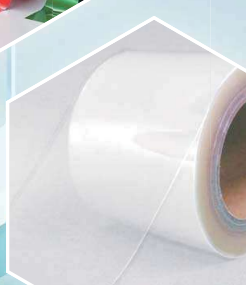
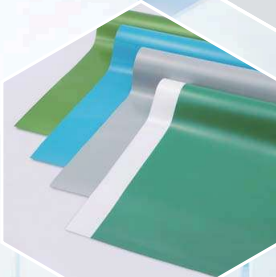


Multi-purpose ultra-durable

Patented

bBa Film

Product Catalog



TAKAHARA Corporation

Be Beautiful Ambience



TAKAHARA Corporation

Headquarters

81 Awarakamoke, Kiyosu-City, Aichi, 452 -0901, Japan
TEL:(052)325-7725 FAX: (052)325-7726

URL: <https://www.takahara-corp.jp>

Tokyo Sales Office

Koshin Building 1F, 11 -2, Uchikanda 1-chome,
Chiyoda-ku, Tokyo, 101 - 0047, Japan
TEL:(03)5283-5266 FAX:(03)5283-5269

Osaki

OSAKI TRADING (THAILAND) CO., LTD.
TAX ID: 0105558000871

2/2, 20 Mithuna 11 Alley, Lane 9, Ratchadaphisek Rd., Sam Sen Nok,
Hual Khwang, Bangkok 10310

02-044-7519-20 www.kkosaki.com info@kkosaki.com [@osakitradng](https://www.facebook.com/osakitradng)



Revised in May 2021

Creating a Comfortable Work Environment From the Feet Up

Benefits
of bBa! Film

1. 高耐久
High durability
Resistant to scratches,
stain, and chemicals

2.

Keep the beautiful look
美観維持
Long-lasting gloss and
stain resistant effect

Be Beautiful Ambience
3. 美しい環境の実現
Beautifully lasts for a long time and
reduces the frequency of replacing.



“Be Beautiful Ambience”
(= Realizing a beautiful environment)
That's the **bBa! Film**'s mission.

Thorough 5S is the basis of field management. However, we don't want to spend a lot of time repairing floors, and redrawing borders or walking areas.

"bBa! Film", a multi-purpose ultra-durable film, is a film tape product with special "bBa! Coating" on the surface. In addition to "protective film" that protects the floor surface from stain and scratches, the line-up includes "line tape" that has less adhesive residue when peeled off and "walking area film" that uses no paint and can be applied quickly. It is resistant to friction and can be kept clean for a long time.

Patented A special structure consisting of an ultra-durable **bBa! Coating** layer on the front surface and a **removable adhesive layer** on the back surface.

PET base material layer

Removable adhesion layer

Release paper (back paper)

Less adhesive residue

Conventional product

bBa! Film

As it is removable and has strong adhesive power, it can be removed cleanly with little adhesive residue and adheres strongly when reapplied.

bBa! Coating layer

Resistant to scratches and stain

Conventional product

bBa! Film

The nano-level density of the bBa! Coating layer prevents dirt from entering inside and its nano-level smoothness keeps it scratch-resistant.

Abrasion resistance **Stain resistance** **Chemical resistance**

Refer to the next page for the surface characteristics of bBa! Coating.

Surface characteristics test results of bBa! Coating



1. Stain-resistant: Stain is not likely to remain

(KAKEN TEST CENTER, Kyoto Laboratory)

	Black permanent marker	Red ink	Lipstick	Heat-treated cooking oil	Hair dye solution	Sulfur mark
bBa! Clear Film	○	○	○	○	○	○

※ 0.1 ml of each solvent was dropped or applied and left for 24 hours. The sample was washed with a neutral detergent, dried, and then judged.
★ The sample was washed with ethanol, dried, and then judged.

Stain resistance test	Write on "bBa! Super Line Tape"/"bBa! Walking Area Film" and "Conventional product"/"Coated Surface," with a permanent marker, and check how the stain (the marker) will be removed.
Test sample	Black permanent marker
bBa! Super Line Tape	○
Conventional product	×
bBa! Walking Area Film	○
Coated surface	×

○: No remaining stain ×: Remaining stain is remarkable



2. Wear-resistant: Scratch-resistant

(KAKEN TEST CENTER, Ichinomiya Laboratory)

Abrasion test bBa! Clear Film 50 CGE	Test result
Test method JIS 7204	No rupture
Wheel to be worn: GS-17, Load: 1 kgf, 7000 times	

Sand rubbing method (Reciprocate 40 times)	Gloss level
bBa! Clear Film 100 CGE	101 to 80 (reduced by 21%)
bBa! Coat Film 100 CME	42 to 32 (reduced by 22%)
Hard Coat Film of Company N	89 to 53 (reduced by 40%)
Hard Coat Film of Company M	96 to 60 (reduced by 37%)

※ Sand rubbing method: Place silica sand on the painted surface, place a weight equivalent to the body weight on it, reciprocate it 40 times, and then examine the change in 60% gloss.
※ The higher the measurement value, the higher the gloss level.

Abrasion resistance test: Polished "bBa! Super Line Tape"/"bBa! Walking Area Film" and "Conventional product"/"Coated Surface" with a steel scrubbing brush.

Test sample	Steel scrubbing brush	Comparison with conventional products and coated surfaces
bBa! Super Line Tape	○	
Conventional product	×	
bBa! Walking Area Film	○	
Coated surface	×	

○: No change ×: Remarkable scratches



3. Chemical resistance: Resistant to acid/alkali chemicals

(KAKEN TEST CENTER, Ichinomiya Laboratory)

bBa! Clear Film	35% hydrochloric acid	hydrofluoric acid	87% sulfuric acid	Saturated aqueous sodium hydroxide	Methyl ethyl ketone	Ethanol	Methanol	Carbon tetrachloride	Acetone
	○	○	○	○	○	○	○	○	○

※ 0.1 ml of each solvent was dropped onto the bBa! coating and left for 24 hours while covered with a watch glass. The sample was washed with a neutral detergent, dried, and then judged.

Chemical resistance test: Methyl ethyl ketone was dropped onto the "bBa! Super Line Tape" and "bBa! Walking Area Film" and left for a while.

Test sample	MEK (Wiped after 3 hours)	Comparison with conventional products and coated surfaces
bBa! Super Line Tape	○	
Conventional product	×	
bBa! Walking Area Film	○	
Coated surface	×	

○: No change ×: Remarkable deterioration



4. Antibacterial property and mold resistance

(Japan Chemical Fiber Inspection Association (predecessor of KAKEN TEST CENTER) Biological Testing Center/Test Method: JIS Z 2801, 5.2)

Test bacteria	Escherichia coli NBRC 3972 Escherichia coli	Staphylococcus aureus Staphylococcus aureus	MRSA Nosocomial infection bacteria
Immediately after ingestion	3.7×10 ⁷ (370,000)	1.8×10 ⁷ (180,000)	1.6×10 ⁷ (160,000)
After 24 hours	1.2×10 ⁷ (12,000,000)	1.4×10 ⁷ (14,000,000)	5.4×10 ⁷ (540,000)
bBa! Clear Film 50CGE	<10	<10	<10

(Japan Chemical Fiber Inspection Association (predecessor of KAKEN TEST CENTER) Biological Testing Center/Test Method: JIS Z 2811-2000, Appendix 1 (Provisions))

Sample	Mold resistance
	After 2 weeks
bBa! Clear Film 50CGE	1
	After 4 weeks
bBa! Clear Film 50CGE	1

① Evaluation ② No growth of mold is observed with the naked eye or a microscope.
1: Growth of mold is observed with a microscope, but not with the naked eye.
2: Mycelial growth is slight, and the area of the growing part does not exceed 25% of the total area of the sample.
3: Mycelial growth is moderate, and the area of the growing part is 25% to 50% of the total area of the sample.
4: Mycelia grow well and the area of the growing part is 50% to 100% of the total area of the sample.
5: Mycelia grow rapidly and cover the entire surface of the sample.



5. Coefficient of slip resistance: Safe walking

Appropriate value [Comfort] 0.4 to 0.96 [Safety] 0.38 to 1.03

C.S.R. = Coefficient of slip resistance (Yokoyama Laboratory of Tokyo Institute of Technology)

Types of Shoes	Men's shoes	Sports shoes
	100CGE	100THB-NS
DRY	0.913	0.778
WET	0.418	0.406

※ Bonded the bBa! Clear Film 100 CGE/100THB-NS to the surface of a homogeneous vinyl chloride tile to prepare a test sample.



