



# Matting Solutions for a Stylish Yet Safe Entrance

Dust Control Entrance Matting



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# Introduction

Notrax® has a full selection of outdoor and indoor matting for professional and commercial use. Indoor matting is available in single zone, multi-zone and multi-functional entrance matting in a variety of colours and materials that suit any entrance to create a total matting solution for a comfortable yet safe entrance.

Notrax® Professional Dust Control Matting products are designed to:

- Remove dirt and moisture from shoes
- Prevent debris from entering the building
- Keep entrance ways looking clean and presentable
- Reduce slips, trips and falls from slip hazards on wet floors.

Up to 80% of interior soil is brought into facilities by foot traffic. The utilization of matting ensures that the majority of dirt will be stopped at the entrance. Entrance matting also extends the life of the floor by absorbing much of the initial abuse.

# **Entrance mats**

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 **Mat design and materials**

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 **Logo mats**

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 **Master Flex modular entrance mat systems**

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 **Mat accessories**

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 **Selecting the right mat**

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# Safety and accessibility



## Safety

Wet, slippery floors are dangerous. Slippery entrances are the main safety concern. In dry weather, entrance ways can accumulate dirt on the surface thereby increasing the risk of slips and falls. Due to large amounts of rain and snow in bad weather conditions, entrances can become soaked and slippery. Smaller or inadequate matting can quickly become saturated making the situation worse. Heavily soiled mats allow contaminants to migrate to the interior floor.

Entrance mats need a high water absorption rate to properly dry shoes. Absorption capacities between 4 to 6 litres of water per square meter are suitable for heavy traffic areas. Outdoor rubber mats have moulded patterns or grooves to enhance the anti-slip properties even when wet.

Entrances also become a main exit during fire or other emergencies. Since fire classifications vary by type of building, type of entrance and type of entrance matting system, it is recommended to consult the fire guidelines when selecting an installed entrance matting system.

## Accessibility

Especially in public and commercial buildings, the entryway should be accessible for all. Architectural design guidelines specify that entrances must suit wheelchair users and accommodate people using mobility aids. Floors should have a wheelchair friendly surface, be trip free and remove water from wheels and shoes to reduce slippery surfaces within the building. It is also possible to integrate tactile guidance into the matting system for the visually impaired.

Entrance mats or recessed matwells must be flush with the floor surface or any difference in height between the flooring surface and the mat should be limited to no more than 6 – 12 mm ( $\frac{1}{4}$ " to  $\frac{1}{2}$ "). Carpets should be of shallow dense pile that is non-directional to allow easy passage for wheelchair users and for people using crutches. Avoid coir matting, deep pile or excessively grooved carpet. Preferably the recessed mat frame at main entrances should be as wide as the entrance.

# Benefits of entrance mats



How to select the  
right entrance mat  
for your building?

The entrance is the building's first impression.

## **Entrance mats reduce cleaning costs**

70-80% of the dust, dirt and grime in public buildings is tracked in from the outside and spread throughout the floors.

## **Entrance mats contribute to improved indoor air quality**

Removing tracked-in pollutants from shoes can improve air quality through reduction of air particles.

## **Entrance mats protect and preserve interior flooring**

Constant tracking of dirt into the building is also a prime factor in the wearing of interior floors and carpeting.

## **Entrance mats help to prevent slips, trips and falls**

During bad weather, interior flooring can become slippery and interior carpet can become saturated increasing the risk of slips and falls.

# The Zones

1

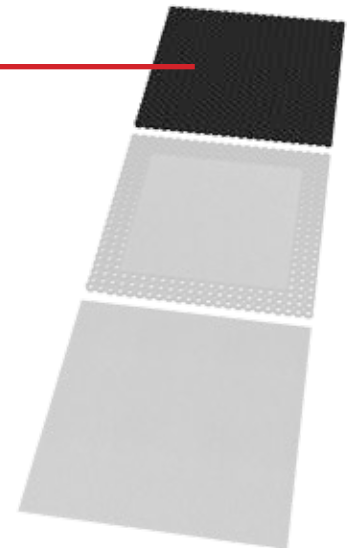


Besides being the first impression to people entering the building, entrance mats perform three main functions:

## **Zone 1: Scrape and trap dirt.**

Over a 20 day period, 1000 people will deposit 24 pounds of dirt. Proper use of entrance matting can reduce the amount of dirt that is brought into the building that would otherwise get trapped in interior carpeting. Brush matting is made from coarse yarns to scrape shoes in transit to remove up to 40% of heavy dirt and debris.

**Zone 1**





# The Zones

2

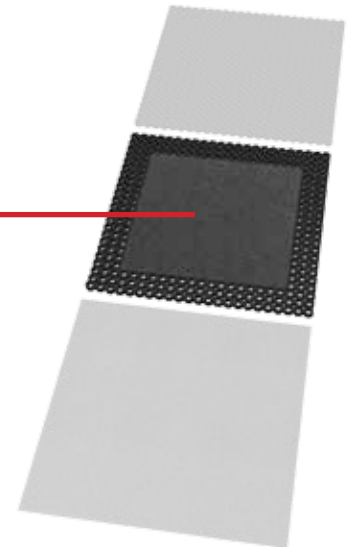


## **Zone 2: Clean shoes to extend floor life.**

The main hazard to carpeting is dirt and soils. Carpet soils have a texture that is similar to a razor, and as carpets are walked on, their fibers can be cut. Within the first 6 feet, 42 % of the floor's finish or carpet nap will be removed after only 1500 people have entered. This shortens the overall life span of the carpet.

