



Notrax®

Ergonomic Anti-fatigue & Safety Matting



Recognizing the symptoms

Fatigue and pain in back and lower limbs

80% of workers have problems relating to their feet, legs and back. These problems are highest with workers standing over 4 hours per working day. A correlation exists between these complaints and general worker fatigue. Long term symptoms could lead to musculoskeletal disorders (MSDs).

Slip, trips and fall incidents

20% of work related accidents are caused by slips and falls. Worker injuries could result in absenteeism, decreased productivity or even liability claims.

Absenteeism

Absenteeism, especially long-term absenteeism, has a negative impact on labour costs and results.



Benefits of anti-fatigue and safety mats

Experts agree that matting can significantly improve productivity and employee satisfaction while reducing absenteeism and chronic illnesses related to long-term standing.

Tiredness and discomfort are reduced by 50% in comparison to hard floors and the risk of slips and falls is virtually eliminated.

There is good reason to believe that reduction of fatigue also reduces the number of accidents and improves general work efficiency.

Absenteeism is reduced by 1/3.

There are fewer days lost to injuries, fewer medical claims and compliance with health and safety regulations.

Productivity is maintained throughout the working day.

A good rule of thumb is that 1 minute per day in the workplace is worth roughly € 100 per year. Thus 5 minutes of lost time due to decreased productivity per day due to fatigue is worth: € 500.

How matting works

Cushioning effect stimulates continuous micro movements.

Anti-fatigue mats are engineered to make the body naturally and imperceptibly sway, promoting blood flow.

Ergonomic design spreads weight and corrects balance.

The use of an anti-fatigue mat enables correct balancing and a uniform distribution between the right and left leg.

Slip resistant surface prevent slips and falls.

While the anti-slip function is important, it is also important to watch the worker's freedom of movement, such as easy twist turns.

Bevelled edges prevent tripping on the mat.

Safety ramps allow easy access on to and off of the mat surface. Highly visible yellow safety borders comply with OSHA safety code.

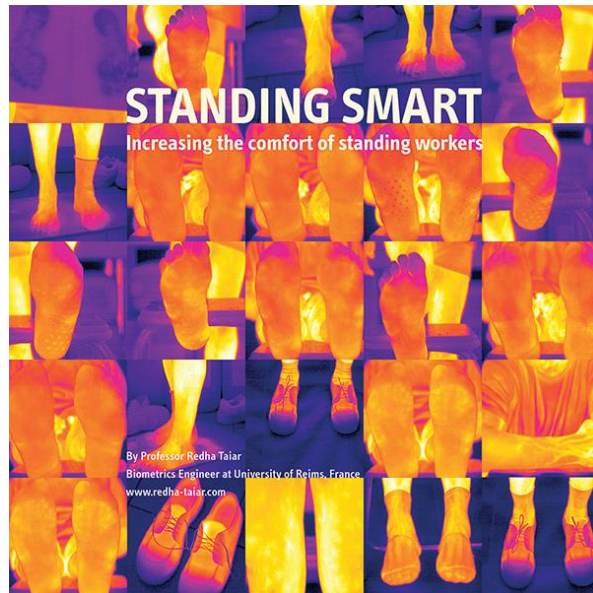
Insulation improves worker comfort and wellbeing

Matting serves as an insulating barrier protecting workers from the hard surface, cold floors, vibrations, moisture and sound.

Matting protects flooring from damage

Mats cushion the fall of fragile products, tools and other objects. Mats also protect the floor from these falling objects.





[Download Standing Smart](#)

Scientific Research on Anti-fatigue Matting

A peer-reviewed study by Prof. Dr. Redha Taiar at the University of Reims in France illustrated how human mechanics in a working environment are impacted through the use of anti-fatigue mats.

Two causes of fatigue

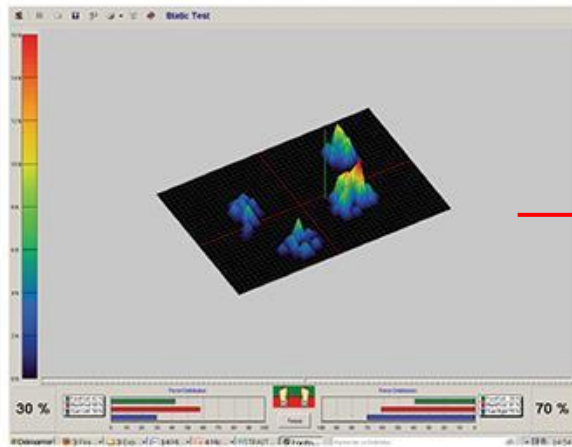
By observing and measuring foot pressure for employees standing for long periods, Prof. Taiar was able to identify two causes of fatigue and therefore a two-pronged approach in combating the muscular-skeletal disorders associated with long-term standing.

Vary foot pressure while standing

Firstly, the worker must initiate a variation in foot pressure to improve the upright standing position. This top down approach helps to eliminate the build-up of pressure points on the feet (Cinderella fibres). To achieve this, his advice to workers is to regularly change the pressure point inside the shoe.

