

# **TireGuard®**

**Basic concept was the TOP guard** - manufactured out different layers of NEW RUBBER and NYLON (strong) pressed together special on Verimpex request.

**TIRE GUARD idea has been developed in England (Great Brittan) during a partnership with Verimpex and his English supplier.**

**Further developments and research done by Marc D'Hont, by traveling around the Globe, collecting information, getting advices, making tests,**

**Cooperation with the Ghent University and other affiliated partners resulted in the nowadays very strong and "green" industrial" and" Residential" strong mats.**

**All-round:**

**Trafic:**

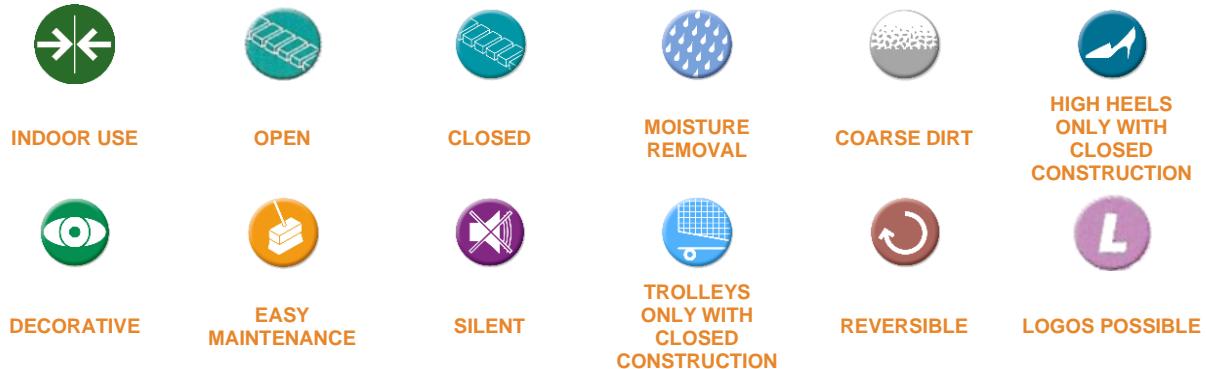
**Rétention des salissures:**

**Récupération:**

## **Characteristics**

The Tireguard® is suitable for heavy-traffic entrance areas and characterised by an attractive price/quality ratio. A distinct feature of the Tireguard® mats is that the rubber strips are recycled from discarded aeroplane tires. A masterly example of the conscious use of environmentally-friendly materials.



### Strong points:

**Structure of the tires are immense strong; recyclable product; think green**

(just watch a Boeing 747 landing.. the pressure that those tires have is enormous)

**Machines and other devices have been developed for- and in order of VERIMPEX.**

**We can use the mat on both sides, is reversible.**

**Good absorbing of moisture – see rubber stripes**

**Ecological entrance mat with excellent durability**

**Water is evaporating through the alu-profiles very quickly**

**Thanks to the alu profiles, this mat is extremely hard-wearing**

**Tire guard represent excellent value for money.**

**Last for 10 YEARS**

**Can be delivered in different colors and is suitable for high level end-users as well in**

**the Industrial Industry as well for the Residential area.**

**A durable and environmentally-friendly alternative for your entrance**

**Can be used as well OUTSIDE as INSIDE**

**We advise to use a double strip, for increased durability; strength; efficiency;**

## Composition

The Tireguard® owes its qualities to the unique combination of moisture-absorbing fibres and scraping profiles. In this mat, the fibres are interwoven in recycled rubber strips. The profiles are available in aluminium or brass. The top and bottom of the mat are identical, which means that rectangular mats can be used on both sides and therefore twice as long.

## Construction

### > closed / single



### > closed / double



### > open / single



### > open / double



- The Tireguard® is in open or closed construction. In case of a closed construction, the dirt remains on the mat, whereas in case of an open construction, the dirt falls between the profiles.
- Closed constructions are more comfortable to walk on.
- The Tireguard® is available with single or double strips. Double drying strips create 30% more drying surface.

