

**RI – JET 165 LOGO**
PRODUCT CODE: 3-0065**PRODUCT DESCRIPTION**

This 3.1-mil matte white vinyl is compatible with a variety of printing methods such as solvent, eco-solvent, latex and UV ink jet technologies. The permanent adhesive features very high cohesion. It is designed for a wide variety of substrates such as glass, ABS, PS and PVC; however, it is unsuitable for apolar surfaces (like PE and PP). The product is excellent for use in advertising and promotional applications (posters, billboards and signs).

APPLICATIONS

- Advertising and promotional applications
- Point of purchase displays

FEATURES AND BENEFITS

- Solvent, eco-solvent, latex and UV ink jet printable

TECHNICAL DATA

Face Material	3.1-mil matte white vinyl
Color and Finish	Matte white
Adhesive	Permanent acrylic adhesive
Liner	Digital 83# paper liner with Ritrama logo

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	2.4 lbs	3.5 lbs
Minimum Application Temperature	50°F	
Service Temperature Range	-22°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May-14

Form 108-01 (1/99)

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**RI – JET 145 LOGO**
PRODUCT CODE: 3-0066**PRODUCT DESCRIPTION**

This 3.1-mil gloss white vinyl is compatible with a variety of printing methods such as solvent, eco-solvent, latex and UV ink jet technologies. The permanent adhesive features very high cohesion. It is designed for a wide variety of substrates such as glass, ABS, PS and PVC; however, it is unsuitable for apolar surfaces (like PE and PP). The product is excellent for use in advertising and promotional applications (posters, billboards and signs).

APPLICATIONS

- Advertising and promotional applications
- Point of purchase displays

FEATURES AND BENEFITS

- Solvent, eco-solvent, latex and UV ink jet printable

TECHNICAL DATA

Face Material	3.1-mil gloss white vinyl
Color and Finish	Gloss white
Adhesive	Permanent acrylic adhesive
Liner	Digital 83# paper liner with Ritrama logo

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	2.4 lbs	3.5 lbs
Minimum Application Temperature	50°F	
Service Temperature Range	-22°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

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May-14

Form 108-01 (1/99)



CLASSIC ECONOMY GLOSS PRODUCT CODE: 3-0070

PRODUCT DESCRIPTION

This 3.2-mil high gloss white vinyl is compatible with a variety of printing methods such as solvent, eco-solvent, latex and UV ink jet technologies. The permanent adhesive features high clarity and very high cohesion. It is designed for a wide variety of substrates such as glass, ABS, PS and PVC; however, it is unsuitable for apolar surfaces (like PE and PP). The product is excellent for use in advertising and promotional applications (posters, billboards and signs).

APPLICATIONS

- Advertising and promotional applications
- Point of purchase displays
- Decals

FEATURES AND BENEFITS

- Solvent, eco-solvent, latex and UV ink jet printable
- Excellent bright, white vinyl film
- 3-year outdoor durability

TECHNICAL DATA

Face Material	3.2-mil high gloss white vinyl
Color and Finish	High gloss white
Adhesive	Permanent acrylic adhesive
Liner	Digital 83# liner

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	1.6 lbs	2.4 lbs
Minimum Application Temperature	50°F	
Service Temperature Range	-22°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Jan-13

Form 108-01 (1/99)



CLEAR CLING

PRODUCT CODE: 3-1321

PRODUCT DESCRIPTION

7.0-mil STATIC CLING gloss clear flexible vinyl adheres to glass or polished top surfaces without the use of adhesive.

APPLICATIONS

- Children's stickers and game pieces
- Decals
- Product Identification
- Promotional products
- Temporary product identification
- Window graphics

FEATURES AND BENEFITS

- Adheres to glass or polished top surfaces without the use of adhesive

TECHNICAL DATA

Face Material	7.0-mil static cling vinyl
Color and Finish	Gloss Clear
Adhesive	Not applicable
Liner	10pt coated cardstock printable layflat

TYPICAL CHARACTERISTICS

Printability	Excellent
Minimum Application Temperature	20°F
Service Temperature Range	-0°F to +175°F
Shelf Life (@ 73°F, 50% RH)	6 months
Outdoor Durability	Not recommended

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	Poor
10% Ammonium Hydroxide (10 min)	Poor
Anti-Freeze (24 hr)	Poor
SAE 20 Motor Oil (24 hr)	Poor
Gasoline (1 hr)	Poor

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May-14

Form 108-01(1/99)



WHITE CLING PRODUCT CODE: 3-1322

PRODUCT DESCRIPTION

7.0-mil Static Cling gloss white flexible vinyl adheres to glass or polished top surfaces without the use of adhesive.

APPLICATIONS

- Children's stickers and game pieces
- Decals
- Product Identification
- Promotional products
- Temporary product identification
- Window graphics

FEATURES AND BENEFITS

- Adheres to glass or polished top surfaces without the use of adhesive
- Printable layflat liner

TECHNICAL DATA

Face Material	7.0-mil static cling vinyl
Color and Finish	Gloss white
Adhesive	Not applicable
Liner	10pt coated cardstock printable layflat

TYPICAL CHARACTERISTICS

Printability	Excellent
Inks	Vinyl
Minimum Application Temperature	20°F
Service Temperature Range	-0°F to +175°F
Shelf Life (@ 73°F, 50% RH)	6 months
Outdoor Durability	Not recommended

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	Poor
10% Ammonium Hydroxide (10 min)	Poor
Anti-Freeze (24 hr)	Poor
SAE 20 Motor Oil (24 hr)	Poor
Gasoline (1 hr)	Poor

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May-14

Form 108-01 (1/99)



ULTRA GLOSS BO STANDARD PRODUCT CODE: 3-1849

PRODUCT DESCRIPTION

This premium, 5-year outdoor durable gloss white film with gray adhesive for block out is ideal for slightly curved surface applications. Excellent for use in medium-term promotional, point of purchase displays, trade shows displays, outdoors signage and banners.

APPLICATIONS

- Medium term promotional displays
- Point of purchase displays
- Trade show displays
- Outdoors signage and banners

FEATURES AND BENEFITS

- Gray adhesive for block out
- Premium 5-year durable

TECHNICAL DATA

Face Material	3.0-mil flexible vinyl
Color and Finish	White gloss
Adhesive	Permanent acrylic, pigmented gray
Liner	90# polycoated bleached kraft

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	4.5 lbs./inch	6.0 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	2 years	
Outdoor Durability	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Dec-10

Form 108-01 (1/99)



ULTRA MATTE BO STANDARD PRODUCT CODE: 3-1863

PRODUCT DESCRIPTION

This premium 5-year outdoor durable matte white film with gray adhesive for block out is ideal for slightly curved surface applications. Excellent for use in medium term promotional displays, point of purchase displays, trade shows displays, outdoor signage and banners.

APPLICATIONS

- Medium term promotional displays
- Point of purchase displays
- Trade show displays
- Outdoor signage

FEATURES AND BENEFITS

- 5- year outdoor durable
- Gray adhesive for block out

TECHNICAL DATA

Face Material	3.0-mil flexible vinyl
Color and Finish	White matte
Adhesive	Permanent acrylic, pigmented gray
Liner	90# polycoated bleached kraft

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	4.5 lbs./inch	6.0 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	2 years	
Outdoor Durability	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

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Dec-10

Form 108-01 (1/99)



ULTRA GLOSS REMOVABLE X PRODUCT CODE: 3-1955

PRODUCT DESCRIPTION

This premium 5-year outdoor durable gloss white film is ideal for slightly curved surface applications. Excellent for use in medium-term promotional, point of purchase displays, trade show displays, outdoors signage, banners and vehicle graphics.

