

The First, The Best Green Floor Rubber

First Green

Rubber Flooring

Tile | Sheet | Stair

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In the center of delivering emotional satisfaction, RM will be together.

RM manufactures products that improve indoor air quality and protect the environment as a specialist in manufacturing eco-friendly rubber tiles.

In addition, RM products deliver fire protection, long durability, and anti-slip properties.

RM advances with its customers in various fields, and it is expanding in the domestic and overseas market with great joy in opening up the future together.

RM always strives to become a company that cares for customers by providing added value, including the highest quality products.

RM will be at the center of offering the best emotional satisfaction to customers.

History

- 2015 | Foundation of RM Co., Ltd. in January
(with the foundation of 25 years of rubber technology of LS Cable & System)
- 2015 | Signing of LG Hausys OEM Supply Agreement
- 2015 | Supplier of Hyundai Rotem Railway Floor Material: High Speed Railway, Regular Railway, Light Railway
- 2015 | Acquisition of ISO9001, Venture Company
- 2016 | Establishment of affiliated research institute
- 2016 | Exporting rubber tile material to Company M (US)
- 2017 | Leader in materials, parts, equipment, excellent NICE technology evaluation company
- 2018 | Supplier of speed skating rink for Pyeongchang Winter Olympics
- 2019 | INNOBIZ company, signing of supply agreement with Hyundai L&C,
signing of cork rubber tile supply agreement with Company C (US)
- 2020 | Acquisition of ISO45001, acquisition of environmental mark certification,
registration of patent for inter-floor vibration prevention technology
- 2021 | Signing of supply agreement with Eugene Corporation, acquisition of ISO 14001,
launching of axial light products, acquisition of US indoor air quality certification GreenGuard Gold, acquisition of international ship certification (DNV, MED, KR)

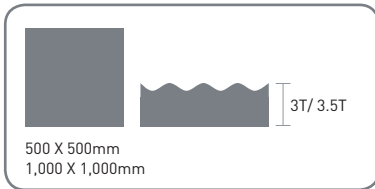
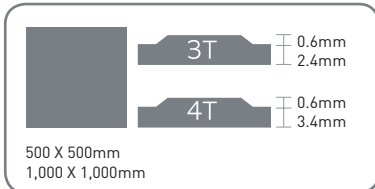
VISION

The company that pursues a happy life
with eco-friendly tiles and floor insulation.

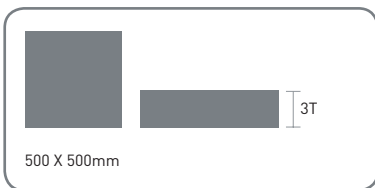
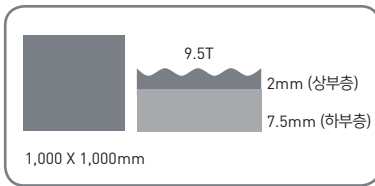


INDEX (TILE / SHEET)

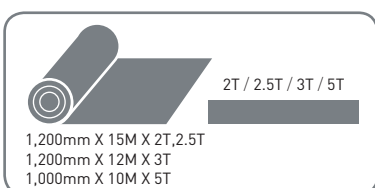
TILE



Sports

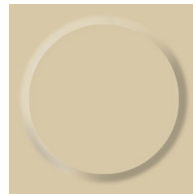


SHEET

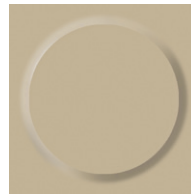


Round

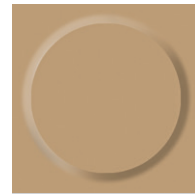
Solid



TISR 47



TISR 43

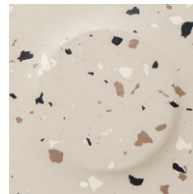


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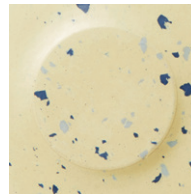


TISR 402

Chip



TICR 5003



TICR 3881



TICR 1248



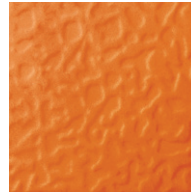
TICR 424

Hammered

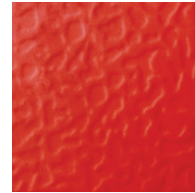
Solid



TISH 009



TISH 505

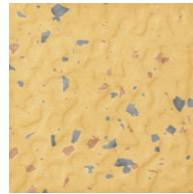


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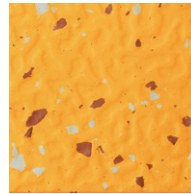


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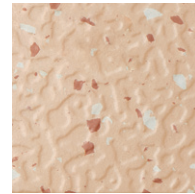
Chip