## Colours

Profiles >



brass\*



aluminium

Textile >



gris



brun



rouge



noir



bleu



vert



coco

\*only available in 18mm version

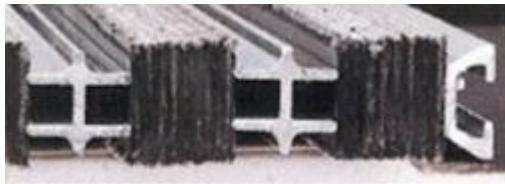
## Technical data

### properties of the materials

	aluminium profiles	brass profiles
Shape	and	and

Height 12 mm version	11.4 mm	
Height 18 mm version	15 mm	15 mm
Maximum permitted line load on aluminium profiles	240 N/mm	
Coefficient of lineal thermal expansion	0.0238 mm/m per °C (± 1 mm per 40 °C)	0.0238 mm/m per °C (± 1 mm per 40 °C)

## rubber strips



The rubber strips are ± 12 mm or ± 18 mm high and 15 mm wide. All strips are made from material recovered from aeroplane tires. The rubber strips consist of rubber layers with continuous layers of textile. The rubber strips contain at least 50% vulcanised rubber from aeroplane tires.

The drying textile consists of :

- 8 textile layers minimum, consisting of nylon
- 7 intermediate layers of rubber
- 2 outer layers of rubber
- weft nylon

rubber sheet	drying textile
Total thickness	14.5 mm ± 0.5 mm
Mixture	rubber

## steel wire (hard, fully cold galvanised steel wire)

Diameter	minimally 2 mm
Galvanisation layer thickness	30 to 35 micron (i.e. 260 gr zinc/m <sup>2</sup> wire)
Hardness	between 1180 and 1370 N/mm <sup>2</sup>

## approximate total weight (in kg/ m<sup>2</sup>)

		aluminium profiles	brass profiles
18 mm	single rubber strips closed construction	16.5 kg	29.5 kg
18 mm	double rubber strips closed construction	16.9 kg	30 kg
18 mm	single rubber strips open construction	15.4 kg	28.5 kg
18 mm	double rubber strips open construction	15.9 kg	29 kg
12 mm	single rubber strips closed construction	12.7 kg	
12 mm	double rubber strips closed construction	13 kg/m <sup>2</sup>	
12 mm	single rubber strips open construction	11.7 kg	
12 mm	double rubber strips open construction	12 kg	

## Tests

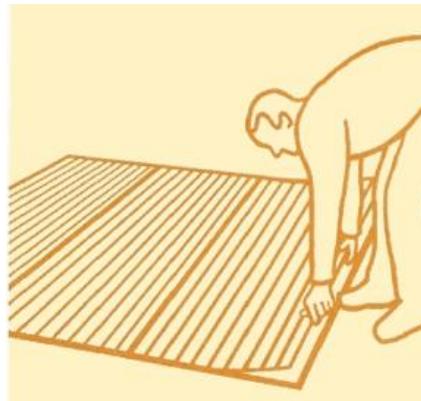
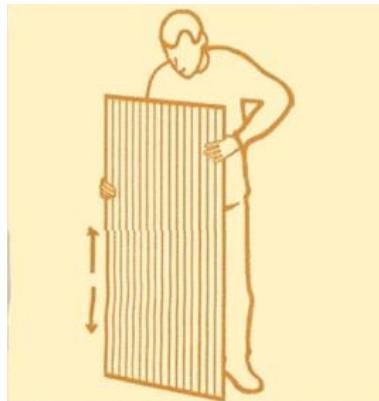


All tests were carried out by the University of Ghent, textile department. A copy of the official test results is available upon request. Samples of materials subjected to the stringent wear test (Wronz test) are available for inspection at Verimpex, Brugge.