Entrance matting absorbs much of the initial abuse to extend the life of the interior flooring or carpeting to protect the investment.

**Zone 2**





# The Zones

3

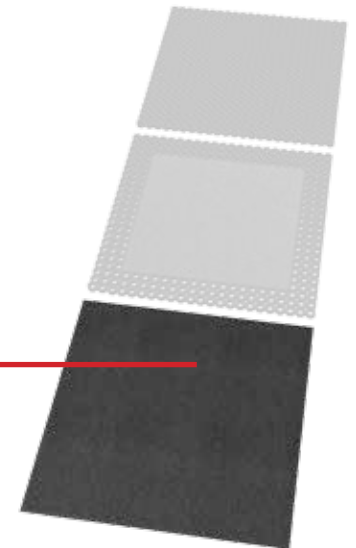


## **Zone 3: Dry shoes to prevent slipping.**

Wet, slippery floors are dangerous. Entrance matting also reduces the risk of slips and falls. The absorbing function of mats dries shoes to prevent slipping. Entrance matting can absorb up to 5 litres of water per square meter to ensure that shoes are dried properly to avoid slips and falls on wet floors. Rubber or vinyl backing that is moisture resistant and slip resistant prevents the mat from shifting to prevent sliding, tripping or falls even further.

It is important to choose entrance matting with these functions in mind to maximize the benefits. For large entrances, a combination can be made of single function entrance mats, brush mats for scraping, combination of brush and absorbent mats for cleaning and absorbent mats for drying. However, smaller entrances of shops and office buildings often do not have the space to allow a full matting system. Not to worry, there are a number of multi-function entrance mats that combine coarse scraping yarns, with softer absorbent yarns to still function effectively in smaller entrances.

**Zone 3**



# Indoor mats



**Large commercial buildings with heavy traffic areas can see as much as 5000 crossings a day. For public buildings with high daily foot traffic, the benefits of a good entrance matting system are very measurable in contributing to improving indoor air quality, improving acoustic performance, extending the useable life of interior floors and reducing maintenance and cleaning costs.**

Properly specifying entrance mats for installation and projects is important to securing all of the benefits. The type, quality and size of the mat installed will vary according to the amount of foot traffic, the use of the building, the environment in which the building is situated and many other factors.

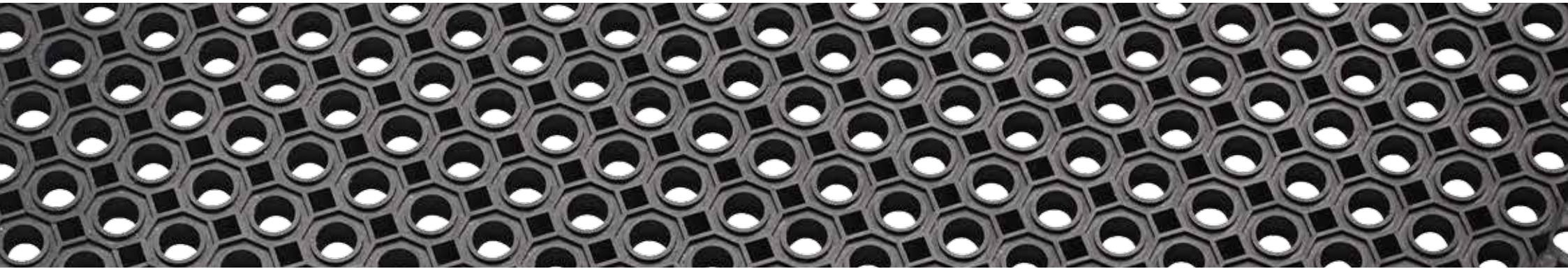
## **Functionality**

Size, material and density play a role in durability, water absorption capacity and dirt removal – the more the better. Polyamide and polypropylene fibres are strong and durable offering brushing and scraping and are crush resistant meaning they hold their structure well making them suitable for large and busy entrances. Crush resistant mats will tolerate more wear and keep their appearance and functionality longer in high traffic conditions. Polyamide has superb absorption qualities yet is also stain resistant.

Shoes should touchdown at least three times on the mat for proper scraping, cleaning and drying. As a rule of thumb, it takes 2 meters of a good textile surface to trap 42% of moisture and dirt, 4 meters should achieve up to 65% and 6 meters up to 90%. LEED also recommends a permanent entryway walk-off system at least 10 feet (3 meters) long (up from 6 feet (1.8 meters) in previous versions of LEED).