6. Antistatic properties/diffusiveness

(Tech Triangle Co./Test Method: ESD, STM 11 Surface Resistance Measurement IEC 61340-2-3/JIS C-2170)

	Relative humidity	Temperature	Hours for leaving	Number of sample	Applied voltage	Surface resistance (average)	Evaluation
bBa! Clear Film 100THB-NS	12.7 to 13.2%	24.5 degrees C	48	6 times	100V	4.33×10 ¹⁰ Ω	
	49.9 to 50.3%	24.7 degrees C	48	6 times	100V	8.78×10 ¹⁰ Ω	Diffusible and antistatic materials

Measuring instrument: Resistance Meter: 8873, Probe 803 B of ETS Calibration Fixture: 809 B of ETS

Characteristics of the adhesive



7. UV shielding rate and visible light transmittance

Test Results (%) Japan Chemical Fiber Inspection Association (predecessor of KAKEN TEST CENTER) Test Method: Spectrophotometer, Full wavelength average (300 to 400 nm)

Sample	Full wavelength range	UV-A wave	UV-B wave	Visible light transmittance
bBa! Clear Film 50CGE	290 to 400 nm 90% or more	320 to 400 nm 85% or more	290 to 320 nm 95% or more	Visible light (400 to 800 nm) 90.6%

※ The visible light transmittance of PET base material is about 92.0%.

Characteristics of the entire bBa! Film



8. Incombustible: Flame-resistant

Certification of incombustible material

In accordance with the provisions of Article 68-26, Paragraph 1 of the Building Standards Act (including the cases where it is applied mutatis mutandis pursuant to Article 68, Paragraph 1 of the Act) and in compliance with the provisions of Article 2, Item (vi) of the Act and Article 108-2, Item (i) through (iii) (Incombustible Materials) of the Order for Enforcement of the Act in accordance with the provisions of Article 68-25, Paragraph 1 of the Building Standards Act (including the cases where it is applied mutatis mutandis pursuant to Article 68, Paragraph 1 of the Act) and in compliance with the provisions of Article 2, Item (vi) of the Act and Article 108-2, Item (i) through (iii) (Incombustible Materials) of the Order for Enforcement of the Act.

Certification Number: NM-2507 (Test specimen: TP50CGE/Japan Testing Center for Construction Materials/Date of approval: Monday, September 14, 2009)

In accordance with the provisions of Article 68-25, Paragraph 1 of the Building Standards Act (including the cases where it is applied mutatis mutandis pursuant to Article 68, Paragraph 1 of the Act) and in compliance with the provisions of Article 2, Item (vi) of the Act and Article 108-2, Item (i) through (iii) (Incombustible Materials) of the Order for Enforcement of the Act in accordance with the provisions of Article 68-25, Paragraph 1 of the Building Standards Act (including the cases where it is applied mutatis mutandis pursuant to Article 68, Paragraph 1 of the Act) and in compliance with the provisions of Article 2, Item (vi) of the Act and Article 108-2, Item (i) through (iii) (Incombustible Materials) of the Order for Enforcement of the Act.

Certification Number: NM-4814 (Test specimen: TP 100 CGE/Japan Testing Center for Construction Materials/Date of approval: September 13, 2010)

Combustion test of material for railway vehicle

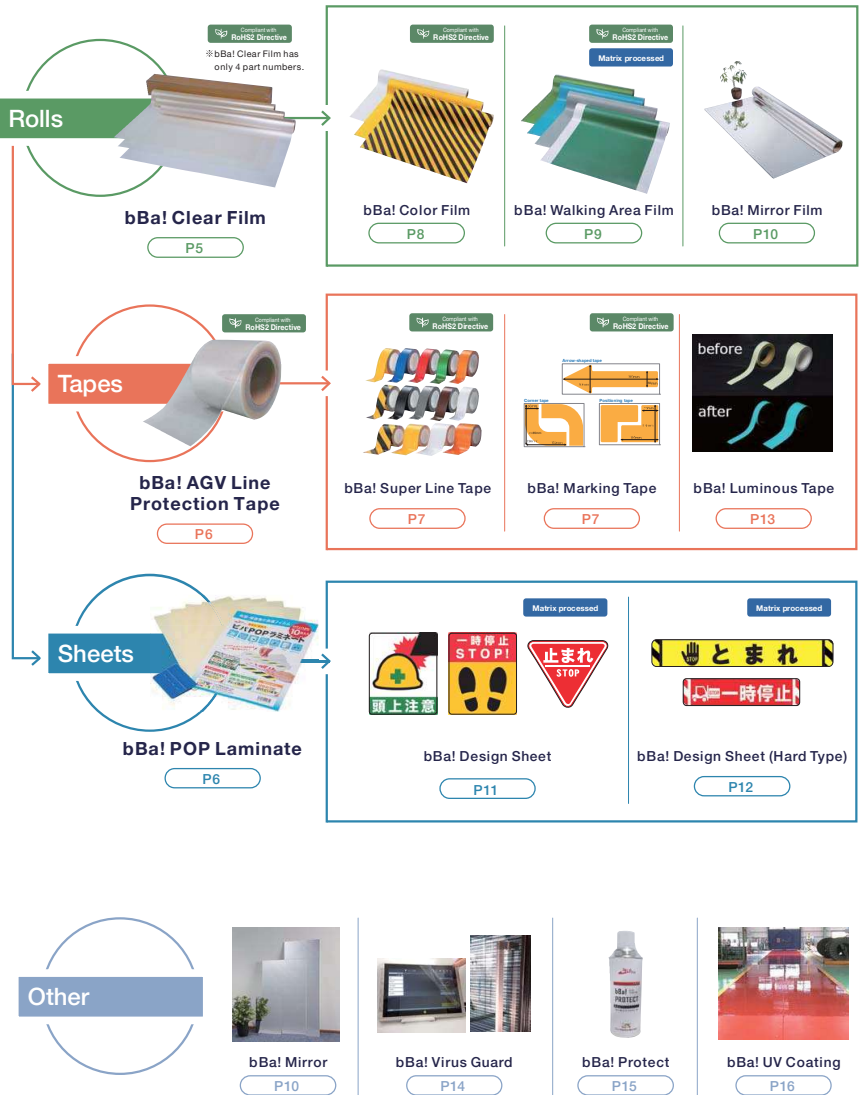
Japan Railway Rolling Stock & Machinery Association, Certification for incombustibility, March 28, 2011 Testing of vehicle materials 22-109K)

	During alcohol combustion	After alcohol combustion
Ignition	N/A	-
Catching fire	N/A	Remaining dust
Smoke	N/A	Carbonization
Power of fire	-	Change
Melt and drip resistance	-	Smooth

※ Bonded the bBa! Clear Film TP50CGE to a 1.0 mm base iron plate with an acrylic resin adhesive.

Rich line-up of bBa! Film

By taking advantage of the characteristics of bBa! Coating, we have prepared products for various applications.



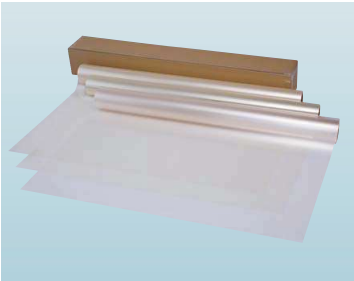
Ultra-durable protective film that strongly protects various smooth surfaces

bBa! Clear Film

3 types are available: shiny gloss, matte with matte finish, and non-slip with emboss finish. This protective film is very resistant to scratches to keep it clean and long lasting. Can be used for protection of floor surface, floor marks, and various other smooth surfaces such as walls, furniture, building materials, etc., to keep them look beautiful.

Compliant with RoHS2 Directive
...PN marked with ★

Compliant with RoHS2 Directive
It is an EU law on the restriction of use of certain hazardous substances that have a negative impact on human health and the environment during final disposal in landfills or incineration.