	<b>in general</b>	<b>aluminium profiles</b>		<b>brass profiles</b>	
Fire (in walking direction)	pr EN ISO 11925-2 pr EN ISO 9239-1	Class B		Class B	
Smoke	Classification according to Pe EN 13501-1 (2000)	S 1		S 1	
Light Wronz	ISO 105 B02 (1994) Value 25,000	Class 5-8		Class 5-8	
Moisture absorption test	report 02-787 A	Extra weight compared to dry state Tireguard® single Tireguard® double	wet gr/m <sup>2</sup> gr/m <sup>2</sup>	after 1 hour gr/m <sup>2</sup> gr/m <sup>2</sup>	after 24 hours gr/m <sup>2</sup> gr/m <sup>2</sup>

## Execution

<b>height</b>	<b>installation</b>	<b>well depth</b>
12 mm	in a matwell	15 mm
18 mm	in a matwell	20 mm



### production

The mat is made to size in the factory. The mat is made in different sections, each with a stride length of 35 cm to 65 cm maximally. The different sections are placed together to obtain the required size of the mat. The layout and the arrangement of the different sections are determined in consultation with the manufacturer. In case of broad surfaces, the sections are placed next to one another and separated by a reversed T-shaped profile. The width of the mats is determined on the basis of aesthetic considerations and required functionality.



## Maintenance instructions

Regular maintenance	<ul style="list-style-type: none"> <li>Sweep the mat with a broom or vacuum in the direction of the profiles (not perpendicular to the direction of the profiles).</li> </ul>
Periodic maintenance	<ul style="list-style-type: none"> <li>Remove the mat from the matwell.</li> <li>Vacuum the matwell and the mat thoroughly.</li> <li>Carefully replace the mat.</li> </ul>
Thorough maintenance	<ul style="list-style-type: none"> <li>Sweep the mat with a broom or vacuum in the direction of the profiles (not perpendicular to the direction of the profiles).</li> <li>Remove the mat from the matwell.</li> <li>Vacuum the matwell and the mat thoroughly.</li> <li>Clean the mat with a high-pressure cleaner, a garden hose or a hard scrubbing brush, in combination with water and a universal detergent.</li> <li>Let the mat dry completely (preferably in an upright position).</li> </ul>



Thoroughly vacuum the Tireguard® mat and the matwell in the direction of the profiles (not perpendicular to the direction of the profiles).