Restore balance with an anti-fatigue mat

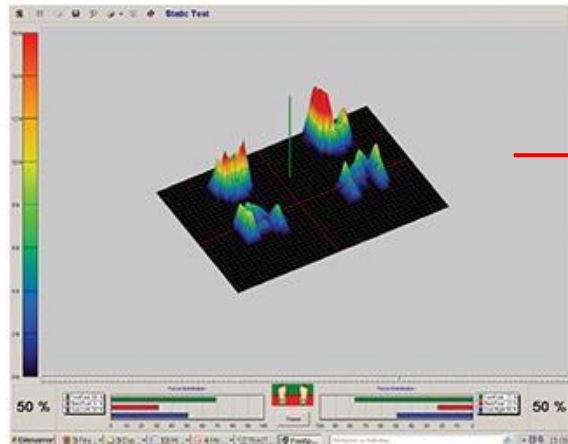
Secondly, by using anti-fatigue mats made from the latest technological materials. This bottom up approach helps to eliminate pressure points from the floor by spreading weight evenly. The use of anti-fatigue mats corrects balance and restores uniform distribution between the right and left leg.



Prof. Taiar's findings confirmed that pains are substantially reduced with the use of anti-fatigue mats compared to the initial situation without mats.

Without a mat:

Without a mat there is a disfunction in the balance of the person. This imbalance is very harmful for the body. Stagnation of blood circulation in the lower extremities causes fatigue and lower limb disorders.

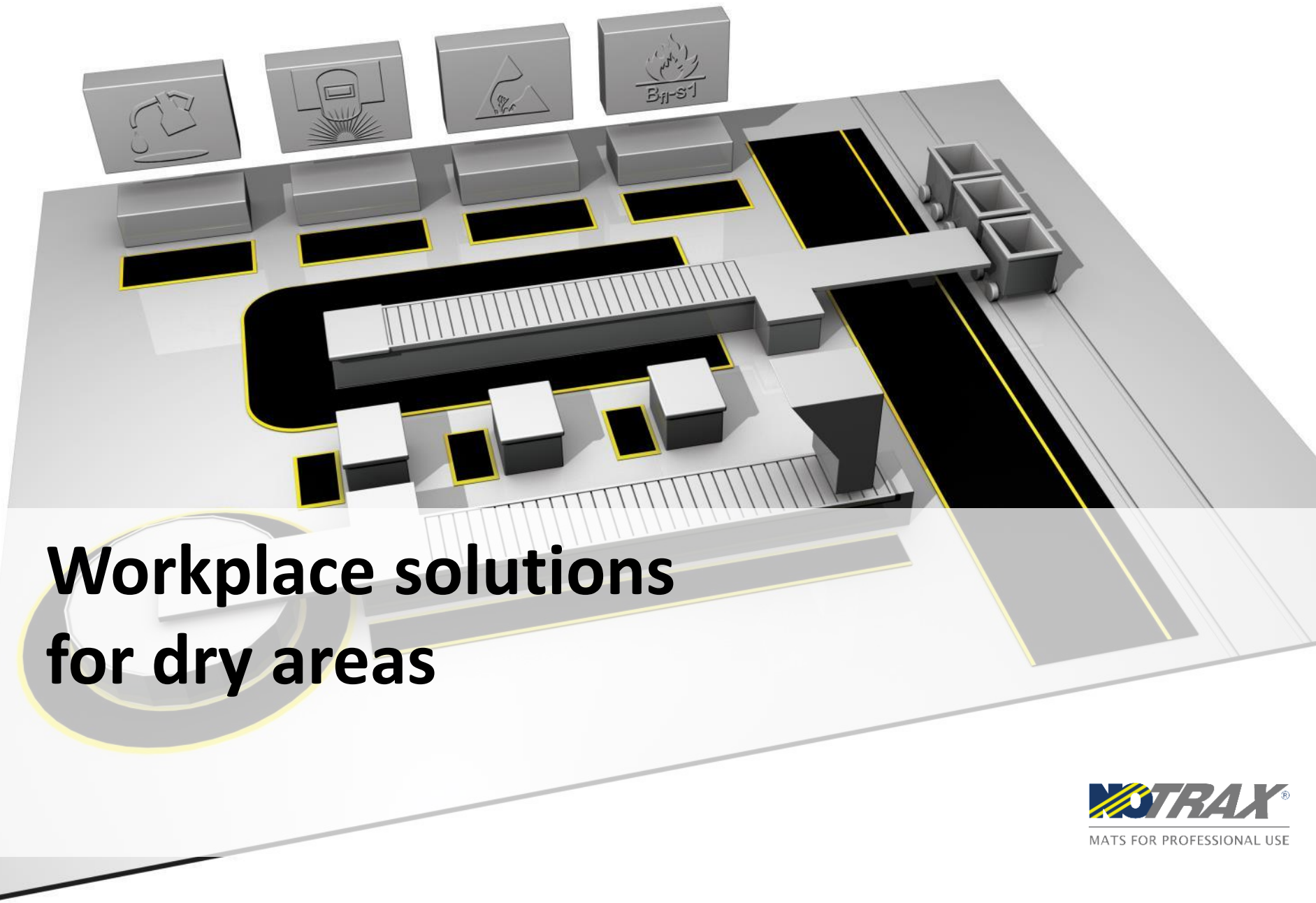


With a mat:

Cushioning effect stimulates continuous micro movements minimizing blood pooling in the legs. Ergonomic design corrects balancing of the body. This reduces pains and discomfort substantially.



Ergonomic Anti-fatigue & Safety Matting



**Workplace solutions
for dry areas**

Workplace solutions – dry areas



Notrax® matting can be customized to any area to ensure the most efficient and ergonomic workstation.