APPLICATIONS

- Point of purchase displays
- Trade show displays
- Outdoor signage
- Banners
- Vehicle graphics

FEATURES AND BENEFITS

- Licensed Air Flow Release Liner™ for reduced wrinkling and air bubbles
- Solvent gray removable adhesive

TECHNICAL DATA

Face Material	3.0-mil flexible vinyl
Color and Finish	White gloss
Adhesive	27, gray removable solvent
Liner	90# Licensed Air Flow Release Liner™

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	25 oz.	32 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability (ASTM G53)	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
Jul-13 Form 108-01 (1/99)



CLASSIC GLOSS ACRYLIC PRODUCT CODE: 3-1967

PRODUCT DESCRIPTION

This economical 3-year outdoor durable gloss white film is ideal for flat surface applications. Excellent for use in promotional displays, point of purchase graphics, trade show displays, and window graphics.

APPLICATIONS

- Promotional displays
- Point of purchase graphics
- Trade show displays
- Window graphics

FEATURES AND BENEFITS

- Economical
- Ideal for flat surface applications

TECHNICAL DATA

Face Material	3.5-mil flexible vinyl
Color and Finish	White gloss
Adhesive	Permanent acrylic, emulsion
Liner	72# polycoated bleached kraft

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	2.9 lbs./inch	4.4 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	2 years	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

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Dec-10

Form 108-01 (1/99)



B.C.I.
IMAGING

www.bciimage.com
866 971-1008

www.ritrama.com



CLASSIC MATTE ACRYLIC PRODUCT CODE: 3-1980

PRODUCT DESCRIPTION

This white vinyl film is ideal for flat-surface applications. This product is excellent for use in promotional displays, point of purchase displays, trade show displays, and window graphics.

APPLICATIONS

- Fleet/bus advertisements
- Promotional displays
- Point of purchase displays
- Trade show displays
- Outdoors signage

FEATURES AND BENEFITS

- Ideal for flat surface applications

TECHNICAL DATA

Face Material	3.4-mil flexible vinyl
Color and Finish	White matte
Adhesive	Permanent acrylic, emulsion
Liner	72# polycoated bleached kraft

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	2.9 lbs./inch	4.4 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	2 years	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

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Dec-10

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ULTRA GLOSS BO PRODUCT CODE: 3-1981

PRODUCT DESCRIPTION

This premium 5-year outdoor durable gloss white film with gray adhesive for block out is ideal for slightly curved surface applications. Excellent for use in medium-term promotional displays, point of purchase displays, trade shows displays, outdoor signage and banners.

APPLICATIONS

- Medium-term promotional displays
- Point of purchase displays
- Trade show displays
- Outdoor signage

FEATURES AND BENEFITS

- 5- year outdoor durable
- Gray adhesive for block out

TECHNICAL DATA

Face Material	3.0-mil flexible vinyl
Color and Finish	White gloss
Adhesive	Permanent acrylic, pigmented gray
Liner	72# polycoated bleached kraft

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	4.5 lbs./inch	6.0 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	2 years	
Outdoor Durability	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

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Dec-10

Form 108-01 (1/99)



CLASSIC MATTE BO PRODUCT CODE: 3-2008

PRODUCT DESCRIPTION

This promotional 3-year outdoor durable matte white film with permanent gray adhesive for block out is ideal for flat-surface applications. Excellent for use in short-term promotional advertising, point of purchase, trade show displays and outdoors signage.

APPLICATIONS

- Short term promotional advertising
- Point of purchase displays
- Trade show displays
- Outdoor signage

FEATURES AND BENEFITS

- Gray solvent adhesive for block out

TECHNICAL DATA

Face Material	3.5-mil flexible vinyl
Color and Finish	Matte white
Adhesive	07G Permanent solvent, pigmented gray
Liner	72# polycoated bleached kraft

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	4.5 lbs./inch	6.0 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
Apr-14 Form 108-01 (1/99)



B.C.I.
IMAGING

www.bciimage.com
866 971-1008

www.ritrama.com



CLASSIC GLOSS BO PRODUCT CODE: 3-2009

PRODUCT DESCRIPTION

This promotional 3-year outdoor durable gloss white film with permanent gray adhesive for block out is ideal for flat-surface applications. Excellent for use in short-term promotional advertising, point of purchase, trade show displays and outdoors signage.

APPLICATIONS

- Short term promotional advertising
- Point of purchase displays
- Trade show displays
- Outdoor signage

FEATURES AND BENEFITS

- Gray solvent adhesive for block out

TECHNICAL DATA

Face Material	3.5-mil flexible vinyl
Color and Finish	Gloss white
Adhesive	07G, Permanent solvent, pigmented gray
Liner	72# polycoated bleached kraft

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	4.5 lbs./inch	6.0 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

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Apr-14 Form 108-01 (1/99)

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CLASSIC MATTE REMOVABLE BO PRODUCT CODE: 3-2010

PRODUCT DESCRIPTION

Matte white film with gray removable adhesive, ideal for slightly curved surface applications. Excellent for use in fleet/bus advertisements, medium-term promotional graphics, point of purchase displays, trade show displays, outdoor signage, and banners. It is not recommended for use over rivets and corrugated surfaces.

APPLICATIONS

- Fleet/bus advertisements
- Promotional displays
- Point of purchase displays
- Trade show displays
- Outdoors signage

FEATURES AND BENEFITS

- Removable solvent gray adhesive
- Up to one year removability on most OEM painted surfaces

TECHNICAL DATA

Face Material	3.2-mil flexible vinyl
Color and Finish	White matte
Adhesive	27, Medium-peel removable solvent, pigmented gray
Liner	72# polycoated bleached kraft

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	1.5 lbs./inch	2.5 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
Apr-14 Form 108-01 (1/99)



CLASSIC GLOSS REMOVABLE BO PRODUCT CODE: 3-2011

PRODUCT DESCRIPTION

Gloss white film with gray removable adhesive, ideal for slightly curved surface applications. Excellent for use in fleet/bus advertisements, medium-term promotional, point of purchase displays, trade show displays, outdoor signage and banners.

APPLICATIONS

- Fleet/bus advertisement
- Medium-term promotional
- Point of purchase displays
- Trade show displays
- Outdoor signage and banners

FEATURES AND BENEFITS

- Solvent removable gray adhesive
- Ideal for slightly curved surface applications

TECHNICAL DATA

Face Material	3.5-mil flexible vinyl
Color and Finish	White gloss
Adhesive	27, Medium-peel removable solvent pigmented gray
Liner	72# polycoated bleached kraft

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	1.5 lbs./inch	2.5 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

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May-14 Form 108-01 (1/99)



CLASSIC GLOSS BO X PRODUCT CODE: 3-2039

PRODUCT DESCRIPTION

Gloss white film with gray permanent adhesive and Air Flow Release Liner™, ideal for flat surface applications. Excellent for use in permanent short-term promotional point of purchase displays, trade show displays, outdoor signage and banners.

APPLICATIONS

- Point of purchase displays
- Trade show graphics
- Outdoor signage
- Banners

FEATURES AND BENEFITS

- Licensed Air Flow Release Liner™ for reduced wrinkling and air bubbles
- High opacity solvent gray adhesive

TECHNICAL DATA

Face Material	3.5-mil flexible vinyl
Color and Finish	White gloss
Adhesive	07G permanent solvent pigmented gray
Liner	90# Licensed Air Flow Release Liner™

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	4.0 lbs./inch	5.0 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

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Apr-14 Form 108-01 (1/99)



CLASSIC CLEAR REMOVABLE PRODUCT CODE: 3-2132

PRODUCT DESCRIPTION

This 3.5 mil gloss clear vinyl with solvent removable adhesive is compatible with a variety of printing methods such as solvent, eco-solvent, latex and UV ink jet technologies. Excellent for use in point of purchase displays, trade show displays, and window graphics.

APPLICATIONS

- Window graphics
- Point of purchase displays
- Trade show displays

FEATURES AND BENEFITS

- Compatible with a variety of printing methods
- Solvent removable adhesive – can be wet applied

TECHNICAL DATA

Face Material	3.5-mil flexible vinyl
Color and Finish	Clear gloss
Adhesive	27, solvent removable adhesive
Liner	72# bleached kraft

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	30 oz.	40 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May-14

Form 108-01 (1/99)

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CLEAR FRIENDLY PRINT

PRODUCT CODE: 3-2209


PRODUCT DESCRIPTION

Gloss clear ultraviolet light stable polypropylene. Excellent for use in point-of-purchase, trade show displays, and window graphics. Because of its enhanced UV stability, the film features 2-year outdoor durability.