# Outdoor mats



**Outdoor entrance mats are the first line of defence against dirt. Over a 20 day period, 1000 people can walk in 9.6 kilograms (24 pounds) of dirt into a building (ISSA). Twelve times as much dirt is tracked in during wet weather conditions based on field tests conducted by BST Laboratory over a 11-month period.**

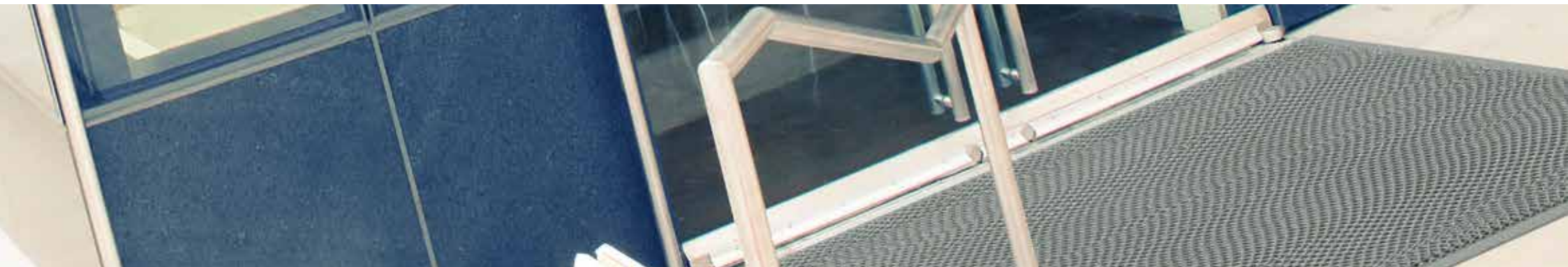
## **Functionality**

Outdoor mats are often constructed in an open, grid or grate design to maximize the flow of water, snow, ice, sand, mud and debris away from the surface to keep the walking area clear. Raised studs allow drainage of water under the mat in all directions. Classic rubber mats include the Oct-O-Mat™ ring mat with its large octagonal ring and the Rubber Brush™ fingertip mat. The weight of the rubber keeps the mat in place to prevent moving or shifting. Newer designs include the next generation Oct-O-Flex™ with smaller octagonal drainage holes that are wheelchair friendly and EU compliant for public entrances.

Notrax® heavy duty rubber compounds are naturally resilient to adapt to any outdoor surface and are extremely waterproof. Extruded PVC offers durable yet flexible material that is ultra violet resistant, oil resistant, and performs well in different climates. The main function of outdoor zone 1 mats is to remove the majority of dirt, mud and grime. Up to 40% of dirt and debris can be removed before entering the building.

Outdoor entrance mats are not absorbent and should be used in combination with an interior matting solution to continue the cleaning and drying of shoes to prevent slips and falls due to slippery floors.

# Installation and customization



## Customization

Entrance matting is manufactured on rolls of approximately 20 meters. Almost all Notrax® products can be customized per linear meter and factory finished, including matched bevelled nosing to finish off the mat. Other special shapes or forms, including circles, half-moons, and arches can be produced for custom installations. All customized matting can be supplied with recommended accessories such as bevelled edging or seaming tape for width-wise expansion.

## Installation

Entrance mats can be installed in large entrances, wall-to-wall, or in recessed matwell frames. A recessed matwell frame is a sunken recess in standard entrances, under automatic doors or rotating doors. The matwell ensures the mat is flush with the floor, provides stability for the mat and helps to contain dirt and debris between cleanings. To ensure a perfect fit of Notrax® entrance mats in the recess, select the proper thickness to ensure the mat is flush with the floor and allows proper door closure. Notrax® Recess Fillers are available in various thicknesses to adjust the depth of an existing recess as needed. For larger entrances where gluing may be required, vinyl compatible double sided-tape or a solvent free adhesive is recommended.



- Entrance mats
- **Mat design and materials**
- Logo mats
- Master Flex modular entrance mat systems
- Mat accessories
- Selecting the right mat

# Materials



## Carpet materials

### **Polyamide (PA)**

are polymers which contain repeating amide,  $-CO-NH-$ , linkages. The best known manufactured polyamides are often called nylons.

### **Polypropylene (PP)**

also known as polypropene, is a thermoplastic polymer used in a wide variety of applications including packaging and labeling, textiles (e.g., ropes, thermal underwear and carpets).

### **Decalon®**

is an exclusive Notrax® yarn constructed of 2750 denier polypropylene fibre. It enables a line of products that provide superb wear resistance, exceptional moisture retention and crisp pattern appearance in coordinating colours.

### **Denier**

is defined as the thickness of the yarn strand. Combined with the face weight (grams of yarn per  $m^2$ ), and the density or volume of yarn strands, It is a critical factor in the performance, quality and durability of an entrance mat.



# Materials



## Rubber materials

### **Natural Rubber NR**

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

### **SBR**

SBR stands for Styrene Butadiene Rubber. It is a synthetic rubber that can be compounded to provide very fine abrasion, wear, and tensile qualities. Notrax® uses SBR as the backing of its heavy duty high performance mat products, molded with grip pattern.

### **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.

## Thermoplastic materials

### **Polyvinyl chloride (PVC)**

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

### **Vinyl**

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.

### **DOP**

stands for Dioctyle Phthalate which is an additive used to cheapen vinyl compounds. It is slowly released into air, leached in to soil, water or liquids/foods. Direct exposure can cause serious health problems. Notrax® compounds are free of toxic DOP.