Standing on hard floors for long periods can lead to MSDs

Long-term standing causes muscles to constrict and blood stagnates causing fatigue. The worker is out of balance which aggravates the problem. Lower back pain is highest in workers who stand for 4 hours or more per day.

Workstation ergonomics have become even more important

As production processes evolve and work has become more specialized and repetitive, workplace ergonomics have become widely accepted in order to increase productivity and efficiency while reducing costs related to absence due to MSDs.

Anti-fatigue matting corrects balance and stimulates circulation

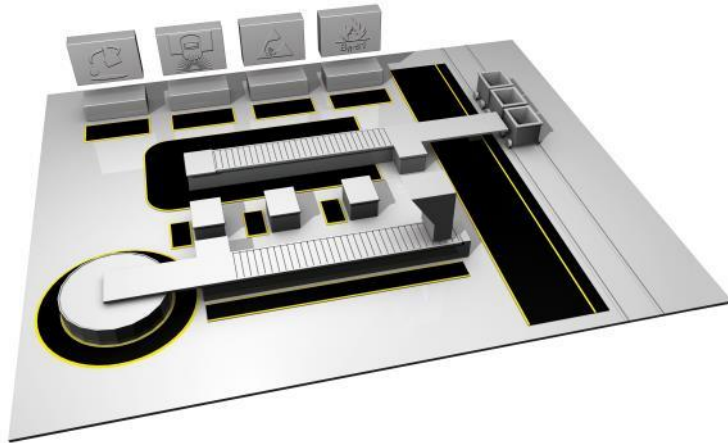
The unique composition of an ergonomic pattern and cushioning underlay evenly distributes weight, stimulates blood flow and restores balance and proper posture.

Too much cushioning can have a negative effect

Like jogging on a beach, too much softness will cause excessive fatigue because it overworks the muscles.



Workplace solutions – dry areas



Standard or custom sizes for every workstation

Anti-fatigue matting includes standalone mats for individual workstations, linear lengths for production lines or streets, and modular solutions continuous for large custom configurations.

Various materials and compounds

Matting is manufactured in specialized PVC, rubber or polyurethane compounds for specific industrial environments e.g. general purpose, oil resistant, fire retardant for welding areas, static dissipative for ESD protection.

Solid anti-slip surface

Surface pattern provides traction for sure footing. Closed design ensures easy cleaning and prevents small items from falling under the mat.

Bevelled edges prevent tripping on the mat.

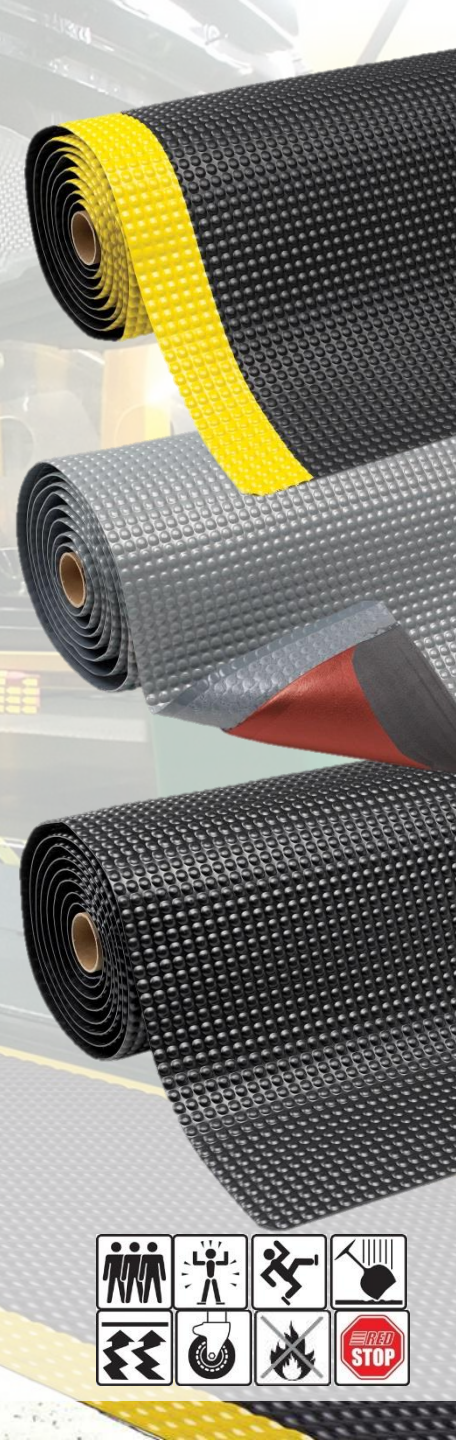
Safety ramps allow easy access on to and off of the mat surface. Highly visible yellow safety borders comply with OSHA safety code.



Dry Areas 4

Heavy Duty Industrial

782 Sky Trax™





Workplace solutions for wet areas

Workplace solutions – wet areas



Slips and falls are responsible for 20-30% of long-term absence

Nearly 30% of same-level falls result in more than 21 workdays lost and loss of productivity is often an unfortunate side effect.

Four main causes of slip accidents

1. Wet surfaces due to excess water or fluids
2. Slippery dry surfaces due to built-up dust or debris, e.g. sawdust
3. Obstructions both temporary and permanent
4. Uneven surfaces such as changes in levels or unmarked ramps.

Anti-slip mats increase traction

Wet sources of contamination include water, oils, grease, and soap from cleaning solutions. This can be addressed by increasing traction through footwear and slip resistant matting.