APPLICATIONS

- Point of purchase displays
- Trade show displays
- Window graphics

FEATURES AND BENEFITS

- Environmentally friendly 3.6-mil gloss clear flexible polypropylene 
- 2-year outdoor durability
- Compatible with a variety of printing methods including UV ink jet, not compatible with solvent ink jet

TECHNICAL DATA

Face Material	3.6-mil UV light stable polypropylene
Color and Finish	Gloss clear
Adhesive	Permanent acrylic
Liner	90# polycoated bleached kraft

TYPICAL CHARACTERISTICS

Average Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	30 oz.	40 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Outdoor Durability	2 years	
Shelf Life (@ 73°F, 50% RH)	2 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Gasoline	Slight Lifting
Anti-Freeze (24 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Dec-10



ULTRA SEMI GLOSS BO PRODUCT CODE: 3-2276

PRODUCT DESCRIPTION

This 3.5-mil premium calendered vinyl consists of a flexible, semi-gloss film having excellent weathering and aging characteristics. Used for decorative striping, transportation makings, flat surface, product identification and warning decals. Features a grey pigmented adhesive for use where an opaque label is required.

APPLICATIONS

- Decorative trim
- Transportation makings
- Product identification
- Warning decals

FEATURES AND BENEFITS

- Excellent weathering and aging characteristics
- Solvent, eco-sol, latex and UV ink jet printable

TECHNICAL DATA

Face Material	3.5-mil premium calendered vinyl
Color and Finish	Semi-gloss white
Adhesive	02G pigment grey permanent solvent
Liner	90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Adhesion Values - Ranges	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	85 oz.	115 oz.
Minimum Application Temperature	32°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
Nov-13

Form 108-01 (1/99)

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ECONOMY VUE PRODUCT CODE: 3-2287

PRODUCT DESCRIPTION

Matte white vinyl laminated onto black vinyl and perforated (this version has 40% open area -1.5-mm holes) in order to print on one side and to see through the other side.

The semi-permanent solvent adhesive is repositionable and easy to remove after application. Printing methods: solvent, eco-sol and latex, offset and large format digital print (solvent, eco-sol and latex).

APPLICATIONS

- Outdoor and transit advertising:
- Point of purchase displays
- Novelty products
- Window glazing (buses, trams fleet in general)

FEATURES AND BENEFITS

- Compatible with variety of printing methods. Not UV Ink Jet printable.
- Solvent adhesive is repositionable and easy to remove after application.

TECHNICAL DATA

Face Material	6.0-mil flexible vinyl
Color and Finish	Black/white gloss
Adhesive	ASP30, Semi-permanent solvent
Liner	Solid paper liner

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	40 oz.	50 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability (ASTM G53)	2 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
Feb-14 Form 108-01 (1/99)



ULTRA SIDEWALK PRODUCT CODE: 3-2302

PRODUCT DESCRIPTION

This premium, outdoor durable gloss white vinyl film product was designed for short term, slightly textured exterior asphalt and cured concrete walkway surfaces. Use with slip-resistant overlamine 3-8621 for sidewalk graphics.

APPLICATIONS

- Concrete walls
- Sidewalk graphics

FEATURES AND BENEFITS

- Premium- 5 year durable
- High caliper permanent adhesive

TECHNICAL DATA

Face Material	3.0-mil flexible vinyl
Color and Finish	White gloss
Adhesive	86, 4.0-mil permanent acrylic
Liner	90# polycoated bleached kraft

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	4.5 lbs./inch	7.5 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	2 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
June-12 Form 108-01 (1/99)



ULTRA SIDEWALK PRODUCT CODE: 3-2302

PRODUCT DESCRIPTION

This premium, outdoor durable gloss white vinyl film product was designed for short term, slightly textured exterior asphalt and cured concrete walkway surfaces. Use with slip-resistant overlamine 3-8621 for sidewalk graphics.

APPLICATIONS

- Concrete walls
- Sidewalk graphics

FEATURES AND BENEFITS

- Premium- 5 year durable
- High caliper permanent adhesive

TECHNICAL DATA

Face Material	3.0-mil flexible vinyl
Color and Finish	White gloss
Adhesive	86, 4.0-mil permanent acrylic
Liner	90# polycoated bleached kraft

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	4.5 lbs./inch	7.5 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	2 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
June-12 Form 108-01 (1/99)

**ULTRA GLOSS BO X**
PRODUCT CODE: 3-2310**PRODUCT DESCRIPTION**

A premium 5-year outdoor durable gloss white film ideal for slightly curved surface applications. Excellent for use in medium-term promotional, point of purchase, trade show displays, outdoor signage and banners.

APPLICATIONS

- Point of purchase displays
- Trade show displays
- Outdoor signage
- Banners

FEATURES AND BENEFITS

- Licensed Air Flow Release Liner™ for reduced wrinkling and air bubbles.
- Ideal for slightly curved surface applications.
- High opacity permanent gray adhesive.

TECHNICAL DATA

Face Material	3.0-mil flexible vinyl
Color and Finish	White gloss
Adhesive	07G, permanent solvent, pigmented gray
Liner	90# patterned Licensed Air Flow Release Liner™

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	48 oz./inch	67.2 oz./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor durability	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
May-14 Form 108-01 (1/99)



ULTIMATE OPAQUE WRAP X

PRODUCT CODE: 3-2360

PRODUCT DESCRIPTION

The film is a gloss white flexible cast vinyl with a primed gray repositionable adhesive on the backside and our Licensed Air Flow Release Liner™ for easier, faster graphics installation. The premium high performance, flexible cast vinyl is ideal for application to irregular surfaces. The media is solvent, eco-sol and UV ink jet printable.

APPLICATIONS

- Vehicle wraps
- Bus graphics
- Fleet graphics

FEATURES AND BENEFITS

- Licensed Air Flow Release Liner™ for reduced wrinkling and air bubbles
- 7 year outdoor durable gloss white flexible vinyl
- Solvent repositionable semi-permanent adhesive

TECHNICAL DATA

Film Caliper	2.0-mil.
Adhesive	560, repositionable semi-permanent adhesive
Release Liner	90# patterned Licensed Air Flow Release Liner™
Processability	Steele rule, thermal and rotary die-cutting & computerized sign making
Outdoor Durability of Film	7 Years vertical exposure in a temperate climate
Minimum substrate application temperature	55° F
Service temperature range (Peak values)	-50°F to +225°F

TYPICAL CHARACTERISTICS

Adhesion Values	<u>20 min.</u>	<u>24hrs.</u>
(Stainless steel substrate 180° peel @ 10"/min, 73° F)	24 oz/in	30 oz/in
Shelf Life (@ 73° F, 50% R.H.)	1 Year	
Elongation	120%	
60° Gloss	80 minimum	
Dimensional Stability(48 Hrs. @ 150° F)	0.01 in	

CHEMICAL RESISTANCE

Distilled Water (24 Hrs.)	No Effect
SAE 20 Motor Oil (1 Hr.)	No Effect
Gasoline (30 Min.)	No Effect
10% HCL (10 Min.)	No Effect
10% NH4OH (10 Min.)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Jul-13

Form 108-01 (1/99)



ULTRA MATTE BOX PRODUCT CODE: 3-2376

PRODUCT DESCRIPTION

Premium 5-year outdoor durable white matte film ideal for slightly curved surface applications. Excellent for use in medium-term promotional, point of purchase displays, trade shows displays, outdoors signage and banners.

APPLICATIONS

- Point of purchase displays
- Trade shows displays
- Outdoors signage
- Banners

FEATURES AND BENEFITS

- High opacity solvent permanent gray adhesive
- Licensed Air Flow Release Liner™ for ease of graphic applications.