# Production processes



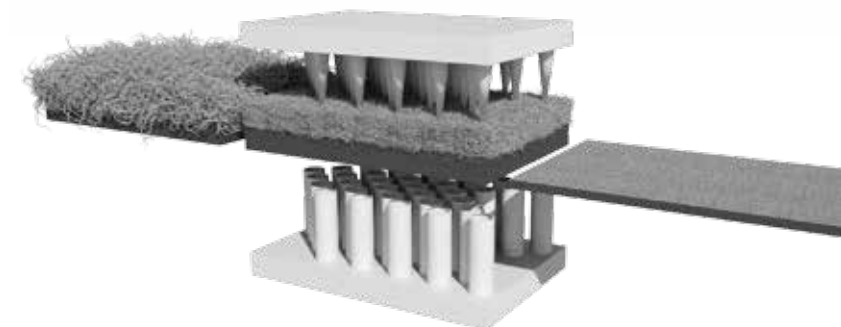
## **Needlepunch**

is a manufacturing process for carpet matting, engineered with a unique blend of 4 Denier thicknesses of polypropylene yarn ranging from very fine to very thick, needle punched products offer good crush resistance.



## **Tufted products**

are sewn into a backing. Notrax™ uses only the very best yarns offering high quality in terms of water absorption and appearance. Tufted products offer broad choice of colours, finishes and patterns.





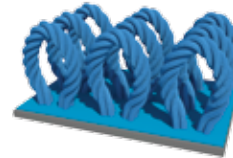
# Surface finishes



Tufted mat  
surfaces are  
finished as loop  
pile or cut loop pile.

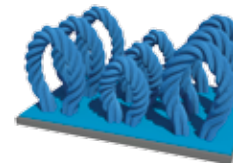
## **Loop Pile**

are tufted loops of yarn to create a stylish finish with a soft, smooth finish. Well suited to heavy trafficked areas and does not show footprints.



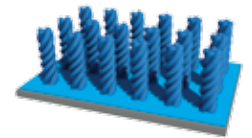
## **Multi-level Loop Pile**

also called high-low loop pile, creates a textured finish of various heights. Can be used in a random or sequenced design to create textures or patterns.



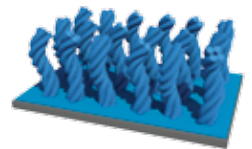
## **Cut Loop Pile - Velours**

are manufactured by cutting the yarn loops which produces an upright pile that has a more luxurious, formal look than loop pile.



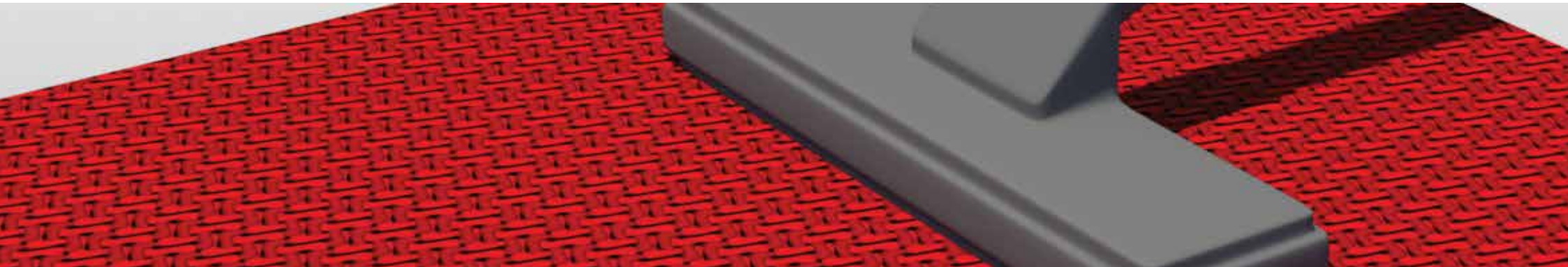
## **Cut Loop Pile - Frieze**

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





# Cleaning & maintenance



**Cleaning and maintenance affect continued effectiveness Entrance mats function optimally when regularly cleaned.**

Permanently installed mats need to undergo regular maintenance and thorough cleaning to remove the build-up of contaminants that could otherwise be tracked throughout a facility. A maintenance schedule should include daily vacuuming of the top surface, especially in heavy traffic areas, to prevent dirt from building up and being ground into the mat. Weekly grooming of the carpet will maximize vacuuming by loosening the fibres and creating easier access to the soil underneath. Monthly injection and extraction cleaning method will clean fibres and remove any leftover dirt.

As with indoor mats, outdoor entrance mats also perform optimally when regularly cleaned, though they do not need to adhere to the strict regimen of daily cleaning and maintenance. Outdoor mats can easily be cleaned by hosing the mat off with water on a regular basis. Also sweep or vacuum under the mat to remove any debris.



- Entrance mats
- Mat design and materials
- **Logo mats**
- Master Flex modular entrance mat systems
- Mat accessories
- Selecting the right mat

# Custom printed logo mats



**BrilliantStep™ high definition printing**  
**Logo mat designs are created and sent for approval. Mat is printed 24 hours after approval is given. No minimum quantities**  
**Logo mat custom services with no minimum quantities, extremely fast service and drop shipment delivery.**

Logo matting provides the option to completely customize a quality dust control entrance mat with the company image, logo or message for powerful branding. The entrance mat becomes a large promotional opportunity to enhance your company identity and truly welcome guests because as they enter most people primarily look to the floor.

High resolution printing for definition, shading, 3D printing effects and photo quality printing. Colour fastness according to DIN 54006.

