

# **Certifications**

Years of market experience has enabled Mat.en to understand what are the real needs of their clients and to follow paths which has led to achieve credits and certifications that proves the quality of products and processing.

Mat.en didn't just do this but has made collaborations with external institutions, such as University and design and architecture stuides, to develop prototypes and to get important data about the strenght of their profiles or their rendering to be included in the autocad projects.

# Quality Certification ISO 9001:2015

Since 2000, first as Arwei Italiana and then as Mat.en, the company is certified ISO 9001:2015 quality.

# Non-slip Certification Standard DIN 51130

Mat.en technical mats have been tested to slipping by the inclined ramp method achieving very satisfactory results (R12 for the needle punched and R13 for the nylon brush).

# CE Marking and DOP EN 14041:2004 Licensing

The FIREPLATE finish on the technical mats allows their marking and the release of a DOP (Declaration of Performance) according to the EN 14041:2004 regulation necessary for the LEED projects.

# Recycled Components ISO 14021

The Mat.en technical mats are built with the environment in mind and in every one there is an important amount of recycled material (pre and post-consumer).

The pre-consumer material is defined as material diverted from waste stream during the manufacturing process. The post-consumer material is defined as waste material generated by households or by retail, industrial, institutional spaces in their role as product end-users, which can no longer be used for its purpose. The content of recycled material is defined in accordance with the international standard ISO 14021 – Labels and environmental declarations.

# Certificazione Ignifuga EN 13501-1

Su diversi profili e con rivestimenti specifici è disponibile la versione FIREPLATE in classe ignifuga Bfl-s1.

## **Mapping LEED® v4**

More and more buildings are built following the LEED, BREEAM or WELL protocol, where, between the various requirements, are scheduled rollable mats, cleanable and regenerable and that emit a low VOC content. Mat. en technical mats are suitable and provided of LEED mapping realized in collaboration with the TUV institute.

## Study of Static and Dynamic range of Technical mats

The design of new aluminium and pvc profile was performed in collaboration with DICATAM engineers department – Department of Civil, Environmental, Architectural Engeneering and Mathematics of the University of Brescia with which were also performed dynamic and static flow test over all aluminium profiles of Maten's mats.

## **VOC emissions**

The technical mats with FIREPLATE finish have been tested according to the Indoor Air Comfort GOLD ® protocol obtaining excellent results: A+ class for the French VOC Regulation, the exemplary level of BREEAM International and the approval according to AgBB, LEED V 4.1 BETA, Belgian Regulation, Italian CAM Edilizia protocols.

(The certification refers to the entire technical mat).





The new operational HQ Mat.en in Artogne (BS)

## Introduction

Entrance matting are the flagship of the artisanal production and totally Made in Italy of Mat.en.

The mats and their profiles are draw, assembled and totally shape in the headquarters of Artogne and Piamborno (BS) and for their realization are used only european raw material (over 70% from Italy).

The Mat.en's entry sistem are suitable for the protocols: LEED, BREEAM and WELL and they are certificates fireproof Bfl-s1 version FIREPLATE.

Large attention is given also to the environment with the use of recycled aluminium coming from the waste of processing and from aluminium carpets retired and recycled correctly (PROMO-ROTTAMAZIONE project) through a new extrusion of profiles, of ecological painting and coatings in natural fibers or with needled Econyl derived from the rescue of the disused fishing nets.

Thanks to the different tickness avaiable (12,17 or 25mm), to the

double width of the profiles (23 or 41mm), to the section of themself (1,2 e 2,2mm), to the different materials (aluminium, recyled aluminium or PVC), to the different coatings (Velvet or Aran needle punched, black rubber, nylon, brush, knurled aluminium and ecologic felt) Mat.en's range of products is suitable for any situation and transit.

The possibility of customization with wood effect (DECO project) or photoluminescent (SAFETY project) or that of making inlayed brand in inlay or laser engravings of your own brand make them, in addition to being an effective cleaning tool, an excelent communicative vehicle.