TECHNICAL DATA

Face Material	3.0-mil flexible vinyl
Color and Finish	White matte
Adhesive	07G, gray pigmented permanent solvent
Liner	90# patterned Licensed Air Flow Release Liner™

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	34 oz.	50 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability (ASTM G53)	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
Mar-13 Form 108-01 (1/99)



FLEET WRAP PRODUCT CODE: 3-2405

PRODUCTION DESCRIPTION

2.0 mil white cast vinyl is a high gloss formulated cast vinyl designed to optimize solvent ink jet printing. The cast vinyl promotes consistent ink dot size to optimize print color and quality. The solvent inks show excellent drying and anchoring properties to the film.

APPLICATIONS

- Computerized sign-making
- Decals
- Decorative striping
- Product identification
- Service station markings
- Transportation markings and graphics
- Warning labels

FEATURES AND BENEFITS

- The film is a premium high-performance, flexible cast vinyl for application to irregular surfaces.
- Gray primer and permanent adhesive for block out.

TECHNICAL DATA

Face Material	2.0 mil cast vinyl
Color and Finish	Gloss white
Adhesive	480, Permanent acrylic
Liner	90# polycoated two sides layflat

TYPICAL CHARACTERISTICS

Average Adhesion Values	<u>20 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 10"/min., 73°F, on Stainless Steel)	45 oz.	64 oz.
Minimum Application Temperature	40°F	
Service Temperature Range	-50°F to +200°F	
Elongation	120%	
60° Gloss	80 minimum	
Dimensional Stability (48 hrs. @150°F)	0.01 in	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	7 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
10% HCl (10 min)	No Effect
SAE 20 Motor Oil	No Effect
Gasoline (1hr)	No Effect
10% NH4oh (10 min)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. The purchaser, to determine suitability of the product for their purposes, should test all material.

Jul-13

Form 108-01 (1/99)



ULTIMATE GLOSS WRAP X PRODUCT CODE: 3-2437

PRODUCT DESCRIPTION

Gloss white flexible vehicle wrap cast vinyl with repositionable gray-pigmented adhesive with Licensed Air Flow Release Liner™ for easier, faster graphics installation. The film is a premium high performance, flexible cast vinyl for application to irregular surfaces. Solvent, eco-sol, latex and UV ink jet printable.

APPLICATIONS

- Vehicle wraps
- Bus graphics
- Fleet graphics

FEATURES AND BENEFITS

- Licensed Air Flow Release Liner™ for reduced wrinkling and air bubbles
- 7 year outdoor durable gloss white flexible vinyl

TECHNICAL DATA

Film Caliper	2-mil
Adhesive	560, semi-permanent gray-pigmented solvent adhesive
Release Liner	90# polycoated two sides Licensed Air Flow Release Liner™
Outdoor Durability of Film	7 years vertical exposure in a temperate climate
Minimum substrate application temperature	55° F
Service temperature range (Peak values)	-50°F to +225°F

TYPICAL CHARACTERISTICS

Adhesion Values	<u>20 min.</u>	<u>24hrs.</u>
(Stainless steel substrate 180° peel @ 10"/min, 73° F)	24 oz/in	30 oz/in
Shelf Life (@ 73° F, 50% R.H.)	1 Year	
Elongation	120%	
60° Gloss	80 minimum	
Dimensional Stability(48 Hrs. @ 150° F)	0.01 in	

CHEMICAL RESISTANCE

Distilled Water (24 Hrs.)	No Effect
SAE 20 Motor Oil (1 Hr.)	No Effect
Gasoline (30 Min.)	No Effect
10% HCL (10 Min.)	No Effect
10% NH4OH (10 Min.)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May-14

Form 108-01 (1/99)



ULTIMATE LUSTER WRAP X PRODUCT CODE: 3-2438

PRODUCT DESCRIPTION

The film is a luster white flexible cast vinyl with gray repositionable adhesive on the backside and our Licensed Air Flow Release Liner™ for easier, faster graphics installation. The premium high performance, flexible cast vinyl is ideal for application to irregular surfaces. The media is solvent, eco-sol, latex and UV ink jet printable.

APPLICATIONS

- Vehicle wraps
- Bus graphics
- Fleet graphics

FEATURES AND BENEFITS

- Licensed Air Flow Release Liner™ for reduced wrinkling and air bubbles
- 7 year outdoor durable gloss white flexible vinyl
- Solvent repositionable semi-permanent adhesive

TECHNICAL DATA

Film Caliper	2.0-mil
Adhesive	560, repositionable semi-permanent adhesive
Release Liner	90# patterned Licensed Air Flow Release Liner™
Processability	Steele rule, thermal and rotary die-cutting & computerized sign making
Outdoor Durability of Film	7 years vertical exposure in a temperate climate
Minimum substrate application temperature	55° F
Service temperature range (Peak values)	-50°F to +225°F

TYPICAL CHARACTERISTICS

Adhesion Values	<u>20 min.</u>	<u>24hrs.</u>
(Stainless steel substrate 180° peel @ 10"/min, 73° F)	24 oz./in.	30 oz./in.
Shelf Life (@ 73° F, 50% R.H.)	1 Year	
Elongation	120%	
60° Gloss	80 minimum	
Dimensional Stability(48 Hrs. @ 150° F)	0.01 in	

CHEMICAL RESISTANCE

Distilled Water (24 Hrs.)	No Effect
SAE 20 Motor Oil (1 Hr.)	No Effect
Gasoline (30 Min.)	No Effect
10% HCL (10 Min.)	No Effect
10% NH4OH (10 Min.)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May-12

Form 108-01 (1/99)



CLASSIC MATTE REMOVABLE BO STANDARD

PRODUCT CODE: 3-2604

PRODUCT DESCRIPTION

Matte white film with gray removable block out adhesive, ideal for slightly curved surface applications. Excellent for use in fleet/bus advertisements, medium-term promotional, point of purchase displays, trade show displays, outdoor signage and window graphics.

APPLICATIONS

- Fleet/bus advertisement
- Medium-term promotional
- Point of purchase displays
- Trade show displays
- Window Graphics

FEATURES AND BENEFITS

- Removable solvent adhesive
- Ideal for slightly curved surface applications

TECHNICAL DATA

Face Material	3.2-mil flexible vinyl
Color and Finish	Matte white
Adhesive	27, medium-peel solvent removable, pigmented gray
Liner	90# polycoated bleached kraft

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	1.5 lbs./inch	2.5 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Life	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Oct-12

Form 108-01 (1/99)

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OPAQUE FRIENDLY PRINT PRODUCT CODE: 3-4525

PRODUCT DESCRIPTION

2.3-mil white topcoated opaque polypropylene with white pigmented adhesive designed for use as 2-way window graphics (when used with 3-7836 or 3-4595), cover-up labels, decals or other applications requiring a truly opaque stock.

When used with reversed printed 3-7836 or 3-4595 (gloss clear vinyl with ultra removable adhesive)


Ritrama WindowCal II™ is an excellent economical interior 2-way window advertisement.

This white film is metallized one side and coated with a white pigmented adhesive to achieve superior opacity. For use when applied to interior windows.

APPLICATIONS

- Multiple color two-way window graphics
- Interior windows

FEATURES AND BENEFITS

- Environmentally friendly 
- Ultimate opacity
- Screen and UV Ink jet printable

TECHNICAL DATA

Face Material	2.3-mil polypropylene topcoated
Color and Finish	White Gloss
Adhesive	81W pigment white permanent
Liner	50# bleached glassine

TYPICAL CHARACTERISTICS

Target Adhesion Values (PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	<u>15 min.</u> 2.6 lbs./inch	<u>24 hr.</u> 3.2 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Life	For indoor use only	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HC1 (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Dec-12

Form 108-01(1/99)



WINDOWCAL III CLEAR PRODUCT CODE: 3-7104

PRODUCT DESCRIPTION

3.5-mil semi gloss clear flexible vinyl with a removable adhesive designed for use as 2-way window graphics (when use with 4-0175), 1-way window graphics, point of purchase decals applications requiring a no label look. When reversed printed and laminated to 4-0175, Ritrama Window Cal III is an excellent interior and exterior 2-way window advertisement.

