

Protect your precious things

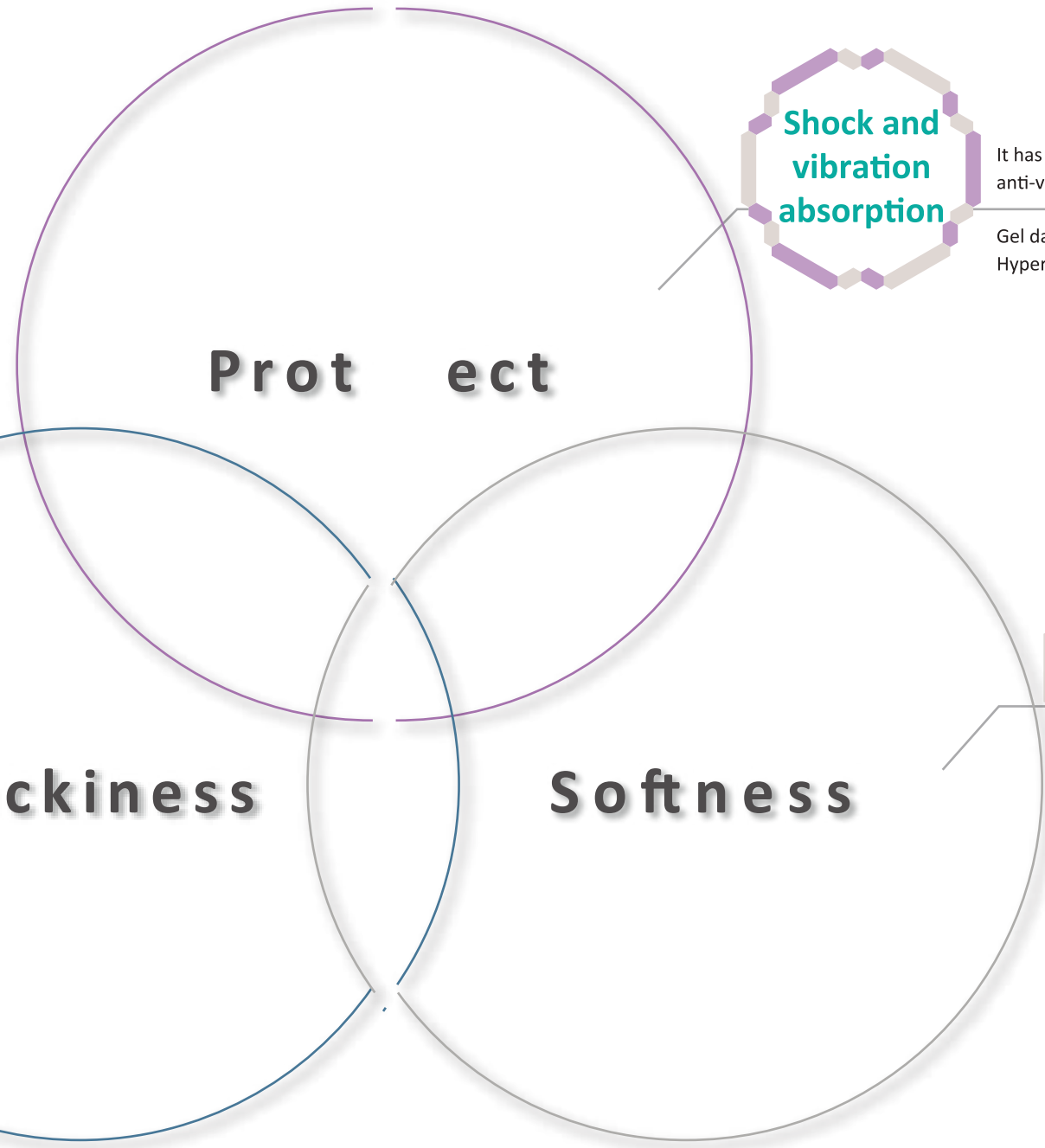


vol.6

What is Exseal urethane gel?

It is an ultra-soft elastomer material that combines softness, self-adhesive, elasticity, and durability that cannot be achieved with conventional rubber materials.

Our job is to listen to our customers' problems one by one and "create new products" to "protect" important things with urethane gel.



Shock and vibration absorption

It has excellent energy absorption and a higher anti-vibration ability than general rubber.