Product standard

Product number	Total Thickness(μm)	Size	Area	Color (Glossy Type)	Shipping lot
TPL50CGE *	112±5	1350mm×30m	40.5 m ²	Clear (Gloss)	1 roll
TPS50CGE *		675mm×30m	20.25 m ²		
TPL100CGE *	162±5	1350mm×30m	40.5 m ²	Clear (Gloss)	1 roll
TPS100CGE *		675mm×30m	20.25 m ²		
TPL100CME	162±5	1350mm×30m	40.5 m ²	Clear (Matte)	1 roll
TPS100CME		675mm×30m	20.25 m ²		
100LTHB-NS	170±5	1350mm×30m	40.5 m ²	Clear (Non-Slip)	1 roll
100STHB-NS		675mm×30m	20.25 m ²		
188LTHB-NS	258±5	1350mm×30m	40.5 m ²	Clear (Non-Slip)	1 roll
188STHB-NS		675mm×30m	20.25 m ²		

Applications

► For protection of the floor and keeping it look beautiful ► For protection of the furniture and building materials and keeping them look beautiful ► Advertising media ► Printing laminate film

Usage Examples



Protection of cafeteria floors of manufacturing company

Example of installation



Floor of a department store



Floor mark protection at distribution centers/(used as cut portion)

"Ultra-Durable Protective Tape" that can be used for multiple purposes such as magnetic tape protection

bBa! AGV Line Protection Tape

Offers strong protection for the AGV (Automated Guided Vehicle) magnetic tape. Highly versatile and can be used for a variety of applications, such as small floor marks and partial reinforcement of line tapes that have insufficient durability.

Compliant with RoHS2 Directive

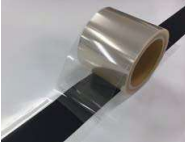
Product standard

Product number	Total Thickness(μm)	Size	Color (Glossy Type)	Shipping lot
AGV Line Protection Tape	162±5	90mm×30m	Clear (Gloss)	6 rolls

Applications

- For protection of floor marks and keeping them look beautiful
- For protection of line tapes and keeping them look beautiful, etc.

Usage Examples



For AGV magnetic tape protection



For protecting floor marks in plants



For protection and reinforcement of line tapes (Places that could be partially damaged by traffic of lifts and carts)

"Ultra-Durable Protective Sheet" for easily reinforcing home-made floor marks, bar codes, etc.

bBa! POP Laminate

Provides strong protection against dirt and scratches on the floor marks, floor bar codes, and other marks. The shape can be cut with scissors or cutters, and used for various applications with high versatility.



※ It comes with one squeegee.

Product standard

Product number	Total Thickness(μm)	Size	Color (Glossy Type)	Shipping lot
POP100	257±5	250mm×337mm	Clear (Gloss)	10 Sheets per Bag

Applications

- For protection of floor marks and keeping them look beautiful
- For protection of floor bar codes and keeping them look beautiful, etc.

Usage Examples



bBa! POP Laminate



Competitors' products

Still beautiful after 6 months

"Ultra-Durable Line Tape" that is scratch-resistant, long-lasting and beautiful

bBa! Super Line Tape

It is resistant to scratches and dirt, and remains beautiful for a long time. Because of the glossy bright color, it is suitable for a wide range of applications that require high visibility and beautiful look, such as for zoning, aisle marks, location marks, and stop position marks.



Ultra-Durable Friction Test

This is a video of an endurance test in which a block is placed on the bBa! Super Line Tape and a conventional line tape, then reciprocated 1500 times. Please scan the QR code and have a look!



Color ※ The colors are for illustration only. They vary from the actual color.



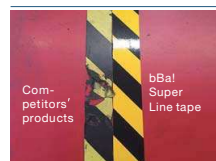
Product standard

Product number	Total Thickness (μm)	Size	Color (Glossy Type)	Shipping lot
LTS50	306 ± 5	50mm × 20m	Yellow/Blue/Red/Green/Orange/Tiger [black yellow stripe]/Black/Gray/Brown/White (Gross)	12 rolls
LTL100	306 ± 5	100mm × 20m	Tiger [black yellow stripe], Yellow, White, Orange (Gross)	6 rolls

Applications

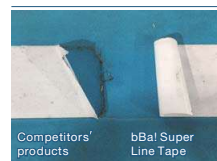
- ▶ For zoning
- ▶ For aisle marks
- ▶ For stop position marks
- ▶ For various other position marks

Comparison of durability with competitors' products



After 3 months of use

Comparison of glue residue when peeled



After 3 months of use

Usage Examples



As a guide line in the station

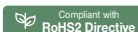


For marking visitor passageways at distribution centers

"Ultra-Durable Marking" that is scratch-resistant, long-lasting and beautiful

bBa! Marking Tape

This is a derivative product developed specifically for marking while maintaining the function of bBa! Super Line Tape. It was developed based on users' feedback to save the trouble of manually cutting the tapes into multiple parts. Custom sizes and shapes are also available.



Product standard

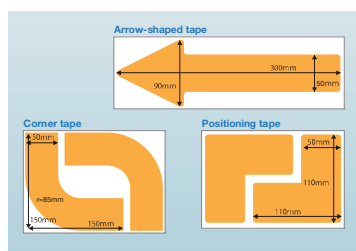
Product name	Color	Shipping lot
Arrow tape	White, Yellow, Blue, Red, Green, Orange	10 Sheets per Bag (10 Pieces)
Corner tape	White, Yellow, Blue, Red, Green, Orange	5 Sheets per Bag (10 Pieces)
Positioning tape	White, Yellow, Blue, Red, Green, Orange	10 Sheets per Bag (20 Pieces)

Color ※ The colors are for illustration only. They vary from the actual color.



Applications

- ▶ For positioning ▶ For guidance ▶ As a corner joint
- ▶ Various clarifications and alerts, etc.



"Ultra-Durable Color Sheet" that is scratch-resistant, long-lasting and beautiful

bBa! Color Film

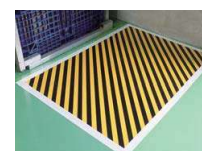
Highly durable color sheet. Can be used as is, or can be used for a wide range of applications such as to create custom width line tapes, custom size sheets, or cut into desired shapes.



Applications

- ▶ To create custom size tapes and sheets
- ▶ For various clarifications and alerts, etc.

Usage Examples



Color ※ The colors are for illustration only. They vary from the actual color.



Example of use as a whiteboard!

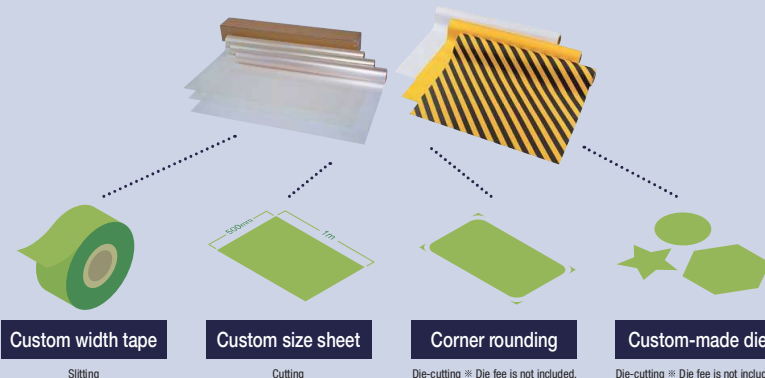
The excellent stain resistance of bBa! Coating enables long-lasting, clean use. In addition, it is resistant to small scratches, so it has a long-lasting stain-resistant effect. Magnetism passes through it, so you apply it on a material that has a magnet function, the function will be maintained.

Product standard

Product number	Total Thickness (μm)	Size	Area	Color (Glossy Type)	Shipping lot
SC100G	306 ± 5	1000mm × 20m	20m ²	White, Yellow, Blue, Red, Green, Orange, Tiger [black yellow stripe] (Gloss)	1 roll

Custom product available!!

By slitting, cutting, die-cutting, etc., custom-made products in the desired size and shape is available.



What is Slitting?

Processing method for continuous cutting with constant width.
※ Minimum width 20 mm ※ Maximum tolerance ± 2 mm width may occur.

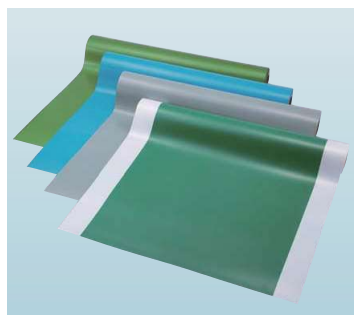
Ultra-Durable Walking Area Sheet to make beautiful and long-lasting walking area in a short time

bBa! Walking Area Film

Stop "painting" the walking area, and start "attaching" it. It takes less time than painting, and layout change is easier. It exhibits abrasion resistance and stain resistance, and keeps the beautiful look for a long time. For walking, traffic, and safety areas where people and carts frequently come and go. It can also be applied to the entire floor in areas where heavy objects do not come and go, such as office spaces, changing rooms, and inspection rooms.