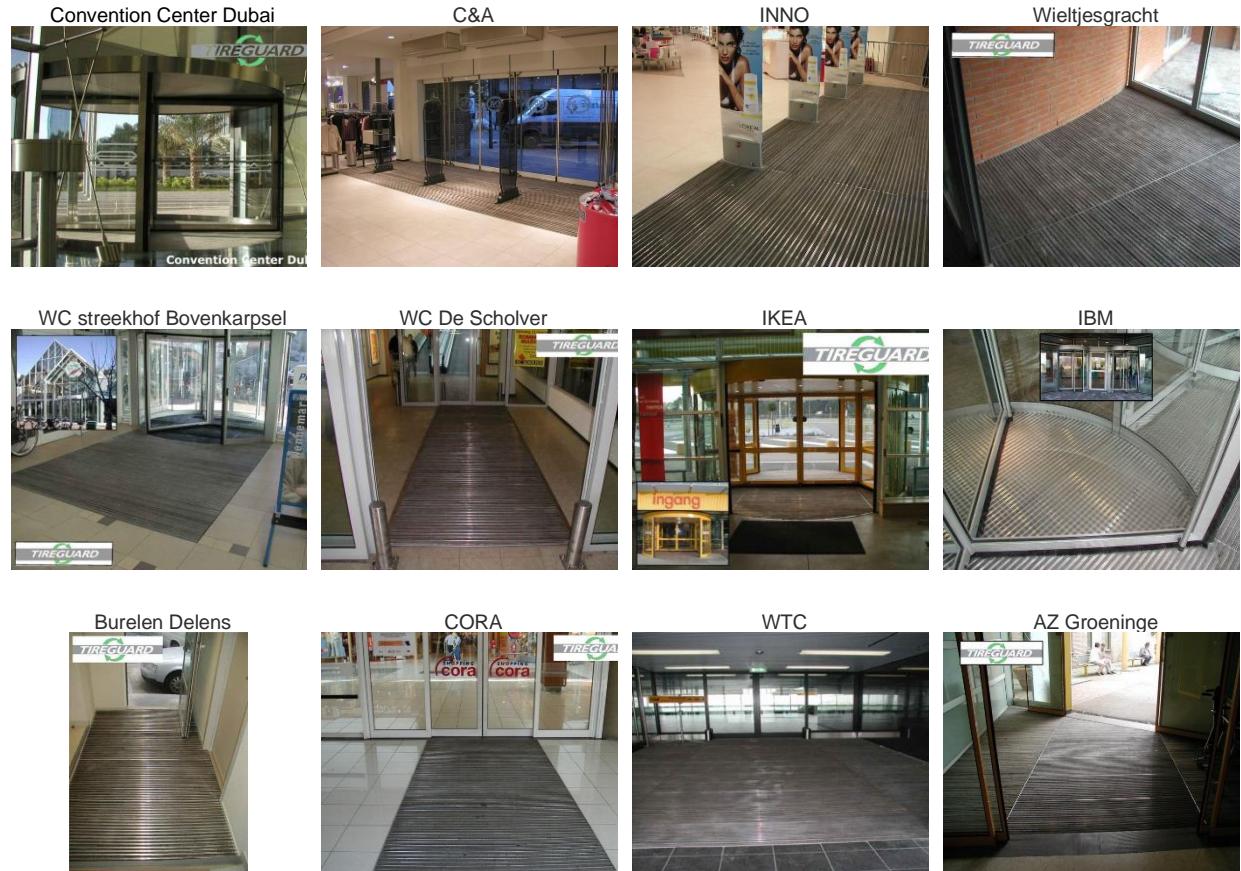


Clean the mat with a high-pressure cleaner, a garden hose or a hard scrubbing brush, in combination with water and a universal detergent. Let dry completely, preferably in an upright position.

## Warranty

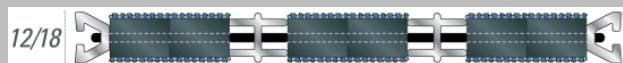
10 years for structural defects in case of normal use is offered in accordance with the warranty conditions.

## References



## Specifications

height	Profile	Textile colour	reference
<b>TireGuard® closed single</b>			
12 mm	ALU	grey textile	
18 mm	ALU	grey textile	
18 mm	Brass	grey textile	
12 mm	ALU	coloured textile	
18 mm	ALU	coloured textile	
18 mm	Brass	coloured textile	
12 mm	ALU	black rubber	
18 mm	ALU	black rubber	
18 mm	Brass	black rubber	

**TireGuard® closed double**

12 mm	ALU	grey textile
18 mm	ALU	grey textile
18 mm	Brass	grey textile
12 mm	ALU	coloured textile
18 mm	ALU	coloured textile
18 mm	Brass	coloured textile
12 mm	ALU	black rubber
18 mm	ALU	black rubber
18 mm	Brass	black rubber

**TireGuard® closed single with edge profiles**

12 mm	ALU	grey textile
18 mm	ALU	grey textile
18 mm	Brass	grey textile
12 mm	ALU	coloured textile
18 mm	ALU	coloured textile
18 mm	Brass	coloured textile
12 mm	ALU	black rubber
18 mm	ALU	black rubber
18 mm	Brass	black rubber

**TireGuard® closed double with edge profiles**

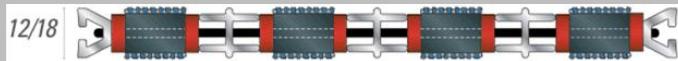
12 mm	ALU	grey textile
18 mm	ALU	grey textile
18 mm	Brass	grey textile
12 mm	ALU	coloured textile
18 mm	ALU	coloured textile
18 mm	Brass	coloured textile
12 mm	ALU	black rubber
18 mm	ALU	black rubber
18 mm	Brass	black rubber