Gel damper
Hyper gel sheetetc.

Self adhesive

The material has a self-adhesive. And the adhesive strength can be restored by washing with water and can be used repeatedly.

STEP-MAT[®]
LIFT-MAT[®]
Gel tacketc.

Super softness

It is very soft and has high physical strength.

HITOHADA[®] gel sheetetc.

Hardness comparison table (Range of urethane gel)

The hardness of rubber is generally expressed as "Shore A".

The gel hardness of EXSEAL is indicated as "Asker C" because it is softer than the "Shore A" range.

| | Shore A | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 |
|-----------------|---------|---|----|----|----|----|----|--------|----|--------------|----|
| | Asker C | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 |
| Range | | | | | | | | Eraser | | Tire of cars | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| Characteristics | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

EXSEAL urethane gel is represented by a teal bar spanning from approximately Shore A 10 to Shore A 70.

Characteristics: Soft (left) to Hard (right), Strong (left) to Weak (right), Adhesive power (left) to Softness (right).

*The hardness comparison table of Shore A and Asker C is based on actual measured value by our company.



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|--|------|---|------|
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| Optional goods for clean mat | P.11 | Adhesive roller series | P.13 |
| Dust catcher | P.15 | Tip remover | P.17 |
| Haimen mat | P.18 | | |

| Transport case for precision devices | | Temporary fixing sheet useful for storing semiconductors and chips. | |
|---------------------------------------|------|---|------|
| GEL-BASE® series NEW | P.19 | GEL-BASE® sheet series NEW | P.25 |

| Dust removal for precision devices | | Dust removal tool that removes foreign matter in manufacturing process of the electronic component. | |
|---|------|---|------|
| STEP-MAT® semiconductive type | P.27 | Body roller semiconductive type | P.28 |
| Gel cleaner pen series | P.29 | Semiconductive gel sheet | P.31 |
| Semiconductive gel roller | P.33 | | |

| Temporary fixation and non-slip | | Temporary fixing, fall prevention products and non-slip materials. | |
|-------------------------------------|------|--|------|
| Urethane washer | P.34 | Gel tack series | P.35 |
| Clear tack sheet series | P.39 | Pit cushion sheet series | P.41 |
| Soft cushion sheet series | P.42 | Pit cushion | P.43 |
| Soft cushion | P.44 | Flame retardant non-slip sheet series | P.45 |

| Buffer / shock absorbing material | | Sheets and pads with high shock absorption. | |
|-----------------------------------|------|---|------|
| Urethane gel insulator | P.46 | Hyper gel sheet series | P.47 |
| Cushion pat | P.49 | HITOHADA® gel sheet series | P.50 |





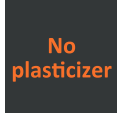




| Anti-vibration damper | | Vibration absorbing block with excellent anti-vibration and soundproof. | |
|-----------------------|------|---|--|
| Gel damper | P.51 | | |

| Soft resin for molding | | Ultra-soft resin for molding and related products. | |
|---|------|---|------|
| HITOHADA® gel undiluted solution, Milky white | P.53 | HITOHADA® gel undiluted solution, Transparent | P.55 |
| HITOHADA® gel undiluted solution, Foaming | P.57 | Optional goods for HITOHADA® gel | P.58 |

| For medical sheet and model | | Medical-related sheets/support tools for healthcare. | |
|---|------|--|------|
| Electrode gel | P.60 | Urethane gel phantom | P.61 |
| Self check tool for breast cancer | P.62 | | |

Physical Properties P.63

About icons

| | | |
|---|--|---|
|  This product has the effect of preventing the generation of static electricity by adding a conductive material to the raw material. |  Antibacterial and antifungal agents were mixed. *Not all antibacterial and antifungal effects have been confirmed. |  Antiviral agents were mixed. *Not all antiviral effects have been confirmed. |
|  This product does not use silicone as a raw material. |  Urethane gel that does not contain plasticizer is used. |  This product has passed the tests of the Food Sanitation Law (the Standard of Container and Packaging). |
|  This product is hard to yellowing caused by UV rays. |  This product uses urethane gel that has cleared the primary skin irritation test. |  This product uses urethane gel that has cleared the patch test. |

About a tolerance of products

About a tolerance of products are as shown below:

| | | | | | |
|------------------|---|-------------|--------|-----------------|----|
| thickness | 1mm thickness or less ...±0.1mm Over 1mm thickness ...±0.2mm | size | ±1.0mm | hardness | ±5 |
|------------------|---|-------------|--------|-----------------|----|

Adhesive mat for heavy vehicles.