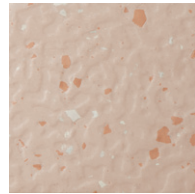
TICH 48



TICH 402



TICH 44



TICH 43

Cork Chip



TICE 5015



TICE 5005



TICE 5001



TICE 5008

Embo Roll

Solid



ROSE 5000



ROSE 4300



ROSE 8000

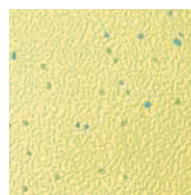


ROSE 4100

Chip



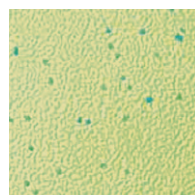
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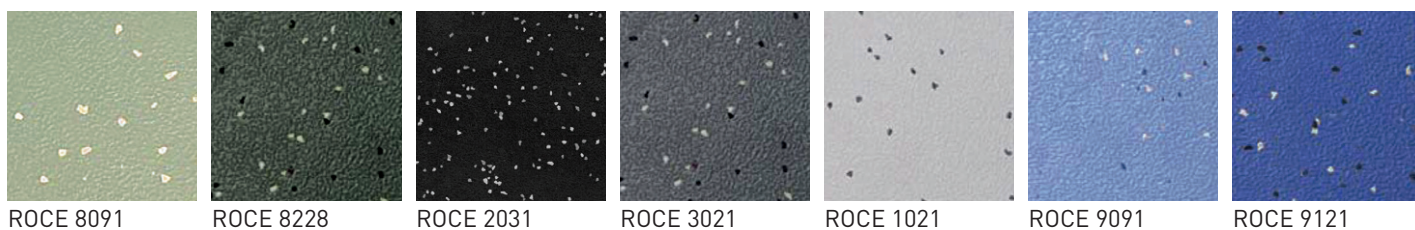
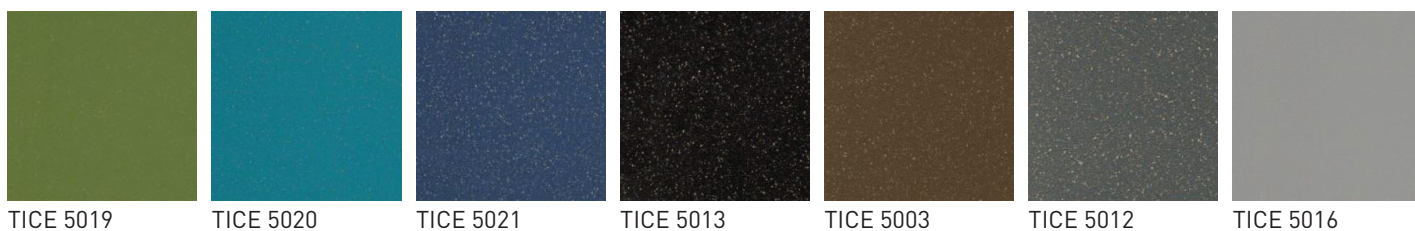
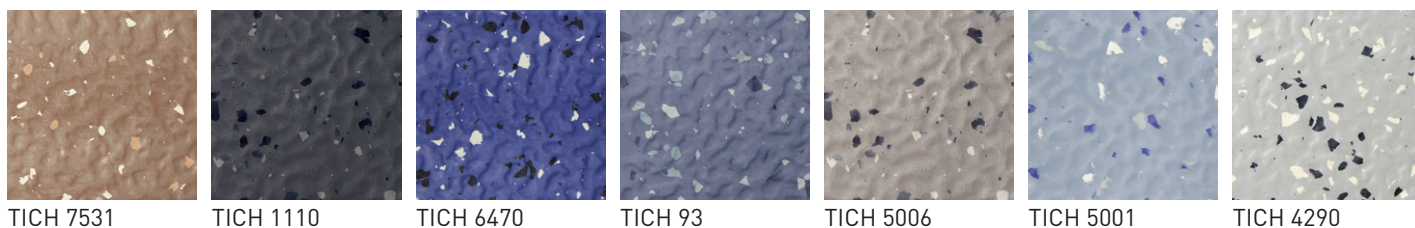
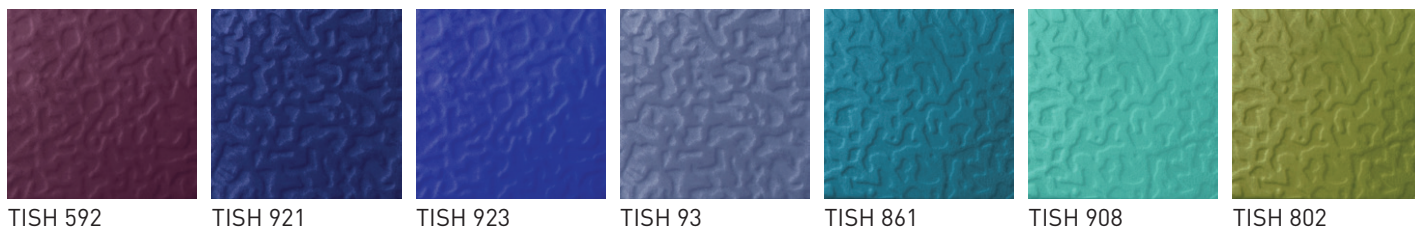
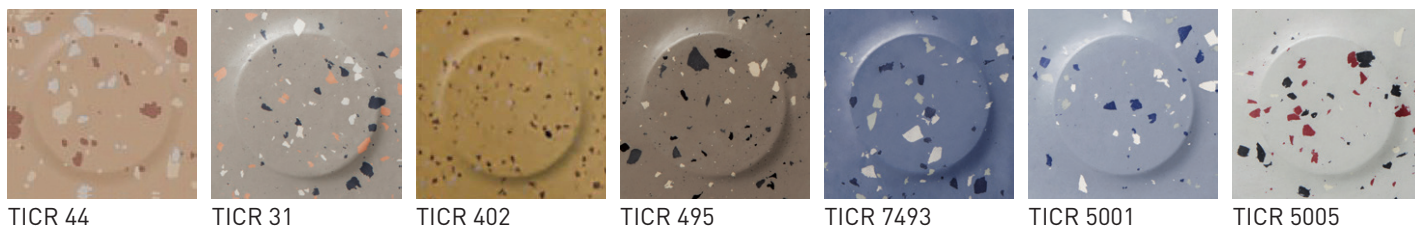
ROCE 4043