Open structure removes debris

Large drainage holes remove wet contamination or dry debris to keep the surface clean and clear.

Matting provides fatigue relief, slip prevention and insulation

Matting serves as an insulating barrier protecting workers from the hard surface, cold floors, vibrations, moisture and sound.

Workplace solutions – wet areas



Standard or custom sizes for every workstation

Anti-slip matting includes standalone mats for individual workstations, linear lengths for production lines or streets, and modular solutions for large custom configurations.

Various materials and compounds

Matting is manufactured in specialized PVC, rubber or polyurethane compounds for specific industrial environments e.g. general purpose, oil resistant and fire retardant for welding areas.

Open structure with anti-slip surface

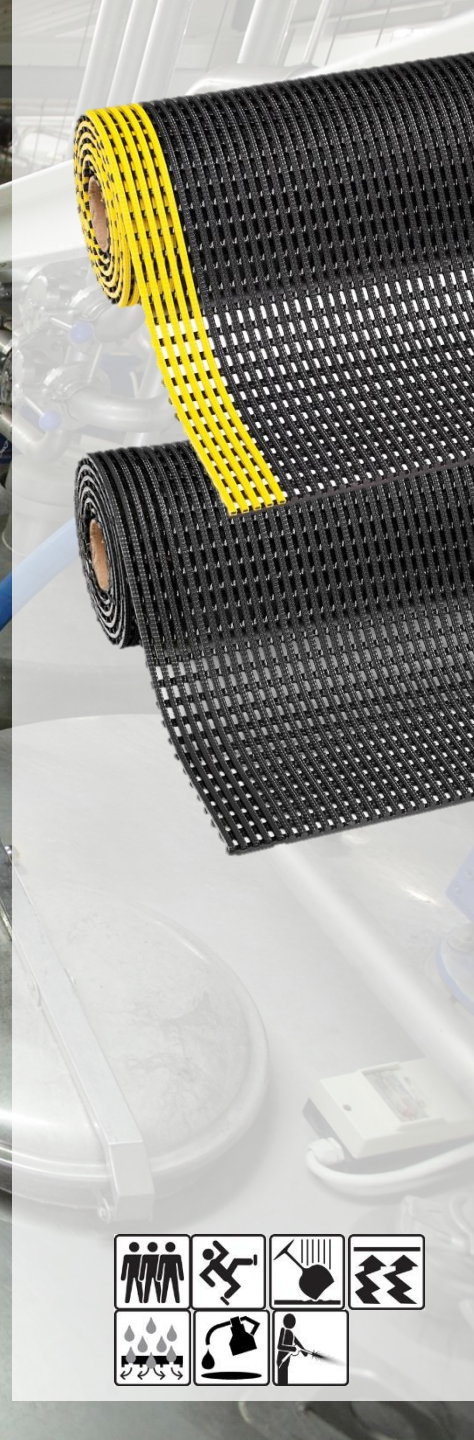
Open structure with drainage holes or channels remove liquids and debris to keep the surface clean and clear. Surface pattern provides traction for sure footing.


Bevelled edges prevent tripping on the mat.

Safety ramps allow easy access on to and off of the mat surface. Highly visible yellow safety borders comply with OSHA safety code.



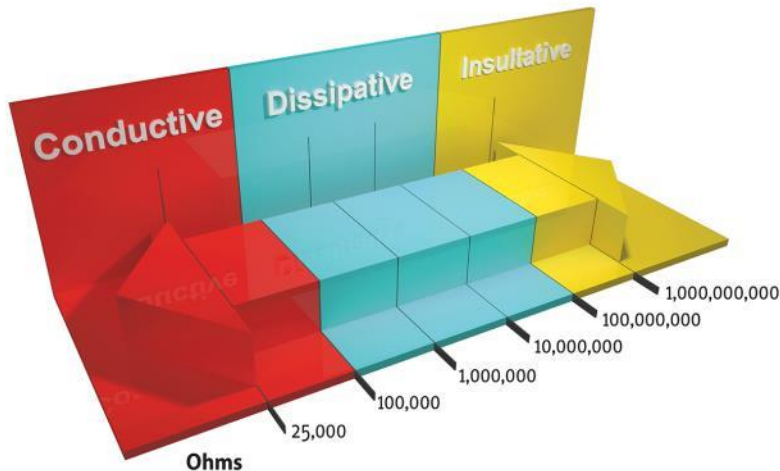
Wet Areas
Heavy Duty Industrial
537 Flexdek™



A man in a dark suit is seen from behind, holding a black umbrella. He is standing in the rain under a dark, stormy sky with a bright lightning bolt visible in the upper right. The scene is used as a metaphor for protection and safety.

Electrostatic Discharge Solutions ESD

Electrostatic Discharge Solutions (ESD) – dry areas



Static dissipative matting is specially formulated to drain static electricity from workers, thereby avoiding unpleasant static shock while safeguarding equipment.

People are one of the prime generators of static electricity.

The simple act of walking around or even sitting on certain types of stools can generate several thousand volts on the human body.

Sensitive components can suffer unseen damage due to static

With the increased use of smaller, more sophisticated hardware, these components more vulnerable to damage from static shock.