LIFT-MAT[®] series

POINT

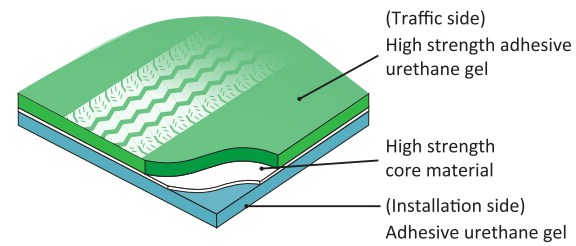
- 1 The adhesive mat for heavy vehicles that can be used repeatedly by wiping with water.
- 2 Correspond to forklifts up to a total weight of 3-4 t, AGV, and handlifts.
- 3 Simply by driving over only three rotations of tire, the mats remove the dirt of tires 90% or more.
- 4 It is economical because it can be used for a few years if you place it once.

Image for use



For indoor passage of heavy vehicles. Also handlifts be OK. For removing dust from the back of the pallet. For air shower / passage

Structure (There are protective films on both sides of the product.)



It is used high strength urethane gel. It has the strength to withstand the weight of heavy vehicles, and it is difficult to be torn and attached to a tire. In addition, it does not need double sided tape to install, so it is possible to install as it is.

*If you install the mat to rough surface, please install stainless steel plate to the floor and then install the mat on it. Or use a "LIFT-MAT for rough surfaces (P.7)."

Test of removal rate

Adhesive gel fits the uneven surface of tires, and remove the fine dust. It is possible to remove dust and grime 90% or more after the forklifts run out on the mat only three rotations of tires. The removal rate almost unchanged after passing 1000 times.

| ! ATP (+AMP) Wipe inspection | |
|------------------------------|---------------------------|
| The number of passing | Removal rate of pollutant |
| First time | 90% or more |
| 1000 times | 90% or more |

*Lumitester is made by Kikkoman.

*This result is confirmation test in-house. There is also the case that the same result can not be obtained.

How to clean

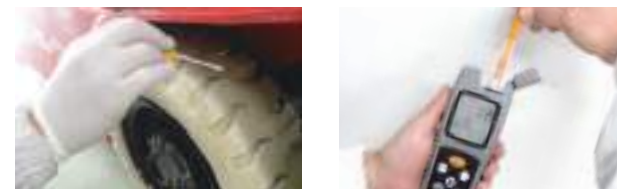
Check the video ▶▶



Please clean the mats with water or our special detergent when the adhesive becomes weak. Then adhesive force will return to normal after cleaning and can be used repeatedly.

*We recommend to increase the number of cleaning or area of mats if traffic is a lot. Then the effect persists.

Check the details ▶▶



Measure the remained dirt of forklifts that had run for a minute indoors. Then the same forklifts ran on the mats and measured a dirt again.

Caution

Notes

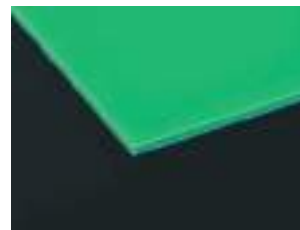
- Not suitable for outdoor use nor at delivery entrances directly from outside as ultraviolet light and heat will damage the urethane material. We recommend indoor use.
- Do not pass by wet or oily tire because it is slippery when the floor and mat are not dried.
- Any objects such as pallets stuck to the mat or tires rotating on it may cause damage. Please also avoid parking or accelerating lifts on the mat.
- Please install a stainless steel plate to rough floor like a concrete because the mat is installed by adhesive of gel. Or use a "LIFT-MAT for rough surfaces (P.7)."
- It is suitable for coating or resin floors to install, but there is a case that it is difficult to install to flat floors depending on materials. Please check with a mat sample before installation. (*Please peel off the mat from corner and slowly because it may peel off the floor depending on material.)
- Avoid installing on floors containing a lot of soft PVC or plasticizer.
- If you care the step of the mat, please use Aluminum slope (P.11).