ROCE 4143



ROCE 8098





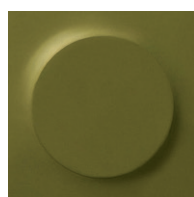
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TISR 10



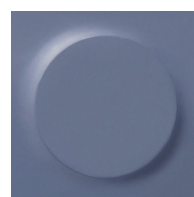
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TISR 802



TISR 86



TISR 93



TISR 91



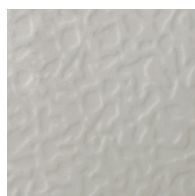
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TISH 826



TISH 42



TISH 31



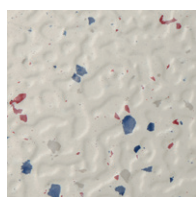
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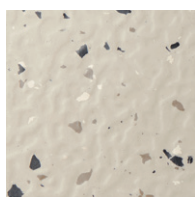
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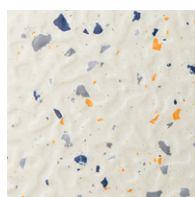
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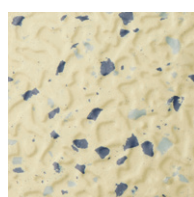
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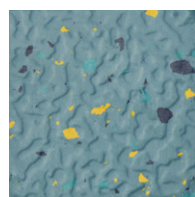
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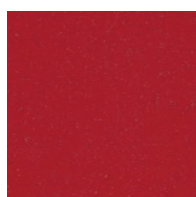
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TICH 81



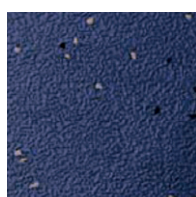
TICH 86



TICE 5017



ROSE 9000

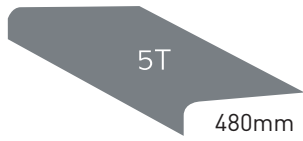


ROCE 9221

※ Unit patterns vary on each side.

※ The index photo may differ in color from the actual product,
and the color may appear different depending on the installation and viewing directions.

STAIR



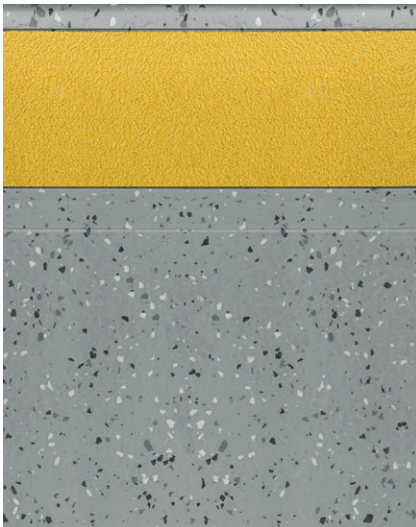
- SNSH (Stair Non-Slip Solid Hammered) / Color: TISH Same
- SNCH (Stair Non-Slip Chip Hammered) / Color: TICH Same

480mm X 1,200mm X 5T
480mm X 1,500mm X 5T
480mm X 1,800mm X 5T
480mm X 2,100mm X 5T
480mm X 2,400mm X 5T

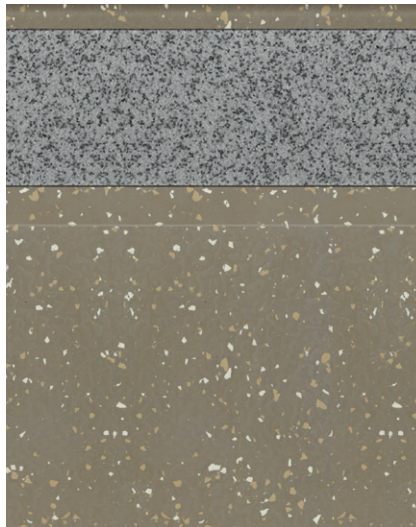


NEW Hammered Stairs

NEW Non Slip Hammered Stairs



SNCH 5006

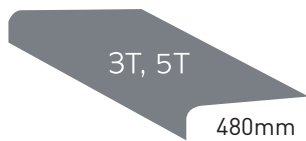


SNCH 7531



SNSH 42





- **STSR (STair Solid Round)** / Color: TISR Same
- **STCR (STair Chip Round)** / Color: TICR Same