**TireGuard® single with edge profiles**

12 mm	ALU	grey textile
18 mm	ALU	grey textile
18 mm	Brass	grey textile
12 mm	ALU	coloured textile
18 mm	ALU	coloured textile
18 mm	Brass	coloured textile
12 mm	ALU	black rubber
18 mm	ALU	black rubber
18 mm	Brass	black rubber

**TireGuard® double with edge profiles**

12 mm	ALU	grey textile
18 mm	ALU	grey textile
18 mm	Brass	grey textile
12 mm	ALU	coloured textile
18 mm	ALU	coloured textile
18 mm	Brass	coloured textile
12 mm	ALU	black rubber
18 mm	ALU	black rubber
18 mm	Brass	black rubber

**TireGuard® open 4 mm single**

12 mm	ALU	grey textile
18 mm	ALU	grey textile
18 mm	Brass	grey textile
12 mm	ALU	coloured textile
18 mm	ALU	coloured textile
18 mm	Brass	coloured textile
12 mm	ALU	black rubber
18 mm	ALU	black rubber
18 mm	Brass	black rubber

**TireGuard® open 4 mm double**

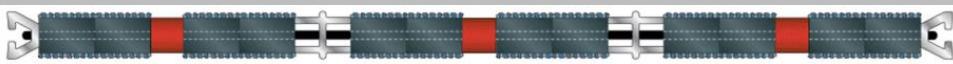
12 mm	ALU	grey textile
18 mm	ALU	grey textile
18 mm	Brass	grey textile
12 mm	ALU	coloured textile
18 mm	ALU	coloured textile
18 mm	Brass	coloured textile
12 mm	ALU	black rubber
18 mm	ALU	black rubber
18 mm	Brass	black rubber