Required size and indication of use

The length in which the target tires can make three rotations of tire. It is possible to use for 1-2 years. (Depending on the operating environment and frequency of use.)

LIFT-MAT[®]

Remove fine dust and grimes of tires. It is possible to use repeatedly by wiping with water.



| Part Number | Size (mm) | Thickness (mm) | Color |
|--------------|-----------|----------------|---|
| LIFT3-0906 | 900×600 | 3.0 | Use side : Green Install side : Blue green |
| LIFT3-1209 | 1200×900 | | |
| LIFT3-1812 | 1800×1200 | | |
| LIFT3-2412 * | 2400×1200 | | |
| LIFT3-3612 * | 3600×1200 | | |

* indicates build-to-order products which require longer delivery time.

CHECK

Custom-sized are also available, please contact us. *Maximum size : 5000×1200mm

Recommended for beginners

LIFT-MAT[®] 4 pieces set

The great deal set with the sponge mop and disinfectant cleaner (500ml) and aluminum slopes.

| Part Number | Size (mm) | Thickness (mm) | Details |
|---------------|-----------|----------------|--|
| LIFT3-0906SET | 900×600 | 3.0 | LIFT-MAT, Sponge mop, Disinfectant cleaner, and Aluminum slope (900×60mm) ×2pcs |
| LIFT3-1209SET | 1200×900 | | LIFT-MAT, Sponge mop, Disinfectant cleaner, and Aluminum slope (1200×60mm) ×2pcs |
| LIFT3-1812SET | 1800×1200 | | LIFT-MAT, Sponge mop, Disinfectant cleaner, and Aluminum slope (900×60mm) ×4pcs |



LIFT-MAT + Cleaner (500ml) + Sponge mop + Aluminum slope ×2pcs

Related products

Aluminum slope / Sponge mop / Disinfectant cleaner (P.11,12)



Check the video ▶▶



Adhesive mat for heavy vehicles.

LIFT-MAT[®] series

LIFT-MAT[®] for rough surfaces



POINT

- 1 It can be installed on floors with rough surfaces such as concrete.
- 2 Adhesive mat for heavy vehicles that can be washed with water and used repeatedly.

Image for use



For passages with rough surfaces of heavy goods vehicles.

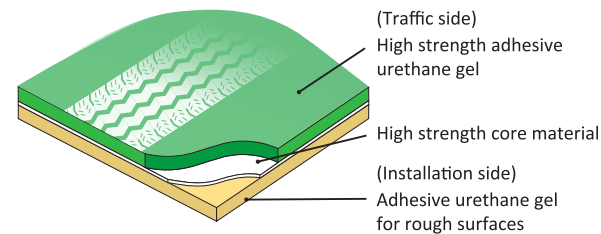
Caution

Notes

LIFT-MAT for rough surfaces is intended for installation on floors with rough surfaces such as concrete. If installed on a painted floor, the paint may peel off when the mat is removed. Please wet it with water and remove it slowly.

If you continue to put a load on the LIFT-MAT for rough surfaces, the gel on the floor may be pushed out and stuck out. Also, if the temperature is high, it will be even easier to stick out.

Structure (There are protective films on both sides of the product.)



It is used high strength urethane gel. It has the strength to withstand the weight of heavy vehicles, and it is difficult to be torn and attached to a tire. In addition, it does not need double sided tape to install, so it is possible to install as it is.

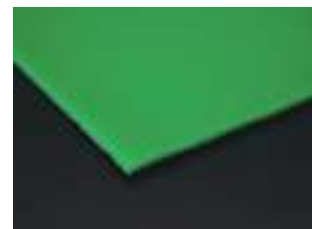
*Adhesive urethane gel for rough surfaces is conformed to the unevenness of the floor.

Physical properties

| Item | LIFT-MAT for rough surface | Remarks (JIS No.) |
|-----------------------------|----------------------------|---|
| Adhesive (180° Peel N/25mm) | 2.01 | Z0237 SUS304 5 minutes after pasting |
| Holding force (sec) | 928 | Z0237 1kg, 24h SUS304, □25mm |
| Ball tack (No.) | 20 | Z0237 30° |

*This measured value is a reference value, it is not a guaranteed value.

*It changes without notice by specification changes.