480mm X 1,200mm X 3T / 5T
 480mm X 1,500mm X 5T
 480mm X 1,800mm X 5T
 480mm X 2,100mm X 5T



Round Stairs

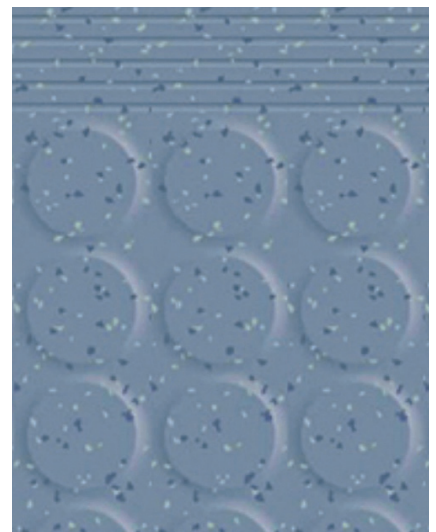
Round Stairs



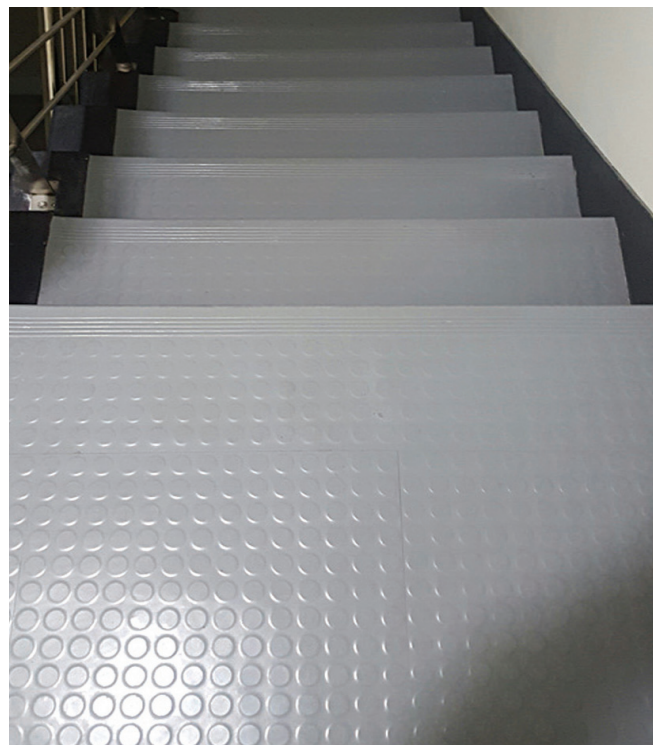
STSR 42



STSR 43



STCR 93



Features

Why should you choose First Green?



It is an eco-friendly product safe for the human body.

The generation of gasoline-based compounds is strictly controlled: less than 0.2 mg/m³.h (non-residential)

- Contents of toluene, formaldehyde and 1,3-butadiene satisfy eco-friendly regulations, and no heavy metals are detected.
- No hazardous chemicals used.



It is a tile with excellent fire stability in the event of a fire.

PVC tile produces chlorine gas in the event of a fire → fatal to the human body.

- In clinical trials using mice, PVC becomes motionless after 6 minutes, and all rubber tile materials survive after completion of the test (KS F 2271 Gas Hazard Test of Construction Finishing Materials)



Hygienic tile with antibacterial effects.

Three major harmful bacteria, E. coli, Pseudomonas aeruginosa and Staphylococcus aureus, are removed by 99.9% after 24 hours.
(Test Standard: KCL-FIR-1003)



Long product life due to outstanding durability.

Long durability compared to PVC with the same components on the exterior and interior.

- Semi-permanent product: suitable for heavy pedestrian traffic (i.e. Gwangmyeong Station, Daegu Station, subways, railway vehicles)



Outstanding noise and slip stability.

Excellent footstep sound reduction in quiet offices or indoor spaces compared PVC products.

- Excellent slip properties compared to PVC tiles with traffic (R9 basic properties).



Low maintenance costs in long-term use.

RM tiles do not need additional protective layers, waxing or seam sealing. All RM tiles are dense, nonporous and dust-resistant surfaces that do not require strong detergents.

Application

Tiles and sheet flooring materials are eco-friendly products that do not contain harmful pollutants and have obtained indoor air quality (Floorscore) certification and domestic environmental mark certification.

RM creates a healthy, beautiful space with advanced, eco-friendly technology.