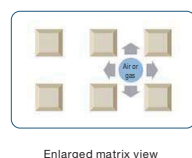


Matrix processed



What is the Matrix?

The "Matrix" is a special adhesive processing (matrix processing) that forms innumerable small irregularities on the adhesive surface, and the structure allows air and gas to escape through the ultra-fine grooves that run horizontally and vertically. Air (air and gas) escapes from the vertical and horizontal grooves, which makes it easy for everyone to apply the film.



Product standard

Product number	Total Thickness(μm)	Size	Area	Color (Glossy Type)	Shipping lot
188NSM	337±5	1000mm×30m	30m ²	Green/Blue/Gray (Non-Slip)	1 roll
188NSM	337±5	1000mm×20m	20m ²	Green with white edge (Non-Slip)	1 roll

Applications

► Walking, traffic, and safety areas ► For protection of floor marks and keeping them look beautiful ► For protection of workbench, etc.

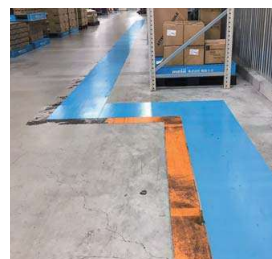
Color ※ The colors are for illustration only. They vary from the actual color.



Usage Examples



Walking area in a manufacturing plant



Walking area in a Warehouse & Logistics

More robust film for heavy objects

bBa! Design Sheet (Hard Type)

While maintaining the performance of the bBa! Design Sheet, the thickness of the base material is increased by 88%. Improved durability against twisting due to traffic of heavy objects, etc. This has expanded the range of application.

Matrix processed

Shipping lot
1 Sheet each



Usage Examples



(1) Size W 1000 mm x H 150 mm

(1)Design	Color part number		
	Yellow	Light Yellow	Red
とまれ	YT100-1	LT100-1	RT100-1
とまれ	YT100-2	LT100-2	RT100-2
とまれ	YT100-3	LT100-3	RT100-3
とまれ	YT100-4	LT100-4	RT100-4
一時停止	Y I 100-1	L I 100-1	R I 100-1
一時停止	Y I 100-2	L I 100-2	R I 100-2
一時停止	Y I 100-3	L I 100-3	R I 100-3
一時停止	Y I 100-4	L I 100-4	R I 100-4
左右確認	YK100-1	LK100-1	RK100-1
左右確認	YK100-2	LK100-2	RK100-2
左右確認	YK100-3	LK100-3	RK100-3
左右確認	YK100-4	LK100-4	RK100-4
侵入禁止	YS100-1	LS100-1	RS100-1
侵入禁止	YS100-2	LS100-2	RS100-2
侵入禁止	YS100-3	LS100-3	RS100-3
侵入禁止	YS100-4	LS100-4	RS100-4

(2) Size W 650 mm x H 150 mm

(2) Design	Color part number		
	Yellow	Light Yellow	Red
とまれ	YT65-1	LT65-1	RT65-1
とまれ	YT65-2	LT65-2	RT65-2
とまれ	YT65-3	LT65-3	RT65-3
とまれ	YT65-4	LT65-4	RT65-4
一時停止	Y I 65-1	L I 65-1	R I 65-1
一時停止	Y I 65-2	L I 65-2	R I 65-2
一時停止	Y I 65-3	L I 65-3	R I 65-3
一時停止	Y I 65-4	L I 65-4	R I 65-4
左右確認	YK65-1	LK65-1	RK65-1
左右確認	YK65-2	LK65-2	RK65-2
左右確認	YK65-3	LK65-3	RK65-3
左右確認	YK65-4	LK65-4	RK65-4
侵入禁止	YS65-1	LS65-1	RS65-1
侵入禁止	YS65-2	LS65-2	RS65-2
侵入禁止	YS65-3	LS65-3	RS65-3
侵入禁止	YS65-4	LS65-4	RS65-4

"Ultra-durable mirror film" that is resistant to scratches and scatter proof

bBa! Mirror Film

By applying it to a smooth surface such as glass, you can use it as a mirror. It can be used for various applications, such as for repairing old mirrors, reflecting lights, or making the surface shatter-resistant. It can be used safely in the environments that require durability and safety from stores and facilities to plants.



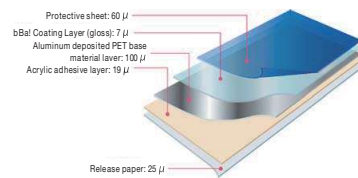
Product standard

Product number	Total Thickness(μm)	Size	Color (Glossy Type)	Shipping lot
bBa! Mirror 100	211±5	1000mm×20m	Mirror (Gloss)	1 roll

Applications

- ▶ To make a mirror shutter-resistant
- ▶ For display materials at stores, etc.
- ▶ As a lighting reflective film
- ▶ To repair deteriorated mirror, etc.

Structural diagram



Example of installation



Example of installation in hot bath facility

"Ultra-Durable Acrylic Mirror that is resistant to scratches, light, and scatter proof

bBa! Mirror

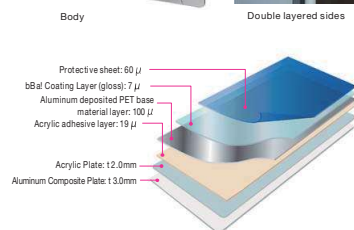
This is a highly durable acrylic mirror with bBa! Mirror Film bonded to an acrylic plate and reinforced with an aluminum composite plate on the back. The weight is about 1/3 of the glass and installation is easy. A highly durable and safe mirror that is shutter and scratch-resistant.

Applications

- ▶ To make a mirror shutter-resistant
- ▶ For display materials at stores
- ▶ As a furniture display material
- ▶ As sales promotion goods and accessories

Custom size available!

Maximum size 900mm x 1,800mm
 ※ The larger the size, the more likely distortion will occur. Also, depending on the desired size, the corner rounding may be difficult.



Product number	Total thickness	Size	Color (Glossy Type)	Shipping lot
bBa! Mirror	5mm	440mm × 350mm (Corner rounding 10mm)	Mirror (Gloss)	1 Sheet

"Ultra-Durable Floor Mark sheet" that is scratch-resistant, long-lasting and beautiful

bBa! Design Sheet

Highly durable floor mark sheet with special "bBa! Coating" on the surface. Since it is resistant to scratches and chemical agents can be used to remove stiff dirt, visibility is hardly degraded and clarity lasts longer. In addition, the adhesive surface is matrix-processed to prevent air from entering. You can choose from 10 types. It is also possible to create a custom design of your choice.

Also available for social distance.



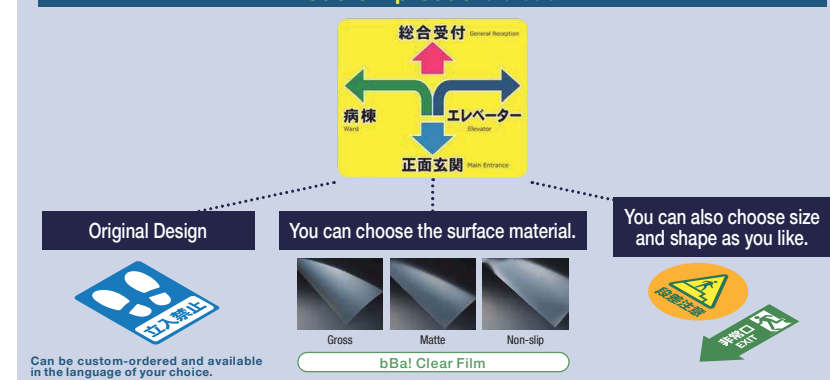
Matrix processed

(1)A-2 Keep off H250mm × W300mm 	(2)B-1 No outdoor shoes H250mm × W300mm 	(3)C-1 No Fire H250mm × W300mm 	(4)D-1 Stop H250mm × W300mm 	(5)E-2 Stop H300mm × W250mm
(6)F-2 Watch your head H300mm × W250mm 	(7)G-2 Watch your step H250mm × W300mm 	(8)H-1 Watch out for forklift H250mm × W300mm 	(9)K-1 Check left and right H250mm × W300mm 	(10)L-1 Evacuation exit guidance H250mm × W300mm

*Luminous type is also available.