ESD Matting is static dissipative between $10^6 \Omega$ - $10^9 \Omega$

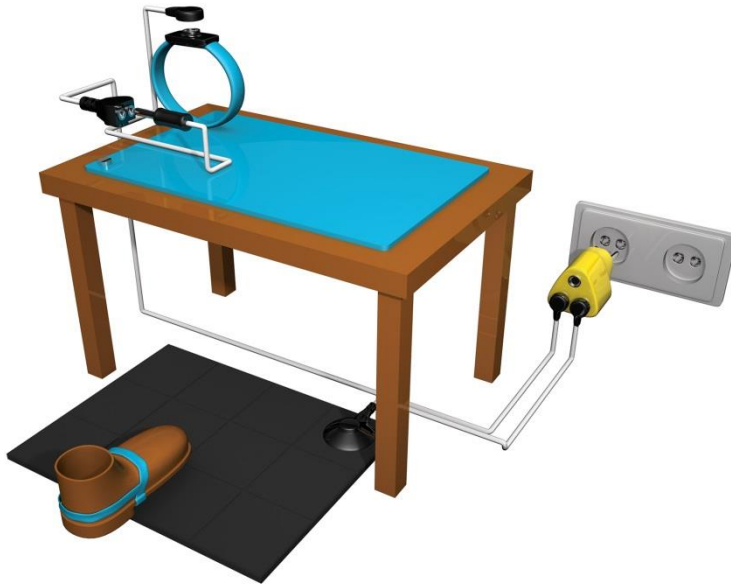
Static dissipative mats discharges more slowly and in a somewhat more controlled manner than with conductive materials. To achieve an ESD protective work area, all conductors, including personnel, must be grounded.

ESD rubber flooring is most effective

ESD rubber flooring has been cited by MIT Lincoln Laboratories as most effective protection regardless of footwear. ESD anti-fatigue matting offers ergonomic benefits for standing workers as well as ESD protection.



Electrostatic Discharge Solutions (ESD) – dry areas



Static dissipative matting is specially formulated to drain static electricity from workers, thereby avoiding unpleasant static shock while safeguarding equipment. To achieve an ESD protective work area, all conductors, including personnel, must be grounded.

Functionality

ESD matting is available as standalone mats for individual workstations, linear lengths for production lines or streets, and modular solutions for large custom configurations.

Solid anti-slip surface

Surface pattern provides traction for sure footing. Closed design ensures easy cleaning and prevents small items from falling under the mat.

Bevelled edges prevent tripping on the mat.

Safety ramps allow easy access on to and off of the mat surface. Highly visible yellow safety borders comply with OSHA safety code.

Accessories

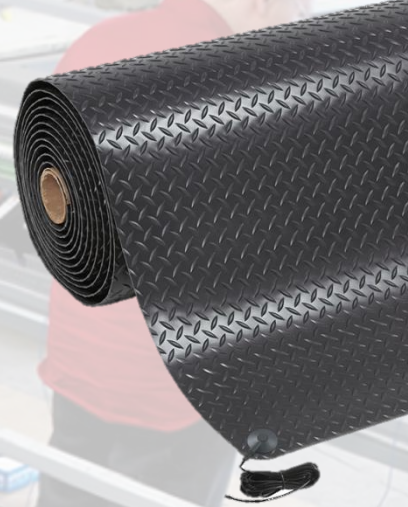
A full range of ESD accessories are available including table mats, shelf liners, grounding plugs and cords, wrist bands, heel grounders and ESD mat cleaner.



ESD Protection

Heavy Duty Industrial

826 Diamond Stat™





Food Processing and Food Service Matting Solutions

Food processing and food service – dry / wet areas



Balancing food safety and employee safety

The goal is to prevent cross contamination and maintain strict HACCP standards, while maintaining employee safety when handling knives and operating equipment, preserve employee wellbeing and maintain productivity throughout the day.

Microscopic grease build up can cause slip falls

Floors are smooth to facilitate cleaning and disinfecting, but the presence of water, oils and microscopic grease build up causing accumulation of stains that make an anti-slip coating ineffective over time.

Static postures and repetitive movements cause MSDs

In a sector with mostly standing workers, the OSHA recommends anti-fatigue mats in addition to avoiding static postures and awkward neck postures during often repetitive tasks.

Kitchen employees work in extreme hot or cold temperatures

Cold temperatures to preserve food during cleaning, preparation or packaging; hot temperatures during food cooking or serving. Factory floors are often cold and wet, so matting helps to insulate workers, keep their feet warmer and improve overall wellbeing.

Food processing and food service – dry / wet areas



Standard or custom sizes for every workstation

Anti-slip matting includes standalone mats for individual workstations, linear lengths for production lines or streets, and modular solutions for large custom configurations.

Various materials and compounds

Matting is manufactured in specialized PVC, rubber or polyurethane compounds for specific industrial environments e.g. general purpose, oil resistant and fire retardant for welding areas.

Open structure with anti-slip surface

Open structure with drainage holes or channels remove liquids and debris to keep the surface clean and clear. Surface pattern provides traction for sure footing.

Bevelled edges prevent tripping on the mat.

Safety ramps allow easy access on to and off of the mat surface. Highly visible yellow safety borders comply with OSHA safety code.



Food Production Heavy Duty Industrial

T11 San-Eze™





Anti-Slip Hygienic Matting Solutions

Anti-Slip Hygienic Matting Solutions – dry / wet areas



Locker rooms, etc. are ideal breeding grounds for bacteria

Communal sports and leisure environments such as gyms, locker rooms and showers, are ideal breeding grounds for bacteria that spread infections. Hygienic matting is treated with an anti-microbial to prevent growth of bacteria, fungi and other micro-organisms.