Education

Healthcare

Commercial
stairs

Multi-purpose
sports facility

Industry

Logistics
facilities

Refrigeration and
freezing facilities

GMP/HACCP
facility

Data center

Office facility

Transportation
facilities

Railway, ship

Officetel hallway

Religious facility

Outdoor
Deck Rubber

Certifications



ISO Certificate



ISO Certificate



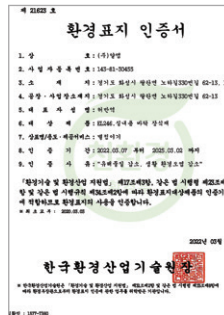
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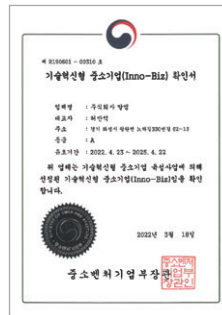
GreenGuard Gold Certificate



Floorscore Certificate



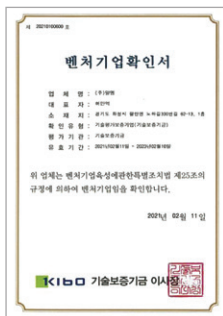
Environmental Mark Certificate



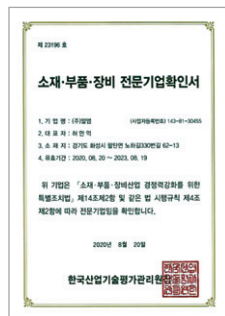
INNObiz Certificate



Affiliated Research Institute Certificate



Venture Company Certificate



Materials, Parts and Equipment Specialist Certificate



Trademark Registration



Design Registration Certificate



Design Registration Certificate



Patent Certificate



Patent Certificate



Patent Certificate



Patent Certificate



Patent Certificate

Technical Data

Technical data

Test Item	Test S	Requirement	Verdict
Thickness	EN 428	Tolerance : $\pm 0.2\text{mm}$	Pass
Length/Width (Dimensions)	EN427	$\pm 0.15\%$	Pass
Dimensional stability	EN 434	Tolerance allowed $\pm 0.4\%$	Pass
Tensile Strength	ISO 34-1	B method Average value $\geq 20\text{N/mm}$	Pass
Squareness	EN 427	$\pm 0.25\text{ mm}$	Pass
Flexibility	EN 435	A method- $\varnothing 20\text{mm}$: no crack	Pass
Hardness	ISO 7619	≥ 75 (Shore A)	Pass
Residual Indentation	EN 433	$\leq 0.25\text{mm}$	Pass
Abrasion Resistance	ASTM D3389	H18, 500g, 1000 cycle : $< 1\text{g}$	Pass
Color fastness	EN ISO 105-B02	"3 method, test condition 6.1a Blue wool scale : $\geq \text{Min } 6"$	Pass



APPLICATION PROPOSAL



EDUCATION



HEALTHCARE



STAIR



GYMNASIUM



INDUSTRY



LOGISTICS



REFRIGERATION



SANITATION



OFFICE



OUTDOOR DECK RUBBER

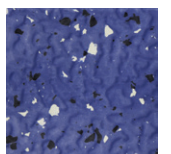
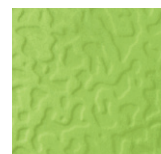


Educational facilities

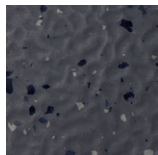
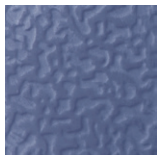
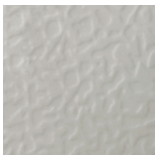


Abrasion Resistance ★★★★★
 Anti-slip ★★★★★
 Cost reduction ★★★★★
 Dust scattering and generation protection ★★★★★

RECOMMENDED
 PRODUCT

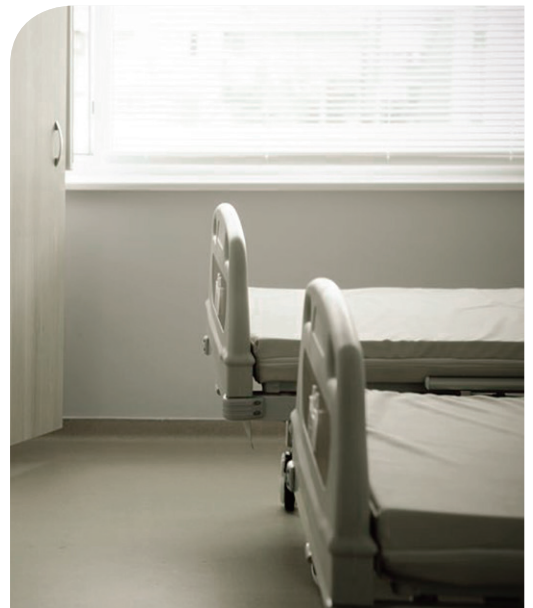


Educational facilities



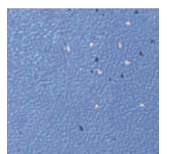
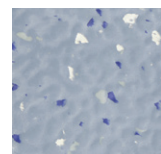
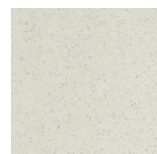
RECOMMENDED
PRODUCT

