

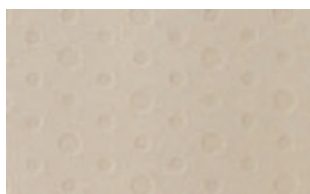
NS FLATY

category: slip-resistant and antibacterial vinyl sheet

Because of its special flat surface with UV coating and aluminum oxide, NS FLATY is not only easy to maintain but highly slip-retardant. It also has antibacterial property as well. Very much suitable for school projects.

| | | | | |
|---------------------------------------|--|--|----------------|--------------|
| Specification | overall thickness | 2.0mm | width x length | 1820mm x 20m |
| | others | Antibacterial Finished / UV-Coated Surface | | |
| JIS Registered No. | JIS Registered No. GB0507188 (JIS A 5705 Vinyl Sheet Flooring) | | | |
| Packing | 20m/roll | | | |
| Net Weight | 84.0kg/roll | | | |
| Recommended Adhesive from TOLI | dried mortar and concrete | Eco Royal Cement, Eco AR600 / (for heavy traffic area) Epo Gray S, US Cement | | |
| | humid mortar and concrete | Epo Gray ST, US Cement, US Cement (less-smelly) | | |
| | TOLI UNDERLAY SHEET | US Cement, US Cement (less-smelly), US200 | | |
| Welding | Welding rod for heat-welding (antibacterial finished) is available on a color-by-color basis. | | | |
| Notes on Installation | ♦Seams should be heat-welded. ♦For one week after installation, direct sunlight, sudden change of temperature due to air conditioning, and water washing should be avoided. ♦The surface of NS FLATY is rather solid because aluminum oxide is contained. Therefore, when you use the cutter knife, please replace the edge frequently to avoid the abrasion. ♦When you install 2 different sheets, each edge should be jointed at the seam. (Do not cut in the middle of the sheet.) ♦TOLI UNDERLAY SHEET (page 278) is also workable as the sub-floor. Please use the same adhesive for both top and bottom of UNDERLAY SHEET. ♦Please do not use the urethane adhesive other than US Cement, US Cement (less-smelly). (except using TOLI UNDERLAY SHEET) | | | |
| Recommended Maintenance Wax from TOLI | T Wax (Non-shiny & Antibacterial), "HEALTH CARE COAT" from C×S Corporation (Shiny & Antibacterial) | | | |
| Others | ♦NS FLATY is for indoor use. Do not install in exterior or semi-exterior places that are exposed to direct sunlight for a long time. ♦The dirt and stains will be more visible on the floor covering with lighter plain colors, compared to dark colors. Also they are more likely to stick with the deep-embossed surface than the flat surface. ♦Please be aware that some rubber casters might cause color-contamination. ♦Please note that the product has the indigenous odor from its materials. ♦When you apply the finish coating on the top, antibacterial wax should be chosen. Otherwise you cannot expect antibacterial performance. Also please bear in mind that if you apply the finish coating too much, non-slip effect on the surface might be deteriorated. | | | |