Shipping lot
5 Sheets per Bag

Custom product available!



Can be used on the floor for a long time. "Ultra-Durable Luminous Tape" with high luminance and long afterglow

bBa! Luminous Tape

Luminous tape absorbs and accumulates light (natural light and artificial light) and emits light when it becomes dark. The bBa! Luminous Tape has a special coating "bBa! Coating" on the surface, making it a highly durable disaster prevention/safety product that can be safely used even on floors and other surfaces. The luminance and afterglow time satisfy the JIS standard (JC class), and the high luminance and long afterglow make it highly practical.



Product standard

Product number	Total Thickness(μm)	Size	Color (Glossy Type)	Shipping lot
BT2510	460±5	25mm×10m	Yellowish green (gloss) ※ Illuminates blue in the dark	1 roll
BT255	460±5	25mm×5m	Yellowish green (gloss) ※ Illuminates blue in the dark	1 roll
BT251	460±5	25mm×1m	Yellowish green (gloss) ※ Illuminates blue in the dark	12 rolls
BT5010	460±5	50mm×10m	Yellowish green (gloss) ※ Illuminates blue in the dark	1 roll
BT505	460±5	50mm×5m	Yellowish green (gloss) ※ Illuminates blue in the dark	1 roll
BT501	460±5	50mm×1m	Yellowish green (gloss) ※ Illuminates blue in the dark	12 rolls

Applications

- ▶ For safety measures (prevention of stepping off stairs, etc.)
- ▶ For disaster countermeasures (evacuation route guidance, etc.)
- ▶ As a sign in the dark such as at night or during power outages

Phosphorescence luminance measurement

(Measuring distance: 350 mm, angle of measurement: 3 degrees, in mcd/m²)

The bBa! Luminous Tape has higher luminance and longer afterglow than conventional products, and their afterglow properties remarkably exceed the JC values.

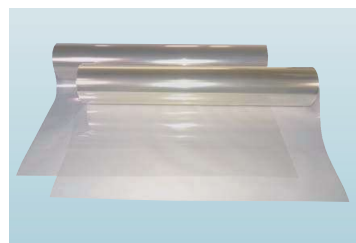
Product	Elapsed time					Thickness (mm)
	2 minutes	10 minutes	20 minutes	30 minutes	60 minutes	
bBa! Luminous Tape	1027	286.2	149.6	88.9	37.1	0.46
JIS JC Standard	880	210	100	62	30	

※ The luminance measurement method conforms to JIS Z 9107.
 ※ These figures and data are not guaranteed for the surface the tapes were used on.

Ultra-Durable Protective Film for custom-made displays

bBa! Touch Panel Protective Film

bBa! Touch Panel Protective Film is a highly durable protective film with the function of special coating "bBa! Coating". Compared to protective films for smartphones, PCs, etc., it is difficult to find ready-made products for machinery equipment and specially shaped monitor screens and panels. We can make custom-made proposals for such surfaces or products.



Product standard

Product number	Total Thickness(μm)	Original fabric size	Color (Glossy Type)	Shipping lot
TP100CQE-SI	258±5	680mm×20m	Clear (Gloss)	1 roll
TP100CME-SI	258±5	680mm×20m	Clear (Matte)	1 roll

Applications

- ▶ For degradation prevention and protection of various screens

Usage Examples



For protection of IC card touch screen at stations and ticket gates



For protection of station and ticket vending machine screens

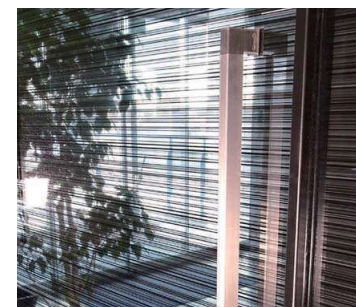
"Antiviral film" that is soft and easy to apply to areas that cannot be frequently sterilized

bBa! Virus Guard (Soft Type)

※ This product uses RIKEGUARD[®].
 RIKEGUARD[®] is a registered trademark of RIKEN TECHNOS CORPORATION.
 ※ This product does not have special "bBa! Coating".

A film product with antiviral and antibacterial properties. The soft type is easy to apply to curved parts. It is processed to remove air bubbles from under the sheet.

※ This is not a pharmaceutical product. Reduce the number of certain type of viruses on the product. Antiviral material that satisfies the safety standard of SIAA is used. Antiviral processing is not intended to treat or prevent disease.

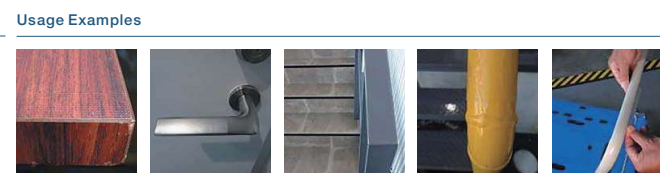


Product standard

Type	Base Material Thickness (μ)	Size	Color	Material	Adhesion	Texture	Shipping lot
Soft Type (PVC)	100μ	1010mm×30m	Transparent (No Gloss)	PVC	Medium adhesion	Soft	1 roll
		200mm×280mm					1 Bag (5 Sheets)

Applications

- ▶ For workbenches
- ▶ For door knobs/handrails
- ▶ For carts, etc.



"Antiviral film" for custom-made displays

bBa! Virus Guard (Slight Adhesion Type)

※ This product uses RIKEGUARD[®].
 RIKEGUARD[®] is a registered trademark of RIKEN TECHNOS CORPORATION.
 ※ This product does not have special "bBa! Coating".

A film product with antiviral and antibacterial properties. Slightly adhesive type is easy to apply to the display screen or touch panel screen, and can be re-applied many times.

※ This is not a pharmaceutical product. Reduce the number of certain type of viruses on the product. Antiviral material that satisfies the safety standard of SIAA is used. Antiviral processing is not intended to treat or prevent disease.



Product standard

Type	Base Material Thickness (μ)	Original fabric size	Color	Material	Adhesion	Texture	Sales type
Slight Adhesion Type	50μ	1020mm×100m	Transparent (Glossy)	PET	Slight adhesion	Rigidity	Size/shape Custom-made

Applications

- ▶ For registers
- ▶ For operation panels
- ▶ For restaurant order panels
- ▶ For learning tablets, etc.

Usage Examples



Custom-made items!

We will make a proposal according to your desired size, shape, and quantity.
 ※ Original fabric is available.

Antifouling spray with water and oil repellency

bBa! Protect

bBa! Protect is a one-component, room temperature curing water and oil repellent coating agent with special additives. Prevents cement, concrete sludge, mud, soot, oil, etc., from sticking and improves the work environment. The film is flexible and remains effective even when used on elastic part of the rubber.



Coating method

STEP ① : Pretreatment

As a coating pretreatment, perform degreasing and cleaning thoroughly.

STEP ② : Spray & Paint

Spraying bBa! Protect and applying it with a rag makes a uniform coating film.

STEP ③ : Overpainting

As for the first time, two coats will give you a better effect.

Steel plate oil repellent comparative test

Observed for 24 hours after application of waste oil (while standing the steel plate at an angle of 80 degrees after application)



Machine Tool (Inner Wall) Antifouling Comparison Test

Coated with bBa! Protect and then compared the results



Feature Details			
Applications	Oil repellency, water repellency, antifouling, protection	Solvent resistance IPA ※3 Isohexane ※4	○ ○
Target material	Rubber, metal, resin, wood		
Principal component	Silicon compound		
Boiling point range (degrees C)	100 to 140	Anti-Rust Ability Wet Test	2 weeks ☺
Coating area	1L 10m ² 420 ml Aerosol 3 to 5 m ²	Hardness	3H
Drying time	3 to 6 hours (Standard time: 3 hours in summer, 6 hours in winter)	Film durability (water repellency)	Approx. 6 months in the train
Film Thickness (μm) ※1 Coat the vertical surface of SPOC Steel Plate ※2	0.1 to 0.2	Heat resistance	300 degrees C

※ 1 μm···1μm=0.001mm

※ 2 SPOC steel sheet: Cold rolled steel sheet. Milled steel sheet. Used for automobile bodies, etc.