Most common cause of accidents is slips and falls

One of the most common causes of swimming pool accidents is slips and falls. In and around shared changing rooms, locker rooms, swimming pools and showers are a slip hazard with wet, slippery and cold floors.

Microscopic grease build up can cause slip falls

Floors are smooth to facilitate cleaning and disinfecting, but the presence of water, oils and microscopic grease build up from shampoos, soaps and oils, causing accumulation of stains that make an anti-slip coating ineffective over time.

Anti-Slip Hygienic Matting Solutions – dry / wet areas



Standard or custom sizes

Anti-slip matting includes standalone mats for individual showers, linear lengths for walkways or changing rooms, and modular solutions for large custom configurations.

Various materials and compounds

Matting is manufactured in specialized PVC or polyethylene compounds. The compounds are anti-bacterial and UV resistant.

Open structure with anti-slip surface

Open structure with drainage holes or channels remove liquids and debris to keep the surface clean and clear. Surface pattern provides traction for sure footing.

Soft and comfortable for bare feet

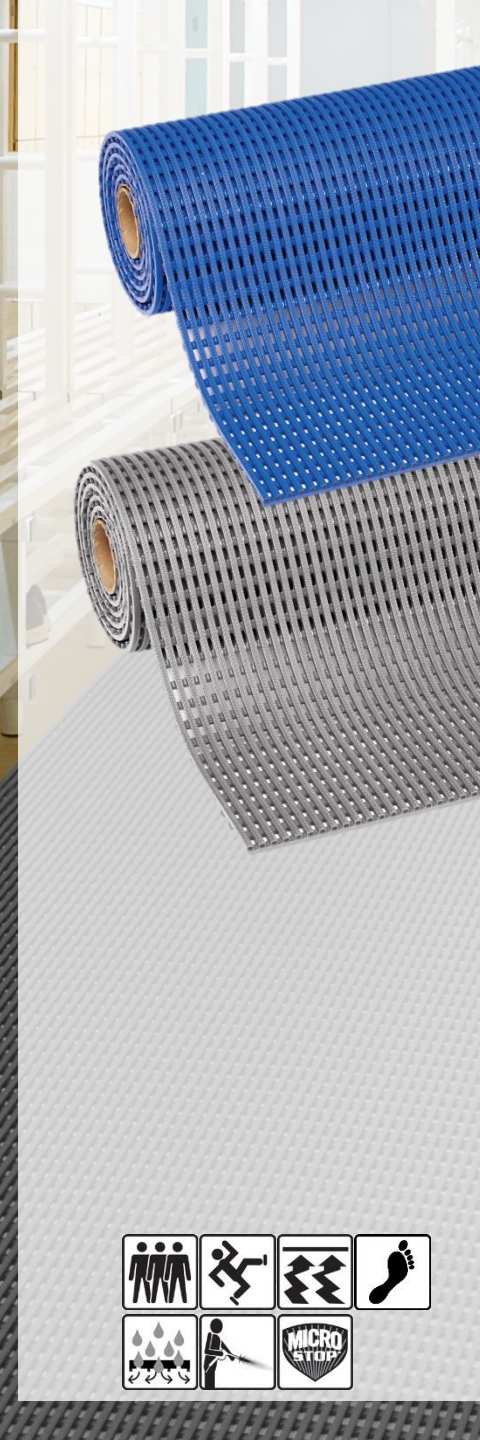
The mat is designed to be comfortable and warm for bare feet, isolating users from the cold and often wet floors, while also offering grip for slip prevention.



Hygienic Matting

Heavy Duty Industrial

536 Akwadek™





Frequently Asked Questions about Ergonomic Anti-fatigue & Safety Matting

Pictograms



Anti-Fatigue

Matting that alleviates foot pressure, stimulates blood circulation and helps reduce stress on the lower back, leg joints and major muscle groups.



Anti-Slip

Matting designed to provide added traction through aggressive surface patterns and textures.



Oil Resistant

Matting suitable for contact with industrial oils.



Welding

Made of durable fire retardant rubber compounds. These mats can be used in areas where welding takes place.



ESD

Matting formulated to absorb static electricity. Avoids unpleasant static shock and safeguards equipment.



Fire Retardant

Matting designed to resist the spread of fire and withstand heat, substantiated by test certifications from independent laboratories.



Grip Step®

Coating for extra adherence in extremely slippery areas. Slip resistance up to R13 according to DIN 51130.



Drainage

Open construction matting allows for liquids and debris to pass through, providing secure footing in a wet environment.



Protection

Absorbs impact, reduces breakage and protects floors.



Non-Conductive

Matting formulated to provide insulation to protect workers in case of electrical shock.



Wheeled Access

Matting suitable for wheeled access (i.e. carts).



Insulation

Against cold, heat, vibrations and noise. Matting elevates standing workers from cold/wet floors, which keeps their feet warmer thereby improving overall perception of wellbeing.



Heavy Duty

Recommended for heavy duty use in industrial environments.



Medium Duty

Recommended for medium duty use in industrial environments.



Light Duty

Recommended for light duty use in industrial environments.



Modular System

Interlocking mats allow on-site customization with snap together units that can be assembled in any shape or form, as standalone mats or wall to wall configurations.



Cold Resistant

Material can withstand freezing temperatures.