**TireGuard® open 10 mm single**

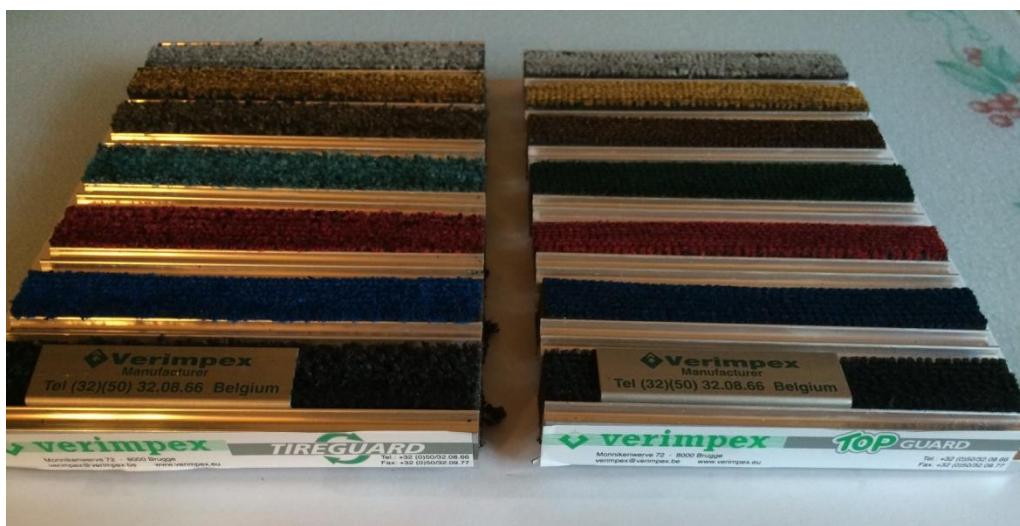
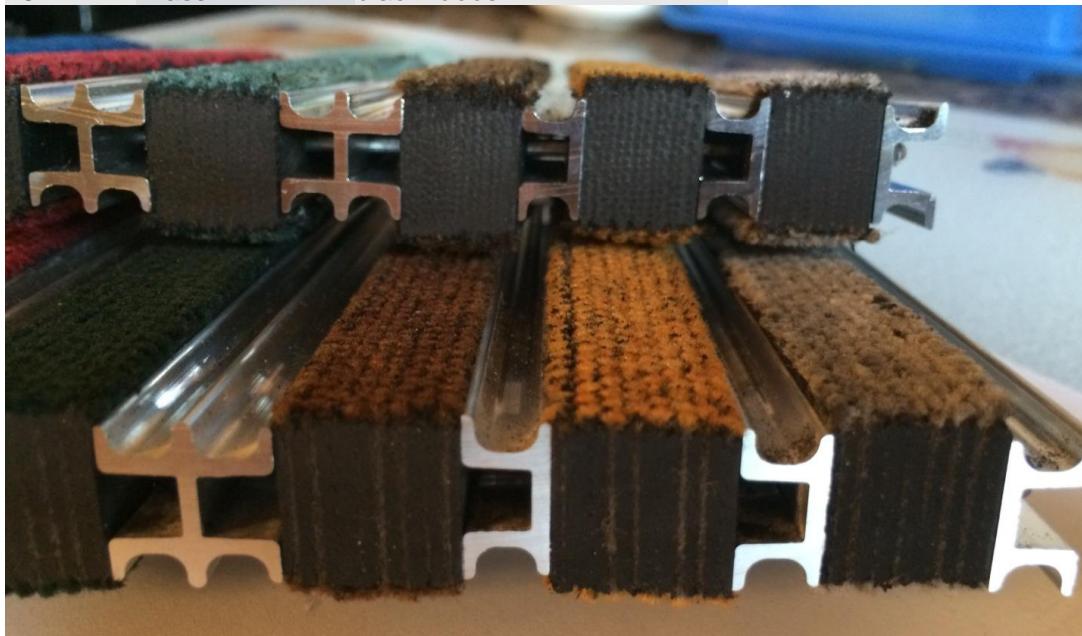
12 mm	ALU	grey textile
18 mm	ALU	grey textile
18 mm	Brass	grey textile
12 mm	ALU	coloured textile
18 mm	ALU	coloured textile
18 mm	Brass	coloured textile
12 mm	ALU	black rubber
18 mm	ALU	black rubber
18 mm	Brass	black rubber

### TireGuard® open 10 mm double

12/18



12 mm	ALU	grey textile
18 mm	ALU	grey textile
18 mm	Brass	grey textile
12 mm	ALU	coloured textile
18 mm	ALU	coloured textile
18 mm	Brass	coloured textile
12 mm	ALU	black rubber
18 mm	ALU	black rubber
18 mm	Brass	black rubber





De haute qualité, durable et durable. Tireguard est un tapis d'entrée unique avec des profils de racloir et des bandes de séchage en caoutchouc recyclé provenant de pneus d'avions. Les différentes versions sont parfaitement utilisables sous une forme symétrique. La haute résistance de Tireguard est le tapis d'entrée idéal pour la pression. Par exemple dans les écoles, les centres commerciaux et les aéroports

- Double bandes textiles possibles pour une absorption accrue de l'humidité
- Les bandes textiles sont également disponibles en différentes couleurs (noir, vert, rouge, bleu, marron, ...)
- Profils intermédiaires disponibles en aluminium, aluminium anodisé ou laiton
- La structure ouverte assure une bonne évacuation de l'humidité et de la saleté pour les conditions les plus difficiles

La grille d'entrée TIREGUARD est unique, durable, de haute qualité et esthétique. Fabriqué à partir d'aluminium recyclé et de pneu d'avions. En plus d'offrir une absorption accrue de l'humidité, elle offrira une haute résistance idéale pour les endroits de grands passages comme les écoles, les centres commerciaux et les aéroports. Aussi, très prisé pour les bâtiments verts optant pour des produits fabriqués localement pour une image corporative contemporaine et respectueuse de l'économie durable. Ce tapis améliorera l'efficacité de l'entretien de votre bâtiment, c'est garanti!