Thanks to the non-split certification DIN 51130 and to the trailerable ramps, mat.en's carpets are safe and rule of law.

Related to a series of useful accessiories in order to have a perfect installation of the mats or for

added functionality every mat are heel-proof, rool-up and replaceable in every single part of them.

Mat.en's entrance matting are made through the combination of 4 elements thanks to which you can produce the ideal mat for each entrance and transit.

## **SCRAPPING PROMOTION**

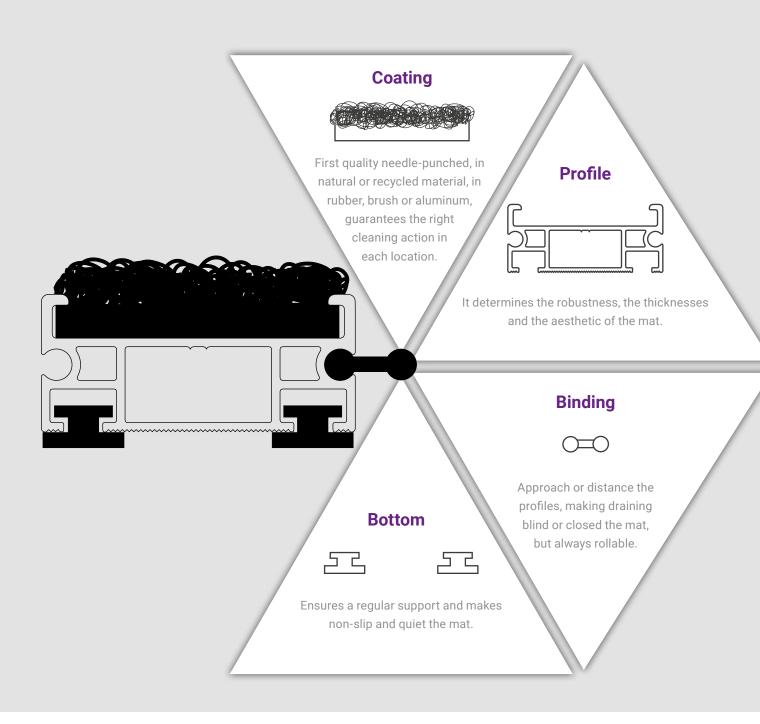
Mat.en offers to its customers the opportunity to receive, no cost of transport, a new technical mat pledging to: withdraw, disassemble and processing facilities free of charge the old aluminium carpet (if of own production) making new profiles in recycled aluminium. A concrete way to provide a service and help the environment.

## THE ART OF CUSTOMIZATION

The attention to details, the choice of raw materials of exceptional quality, the taste of design and the customization are the 100% manifestations of the spirit of Mat.en's carpets, totally designed and made in Italy.

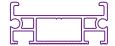
# The 4 components

# of the Mat.en's Entrance Matting System



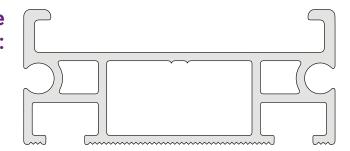
For all the components are foreseen one or more variants the use of which allows to obtain a fireproof Bfl-s1 certificated mat.





# **▲** Profile

The supporting profile is the heart of the mat and determines: robustness, thickness and aesthetics and it's available in aluminium (primary or recycled) and in PVC.



**ALUMINUM** is the most suitable material for the realization of technical mats thanks to its lightness combined with a remarkable sturdiness and with the possibility to realize very precise extrusions.

Matens uses very high quality aluminium producing their own profiles from primary billet with alloy AW 6060.

The traditional "narrow plank" (23mm) which guarantees an excellent drainage has recently been flanked by the new "wide planks" (41mm) that renews the aesthetics of carpets, improves the cleaning action and absorbent and better lends to the increasingly important sized of technical mats.