APPLICATIONS

- Two-way window graphics
- Decorative trim
- Transportation markings
- Flat surface graphics
- Product identification

FEATURES AND BENEFITS

- Excellent weathering and aging characteristics
- Moderate peel removable adhesive
- Compatible with various printing methods, including solvent, eco-solvent inkjet
- Dry or wet apply
- Ritrama recommends at least 24 hours of dry time before cutting

TECHNICAL DATA

Face Material	3.5-mil premium calendered vinyl
Color and Finish	Semi-gloss clear
Adhesive	27, removable solvent acrylic
Liner	90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	32 oz.	45 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	2 years	
Outdoor Life	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
June-12 Form 108-01 (1/99)

**CLASSIC CLEAR UV**
PRODUCT CODE: 3-7122**PRODUCT DESCRIPTION**

3.5-mil high gloss flexible vinyl is an economical vinyl with solvent permanent solvent adhesive that is ideal for window graphics, point of purchase displays, decals, and other identification pieces. Solvent, eco-sol, latex and UV ink jet printable.

APPLICATIONS

- Point of purchase displays
- Window graphics

FEATURES AND BENEFITS

- Permanent solvent adhesive with ultraviolet light inhibitor
- Can be wet applied

TECHNICAL DATA

Face Material	3.5-mil flexible vinyl
Color and Finish	Gloss clear
Adhesive	07UV, permanent solvent
Liner	90# polycoated bleached kraft

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	70 oz.	90 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	N/A
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	Noticeable Lifting

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
May-14 Form 108-01 (1/99)



STANDARD BACKER PRODUCT CODE: 3-7830

PRODUCT DESCRIPTION

White vinyl that is printable with various digital equipment utilizing solvent ink jet technology. Excellent for use in point-of-purchase, trade show displays, and window graphics. Also can be used as a white stiff backer to bring opacity to your prints.

APPLICATIONS

- Point of purchase displays
- Trade show displays
- Window graphics

FEATURES AND BENEFITS

- 10.0 mil matte white semi-rigid vinyl, permanent solvent adhesive, 90# polycoated layflat liner.

TECHNICAL DATA

Face Material	10.0-mil semi-rigid vinyl
Color and Finish	Matte white
Adhesive	07, Permanent solvent
Liner	90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Average Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	4.5 lbs./inch	7.3 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	2 years	
Outdoor Durability	2 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May-14

Form 108-01 (1/99)

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CLASSIC CLEAR ACRYLIC

PRODUCT CODE: 3-7833

PRODUCT DESCRIPTION

An economical 3-year outdoor durable gloss clear film ideal for flat-surface applications. Excellent for use in promotional displays, point of purchase displays, trade show displays and window graphics

APPLICATIONS

- Point of purchase displays
- Promotional displays
- Trade show displays
- Window graphics

FEATURES AND BENEFITS

- Economical
- Outdoor durability

TECHNICAL DATA

Face Material	3.5-mil flexible vinyl
Color and Finish	Gloss clear
Adhesive	47, Permanent acrylic
Liner	90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Average Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	43 oz.	59 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May-14

Form 108-01 (1/99)



CLASSIC GLOSS STANDARD PRODUCT CODE: 3-7834

PRODUCT DESCRIPTION

An economical 3-year outdoor durable gloss white film ideal for flat-surface applications. Excellent for use in promotional, point-of-purchase, trade show displays, and window graphics. Solvent, eco-sol, latex and UV ink jet printable.

APPLICATIONS

- Point of purchase
- Promotional displays
- Trade show displays
- Window graphics

FEATURES AND BENEFITS

- 3.5-mil gloss white flexible vinyl, permanent solvent adhesive, 90# polycoated layflat liner.

TECHNICAL DATA

Face Material	3.5-mil flexible vinyl
Color and Finish	Gloss white
Adhesive	07, Permanent solvent
Liner	90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Average Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	5.0 lbs./inch	6.0 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
May-14



EASY WINDOW LOW-TACK STANDARD PRODUCT CODE: 3-7836

PRODUCT DESCRIPTION

3.5-mil gloss clear flexible vinyl with ultra removable adhesive designed for use as 2-way window graphics (when use with 3-4525), 1-way window graphics, point of purchase decals or other applications requiring a no label look. When reversed printed and laminated to 3-4525, Ritrama Window Cal II™ is an excellent economical interior 2-way window advertisement.

APPLICATIONS

- 2-way window graphics
- Point of purchase decals or other applications requiring a no label look
- Product is recommended for flat surface application.

FEATURES AND BENEFITS

- 3.5-mil gloss clear flexible vinyl
Ultra low peel removable acrylic adhesive
- 90# polycoated layflat liner tight release
- 6 month clean removability from glass

TECHNICAL DATA

Face Material	3.5 mil- flexible vinyl
Color and Finish	Gloss clear
Adhesive	64, Ultra low peel removable acrylic
Liner	90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Average Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	.2 lbs./inch	.3 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24hr)	Slight Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	NA
10% Ammonium Hydroxide (10 min)	Slight Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	Noticeable Lifting

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May-14

Form 108-01-(1/99)

**CLASSIC GLOSS LOW-TACK**
PRODUCT CODE: 3-7837**PRODUCT DESCRIPTION**

An economical 3-year outdoor durable gloss white film with removable low-tack adhesive, ideal for flat-surface applications. Excellent for use in promotional, point of purchase, trade show displays, and window graphics. Solvent, eco-sol, latex and UV ink jet printable.

APPLICATIONS

- Promotional displays
- Point of purchase displays
- Trade show displays
- Window graphics

FEATURES AND BENEFITS

- Economical
- Ultra-low peel removable acrylic

TECHNICAL DATA

Face Material	3.5-mil flexible vinyl
Color and Finish	Gloss white
Adhesive	64, Ultra-low peel removable acrylic
Liner	90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Average Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	.2 lbs./inch	.3 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	Slight Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	NA
10% Ammonium Hydroxide (10 min)	Slight Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	Noticeable Lifting

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
May-14 Form 108-01 (1/99)

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CLASSIC MATTE BO STANDARD PRODUCT CODE: 3-7838

PRODUCT DESCRIPTION

Flexible vinyl that is printable with various digital equipment utilizing ink jet technology. Excellent for use in point-of-purchase, trade show displays, and window graphics.

APPLICATIONS

- Point of purchase
- Trade show displays
- Window graphics

FEATURES AND BENEFITS

- 3.5-mil matte white flexible vinyl, gray adhesive, 90# polycoated layflat liner.

TECHNICAL DATA

Face Material	3.5 mil- flexible vinyl
Color and Finish	Matte white
Adhesive	Gray pigmented, medium tack permanent acrylic
Liner	90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Average Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	4.3 lbs./inch	5.5 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	2 years	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Dec-10



CLASSIC MATTE REMOVABLE ACRYLIC

PRODUCT CODE: 3-7839

PRODUCT DESCRIPTION

Flexible vinyl that is printable with various digital equipment utilizing ink jet technology. Excellent for use in point-of-purchase, trade show displays, and window graphics.

APPLICATIONS

- Point of purchase
- Trade show displays
- Window graphics

FEATURES AND BENEFITS

- Solvent ink jet technology printable

TECHNICAL DATA

Face Material	3.5 mil- flexible vinyl
Color and Finish	Matte white
Adhesive	Removable acrylic
Liner	90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Average Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	24 oz.	35 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	2 years	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Jan-11



ULTIMATE CLEAR PRODUCT CODE: 3-8563

PRODUCTION DESCRIPTION

2.0 mil clear cast vinyl is specially formulated to optimize solvent in jet printing. The cast vinyl promotes consistent ink dot size to optimize print color and quality. The film remains a premium high-performance, flexible cast vinyl for application to irregular surfaces and for extended outdoor weathering end uses.

APPLICATIONS

- Computerized sign-making
- Decals
- Decorative striping
- Product identification
- Service station markings
- Transportation markings and graphics
- Warning labels

FEATURES AND BENEFITS

- Great for extended outdoor weathering end uses.