※ 3 IPA: Isopropyl alcohol Solvent used in industrial detergents, glass water repellents, etc.

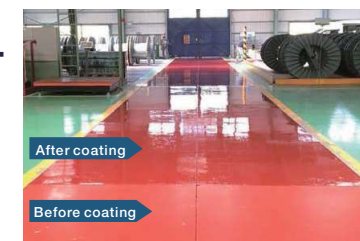
※ 4 Isohexane: Colorless and odorless liquid widely used in pharmaceutical raw materials, adhesives, detergents, etc.

"Ultra-durable UV coating" for places where bBa! Film cannot be applied

bBa! UV Coating

It does not peel off like film even when it is applied to uneven floors or areas where heavy carts turn around, and realizes a floor that is strong and beautiful for a long time. In addition, it is non-formaldehyde and environmentally friendly, so you can use it with peace of mind. Maintenance is much easier and cost is greatly reduced.

Before/After



Benefits

① Keeping the plant look beautiful

- High abrasion resistance protects the surface of the coating from scratches and keeps the beautiful look for a long time. </3697>
- High scuff mark resistance reduces tire marks from lifts and carts.
- It is easy to remove dirt and reduces the burden of cleaning.

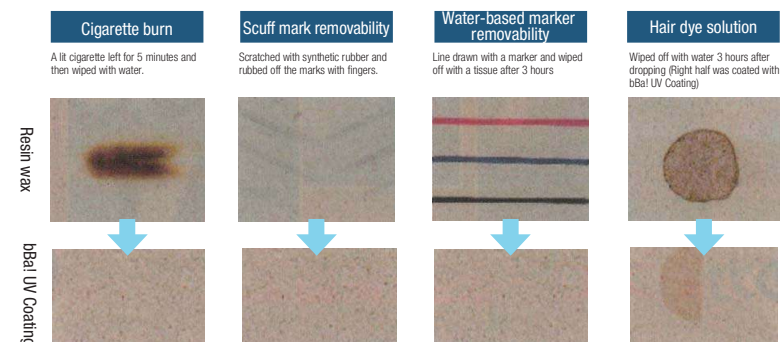
② High performance, low odor

- High chemical resistance makes it ideal for plants that use chemicals.
- Solvent-free paint reduces odor during installation.

③ Quick installation

- Special UV coating enables walking immediately after UV irradiation.
- Quick installation minimizes the plant shut-down period.

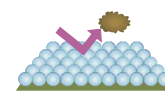
Performance comparison



Features

Keeps long-lasting beautiful look by forming a strong coating film.

bBa! UV Coating forms a high-density coating film by firmly bonding small molecules of less than 1/10 of conventional wax. Provides strong protection against various scratches and dirt. Due to its chemical resistance, chemical agents can be used to remove stiff dirt. Maintains a clean floor for a long time.



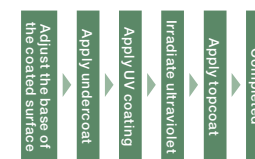
bBa! UV Coating



Conventional wax

Installation processes

Can walk on the floor immediately after coating agent is applied and ultraviolet irradiation is completed.



※Ultraviolet irradiation

Tips for use
1

Usage examples - Manufacturing site (Research building), inspection room, distribution center -

1 bBa! Color Film

P8

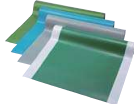


* The colors are for illustration only. They vary from the actual color.

Product number	Size (Width in mm x Length in m)	Shipping lot
SC1005	1000x20	1 roll

2 bBa! Film for walking area

P9



Product number	Size (Width in mm x Length in m)	Shipping lot
188NSM	1000x20	1 roll
188 NSM (Green with white edge)	1000x20	1 roll

3 Custom-made bBa! White Board film

P8



TP 100 CGE + Print + Print Sheet

"bBa! Coating" is applied to the surface layer, and the antifouling effect lasts long. Custom printing is available. The adhesive surface is custom-made with "matrix processing" to prevent air from entering.

4 bBa! Clear film

P5



Product number	Size (Width in mm x Length in m)	Shipping lot
TP1500GE	1350x30	1 roll
TP5000GE	675x30	1 roll
TP1100GE	1350x30	1 roll
TP5100GE	675x30	1 roll
TP1000ME	1350x30	1 roll
TP5100ME	675x30	1 roll
100LHB-NS	1350x30	1 roll
100S7HB-NS	675x30	1 roll
188LHB-NS	1350x30	1 roll
188S7HB-NS	675x30	1 roll

5 bBa! Touch Panel Protective film

P13



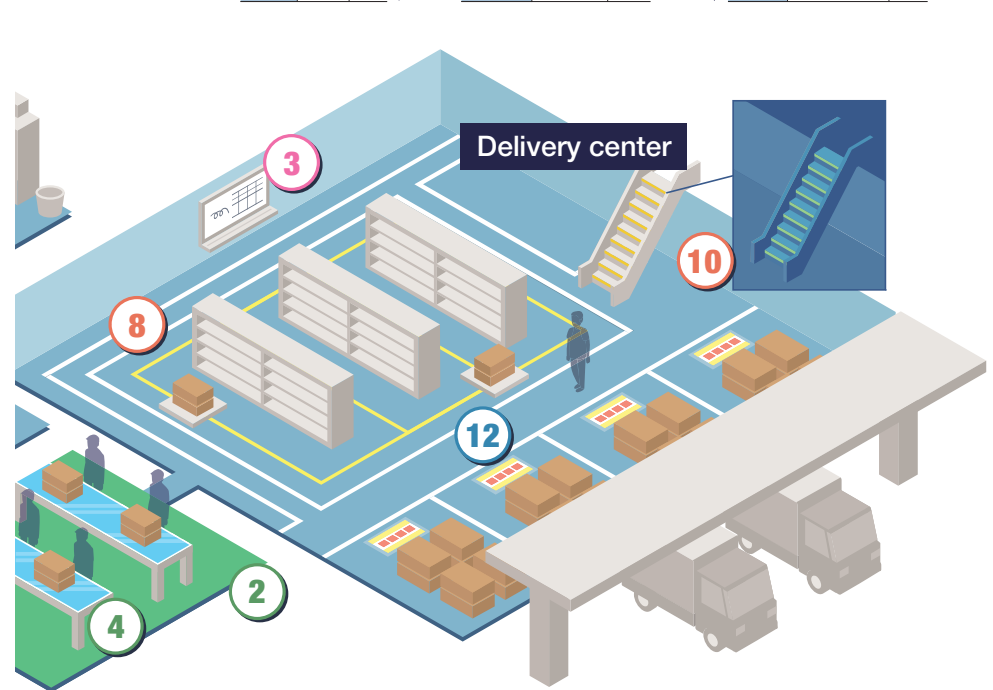
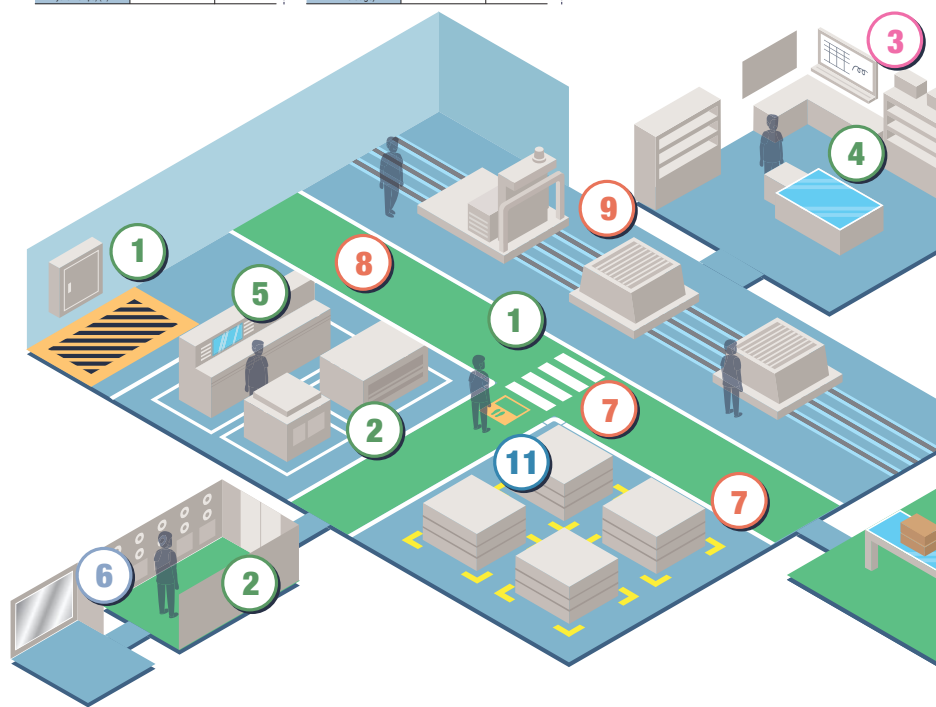
Product number	Size (Width in mm x Length in m)	Shipping lot
TP1000GE-SI	680x20	1 roll
TP1000ME-SI	680x20	1 roll

6 bBa! Mirror

P10



Product number	Size (Width x Height x Thickness in mm)	Shipping lot
bBa! Mirror	440x350x15.0	1 Sheet



7 bBa! Marking Three Types of Tape

P7



* The colors are for illustration only. They vary from the actual color.