For particularly heavy loads (forklift trucks, transpallet ecc..) is possible to use a reinforced profile in which the average thickness of the section was raised from 1.2mm to 2.2mm exponentially increasing the static and dynamic capacity of the carpets.

In a more and more green optic Mat.en as since some years started the project PROMO-SCRAPPING that consists in the withdrawal of old aluminium technical mats, togetgher with the laying of the new ones.

The exhausted carpets are dismantled and divided by components and the aluminium, together with the metal resulting from processing waste and extrusion, is used to create new profiles in **RECYCLED ALUMINUM** with the same mechanical characteristics of the extrused ones by primary billet.

Rods made from recycled aluminium are used to create the new product line marked by the letter R.

The scratch-resistant and shockproof state-of-the-art PVC is a throwback for the technical mats that until the beginning of the 90s were made using plastic rods then supplanted by the versatile, robust and economic aluminium.

Plastic now returns to be a suitable element for the realization of the profiles of the mat beacuse it solves the problem due to the presence of aluminium technical mats in the wells in which anti-theft antennas have been installed and allows also to realize technical mats very light and easier to shape as well as offering a less technical aesthetic thanks to the profile available in two colors: lead gray and black.

The PVC also make the mat suitable for immersion in tank containing sanitizing solutions dedicated to the sanitization of the sole.

#### **AVAILABLE CUSTOMIZATIONS**

For the profile element are available some customizations like: the anodization, the RAL\* ecological painting and the DECO\* one or photoluminescent for the aluminium, while for the plastic can be realized the extrusion in any RAL\* color.

\* for the realization are requestend minimum quantities to evaluate.

## **Aluminum**

Profiles realized in aluminium AW 6060 from primary billet.

# RECYCLED VERSION (R)

On request all profiles are available in recycled aluminium (65% certificated).

## **Ultraplate 12**

thickness with coating 12mm

## Plate 17

thickness with coating 17mm

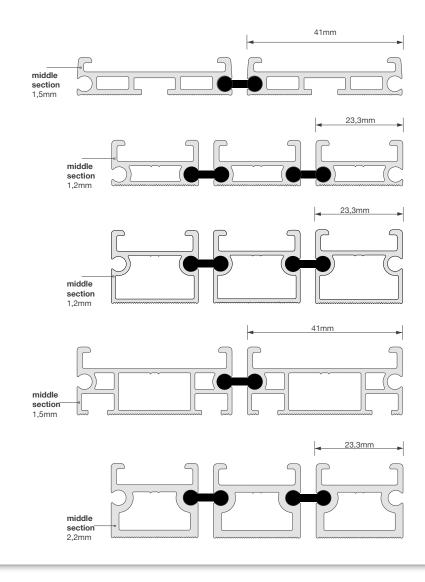
Plate 25

**Luxury 25** 

thickness with coating 25mm

Strong 25

Draining mats of aluminum hollow sections.



**PVC** 

This profile is available in scratch-proof and shockproof PVC. Available, on request, in RAL color (requested minimum quantity).

## Plastik 17

thickness with coating 17mm

Draining mats of PVC hollow sections.







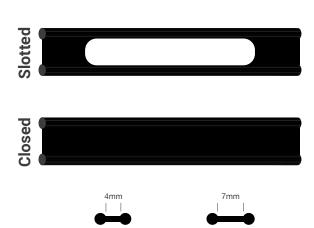






The junctiong allows the union between the profiles of the mats.

The principal solution used is the duct, realized in PE-hd which ensures its streights and the possibility to be recycled with only 5mm distance.



The duct is available in **4 different models** that differ in width and slotting.

The width of this elemet affects the distance between the profiles that can be 7mm (standard finish) or 4mm except for the Plastik 17 only available with 5mm distance.

The 7mm finish is particularly suitable for large entrances where the carpet has to have a large draining capacity of water or dirt while the staves close together at 4mm are more suitable where you want a better aesthetic of the product and a greater absorbent and cleaning capacity (+10%).