TECHNICAL DATA

Face Material	2.0 mil cast vinyl
Color and Finish	Clear
Adhesive	Permanent acrylic
Liner	90# poly-coated two sides layflat

TYPICAL CHARACTERISTICS

Average Adhesion Values	<u>20 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 10"/min., 73°F, on Stainless Steel)	45 oz.	64 oz.
Minimum Application Temperature	40°F	
Service Temperature Range	-50°F to +225°F	
Shelf Life (@ 73°F, 50% RH)	2 years	
Outdoor Durability	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
10% HCl (10 min)	No Effect
SAE 20 Motor Oil	No Effect
Gasoline (1hr)	No Effect
10% NH ₄ oh (10 min)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. The purchaser, to determine suitability of the product for their purposes, should test all material.

Dec-10

Form 108-01 (1/99)



ULTRA SEMI GLOSS WHITE PRODUCT CODE: 3-8664

PRODUCTION DESCRIPTION

This premium 5-year outdoor durable semi-gloss white film is married to our high-tack, high-peel adhesive. Excellent for use in medium term outdoor promotional displays, point of purchase displays, trade shows displays, outdoor signage and hard-to-adhere surfaces

APPLICATIONS

- Medium term promotional displays
- Point of purchase displays
- Cold temperature applications
- Outdoor barricade applications

FEATURES AND BENEFITS

- 5 year outdoor durable
- Great for hard-to-adhere surfaces
- Solvent, eco-sol, latex and UV ink jet printable

TECHNICAL DATA

Face Material	3.5-mil premium calendered vinyl
Color and Finish	Semi-gloss white
Adhesive	02, High-tack permanent solvent
Liner	90# layflat

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel	80 oz.	100 oz.
Minimum Application Temperature	32°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May-14

Form 108-01 (1/99)



CLASSIC MATTE REMOVABLE ACRYLIC STANDARD

PRODUCT CODE: 3-9095

PRODUCT DESCRIPTION

Flexible vinyl that is printable with various digital equipment utilizing ink jet technology. Excellent for use in point of purchase displays, trade show displays, and window graphics.

APPLICATIONS

- Point of purchase displays
- Trade show displays
- Window graphics
- Carpet graphics with 3-9829 Floor Talker® overlaminate

FEATURES AND BENEFITS

- Compatible with a variety of printing methods: solvent, eco-sol, latex and UV inkjet
- 6 month clean removability from most surfaces

TECHNICAL DATA

Face Material	3.4 -mil flexible vinyl
Color and Finish	Matte white
Adhesive	50, Medium tack removable acrylic
Liner	90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Average Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel	2.5 lbs./inch	3.3 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May-14

Form 108-01 (1/99)

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CLASSIC MATTE STANDARD PRODUCT CODE: 3-9096

PRODUCTION DESCRIPTION

This economical 3-year outdoor durable matte white film with permanent solvent adhesive is ideal for flat-surface applications. Excellent for use in promotional displays, point of purchase displays and trade show displays.

APPLICATIONS

- Point of purchase displays
- Promotional displays
- Trade show displays

FEATURES AND BENEFITS

- Economical
- 3- year outdoor durability
- Compatible with a variety of printing methods including solvent, eco-solvent, latex and UV ink jet and conventional and UV screen.

TECHNICAL DATA

Face Material	3.4-mil flexible vinyl
Color and Finish	Matte white
Adhesive	07, Medium tack permanent solvent
Liner	90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	5.0 lbs./inch	6.0 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
May-14 Form 108-01 (1/99)



CLASSIC MATTE LOW TACK STANDARD PRODUCT CODE: 3-9109

PRODUCTION DESCRIPTION

Flexible vinyl that is printable with various digital equipment utilizing ink jet technology. Excellent for use in point-of-purchase, trade show displays, floor graphics and window graphics.

APPLICATIONS

- Point of purchase
- Promotional displays
- Trade show displays
- Window graphics
- Floor graphics (use 3-9829 Floor Talkers® overlamine)

FEATURES AND BENEFITS

- 3.4-mil white flexible vinyl, ultra low peel removable acrylic adhesive, 90# polycoated tight release liner.

TECHNICAL DATA

Face Material	3.4-mil flexible vinyl
Color and Finish	Matte white
Adhesive	64, Low peel removable acrylic
Liner	90# polycoated tight release

TYPICAL CHARACTERISTICS

Average Adhesion Values (PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	<u>15 min.</u> .2 lbs./inch	<u>24 hr.</u> .3 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	Slight Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	NA
10% Ammonium Hydroxide (10 min)	Slight Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	Noticeable Lifting

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes. Ritrama recommends 24 hours of outgasing time between printing and over laminating.

May-14

Form 108-01 (1/99)

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ULTRA SLAPSHOT PRODUCT CODE: 3-9117

PRODUCT DESCRIPTION

This 6.0-mil white vinyl with permanent solvent adhesive is ideal for printing with digital equipment utilizing solvent ink jet technology as well as other printing methods. Excellent for use in point of purchase displays, trade shows displays, and window graphics.

APPLICATIONS

- Point of purchase displays
- Trade show displays
- Window graphics

FEATURES AND BENEFITS

- Compatible with a variety of printing methods.

TECHNICAL DATA

Face Material	6.0-mil semi-rigid vinyl
Color and Finish	Matte white
Adhesive	07, permanent solvent
Liner	90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	5.3 lbs./inch	7.5 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
May-14 Form 108-01 (1/99)

**CLASSIC GLOSS BO STANDARD**
PRODUCT CODE: 3-9278**PRODUCT DESCRIPTION**

This promotional 3-year outdoor durable gloss white film with permanent gray adhesive for block out is ideal for flat-surface applications. Excellent for use in short-term promotional advertising, point of purchase, tradeshow displays and outdoors signage.

APPLICATIONS

- Short term promotional advertising
- Point of purchase displays
- Trade show displays
- Outdoor signage

FEATURES AND BENEFITS

- Printable with various digital equipment utilizing solvent, eco-sol, latex and UV ink jet technology

TECHNICAL DATA

Face Material	3.5-mil flexible vinyl
Color and Finish	Gloss White
Adhesive	07G permanent grey solvent
Liner	90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Average Adhesion Values (PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	<u>15 min.</u> 4.5 lbs./inch	<u>24 hr.</u> 6.0 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

July-12

Form 108-01 (1/99)

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GLOSS FRIENDLY PRINT PRODUCT CODE: 3-9291


PRODUCT DESCRIPTION

White ultraviolet light stable polypropylene. Excellent for use in point-of-purchase, trade show displays, and window graphics. Because of its enhanced UV stability, the film features 2-year outdoor durability.

APPLICATIONS

- Point of purchase displays
- Trade show displays
- Window graphics

FEATURES AND BENEFITS

- Environmentally friendly 3.6-mil gloss white flexible polypropylene 
- 2-year outdoor durability
- Compatible with a variety of printing methods including UV ink jet, not compatible with solvent ink jet

TECHNICAL DATA

Face Material	3.6-mil UV light stable polypropylene
Color and Finish	Gloss white
Adhesive	Permanent acrylic
Liner	90# polycoated bleached kraft

TYPICAL CHARACTERISTICS

Average Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	30 oz.	40 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Outdoor Durability	2 years	
Shelf Life (@ 73°F, 50% RH)	2 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Gasoline	Slight Lifting
Anti-Freeze (24 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Dec-10



ULTRA SLAPSHOT REMOVABLE ACRYLIC PRODUCT CODE: 3-9292

PRODUCT DESCRIPTION

6-mil Matte white vinyl with removable solvent adhesive that is printable with solvent, eco-sol, latex and UV ink jet. Excellent for use in point-of-purchase, trade show displays and window graphics.