Grease and Oil Resistant

Matting that is suitable for use in contact with vegetable oils and animal fats.



RedStop™

This uniquely engineered technology virtually eliminates the slipping and sliding of mats.



MicroStop™

Antibacterial treatment inhibits the growth of micro-organisms such as bacteria and fungi that can cause odour, stains, and product deterioration.



NFSI®

Tested and certified by the National Floor Safety Institute.



NSF

Tested and certified by the National Sanitation Foundation for grease and oil protection and durability.



Barefoot

Pleasantly soft and warm under bare feet.



Cleaning

Suitable for cleaning with high pressure (hot) water jet.

Product Testing



Our Product Testing Charts show the following relative comparisons between the mats:

Wear resistance

Indicates the time it takes for a mat to lose its functionality. This is an accelerated wear test where the results are expressed in total weight loss of material when subjected to 5000 cycles under an abrasion wheel. The higher the pointer in the test chart, the greater its resistance to wear.

Slip resistance

Indicates the slip resistance of a mat. This test measures the force required to cause slippage of a load across the surface material. The coefficient is the ratio of force required divided by the weight. The higher the pointer in the test chart, the greater the coefficient of friction ratio, thus the better the slip resistance of a mat.

Anti-fatigue

Indicates the degree of comfort a mat provides. This test starts by measuring the original thickness of a mat. Then compression is applied and the thickness under this load is measured again. The difference between the two measurements is called deflection. The higher the pointer in the test chart, the better its anti-fatigue properties.

Selecting the right mat



Benefits sought

Selecting the right mat is foremost based on determining the suitability of the product to solve the problem identified. Ergonomics and fatigue relief, the desire to reduce slip and falls, provide relief from cold/damp conditions or protect flooring.

Type of environment

From standard dry or wet environments, the environmental elements will determine the choice of material to ensure the mats can resist incidental or constant oil, grease or chemical exposure present in the workplace.

Intensity of application

Notrax® industrial matting is manufactured to withstand harsh industrial environments. Matting is recommended for heavy duty industrial use, medium duty industrial or commercial use, and light duty use.

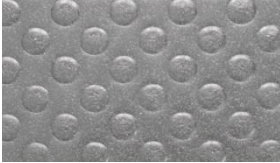
Special needs

Notrax® mats are manufactured in special compounds to meet specialized applications such as fire-retardant, welding, static dissipative, isolative or anti-microbial.

Type of installation

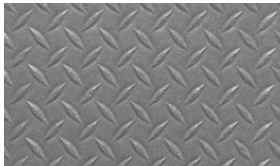
Working environments and plant layout can vary for different companies. Matting includes standalone mats for individual workstations, linear lengths for production lines or streets, and modular solutions for large custom configurations.

Mat Surfaces



Anti/fatigue mat surfaces provide traction, offer comfort and allow freedom of movement that are required for the workstation but are also subject to the perception of workers.

Ergonomic bubble stimulates blood flow and corrects balancing to prevent fatigue in standing workers especially in stationary positions.



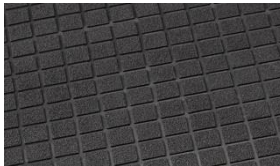
Diamond plate or deck plate has an industrial look with a non/directional pattern that allows freedom of movement, easy twist turns.



Ribbed patterns in the width or the length offer sure footing and are easy to clean.

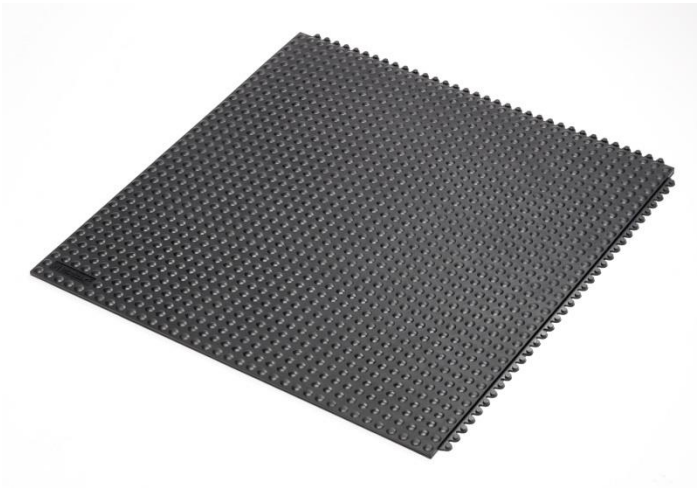


Pebbled patterns have a level and uniform surface provide traction and are easy to clean.



Diamond Grid™ lies in different directions providing a deep texture and is extremely durable.

Rubber Materials



NR: Natural Rubber

Natural Rubber. For general purpose. Superior elasticity for maximum comfort.

SBR: Styrene Butadiene Rubber

SBR stands for Styrene Butadiene Rubber. It is a synthetic rubber that can be compounded to provide very fine abrasion, wear, and tensile qualities.

NBR: Nitrile Rubber

Nitrile rubber is the trade's word used for Acrylonitrile Butadiene Styrene, also known as NBR. It's a synthetic rubber characterized by its high tensile strength and property retention after exposure to heat, oil and chemicals.