Both distance keep the characteristic of all Mat.en technical carpets to be anti-heel esuring safe transit of doormats for all users.

The slotted channel unload dirty and water on the bottom of the cockpit icreasing the ability to hold the same by the mat and to discharge the liquids on the bottom or in any discharges where provided, while the lack of slotting (closed channel) makes the carpet cleaning easier making the aspiration sufficient and avoids during the passage, the view of an unsightly flooring.

All tying systems guarantee the possibility of disassemble and replace every part of the technical mat and guarantee its roll-up.

# Junction EPDM FULL



The junction in EPDM FULL rubber allows to assemble profiles with thickness of 25mm creating a blind and flat technical mat.

The contribution on the scope of this element is very relevant and the realization of techenical mat with this type of element are particularly suitable for entrances where is expected the transit of shopping carts for escalators (therefore with particularly thin wheels) solving in a definite way the problem of stuck wheels between the slats of aluminium.

# Coating



The coating is the noblest part of the mat and the one that determines: location and cleaning action.

Mat.en offers a wide range of inserts which an also be combined with each other for a combined action and even more effective.

## Available in:

Ultraplate 12

Plate 17

Plate 25

Strong 25

Luxury 25

Plastik 17

# SUGGESTED LOCATION:

**▼** Indoor

▼ Covered outdoor

# **Velluto**







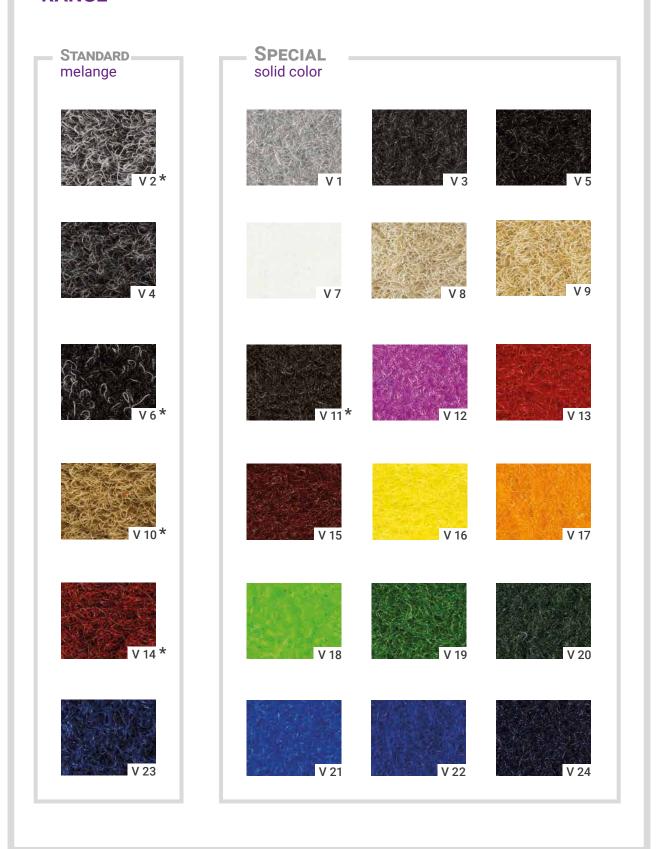
It's the principal used coating on the technical mats thanks to its historicity, to its versatility and to the range of color particularly wide. Realized with 100% polypropylene high quality filament welded on a rubber (100% recycled) per an intense use guarantees a long coating life, an excellent drying of the sole and a good cleaning from the finest dirt. The VELLUTO coating is available in 24 colors of which 6 melange and 18 monochrome resulting ideal for the realization of classic and functional mats but also for high-impact carpets or very colorful inlay brands (the Ultraplate 12 product is realized without bottom and is available only in the colors shown\*). The VELLUTO coating is cerificated to fire in Cfl-s1 class and has a coefficient of resistance to abrasion of 4 class in accordance with the ISO 105×12 regulation. The slipperiness of the technical mats that mount this coating is R-12 (in accordance with the DIM 5110 regulation).