Healthcare

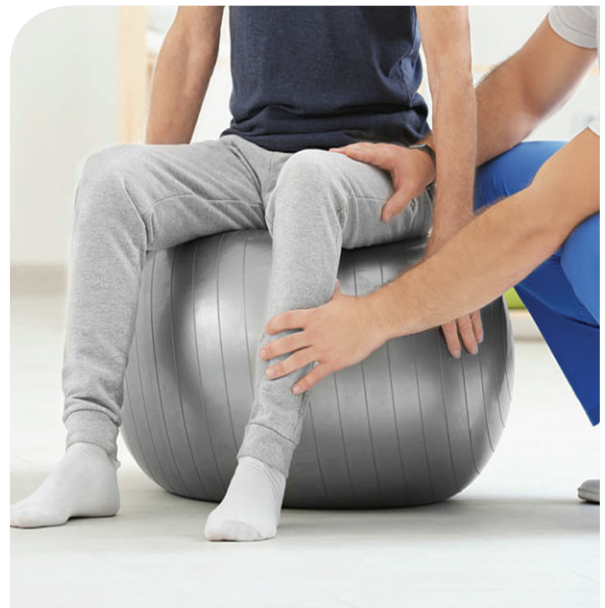


Antibacterial ★★★★★
 Surface flammability ★★★★★
 Cost reduction ★★★★★
 Abrasion resistance ★★★★★

RECOMMENDED
 PRODUCT

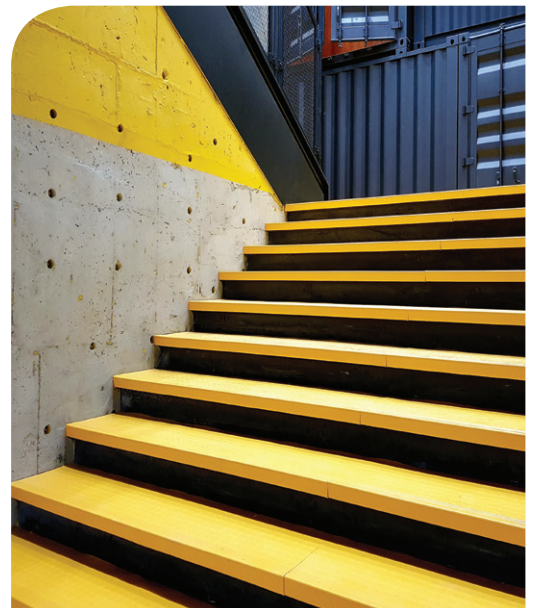
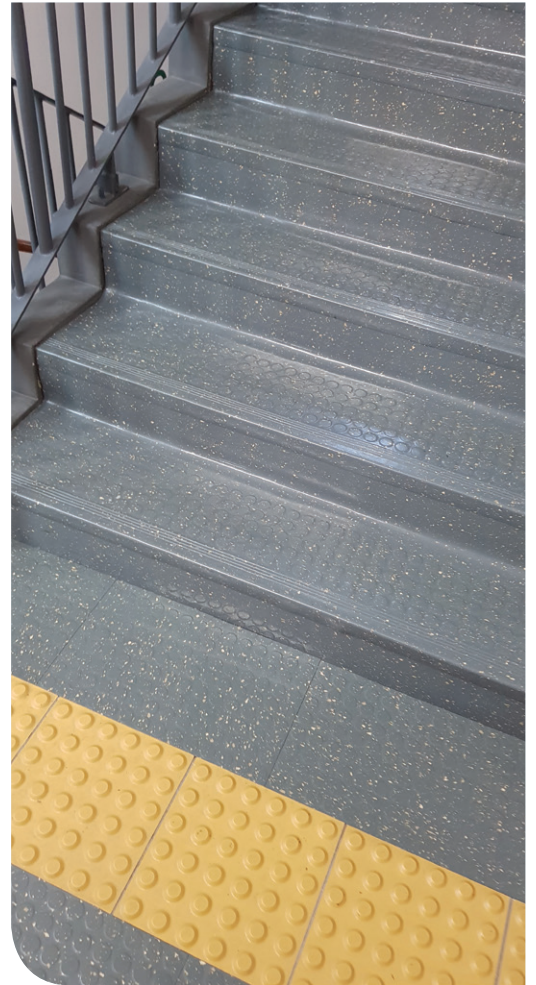


Healthcare



RECOMMENDED
PRODUCT

Commercial stairs

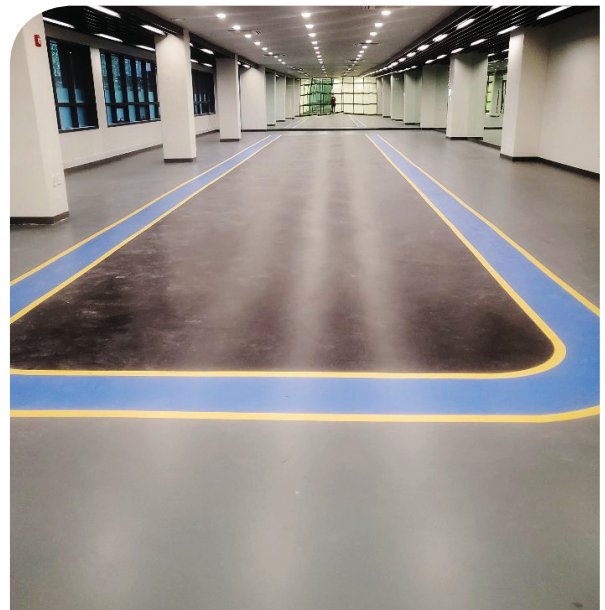


Abrasion resistance ★★★★★
 Anti-slip ★★★★★
 Dust scattering and generation protection ★★★★★
 Cost reduction ★★★★★