APPLICATIONS

- Window Graphics
- Point of Purchase

FEATURES AND BENEFITS

- 6.0-mil matte white semi-rigid vinyl, removable adhesive, 90# poly-coated layflat liner.
- Compatible with a variety of printing methods including solvent, eco-solvent, latex and UV ink jet.
- Ritrama recommends leaving a 1/4 of an inch border around your graphic when printing.
- Ritrama recommends at least 24 hours of cure time before cutting.
- 1-year clean removability under normal conditions.

TECHNICAL DATA

Face Material	6.0-mil semi-rigid vinyl
Color and Finish	Matte White
Adhesive	50, Removable
Liner	90# poly-coated bleached layflat

TYPICAL CHARACTERISTICS

Average Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	24 oz.	35 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May-14

Form 108-01 (1/99)

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CLASSIC HIGH TACK PRODUCT CODE: 3-9444

PRODUCT DESCRIPTION

3.5-mil matte white vinyl designed for solvent, eco-sol, latex and UV ink jet printing. Great for cold temperature applications requiring a quality economical intermediate vinyl with a high tack permanent acrylic adhesive suitable for low surface energy substrates.

APPLICATIONS

- Decals
- Bumper strips

FEATURES AND BENEFITS

- High tack permanent acrylic adhesive suitable for low surface energy substrates and cold temperature applications

TECHNICAL DATA

Face Material	3.5-mil flexible vinyl
Color and Finish	Matte white
Adhesive	99, High-tack permanent acrylic cold temperature
Liner	90# layflat

TYPICAL CHARACTERISTICS

Average Adhesion Values		<u>15 min.</u>	<u>24 hr.</u>
PSTC-1, 180° peel @ 12"/min., 73°F,	Tested on SS	77 oz.	96 oz.
	Tested on PE	71 oz.	91 oz.
	Tested on PP	38 oz.	54 oz.
Minimum Application Temperature		50°F	
Service Temperature Range		-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)		1 year	
Outdoor Durability		3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
May-14 Form 108-01 (1/99)



ULTRA SEMI GLOSS WHITE STANDARD

PRODUCT CODE: 3-9466

PRODUCT DESCRIPTION

3.5-mil premium calendared vinyl consists of a flexible, semi-gloss film having excellent weathering and aging characteristics. Used for decorative striping, transportation markings, product identification and warning decals. High-tack adhesive for low energy surfaces such as hard to adhere to plastics.

APPLICATIONS

- Decorative striping
- Transportation markings
- Product identification
- Warning decals

FEATURES AND BENEFITS

- Suitable for low surface energy substrates.

TECHNICAL DATA

Face Material	3.5-mil premium calendared vinyl
Color and Finish	Semi-gloss white
Adhesive	14, high-tack permanent solvent 2-mils
Liner	90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	141 oz.	154 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
May-14 Form 108-01 (1/99)



CLASSIC VUE ®
PRODUCT CODE: 3-9499

PRODUCT DESCRIPTION

8.0-mil matte white vinyl is an intermediate film punched for removable see-through graphics for windows, glass doors, and similar applications.

APPLICATIONS

- Window graphics
- Glass door graphics
- Promotional graphics

FEATURES AND BENEFITS

- 80-mil hole diameter
- 50 /50 Perf pattern

TECHNICAL DATA

Face Material	8.0-mil flexible vinyl
Color and Finish	Matte white one side; black on the other
Adhesive	27, removable solvent
Liner	Clear polyester

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	15 oz.	20 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	2 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty.
All material should be tested by the purchaser to determine suitability of the product for their purposes.
Feb-14 Form 108-01 (1/99)



IMAGE VUE®
PRODUCT CODE: 3-9500

PRODUCT DESCRIPTION

8.0-mil matte white vinyl is an intermediate film punched for removable see-through graphics for windows, glass doors, and similar applications.

APPLICATIONS

- Window graphics
- Glass door graphics
- Promotional graphics

FEATURES AND BENEFITS

- 60-mil hole diameter
- 65 / 35 Perf pattern

TECHNICAL DATA

Face Material	8.0-mil flexible vinyl
Color and Finish	Matte white one side; black on the other
Adhesive	27, removable solvent
Liner	Clear polyester

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	15 oz.	20 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	2 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

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Feb-14 Form 108-01 (1/99)



OPAQUE FRIENDLY PRINT PRODUCT CODE: 3-9541

PRODUCT DESCRIPTION

2.0-mil white topcoated opaque polypropylene with white pigmented solvent adhesive designed for use as 2-way window graphics (when used with 3-7836) cover-up labels, decals or other applications requiring a truly opaque stock.


When used with reversed printed 3-7836, (gloss clear vinyl with ultra removable adhesive) Ritrama WindowCal II™ is an excellent economical interior 2-way window advertisement for UV Ink Jet print, screen, off set printing.

This white film is metallized one side and coated with a white pigmented adhesive to achieve superior opacity. For use when applied to interior windows.

APPLICATIONS

- Multiple color two-way window graphics
- Interior windows

FEATURES AND BENEFITS

- Environmentally friendly 
- 100 % opacity
- Compatible with a variety of printing methods including UV ink jet, not compatible with solvent ink jet

TECHNICAL DATA

Face Material	2.0 mil polypropylene topcoated
Color and Finish	Gloss white, backside metallized
Adhesive	81W pigment white permanent solvent
Liner	50# bleached glassine

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	2.6 lbs./inch	3.2 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Life	For indoor use only	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HC1 (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Apr-14

Form 108-01 (1/99)

**ULTRA SEMI GLOSS**
PRODUCT CODE: 3-9592**PRODUCT DESCRIPTION**

This 3.5-mil white vinyl is printable with a variety of digital equipment utilizing solvent ink jet technology. Excellent for use in point of purchase displays, trade show displays, and window graphics.

APPLICATIONS

- Point of purchase displays
- Trade show displays
- Window graphics

FEATURES AND BENEFITS

- Repositionable

TECHNICAL DATA

Face Material	3.5-mil premium calendared vinyl
Color and Finish	Semi-gloss white
Adhesive	17, Repositionable, medium-tack permanent solvent
Liner	90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	4.2 lbs./inch	6.0 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
May-14 Form 108-01 (1/99)



CLASSIC GLOSS LOGO PRODUCT CODE: 3-9701

PRODUCT DESCRIPTION

This 3.5-mil flexible vinyl is an intermediate grade vinyl ideal for general screen-printing and solvent ink jet printing. This film is designed for promotional multi-color labels and decals, point of purchase graphics, bumper stickers and other identification pieces.

APPLICATIONS

- Promotional multiple color labels and decals
- Point of purchase displays
- Bumper stickers
- Identification pieces

FEATURES AND BENEFITS

- Compatible with a variety of printing methods

TECHNICAL DATA

Face Material	3.5-mil flexible vinyl
Color and Finish	White gloss
Adhesive	27, removable acrylic
Liner	72#, polycoated bleached kraft with Ritrama logo

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	4.5 lbs./inch	6.0 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	2 years	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Dec-10

Form 108-01 (1/99)



ULTRA TRANSLUCENT REMOVABLE PRODUCT CODE: 3-9892

PRODUCT DESCRIPTION

3.2-mil flexible translucent white vinyl is an intermediate vinyl designed with a special adhesive featuring a good balance of tack, peel and shear. Excellent choice for interior and exterior back-lit graphic applications. Adhesive has excellent anchorage to vinyl, which allows for clean removability from glass.

APPLICATIONS

- Taxi top advertising
- Window graphics

FEATURES AND BENEFITS

- Translucent flexible vinyl, ideal for backlit graphic applications
- Clean removability from glass within 6 months under normal conditions
- Can be wet applied

TECHNICAL DATA

Face Material	3.2-mil flexible translucent vinyl
Color and Finish	White matte
Adhesive	27, medium tack removable solvent
Liner	90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	27 oz.	32 oz.
Shear	100+ hours	
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
May-14

Form 108-01 (1/99)



WALL ACTION PRODUCT CODE: 3-9901

PRODUCT DESCRIPTION

6.0-mil matte white semi rigid vinyl featuring an ultra low-peel removable adhesive that is designed for wall graphics, point of purchase displays, trade show displays and other identification pieces. Solvent, eco-sol, latex and UV ink jet printable.