# **Color** RANGE



#### Available in:

Plate 17

Plate 25

Strong 25

Luxury 25

Plastik 17

# SUGGESTED LOCATION:

**▼** Indoor

▼ Covered outdoor

## **Aran**







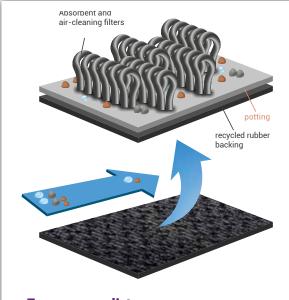
Is the new superficial finish of the needle-punch selected by Mat.en to increase the cleaning capacity and the fine/mid dirty removal of technical mats.

Has the same characteristics and certifications of the VELLUTO but the almondy processing obtained twisting the fiber makes it more robust and scraping.

ARAN is available in 5 melange colors and 1 monochrome.

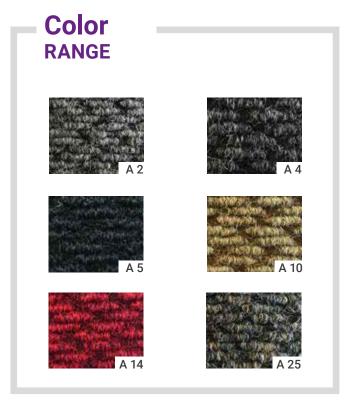
Is particularly suitable for those who want to combine the needle-punch to the rubber or brush coating, the ARAN coating is certified to fire in Cfl-s1 class and has a coefficient fo resisteance to abrasion 4 class in accordance with the ISO 105×12 regulation.

The slipperiness of the technical mats that mount this coating is R-12 (in accordance with the DIM 5110 regulation).



## For coarse dirt

The needle-punch of the tidy 100% PP UV fiber creates an almondy effect that increase the robustness of the fiber and it results ideal for drying and cleaning of fine/mid dust. The resin bonding it to a 100% recycled rubber.







### Available in:

Luxury 25

## **SUGGESTED** LOCATION:

**▼** Indoor

# **Ecoclean**



The GREEN Mat.en doormat is realized using exclusively Econyl filament derived from the recovery of discarded finishing nets.

The 100% polyamide fleece is glued on a PU (polyurethane) bottom totally free of PVC (PVC FREE). The high quality of the fiber guarantees an utilization class 32 (EN 1307 regulation) and a coefficent fo resisteance to abrasion 4 class in accordance with the ISO 105×12 regulation.

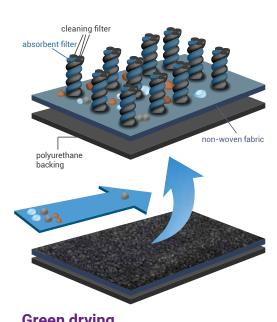
Ecocleans is also able to absorb up to 5.7 litres of water per square meter and is certified to fire in Cfl-s1 class.





# Color **RANGE**





## **Green drying**

Realized through the interweaving of 4 threads (3 dedicated to the cleaning and one to the humidity absorption) inserted in a primary fund non-woven and then glued on a polyurethane base (100% PVC FREE).

## SUGGESTED LOCATION:

- **▼** Indoor
- ▼ Covered outdoor
- **▼** Outdoor

## **Brush**



## Available in:

Plate 17 Plate 25 Strong 25

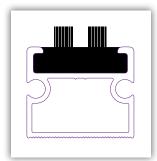
Plastik 17

The brush coating born to remove the fine dirt like pebbles or small stones and preserve the floors of greater value (resins, parquet..).

Realized through the punching of monofilament nylon tufts of 0.3mm section is extremely long-lasting and efficient therefore is suggested to use it in combination with other coatings that complete its cleaning action.