LIFT-MAT[®] for rough surfaces

An adhesive mat that removes fine dirt and dust from tires. It can be installed on rough surfaces.

| Part Number | Size (mm) | Thickness (mm) | Color |
|-------------|-----------|----------------|--|
| LIFT3-0906R | 900×600 | 3.0 | Use side : Green Install side : Amber |
| LIFT3-1209R | 1200×900 | | |
| LIFT3-1812R | 1800×1200 | | |

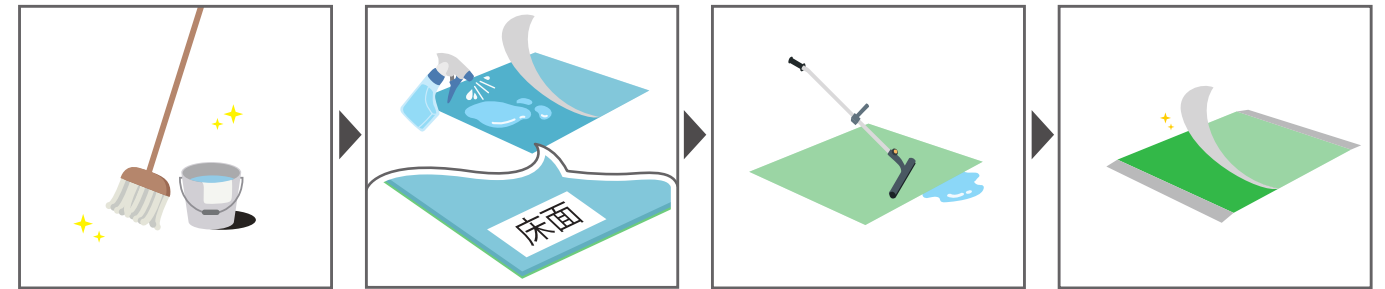
*Please contact us if you are considering using a slope for the LIFT-MAT for rough surfaces.

CHECK

Custom-sized are also available, please contact us. ***Maximum size : 5000×1200mm**

How to install of LIFT-MAT / STEP-MAT

How to install of LIFT-MAT / STEP-MAT



Clean the installation floor.

Peel the film the side that pasted a seal of "床面", and wet the surface with spray.

*Do not peel off the other side film that is not pasted a seal of "床面".

Spread the mat, and force out the air and water with a pressure roller from on the film. Then wipe off moisture.

*Please spread the wet side down.

Peel off the surface film, and install Aluminum slope at both ends. It is possible to use after the mat and floor dry.

*Indication: One night (10-12 hours)

⚠ **Not to be used on uneven surfaces such as concrete floors. It is suitable for coating or resin floors.**

When installing on uneven floors such as concrete floors, lay a stainless steel plate in advance before installing the mat.

⚠ **Please clean installation place before installed the mat. Double sided tape is not needed because the mat have a self-adhesive.**

*There are protective films on both sides of the mat.

*It is possible to make fine adjustment of position and force out the air under the mat by wetting the floor before installation.

*Paste the side with the "床面" sticker on the floor.

*Please do not peel the film that is not pasted a seal of "床面" until the installation completed.

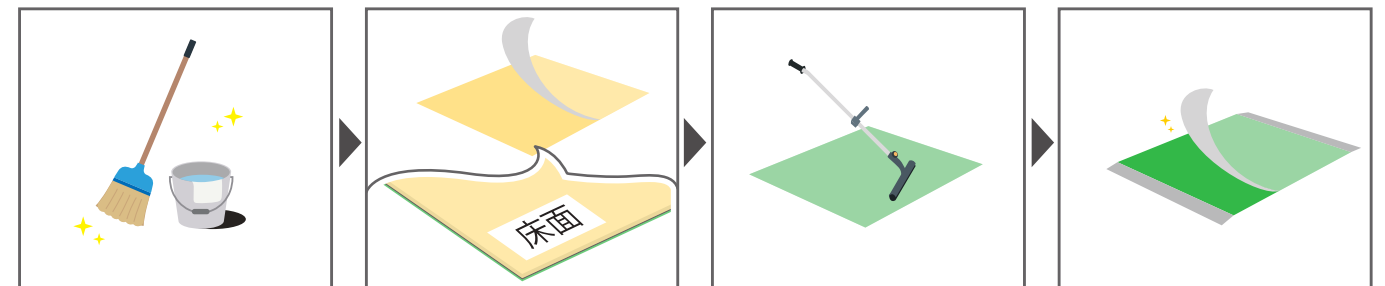
It may damage the surface if you peel off before installation.