Product name	Size (width in mm x height in mm)	Shipping lot
Arrow tape	Refer to the corresponding page	10 Sheets (10 Pieces)/Bag
Corner tape		5 Sheets (10 Pieces)/Bag
Positioning tape		10 Sheets (20 Pieces)/Bag

8 bBa! Super Line Tape

P7



Product number	Size (Width in mm x Length in m)	Shipping lot
LTS50	50x20	12 rolls/case
LTL100	100x20	6 rolls/case

9 bBa! AGV Line Protective tape

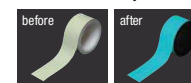
P6



Size (Width in mm x Length in m)	Shipping lot
90x30	6 rolls/case

10 bBa! Luminous Tape

P13



Product number	Size (Width in mm x Length in m)	Shipping lot
BT2510	25x10	1 roll
BT255	25x5	1 roll
BT251	25x1	12 roll
BT5010	50x10	1 roll
BT505	50x5	1 roll
BT501	50x1	12 roll

11 bBa! Design sheet

P11



Size (width in mm x height in mm)	Shipping lot
Refer to the corresponding page	5 Sheets/1 Set

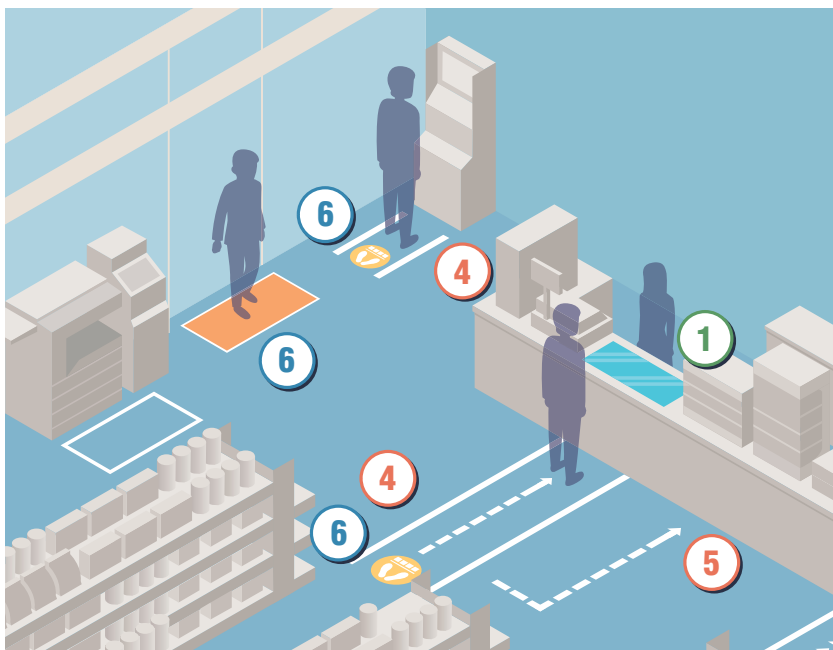
12 bBa! POP Laminate

P6



Product number	Size (width in mm x height in mm)	Shipping lot
POP100	250x337	10 Sheets/Bag

Usage examples - Commercial facilities -



1 bBa! Clear Film

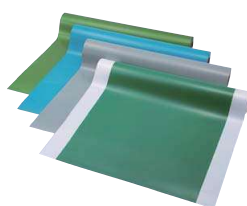
P5



Product number	Size (Width in mm x Length in m)	Shipping lot
TPL50CGE	1350x30	1 roll
TPL50CGE	675x30	1 roll
TPL100CGE	1350x30	1 roll
TPL100CGE	675x30	1 roll
TPL100CME	1350x30	1 roll
TPL100CME	675x30	1 roll
100LTHB-NS	1350x30	1 roll
100STHB-NS	675x30	1 roll
188LTHB-NS	1350x30	1 roll
188STHB-NS	675x30	1 roll

2 bBa! Walking Area Film

P9



Product number	Size (Width in mm x Length in m)	Shipping lot
188NSM	1000x30	1 roll
188 NSM (Green with white edge)	1000x20	1 roll

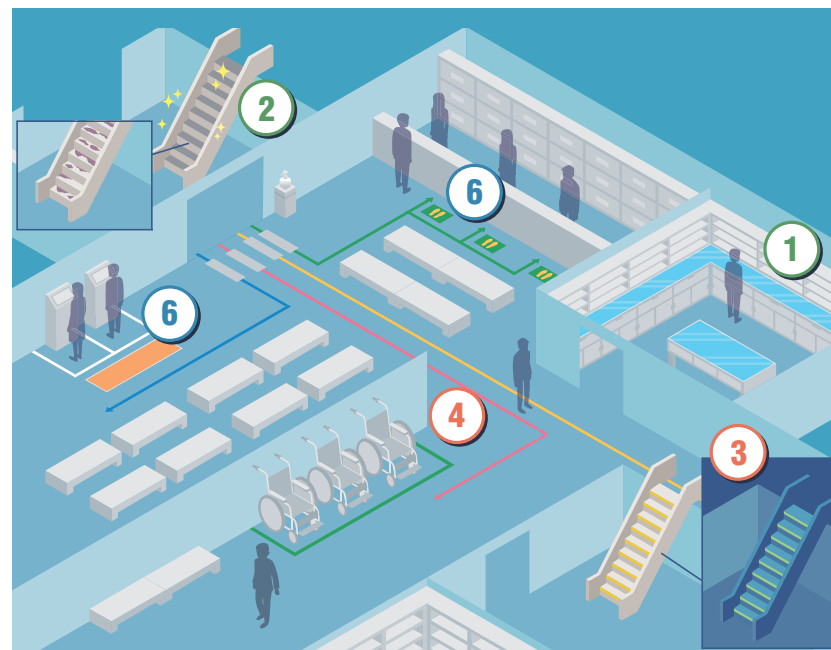
3 bBa! Luminous Tape

P13



Product number	Size (Width in mm x Length in m)	Shipping lot
BT2510	25x10	1 roll
BT255	25x5	1 roll
BT251	25x1	12 roll
BT5010	50x10	1 roll
BT505	50x5	1 roll
BT501	50x1	12 roll

Usage example - Hospital-



4 bBa! Super Line Tape

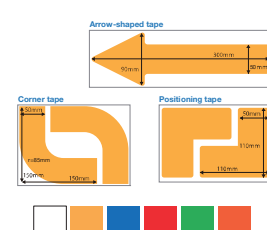
P7



Product number	Size (Width in mm x Length in m)	Shipping lot
LT550	50x20	12 rolls/case
LTL100	100x20	6 rolls/case

5 bBa! Marking Tape

P7



Product name	Size (width in mm x height in mm)	Shipping lot
Arrow tape	Refer to the corresponding page	10 Sheets (10 Pieces)/Bag
Corner tape	Refer to the corresponding page	5 Sheets (10 Pieces)/Bag
Positioning tape	Refer to the corresponding page	10 Sheets (20 Pieces)/Bag

6 bBa! Design Sheet

P11



Size (width in mm x height in mm)	Shipping lot
Refer to the corresponding page	5 Sheets/1 Set

How to apply the bBa! Film

Preparation * It is recommended but not required.

- ◆ Detergent or alcohol ◆ Wiping towel ◆ Cleaning tools for dust removal
- ◆ Cutter ◆ Cutter mat ◆ Scissors ◆ Squeegee ◆ Curing tape
- ◆ Working in pairs is recommended for applying film or tape.