## **Unlimited colour possibilities**

Extended process colour printing for vibrant, stable colours can be used with any colour matching system.



# Colors



## Unlimited colour possibilities

Notrax® logo mats are printed with an extended process colour printing method that produces vibrant, stable colours with almost infinite colour possibilities. The large colour variations allow vivid colours, superb blacks for stark contrasts, and smooth gradations for infinite shading resulting in exceptional photo quality printing to really make the logo stand out. Multi-coloured logos, complicated designs, artwork and even photos can easily be replicated. Select any of the thousands of Notrax® existing colours, or supply a PMS (Pantone Matching System), RAL (Reichs-Ausschuss für Lieferbedingungen) or other colour matching system codes, and we will do our best to match your colours for a true representation of your branding.

## Match Your Mat™

BrilliantStep™ can also be printed in just one colour to match your mat to any interior design or colour scheme. Uni-coloured mats can also be used together with the custom printed logo mats for a completely colour coordinated matting system.

# Logo mat printing



24-hour production

Logo mat designs

are created and

sent for approval.

Mat is printed

24 hours after

approval is given.

## **No minimum quantities**

Logo mat custom services with no minimum quantities, extremely fast service and drop shipment delivery.

## **High definition printing**

Notrax® uses the latest high definition printing technology, making it easy to print complex logo designs, shading and 3 dimensional effects. Our high resolution printing results in a photo quality print with superior image representation. The sharp definition of fine lines, contours and smooth gradations produces precise details for each mat, creating a truly individual image. The height of the carpet pile enhances the depth of the image for an even richer effect.

- Entrance mats
- Mat design and materials
- Logo mats
- **Master Flex modular entrance mat systems**
- Mat accessories
- Selecting the right mat



# Master Flex™ Modular Entrance System



**Modular multi-  
zone entrance  
matting system  
maximizes the  
benefits of matting**

The Master Flex™ Series design blends the functionalities of a multi-zone entrance matting system with the ease of on-site modular installation into an effective and ingenious matting solution. This full service matting system offers a smooth and harmonious transition from outdoor to indoor as well as from scraping to cleaning to drying. The large quality carpet mat inserts in a variety of colours easily coordinate with the aesthetics of any building and interior design while providing excellent absorption of moisture to dry shoes and prevent slips and falls.

The Master Flex™ entrance matting system offers all the benefits of a matting tile that is easily installed, rearranged or replaced. Made from a durable natural rubber compound that is inherently resilient, anti-slip and withstands the heaviest pedestrian foot traffic. The mat has excellent adherence and adapts to any surface while the raised studs underneath allow water to drain through, keeping the surface clean and dry.