*To enter air between floor and mat is the cause of damage.

*Do not pass by wet or oily tire because it is slippery when the floor and mat are not dried.

*Please peel off the mat of from corner and slowly because it may peel off the floor depending on material.

How to install of LIFT-MAT for rough surfaces



Clean the installation floor.

Peel the film the side that pasted a seal of "床面".

*Do not peel off the other side film that is not pasted a seal of "床面".

Spread the mat, and force out the air with a pressure roller from on the film so that the mat stick to the floor.

Peel off the surface film.

*We recommend to install Aluminum slopes at both ends.

⚠ **LIFT-MAT for rough surface adheres firmly to unevenness of floors and adheres strongly. After installing it on the floor, it cannot be re-installed if it is crimped. The floor may be damaged or the paint on the floor may be removed during peeling off. When removing, wet it with water and remove it slowly.**

⚠ **Remove as much dust and fine sand as possible from the installation surface before installing. If you install it with dirt, sand, etc. remaining, it may come off immediately.**

⚠ **It adheres to rough surfaces by crimping the mat against the floor. If the temperature is low, the gel on the floor get to hard, so apply pressure firmly when installing.**

*There are protective films on both sides of the mat.

*Paste the side with the "床面" sticker on the floor.

*Please do not peel the film that is not pasted a seal of "床面" until the installation completed.

It may damage the surface if you peel off before installation.

*To enter air between floor and mat is the cause of damage.

*Please note that we are not responsible for any damage to the floor or paint problems that occur when the mat is removed.



Check the video



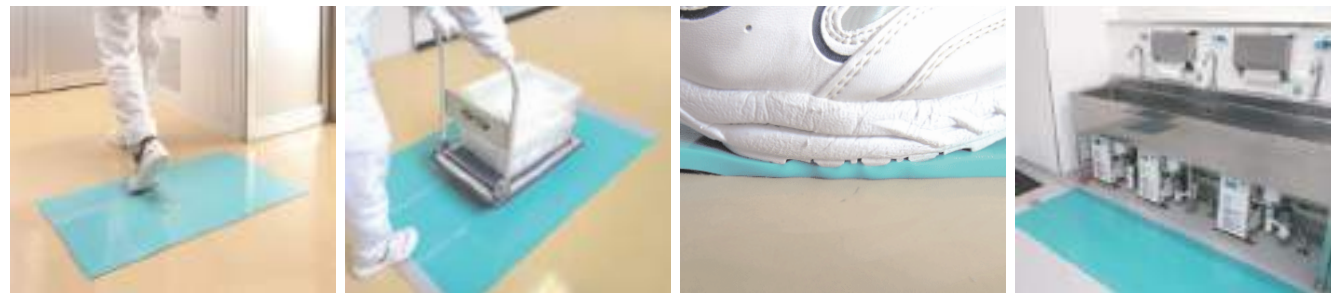
Adhesive mat for soles of shoes and hand trucks.

STEP-MAT® series

POINT

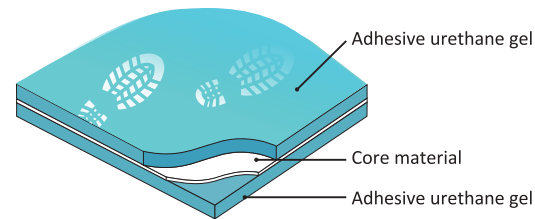
- 1 The adhesive mat for soles of shoes that can be used repeatedly by wiping with water.
- 2 Remove contaminants of soles of shoes 90% or more. (When stepping three times on the mat.)
- 3 Antibacterial and antifungal agents were mixed and the mats prevent breeding of bacteria.
- 4 Antiviral agents were mixed and the mat inhibits virus.

Image for use



In front and behind of clean room. Also hand truck under 100kg be OK. Soft gel fits the soles of shoes, and catch the dusts. For wash basin / air shower / dressing room

Structure (There are protective films on both sides of the product.)



The thick and soft gel fits the uneven surface of the soles of shoes, and remove fine dusts firmly. In addition, it does not need double sided tape to install, so it is possible to install as it is.