RECOMMENDED PRODUCT

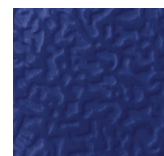
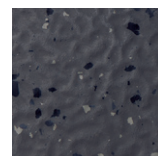


Multi-purpose sports facilities



Abrasion resistance ★★★★★
 Ease of construction ★★★★★
 Cost reduction ★★★★★
 Dust scattering and generation protection ★★★★★

**RECOMMENDED
 PRODUCT**

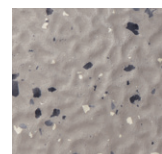


Industry

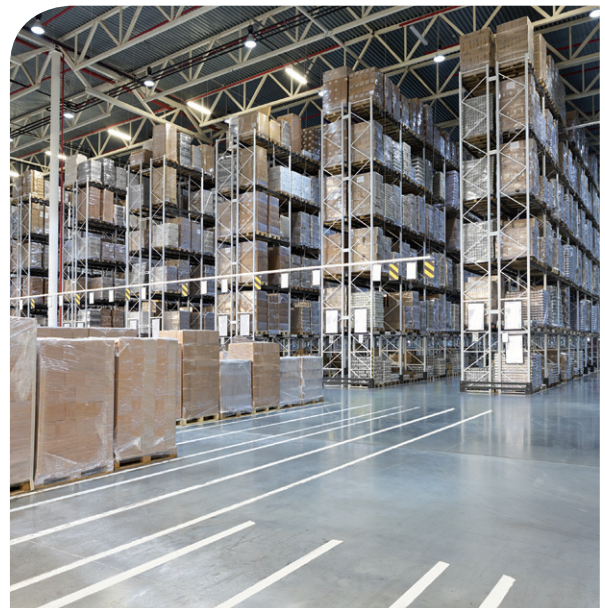


Cost reduction ★★★★★
 Abrasion resistance ★★★★★
 Ease of construction ★★★★★
 Dust scattering and generation protection ★★★★★

RECOMMENDED
 PRODUCT



Logistics facilities



Cost reduction ★★★★★
 Abrasion resistance ★★★★★
 Ease of construction ★★★★★
 Dust scattering and generation protection ★★★★★

RECOMMENDED
 PRODUCT

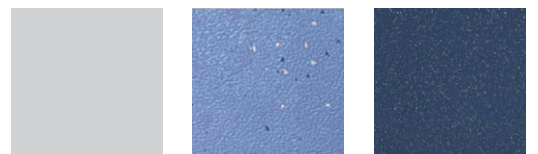


Refrigeration and freezing facilities



Antibacterial ★★★★★
 Ease of construction ★★★★★
 Dust scattering and generation protection ★★★★★

**RECOMMENDED
 PRODUCT**



GMP/HACCP facilities



Abrasion Resistance ★★★★★
 Antibacterial ★★★★★
 Ease of construction ★★★★★
 Dust scattering and generation protection ★★★★★

**RECOMMENDED
PRODUCT**

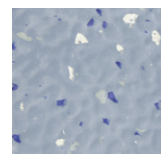
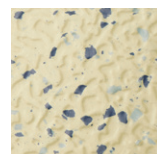


Data center/Office facilities



Conductivity ★★★★★
 Dust scattering and generation protection ★★★★★
 Ease of construction ★★★★★

**RECOMMENDED
 PRODUCT**



Outdoor Deck Rubber



Color fastness to artificial light ★★★★★

Abrasion resistance ★★★★★

Anti-slip ★★★★★

Installation

1. Floor cleaning before construction

- In case of locations with heating, turn on heating, and in case of locations without heating, spend sufficient time for curing to remove moisture (less than 5.0%). Products dedicated for heating spaces can only be installed in heating spaces.
- During installation, a smooth and even surface without floor bumps and curves is required, and the strength of the surface mortar must be sufficient during the entire adhesion installation.
- Floor cracks identified with the naked eye shall be repaired using a crack repair agent.
- If Amine in the crack repair agent is present as residue of the repair agent, it may react with wax and cause mixed surface issues. So, the following precautions should be observed:
 - ① Observe sufficient drying time defined by the manufacturer.
 - ② Use of single-liquid repair agent recommended (in case of two-liquid repair agents, make sure to observe the precise mixture ratio)
- Remove floor contaminants as they spread to the surface of the product.
 - If unevenness and flexion are present, they may cause alignment issues and defects.
 - Product peeling or swelling may occur if the surface hardness is insufficient.

2. Inspection of installation site

- Recommended temperature during installation is 13-25°C, and installation must not be performed on sites below 10°C.
- Products and adhesives to be installed must be maintained and stored at room temperature (18-20°C) for at least 24 hours at the construction site (product should be stored upright) and heating operation must be prohibited for 48 hours after installation. However, heating should maintain above 10°C)
- Take caution if the temperature changes rapidly before the adhesive is completely cured, or else the edges will swell due to dimensional changes.
 - Prevent curling by securing temperature
 - Complete bleeding of the product (to ensure dimensional stability)
 - Complete adhesion of the product

3. Checking and cutting of fabric

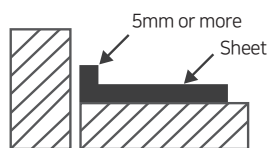
- If more than one roll of fabric is required, the roll number must be selected continuously within the same lot.
 - Check the structure of the installation site and decide how wide the installation will be while considering the fact that there are no joints at the entrance as much as possible.
 - Cut the product and bleed it at installation site temperature (18-25°C).
 - Cutting must ensure buffer (5-10 cm) in the length of the installation site.
- ※ Due to product characteristics, installation must take place in reverse.