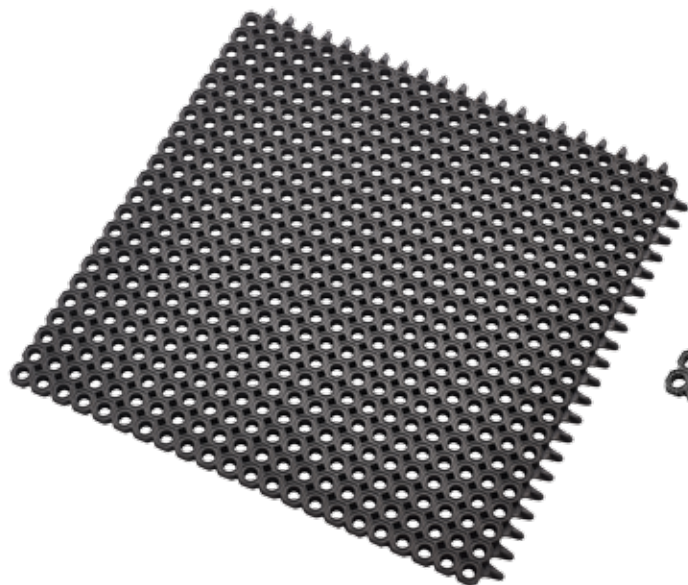
**692 Master Flex HHP™ D12**



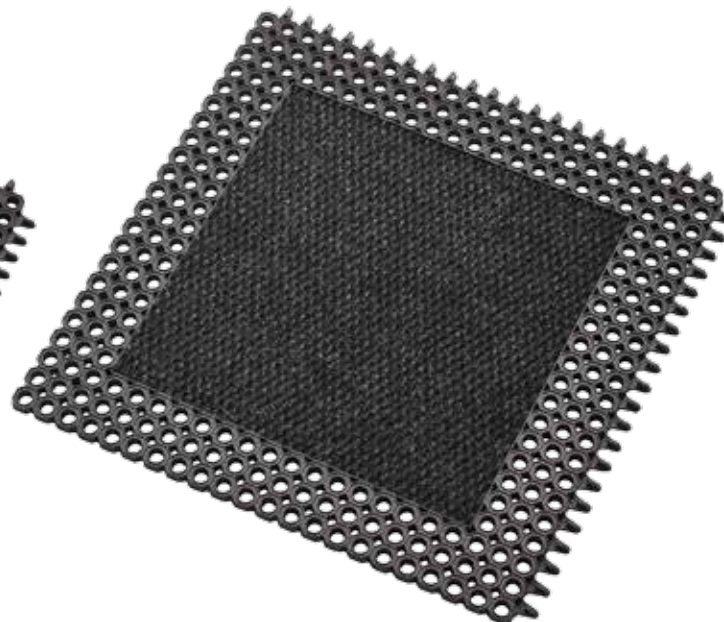
**692 Master Flex HHP™ C12**



**590 Master Flex D23**



**592 Master Flex D12**



**593 Master Flex C12**



**591 Master Flex C23**

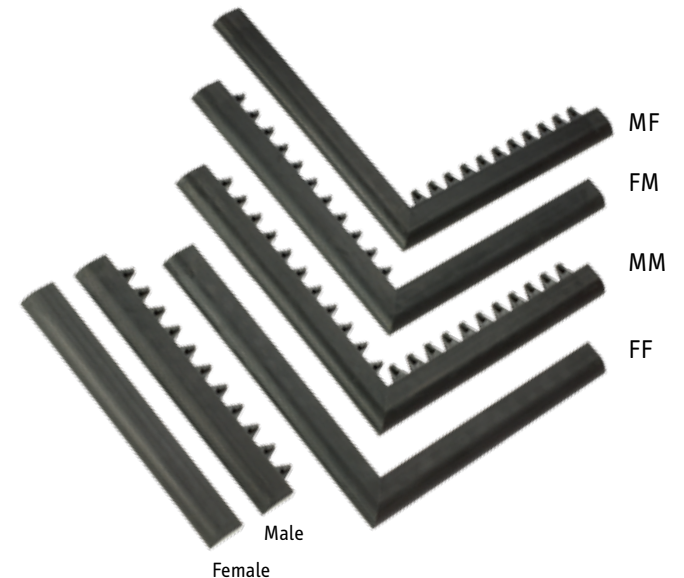
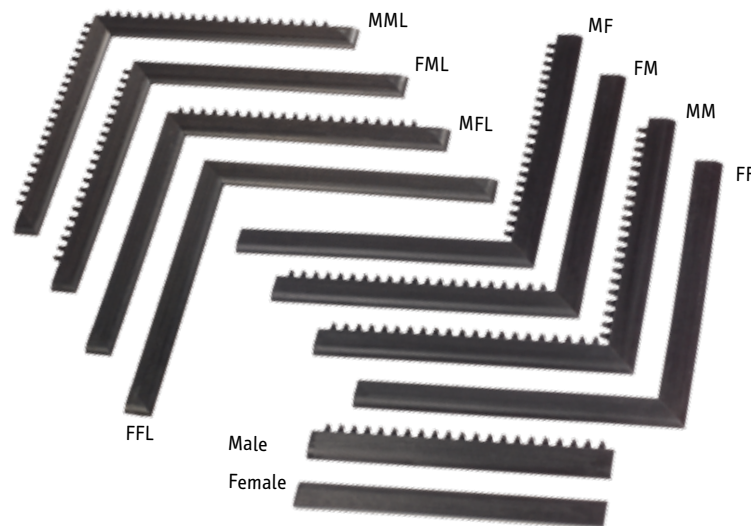


# Master Flex™ Bevels



**597 Master Flex D12/C12™  
Nitrile Safety Ramps**

**596 Master Flex D23/C23  
Safety Ramps**





- Entrance mats
- Mat design and materials
- Logo mats
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- **Mat accessories**
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# Bevels

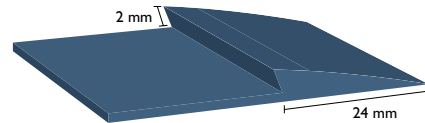


- Easy to apply nosing gives on-site cut mats a factory-finished look
- Apply adhesive to thin side of nosing and attach to back of mat

## Recommended uses:

- Use on custom cut borders to produce a safe and clean bevelled edge

**083**



### 083 Bevelled Nosing 2 mm

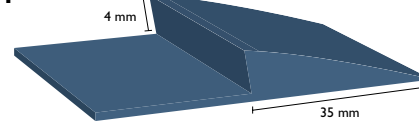
#### Recommended for articles:

- 015, 018, 019, 117, 118, 123, 175, 178, 185, 193, 198, 199, 380, 388, 389

#### Available sizes:

- Full rolls: 45.7 m
- Per linear meter
- Per linear meter mounted

**084**



### 084 Bevelled Nosing 4 mm

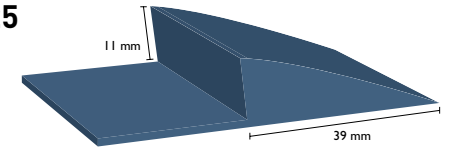
#### Recommended for articles:

- 103, 271

#### Available sizes:

- Full rolls: 30.4 m
- Per linear meter
- Per linear meter mounted

**325**



### 325 Bevelled Nosing 11 mm

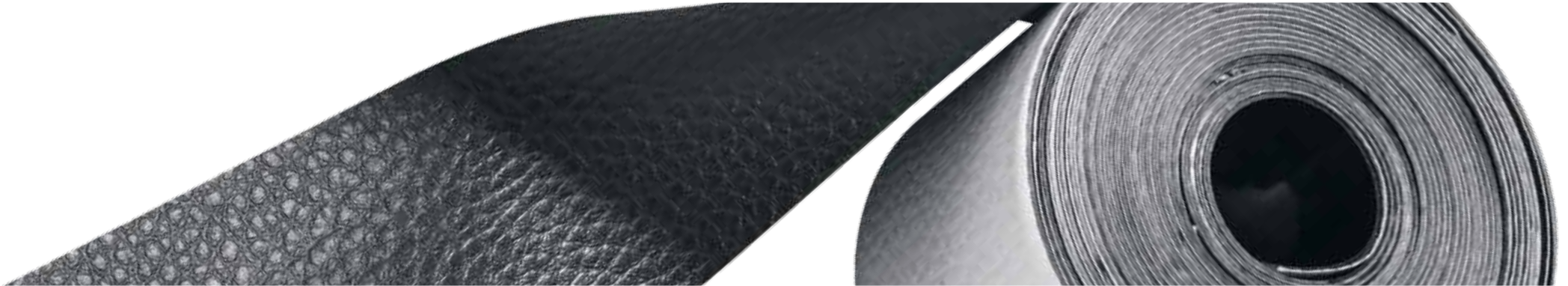
#### Recommended for articles:

- 016, 113, 196, 273, 274, 539

#### Available sizes:

- Full rolls: 18.3 m
- Per linear meter
- Per linear meter mounted
- Available in black and grey

# Mat seaming



## 092 Mat Seaming Tape

- Black vinyl seaming tape with patterned gluing surface for a secure bond
- Embossed protective paper ensures gluing surface remains clean
- Apply Notrax® Glue to patterned side of seaming tape
- It is recommended to seam mats from the same roll in the same direction of the carpet grain for an undetectable seam

## Recommended uses:

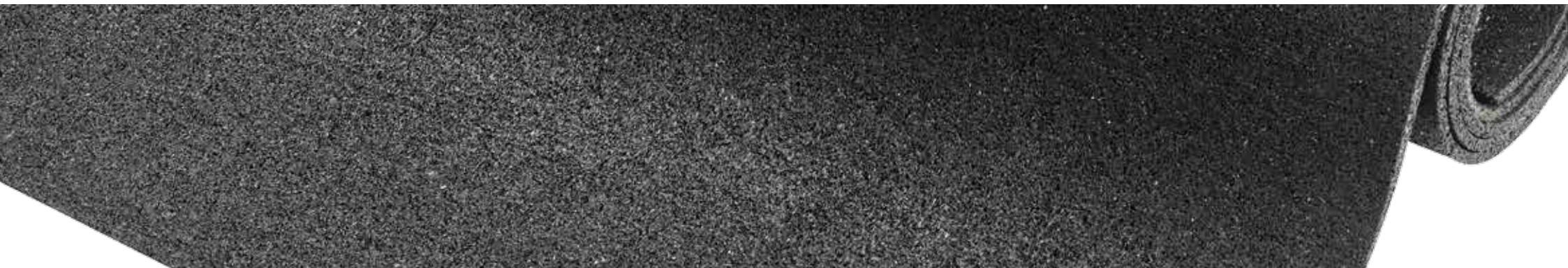
- For widthwise or lengthwise seaming of vinyl backed carpet matting

## Available sizes:

- Full rolls: 5 cm x 45.7 m and 8 cm x 45.7 m
- Per linear meter
- Per linear meter mounted



# Recess fillers



- Used to adjust the depth of an existing recess or matwell frame.
- To ensure a perfect fit in the recess, select the proper thickness so the mat is flush with the floor and allows proper door closure.



## **093 Recess Fillers 6 mm:**

- Full rolls: 120 cm x 10 m
- 120 cm per linear meter



## **094 Recess Fillers 8 mm:**

- Full rolls: 120 cm x 8 m
- 120 cm per linear meter



## **095 Recess Fillers 10 mm:**

- Full rolls: 120 cm x 6 m
- 120 cm per linear meter

# Mat hold



● For use on carpet

For use on hard floor ●

## 090 Mat Hold™

- Needle punched polyester mesh pad adheres to floor and back of mat
- Reversible material. White side down is suitable for use on carpet. Grey side down is suitable for use on hard floors.
- Ensures an almost immobile mat yet does not transfer adhesive to carpet or tile
- Recommended application is to place pad approximately 10 cm from edge of mat bottom surface

## Recommended uses:

- For placement under loose lay mats to prevent indoor carpet mats from shifting

## Full rolls:

- 60 cm wide
- 91 cm wide

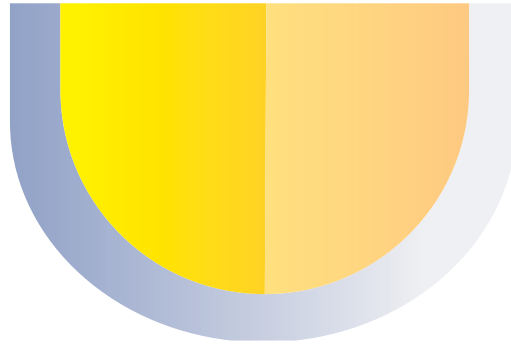
## Custom Lengths:

- Per linear meter in 60 cm or 91 cm widths

- Entrance mats
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# Product Testing Chart



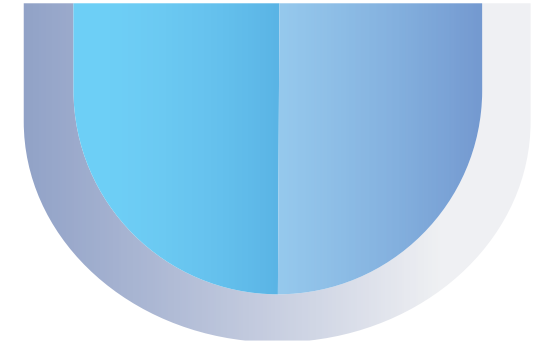
## Water Retention:

Indicates the moisture retention of an entrance mat in actual usage. The higher the pointer in the test chart, the more liters of water per square meter that can be contained within the mat.