*If you install the mat to rough surface, please install stainless steel plate to the floor and then install the mat on it.

How to clean [Check the video](#)



Please clean the mats with water or our special detergent when the adhesive becomes weak. Then adhesive force will return to normal after cleaning and can be used repeatedly.

*We recommend to increase the number of cleaning or area of mats if traffic is a lot. Then the effect persists.

Test of removal rate [Check the details](#)

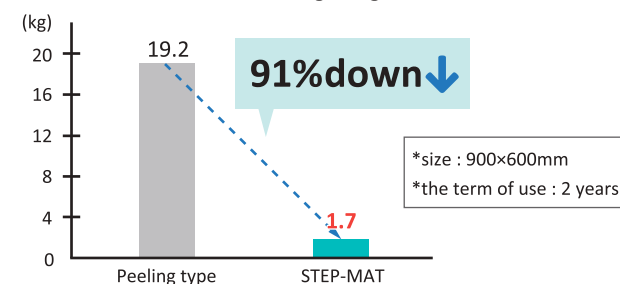
Peeling type of mat does not remove about 40% of dust and grime, so dusts may move with the soles of shoes. While STEP-MAT can remove 90% or more.

| ATP (+AMP) Wipe inspection | |
|----------------------------|---------------------|
| STEP-MAT | Peeling type of mat |
| 90% or more | about 60% |

*Lumitester is made by Kikkoman.
*This result is confirmation test in-house. There is also the case that the same result can not be obtained.

Comparison of trial calculations of waste volume

It is an environmentally friendly product as the sheet that is turned over does not become garbage.



*STEP-MAT is used repeatedly for 2 years. The peeling type is purchased the same product for 2 years after using.
*It is referenced only the weight of the product itself. The weight is an actual measured value and not a guaranteed value.

Caution

Notes

- Not suitable for outdoor use nor at delivery entrances directly from outside as ultraviolet light and heat will damage the urethane material. We recommend indoor use.
- Do not pass by wet or oily tire because it is slippery when the floor and mat are not dried.
- When hand trucks pass, any objects such as pallets stuck to the mat or tires rotate on it may cause damage.
- Please install a stainless steel plate to rough floor like a concrete because the mat is installed by self-adhesive of gel.
- It is suitable for coating or resin floors to install, but there is a case that it is difficult to install to flat floors depending on materials. Please check with a mat sample before installation. (*Please peel off the mat from corner and slowly because it may peel off the floor depending on material.)
- Avoid installing on floors containing a lot of soft PVC or plasticizer.
- If you care the step of the mat, please use Aluminum slope (P.11).

Required size and indication of use

It is possible to use for 2-3 years. (Depending on the operating environment and frequency of use.)



STEP-MAT®

Remove fine dust and grime from soles of shoes. It is possible to use repeatedly by wiping with water.



STEP-MAT® 3mm thick

Thin type for using in front of hinged door.

| Part Number | Size (mm) | Thickness (mm) | Color |
|-------------------|-----------|----------------|------------|
| MAT3-0906V | 900×600 | 3.0 | Blue green |
| MAT3-1209V | 1200×900 | | |
| MAT3-4590V | 895×450 | | |

*MAT3-0906V and MAT3-4590V are compatible with Under-mat (P.11).



STEP-MAT® 6mm thick

Thicker type fits the uneven surface more.

| Part Number | Size (mm) | Thickness (mm) | Color |
|-------------------|-----------|----------------|------------|
| MAT6-0906V | 900×600 | 6.0 | Blue green |
| MAT6-1209V | 1200×900 | | |

CHECK

Custom-sized are also available, please contact us. ***Maximum size : 5000×1200mm**



Recommended for beginners

STEP-MAT® 3 pieces set

The great deal set with the sponge mop and disinfectant cleaner (500ml).

| Part Number | Size (mm) | Thickness (mm) | Details |
|----------------------|-----------|----------------|--|
| MAT3-0906VSET | 900×600 | 3.0 | STEP-MAT, Sponge mop, Disinfectant cleaner |
| MAT3-1209VSET | 1200×900 | | |
| MAT6-0906VSET | 900×600 | 6.0 | |

Related products

Aluminum slope / Sponge mop / Disinfectant cleaner (P.11,12)