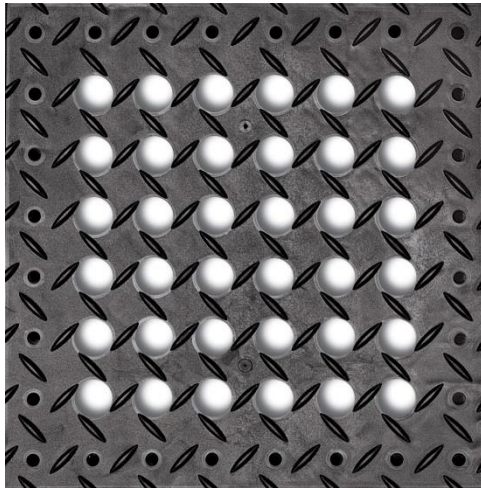
ESD: Static Dissipative Rubber

Static dissipative rubber compound that meets the IEC61340-4-1 (category DIF) requirements with a measured resistance of $R_g 10^6 - 10^9 \Omega$. The entire compound is static dissipative, not just the surface, which makes it more effective. Available in natural rubber, nitrile rubber, and fire retardant compounds.

FR: Fire Retardant

Fire retardant rubber compound with a Bfl-S1 fire classification according to EN 13501-1. This compound is also resistant to most industrial oils and is suitable for welding areas.

Thermoplastic Materials



PVC: Polyvinyl chloride

Polyvinyl chloride is produced by polymerization of the monomer vinyl chloride (VCM). Free of toxic DOP and DMF.

Vinyl stands for polyvinyl chloride, also known as PVC. Made from a plastic compound, vulcanized in to a flexible, durable and moisture resistant material; ideal for use as backing under carpet matting, particularly for longer lengths. Notrax[®] compounds are free of toxic DOP. PVC is recyclable.

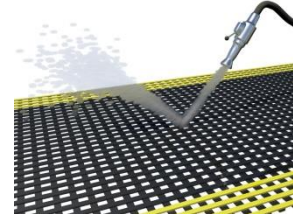
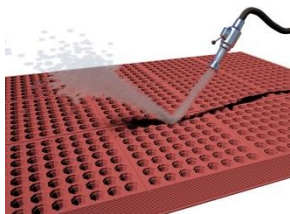
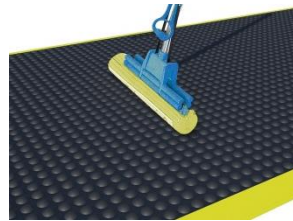
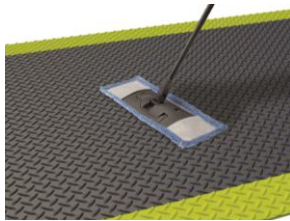
PUR: Polyurethane

Polyurethane polymers are formed by combining two bi- or higher functional monomers.

PE: Polyethelene

Polyethylene is a thermoplastic polymer. Flexible polyurethane foam is used as cushioning and can be created in almost any variety of shapes and firmness. It is light, durable, supportive and comfortable.

Cleaning and Maintenance



Why this is so important . . .

- To prolong the life of industrial mats by preventing dirt build-up
- To maintain the mat's specialized properties such as anti-slip or ESD
- To maintain the overall appearance of the mats

Moulded rubber mats

Use a high-pressure hose (124 bar max.) with hot water (no greater than 70°C max.), especially efficient to remove oils from the mat. The use of a mild soap, mild detergent OR non-butyl degreaser is suggested for a better result. Do not clean gritted mats with high pressure.

Moulded PVC mats

Use a high-pressure hose (124 bar max.) with hot water (no greater than 70°C max.), especially efficient to remove oils from the mat. The use of a mild soap, mild detergent OR non-butyl degreaser is suggested for a better result. Do not clean gritted mats with high pressure.

Vinyl sponge matting

Sweep regularly or dry mop the surface and the back of the mat. The surface can be damp-mopped with a mild soap/detergent.

Runners

Sweep with a broom or vacuum the surface. The usage of wet mop with mild soap or detergent is possible.

ESD Mats

To sweep or dry mop the surface on a regular basis is important to maintain the static dissipative properties of the mat. A static control cleaning solution is advised but also a wet mop with mild soap that will not leave any residue can be used.

Production Facilities



As a global supplier of floor matting products with facilities in Europe and the United States, we constantly seek to reduce the environmental impact of our processes. It means that we aim to grow our business in an environmentally responsible manner, and we do this by focusing on diminishing waste, using recycled materials where possible, and by obtaining more materials from sustainable sources.

The "Lean" organization of our operations not only enables us to stay competitive and provide fast service, it also enables our customers to participate in a joint effort to reduce the carbon footprint simply by making use of our electronic purchasing and invoicing services and drop shipment capabilities.

Our manufacturing facilities are certified:

- ISO 9001
- ISO 14001

REACH



REACH is the European Community Regulation on chemicals and their safe use (EC 1907/2006). It deals with the Registration, Evaluation, Authorization and Restriction of Chemical substances.

The law enacted on 1 June 2007 assigns manufacturers the responsibility of providing high level human and environmental protection from the use of chemicals in manufacturing.

Notrax® does not use any substances currently included on the SVHC (Substances of Very High Concerns) list under REACH, including Di-octyl phthalate (DOP) plasticizer.



Ergonomic Anti-fatigue & Safety Matting

Arbeitsplatzmatten und Antiermüdungsmatten von Notrax erhalten Sie bei:
<https://arbeitsplatzmatten-profi.com>
info@arbeitsplatzmatten-profi.com, Tel. 0 63 59/96 11 906

NOTRAX[®]
MATS FOR PROFESSIONAL USE