4. Reference width installation

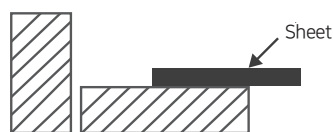
Choose a suitable installation method between the knife cutting method and the long scribler cutting method.

Knife cutting method

- Spread the product to be installed constructed on the floor. [refer to Figure 1]
- Make sure that the fabric that has risen to the wall and the edge sufficiently contacts your hands, cut it in a "V" shape from the corner, and then cut it according to the shape of the wall. [refer to Figure 2]



[Figure 1]



[Figure 2]

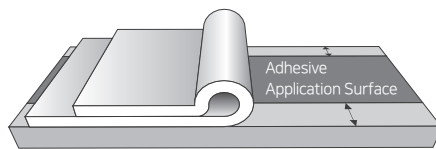
Installation

5. Adhesive application

- Acrylic water-base adhesives should be used in sites where there is no water on the floor and where water is not used, and reactive polyurethane oil adhesives should be used in sites where water is used a lot.
- Make sure to give the adhesive an open time before laying the sheet.
Open time refers to the time when the adhesive is sprayed and the time when the floor material is placed on the adhesive. This improves adhesion by drying moisture in the adhesive.
Open time always depends on the surrounding environment, pore condition under the floor and the state of small holes.
※ Excessively long open time will reduce adhesion, so the adhesive surface should not be allowed to swell or dry during open time.
- The product must be installed using designated adhesives and a designated spreader with a front adhesive installation method. When the adhesive is sufficiently applied to the joints and walls, the product will not appear to be pushed or swollen.
- While ensuring not to move the unfolded product, turn the product upside down to reveal at least half of its bottom [refer to Figure 3].
- Use white chalk to draw a line on the folded part of the floor, which will serve as a guideline for the other half-width adhesive application.
- Pour a certain amount of adhesive on the floor and spread it to the designated dry zone using the designated spreader [refer to Figure 3].
※ Note: Dry zone should be about 30cm horizontally from the product joint.
- If the adhesive has adhesive force, roll the sheet carefully on the adhesive to prevent air from filling up.
Start from the center of the sheet and flatten it by pressing it in both directions using a three-section roller of 45 kg or more. This process removes air and allows the sheet to adhere completely to the adhesive.
For areas where the roller cannot reach, use a hand roller to spread.
- After the first half of the sheet is installed, repeat the process on the remaining half.

The following will render tile installation failure.

- If the adhesion between the tile and floor is insufficient
- If installation is carried out while the adhesive is lumped together
- If the adhesive is misplaced and spread, and heavy objects are placed on the new floor, marks will remain forever.



[Figure 3]

6. Rolling after installation

- After installation, press evenly with a 50kg roller until the adhesive hardens (especially on surfaces of the tile/sheet).

7. Wax coating after installation

- Surface wax coating **must be** applied after installation and cleaning.
(surface contamination occurs when wax coating is not applied)
- Wax coating on rubber surfaces is essential during installation, and it is critical in future maintenance.



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⚠ Cautions (The product is heavy. Take caution during transporting and handling)

Before installation	<ul style="list-style-type: none"> ● Inspect the material for abnormalities before installing the product (if more than 2 rolls of the product are installed, make sure to check the pattern and product number). ● To prevent deformation of the product, the floor material of the rubber roll should not be laid down but should always be placed on a flat floor. ● The temperature of the installation site must be maintained at least 10°C, and the product must be stabilized at the installation site for at least 24 hours. ● Observe the open time and work time, and be sure to follow the specifications as a guideline. ● Take caution of flammable substances or fires.
During installation	<ul style="list-style-type: none"> ● The floor must be dry and clean, smooth without unevenness and swelling of the floor, and the strength of the surface mortar must be sufficient for full adhesive work. ● There should be no dirt, solvent, paint, wax, oil, grease or asphalt on the floor. (Visible floor cracks must be repaired with crack repair agents, and floor contaminants must be removed as they can be transferred to the product surface.) ● Moisture on the floor shall be less than 4%. If moisture level exceeds 4%, installation must take place after drying. ● The temperature of the installation site must be between 10°C and 35°C. If it is below 10°C, installation must be prohibited (swelling or curling may occur during installation).
After installation	<ul style="list-style-type: none"> ● Once installation is complete, clean it thoroughly and maintain the overlapping PE film area to be at least 15cm, and seal the overlap with tape to prevent it from being pushed by pedestrians. ● Prohibit all traffic within 24 hours after installation, and use of wet mop and wax is prohibited within 48 hours. (Block off direct sunlight and moisture within 48 hours of installation)