Recommended environment for long-lasting effects



Usage Notes

- When applied to uneven surfaces, it will peel off easily.
- When water or oil enters the glue surface, it will peel off easily.
- When used outdoors or half-outdoors, its discoloration, deterioration, and peeling may be accelerated. Recommended for indoor use.
- When applied to a newly painted surface, a long sheet, or a P tile to seal it, the soaked chemicals may vaporize and be released, causing it to swell.
- Keep it away from high temperature, humidity and direct sunlight.
- It might be torn or peeled off if heavy object such as forklifts turns on it.
- If an angular, heavy and hard object falls onto it, it might be hollowed or holed.
- Please note that we are not responsible for any damage or breakage of the surface to which the film, tape or sheet is attached when it is applied or removed.

How to take care of the bBa! Film

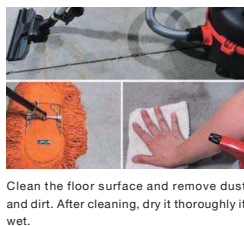


Target products

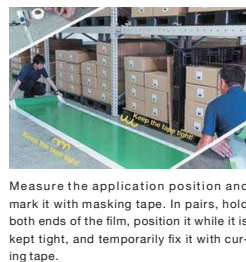
- bBa! Clear film
- bBa! Color Film
- bBa! Walking Area Film

Watch how to apply the films on YouTube!
How to apply the bBa! Film 検索
<https://www.youtube.com/watch?v=rSMMAY96kTE>

1 Cleaning **Key Point**



2 Positioning



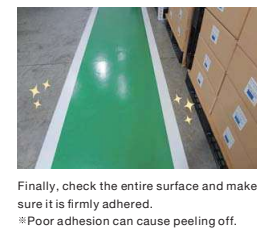
3 Fix the film ends



4 Paste



5 All steps completed

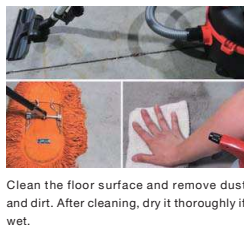


Target products

- AGV Line Protective tape
- bBa! Super Line Tape
- bBa! Luminous Tape

Watch how to apply the films on YouTube!
How to apply the bBa! Film 検索
<https://www.youtube.com/watch?v=xAg5NMMeaWAE>

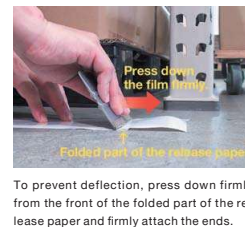
1 Cleaning **Key Point**



2 Positioning



3 Fix the tape ends



4 Paste



5 All steps completed

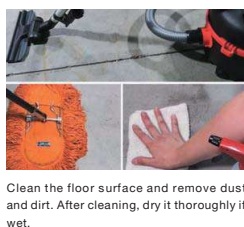


Target products

- bBa! POP Laminate
- bBa! Design sheet
- bBa! Design Sheet (Hard type)

Watch how to apply the films on YouTube!
How to apply the bBa! Film 検索
<https://www.youtube.com/watch?v=9cfepF92SDY>

1 Cleaning **Key Point**



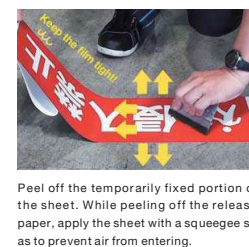
2 Positioning



3 Fix the sheet ends



4 Paste



5 All steps completed



Product Documents List

Product documents can be downloaded from our website.

1 2: <https://www.takahara-corp.jp/bba-catalog.html>

TOP > Services & Products > bBa! Film Catalog

3 4 5: <https://www.takahara-corp.jp/bba-product.html>

Top > Services & Products > Product Information

※ You can download it from [Product Documents] at the bottom of each product introduction.

1 Product Catalog

This is the catalog of bBa! Film. In addition to the "strengths" and "product line-up" of bBa! Film, we also provide comprehensive information including "usage examples" and "how to apply".



2 Collection of usage examples

Usage examples of bBa! Film are described here. The book will help you get an idea of how you can use it.



3 Product leaflets

※ Not available in English.

A single product leaflet that highlights a specific product in the bBa! Film line-up. Comparison with conventional products, product introduction video, and video on how to apply the product are available.



4 Instruction manual on how to apply (3 types)

※ Not available in English.

Three types are available: Film, Tape, and Sheet. The most important points to remember when using this product are to choose the right place to apply it and to clean the area before applying it. These two points are described in the manual, so please refer to it when you use samples for trial or use the product itself.



5 Product Data Sheet (PDS)

※ Not available in English.

This is a technical document that describes "specification and packaging information", "physical properties data (adhesion, transmittance, etc.)", and "film composition" for each product of bBa! Film line-up.



6 Other

※ Not available in English.

Materials such as "SDS", "Environmental Survey (RoHS Directive/REACH Regulation)" and "Applicability Certificate" are also available.

※ It may take some time to prepare the ones we don't have.

Frequently Asked Questions

bBa! Film

Q What are the strengths of bBa! Film?

- A** It has mainly 3 strengths.
- (1) Long-lasting
 - (2) Long lasting and clean at the same time
 - (3) Very little adhesive residue when peeling off.
- As a result, we have received feedback from customers that the products reduce frequency of replacement, give a good impression to visitors, are clear and practical, and are easy to replace with less adhesive residue. Some of our customers have been using our products unreplaced for almost 10 years at areas where only people or light carts go by.

Q Is there any place that is not suitable for use?

- A** Refer to "Recommended environment for long-lasting effects" and "⚠️ Precautions for use" in "How to apply bBa! Film" on pages 21 and 22.

Q What should I do with the adhesive residue?

- A** It tends to remain in warm seasons such as summer. If it remains, please use a normal sticker remover available at DIY stores or online shopping sites and try to remove it as soon as possible.

Q Can it be applied with water?

- A** It can be applied to the smooth floor that does not absorb moisture, such as glass or granite.

bBa! UV Coating

Q Is it possible to purchase the materials only?

- A** Since special equipment has to be used for UV irradiation, we offer the materials in combination with the installation service.

bBa! Protect

Q Can it be applied to the floor surface?

- A** It may be used for cleaning paint and dirt. However, please note that the finish will be smooth and slippery.

Other

Q How can I purchase it?

- A** You can find a list of distributors on our website, so please contact your local dealer or contact us directly.
※ Distributor List Page: <https://www.takahara-corp.jp/partner-list.html>

About Us

Company Profile

Company name	TAKAHARA CORPORATION
President & CEO	Joji Takahara
Founded	In January 1975
Established	In December 1983
Number of employees	28 (including 2 part-time employees)
Capital stock	10 million yen

Company History

In January 1975	Founded in Shikatsu-cho, Nishikasugai-gun, Aichi Prefecture.
In December 1983	Established Takahara Bika CL Co., Ltd.
In June 1988	Introduced carpet dyeing system from AAA, Inc., U.S.A. Patented carpet re-dyeing technique (Patent No. 2101437) (Patent No. 2990344)
In March 1992	Established the distributor for Color Match System in Korea.
In May 1994	Signed a distributorship with U.S. Products and started import and sales of the carpet steam cleaning machine COBRA series.
In September 1996	Renamed to TAKAHARA CORPORATION.
In March 1998	Completed construction of headquarter building in Nishi-ku, Nagoya City.
In March 1999	Launched sales of Sunlight photocatalyst products. Established Tokyo Sales Office in Shinjuku-ku, Tokyo, then relocated to Suginami-ku, and then to Chiyoda-ku.
In February 2009	bBa! Film certified as a "New Collaboration under the Ministry of Economy, Trade and Industry's Small and Medium Enterprise Support System."
In September 2013	Patented "Mirror Surface Sheet with Protective Film and Its Manufacturing Method". (Patent No. 5363396)
In October 2014	Patented "Coated Sheet" (Patent No. 5626829)
In July 2015	Koji Takahara appointed as Chairman of the Board. Joji Takahara appointed as President and Representative Director.
In September 2019	Headquarter office relocated to Kiyosu City, Aichi Prefecture.

Our Business

Takahara Corporation's mission is to "Be Beautiful Ambience" for our customers through the following four businesses.



Building management business



bBa! Film business



Photocatalyst business



House option business