The carpets realized with the brush are particularly non-slip and they got the top class R-13 (in accordance with the DIN 5110 regulation).

The brush coating is used also for the realization of the **Safeway** lanes for the visually impaired and fire exits.



# Rubber

## Available in:

Ultraplate 12 Plate 17

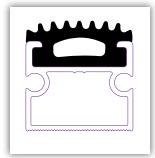
Plate 25 Strong 25

Plastik 17

The EPDM compound 80 sh A and the knurled finishing make this coating ideal for outdoor or covered outdoor locations.

The rubber in fact, is easy to clean and doesn't fear rain or snow.

The principal function of this coating is to scrape the sole removing mud and coarse dirt, preparing it for subsequent drying.



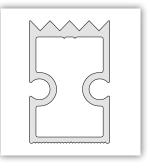
# Scrape



### Available in:

Plate 25 Strong 25 Realized in knurled recycled aluminium has similar characteristics to those of the rubber coating but, thanks to its aluminium structure, considerabily increases the range of the mat inside which it's inserted.

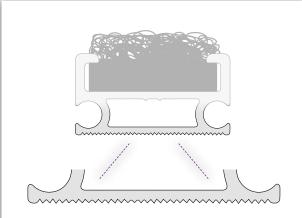
Its being totally in metal makes it suitable for profile customization that can be coloured in the RAL scale, with DECO effect or photoluminescent making it an essential elemnt in the **Safeway** lanes.









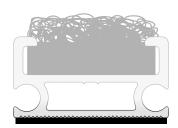


## **Knurled BACKING**

Standard finish on all the pvc profiles and primary or recycled aluminium (except for the Luxury 15 article) suitable for all needs able to quarantee excellent weight unload results.

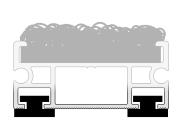
The backing is the part of the mat in direct contact with the floor whose main purpose is to ensure a flat support and unload as smoothly as possible the weight in transit over the carpet.

Mat.en profiles have always been equipped with a non-slip knurled aluminium bottom that fully performs the required functions making the mats safe and robust. The presence of non-flat wells, the increasning dimensions of the compasses and very heavy traffic generated the request for an element that could reduce the sound of trampling and smooth out small irregularities of the floor, this is how the finishes are born: aciustic foam and soft PVC legs.



## **Insulating Foam BACKING**

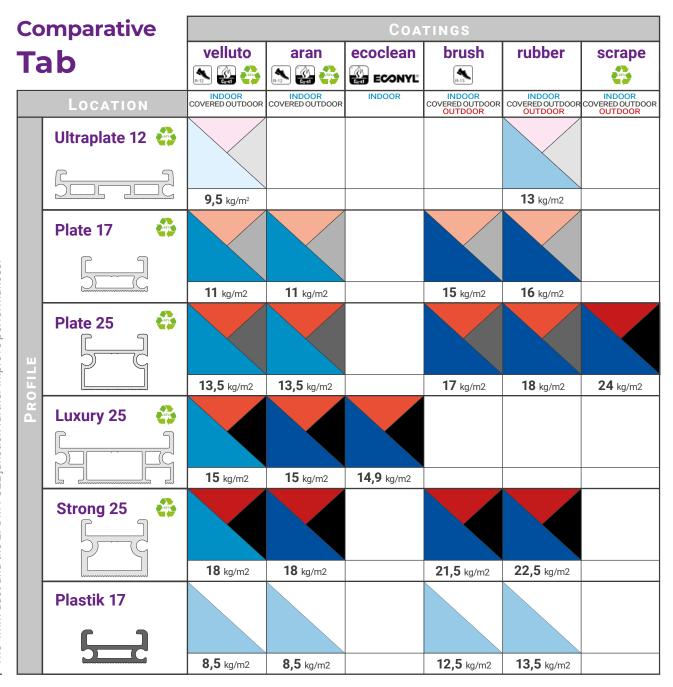
Standard finish on all the pvc profiles and primary or recycled aluminium (except for the Luxury 15 article) suitable for all needs able to guarantee excellent weight unload results.