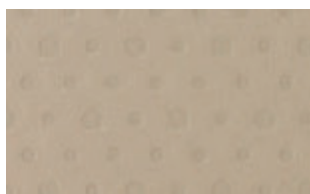
MADE IN JAPAN



NS4501



NS4505



NS4502



NS4506



NS4503



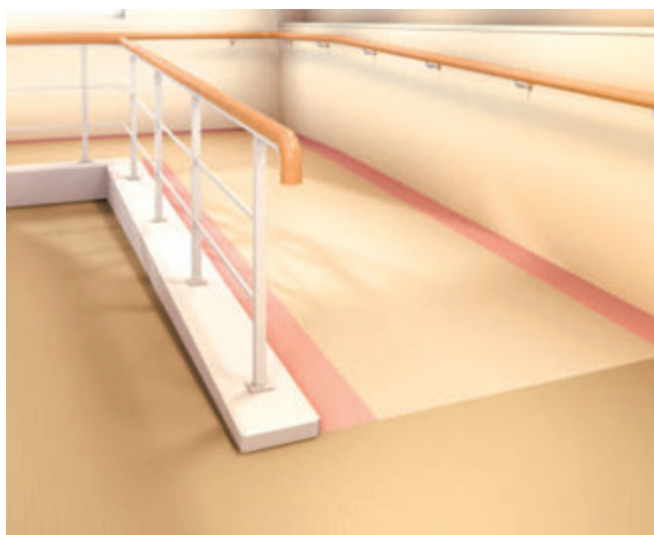
NS4507



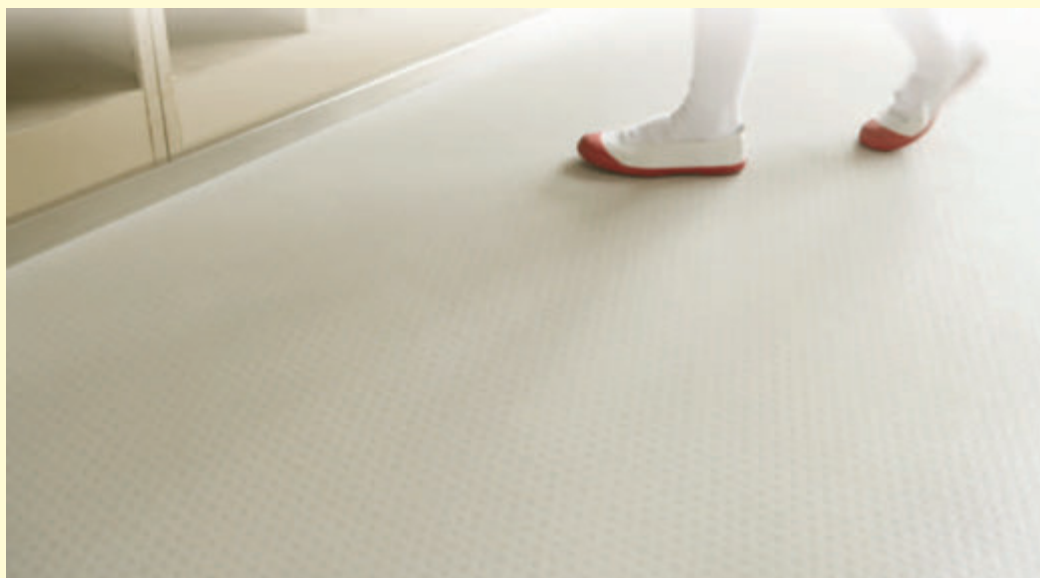
NS4504



NS4508



▲ NS4505/NS4506/NS4507



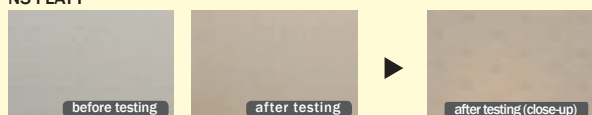
◀ NS4501

Easy maintenance

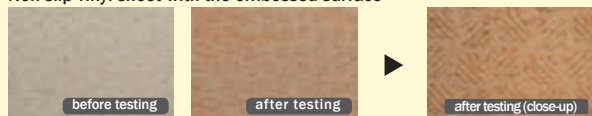
As the surface is flat, it's easy to clean.

■ Stain Testing <maintenance performance in sweeping>

NS FLATY



Non-slip vinyl sheet with the embossed surface



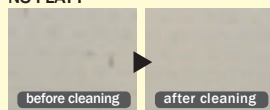
<test method> Spread 5gram of fine-grained sand (5 to 74μm) on the surface of 300mm square vinyl sheet samples, and sweep with a broom 10 times to the same direction. Afterwards check how much of sand is left.

Dirt and stains can be hardly stuck and easily removed.

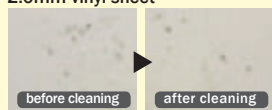
Because of its UV coated surface, dirt and stains can be hardly stuck on it. Even though it's stuck, it can be easily removed.

■ Scuff mark testing <in accordance with JIS K 3920> *Cleaning with a dry cloth

NS FLATY

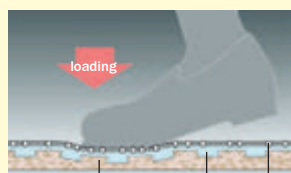


2.0mm vinyl sheet



Excellent non-slip effect by aluminum oxide and 2 different softness.

- (1) By putting the hard designed layer into the soft backing layer, NS FLATY is not only comfortable to walk, but less slippery.
- (2) Aluminum oxide on the top layer can prevent you from slipping.



- (1) Soft materials will be sunk.
- (1) Hard materials will not be sunk.
- (2) Aluminum oxide can grip tightly.

■ Slip Resistance <in accordance with JIS A 1454 (OY-PULL method), rubber shoes>

| | C.S.R. value | |
|--|--------------|---------------|
| | dry | wet and dusty |
| NS FLATY | 0.71 | 0.50 |
| 2.5mm non-slip vinyl sheet with the embossed surface | 0.71 | 0.57 |
| 2.0mm vinyl sheet | 0.84 | 0.46 |

■ Durability to rolling loads <in accordance with JIS A 1454>

| | adhesive | Time until the appearance changes | Time until the floor swells |
|-------------------|-------------|-----------------------------------|-----------------------------|
| NS FLATY | Epo Gray ST | More than 360 minutes | More than 360 minutes |
| 2.0mm vinyl sheet | US Cement | 30 minutes | 45 minutes |
| Poured flooring | N/A | 240 minutes | 340 minutes |

The longer it takes until appearance change or swelling, the more durable to rolling loads.

■ Shock absorption <in accordance with JIS A 6519>

| | overall thickness | measured value(G) |
|-------------------|-------------------|-------------------|
| Tatami | 55.0mm | 55 |
| NS FLATY | 2.0mm | 130 |
| 2.0mm vinyl sheet | 2.0mm | 143 |
| Concrete | N/A | 150 |

The smaller the measured value is, the less shock is caused and the more shock can be absorbed.

Antibacterial finish

The top layer is antibacterial finished. After installation, when the subsequent cure period is over, apply the antibacterial wax "HEALTH CARE COAT" from C×S Corporation.

■ Antibacterial Performance <in accordance with JIS Z 2801>

| | Escherichia Coli | Staphylococcus Aureus | MRSA |
|----------|------------------|-----------------------|-------------|
| NS FLATY | More than 2 | More than 2 | More than 2 |

Conducted by BOKEN Quality Evaluation Institute

Eco-friendliness and lightweight

Compared to general vinyl sheet products, NS FLATY is approx. 20% lighter in weight, so that CO₂ emission and energy consumption at the time of transportation are also smaller. This is why NS FLATY is an eco-friendly and easy-to-install product.