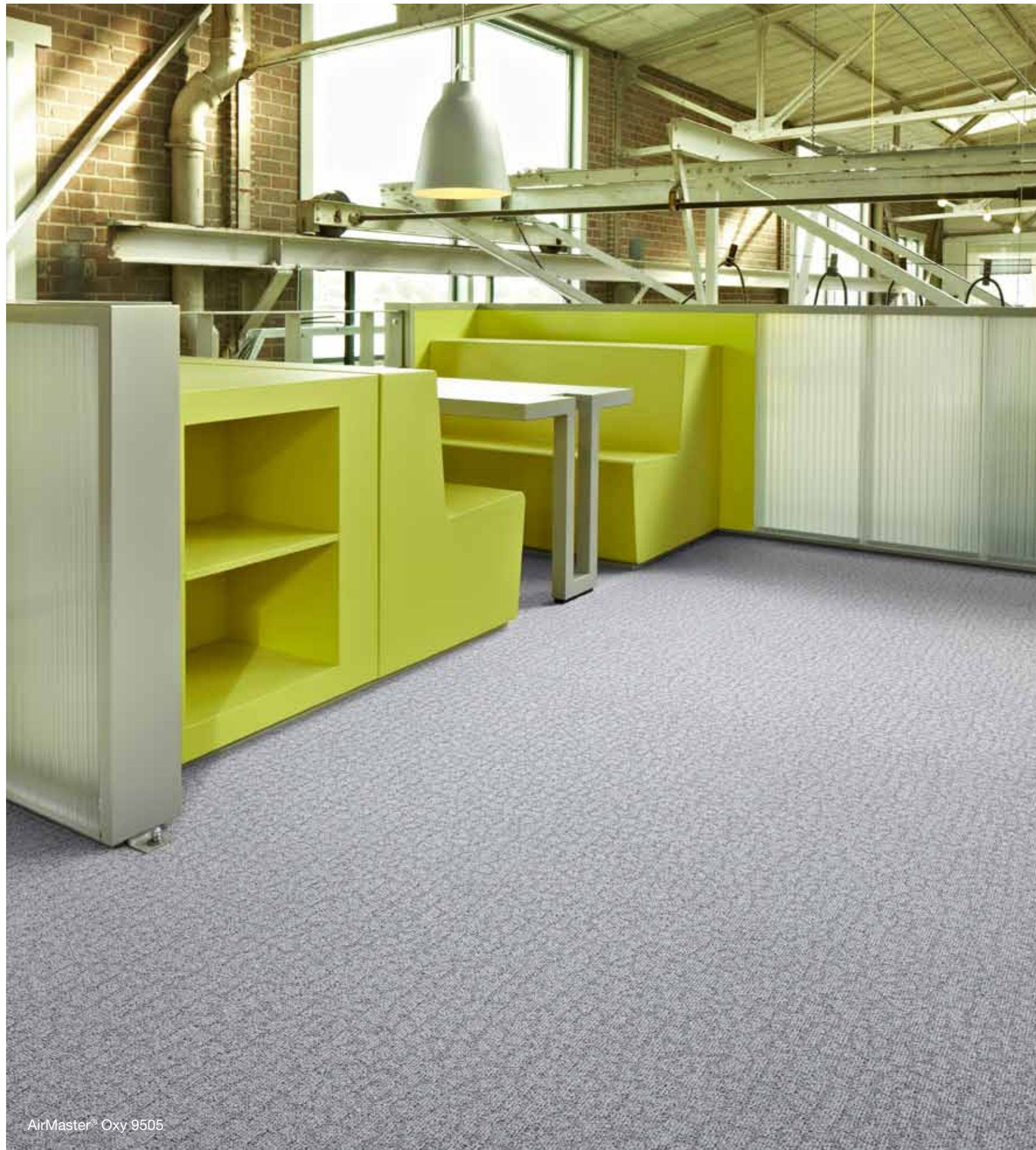


AirMaster® Oxy 9523

with EcoBase™ backing







The perfect base for
unique and healthy
spaces

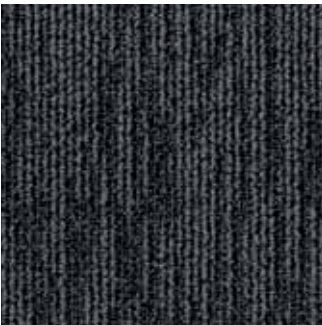


DESSO AirMaster® Elements

DESSO AirMaster® Atmos



Atmos 9505 L51,70/LRV19,88



Atmos 9032 L31,17/LRV6,72



Atmos 9031 L20,75/LRV3,18



Atmos 9096 L51,89/LRV20,04



Atmos 9523 L34,56/LRV8,28



Atmos 9092 L26,65/LRV4,97

DESSO AirMaster® Cosmo



Cosmo 9505 L51,78/LRV19,95



Cosmo 9032 L31,09/LRV6,69



Cosmo 9031 L19,73/LRV2,92



Cosmo 9096 L51,75/LRV19,93



Cosmo 9523 L35,39/LRV8,69



Cosmo 9092 L26,90/LRV5,06

DESSO AirMaster® Oxy



Oxy 9505 L51,12/LRV19,37



Oxy 9032 L30,34/LRV6,37



Oxy 9031 L21,21/LRV3,30



Oxy 9096 L51,97/LRV20,11



Oxy 9523 L34,90/LRV8,45



Oxy 9092 L26,25/LRV4,83

DESSO AirMaster® Sphere



Sphere 9505 L51,20/LRV19,44



Sphere 9032 L29,10/LRV5,88



Sphere 9031 L19,81/LRV2,94



Sphere 9096 L50,42/LRV18,77



Sphere 9523 L34,60/LRV8,30



Sphere 9092 L26,39/LRV4,88