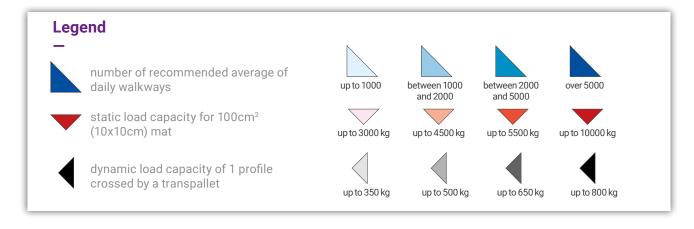


## **PVC legs BACKING**

Standard finish on all the pvc profiles and primary or recycled aluminium (except for the Luxury 15 article) suitable for all needs able to guarantee excellent weight unload results.



For mixed type coverings the reference values are obtained by making an average of the used finishes.



The data contained in the table are based on studies carried out by the DICTAM Department of Univerity of Brescia. The improper maintenance of the cockpit and the lack of cleaning of the carpet may ultimately affect the performance of entrance mats. Report available on request.

# ENTRANCE MATTING SIZING

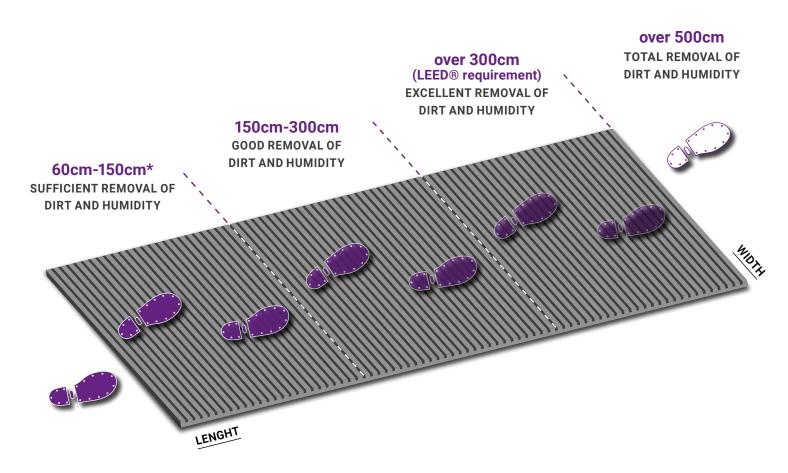
On the planning of the space to be allocated to the carpet priority should be given to the length of the walkway over the carpet because it's the one that affects on the effectiveness of the mat.

Years of experience on the market and internal tests have shown that the minimum size required for a technical m at is around 60cm for residential entrances: small offices, houses... (excellent efficiency if there is a wilful cleaning action of the user) while for the great passages: shopping malls, hospitals ecc.. where there cannot be a stop on the carpet, good results are achieved from 200cm, excellent above 300cm of distance as also indicated by the LEED protocol, while over 500cm the removal of dirt and humidity appearts to be almost total.

To achieve the desired result in cleaning and\or drying is important, in addition to the correct sizing of the carpet, make a targeted choice of coatings (to reach the goal set they can also be combined) and of the distance between the slats.

To keep the mat 100% functional, it's essential to keep it clean and replace the coating when too worn out or exhausted. If well maintained, dimensioned and designed a Mat.en technical mat is enough to solve the problem of the soles cleaning without having to resort to other carpets.

For entrances with particular humidity problems you can integrate the action of the technical mat with that of a clean-off.



<sup>\*</sup>for residential entrances and small offices, where a stop on the mat can be provided, the 60-150cm dimension can generate an axcellent removal of dirt and humidity if volountary shoes rubbing is carried out by the user.

# CREATED TO CLEAN, DESIGNED FOR PLEASURE, BUILT TO LAST!



Entrance Matting System || info@mat-en.com || www.mat-en.com