## Crush Resistance:

Indicates the time it takes for a mat to lose its attractive appearance and functionality. This test simulates the wear an entrance mat will receive under normal foot traffic. The higher the pointer in the test chart, the greater its resistance to wear and crushing.

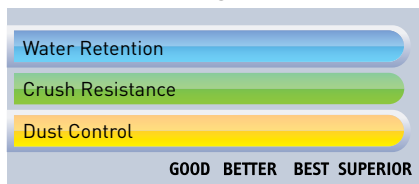


## Dust Control:

Indicates the amount of debris an entrance mat can capture, hold and hide in actual usage. The effectiveness of this function is owed to a combination of manufacturing techniques and the quality of yarns used. The higher the pointer in the test chart, the more debris is scraped off shoes.

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

## Product Testing



# Pictograms



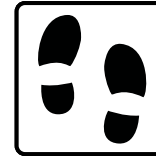
**Indoors**  
For indoor use.



**Absorbing**  
Absorption capacity is measured in litres per square meter.



**Heavy Traffic**  
Suitable for heavy foot traffic conditions in busy public areas, hospitality and commercial environments.



**Dirt Scraping**  
Scraping function removes debris from soles to prevent dirt and grime from entering the building.



**Washable**  
Washable up to 50° Celsius.



**Portico**  
Can be used outdoors in protected, covered or portico areas that are not exposed to rain.



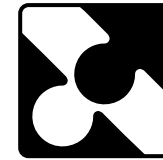
**Drainage**  
Allows water to drain through, leaving a clean and dry surface.



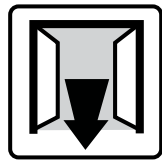
**Medium Traffic**  
Suitable for medium foot traffic conditions in schools, offices and retail environments.



**High Heels**  
Suitable for use with high heels.



**Modular System**  
Interlocking mats allow on-site customization with snap together units that can be assembled in any shape or form.



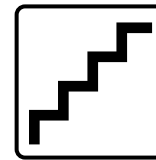
**Outdoors**  
Can be used outdoors in any weather.



**Cold Resistant**  
Can withstand exposure to weather extremes.



**Light Traffic**  
Suitable for light foot traffic conditions in offices and retail shops.



**Stairs**  
Suitable for installation on stairs.

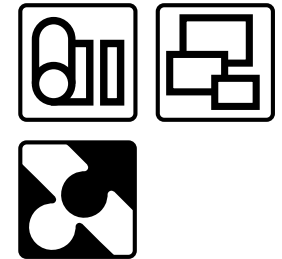
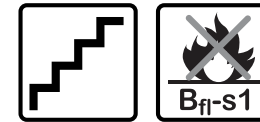
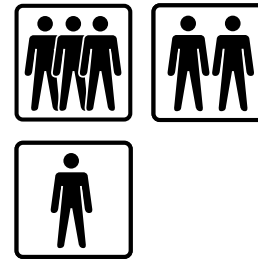
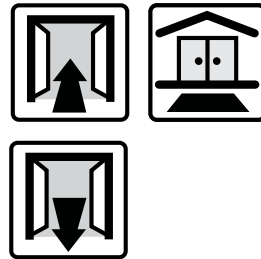
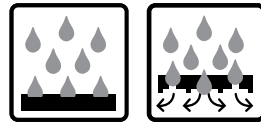


**Fire Retardant**  
Fire rating of Bfl-S1 or Cfl-S1 tested according to EN 13501-1. Matting is designed to resist the spread of fire, substantiated by test certifications from independent laboratories.



**Wheelchair Friendly**  
Smooth top surface or low profile and bevelled edges are ideal for wheelchairs, carts or suitcase wheels.

# Ask the right questions



What questions  
you have to ask  
yourself and in  
which sequence?

## 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 indoor, portico to outdoor environments, the environmental elements will determine the choice of material to ensure the mats can resist extreme weather conditions.

## Intensity of application

Notrax® dust control entrance matting is manufactured to withstand heavy foot traffic in busy commercial environments. Matting is recommended for heavy foot traffic, medium foot traffic, and light foot traffic.

## Special needs

Notrax® mats are manufactured in special qualities to meet specialized applications such as installation on stairs, fire retardant for public buildings, wheelchair accessible.

## Type of installation

Entrances layout can vary for different companies and may require installation in recess frames and mat wells or in and around rotating and sliding doors. Entrance mats are available in standard sizes, linear lengths and modular solutions for large custom configurations.



**[www.notrax.eu](http://www.notrax.eu)**



Notrax® has a full selection of indoor, outdoor and logo mats for professional use. Indoor matting is available in a range of zones, materials and colours to create a total matting solution for clean and safe entrances.