APPLICATIONS

- Wall graphics
- Point of purchase displays
- Trade show displays

FEATURES AND BENEFITS

- Removable adhesive – Ritrama recommends removing graphic at a 180° from the wall, not 90°, to help reduce the chance of any adhesive transfer or wall damage**
- Microsphere removable acrylic adhesive
- Compatible with a variety of printing methods including solvent, eco-solvent, latex, UV ink jet and conventional and UV screen.
- Ritrama recommends leaving a 1/4-inch border around your graphic when printing.
- Ritrama recommends at least 24 hours of cure time before cutting.
- Removable for up to one year under normal interior conditions.

TECHNICAL DATA

Face Material	6.0-mil semi rigid vinyl
Color and Finish	Matte white
Adhesive	00, low-peel removable
Liner	90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	16 oz.	24 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability of film	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	Noticeable Lifting

**Removing wall graphics can cause damage to walls due to a variety of uncontrolled variables. Ritrama, Inc. does not warrant damage to interior wall surfaces caused by the removal of wall graphics even if a removable adhesive is used.

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May-14

Form 108-01 (1/99)

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Guatemala - Costa Rica - Colombia



ULTRA GLOSS HIGH BOND BO LOGO PRODUCT CODE: 3-9907

PRODUCT DESCRIPTION

A premium 5-year outdoor durable gloss white vinyl media with permanent High Bond Gray adhesive for mounting to boards and other hard to adhere to substrates. Excellent for use on Acrylic, Diebond®, Sintra®, Gatorplast™, Gatorfoam®, Steel and painted dry wall for medium-term promotional, point of purchase, trade show displays, outdoor signage and banners.

APPLICATIONS

- Point of purchase displays
- Trade show displays
- Hard to adhere to substrates
- Permanent wall graphics
- Print and cut graphics

FEATURES AND BENEFITS

- 5-year outdoor durable gloss white vinyl
- High Bond Gray adhesive

TECHNICAL DATA

Face Material	3.0-mil flexible vinyl
Color and Finish	White gloss
Adhesive	Permanent acrylic High Bond Gray
Liner	72# polycoated bleached kraft

TYPICAL CHARACTERISTICS

Target Adhesion Values (PSTC-1, 180° peel @ 12"/min., 73°F, on:)	<u>15 min.</u>	<u>24 hr.</u>
Stainless Steel	60 oz. /inch	80 oz. /inch
Polyethylene	45 oz. /inch	60 oz. /inch
Polypropylene	50 oz. /inch	65 oz. /inch
Gatorplast™	60 oz. /inch	75 oz. /inch
Gatorfoam®	45 oz. /inch	60 oz. /inch
Sintra®	60 oz. /inch	65 oz. /inch
Diebond ®	75 oz. /inch	85 oz. /inch
Acrylic	80 oz. /inch	85 oz. /inch
Glass	70 oz. /inch	85 oz. /inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Jan-14

Form 108-01 (1/99)



ULTRA MATTE HIGH BOND BO PRODUCT CODE: 3-9908

PRODUCT DESCRIPTION

A premium 5-year outdoor durable matte white vinyl media with permanent High Bond Gray adhesive for mounting to boards and other hard to adhere to substrates. Excellent for use on Acrylic, Diebond®, Sintra®, Gatorplast™, Gatorfoam®, Steel and painted dry wall for medium-term promotional, point of purchase, trade show displays, outdoor signage and banners.

APPLICATIONS

- Point of purchase displays
- Trade show displays
- Hard to adhere to substrates
- Permanent wall graphics
- Print and cut graphics

FEATURES AND BENEFITS

- 5-year outdoor durable matte white vinyl
- High Bond Gray adhesive

TECHNICAL DATA

Face Material	3.0-mil flexible vinyl
Color and Finish	White matte
Adhesive	Permanent High Bond Gray
Liner	72# polycoated bleached kraft

TYPICAL CHARACTERISTICS

Target Adhesion Values (PSTC-1, 180° peel @ 12"/min., 73°F, on):	<u>15 min.</u>	<u>24 hr.</u>
Stainless Steel	60 oz. /inch	80 oz. /inch
Polyethylene	45 oz. /inch	60 oz. /inch
Polypropylene	50 oz. /inch	65 oz. /inch
Gatorplast™	60 oz. /inch	75 oz. /inch
Gatorfoam®	45 oz. /inch	60 oz. /inch
Sintra®	60 oz. /inch	65 oz. /inch
Diebond ®	75 oz. /inch	85 oz. /inch
Acrylic	80 oz. /inch	85 oz. /inch
Glass	70 oz. /inch	85 oz. /inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May-14

Form 108-01 (1/99)



CLASSIC HIGH GLOSS HIGH BOND BO LOGO

PRODUCT CODE: 3-9909

PRODUCT DESCRIPTION

A 3-year outdoor durable high gloss white vinyl media with permanent High Bond Gray adhesive for mounting to boards and other hard to adhere to substrates. Excellent for use on Acrylic, Diebond®, Sintra®, Gatorplast™, Gatorfoam®, Steel and painted dry wall for medium-term promotional, point of purchase, trade show displays, outdoor signage and banners.

APPLICATIONS

- Point of purchase displays
- Trade show displays
- Hard to adhere to substrates
- Permanent wall graphics
- Print and cut graphics

FEATURES AND BENEFITS

- 3-year outdoor durable gloss white vinyl
- High Bond Gray adhesive
- Solvent, eco-sol, latex and UV Ink Jet Printable

TECHNICAL DATA

Face Material	3.5-mil flexible vinyl
Color and Finish	White high gloss
Adhesive	Permanent acrylic High Bond Gray
Liner	72# polycoated bleached kraft

TYPICAL CHARACTERISTICS

Target Adhesion Values (PSTC-1, 180° peel @ 12"/min., 73°F, on:)	<u>15 min.</u>	<u>24 hr.</u>
Stainless Steel	60 oz. /inch	80 oz. /inch
Polyethylene	45 oz. /inch	60 oz. /inch
Polypropylene	50 oz. /inch	65 oz. /inch
Gatorplast™	60 oz. /inch	75 oz. /inch
Gatorfoam®	45 oz. /inch	60 oz. /inch
Sintra®	60 oz. /inch	65 oz. /inch
Diebond ®	75 oz. /inch	85 oz. /inch
Acrylic	80 oz. /inch	85 oz. /inch
Glass	70 oz. /inch	85 oz. /inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Jan-14

Form 108-01 (1/99)

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CLASSIC MATTE HIGH BOND BO PRODUCT CODE: 3-9910

PRODUCT DESCRIPTION

A 3-year outdoor durable matte white vinyl media with permanent High Bond Gray adhesive for mounting to boards and other hard to adhere to substrates. Excellent for use on Acrylic, Diebond®, Sintra®, Gatorplast™, Gatorfoam®, Steel and painted dry wall for medium-term promotional, point of purchase, trade show displays, outdoor signage and banners.

APPLICATIONS

- Point of purchase displays
- Trade show displays
- Hard to adhere to substrates
- Permanent wall graphics
- Print and cut graphics

FEATURES AND BENEFITS

- 3-year outdoor durable matte white vinyl
- High Bond Gray adhesive
- Solvent, eco-sol, latex and UV Ink Jet Printable

TECHNICAL DATA

Face Material	3.2-mil flexible vinyl
Color and Finish	White matte
Adhesive	Permanent acrylic High Bond Gray
Liner	72# polycoated bleached kraft

TYPICAL CHARACTERISTICS

Target Adhesion Values (PSTC-1, 180° peel @ 12"/min., 73°F, on:)	<u>15 min.</u>	<u>24 hr.</u>
Stainless Steel	60 oz. /inch	80 oz. /inch
Polyethylene	45 oz. /inch	60 oz. /inch
Polypropylene	50 oz. /inch	65 oz. /inch
Gatorplast™	60 oz. /inch	75 oz. /inch
Gatorfoam®	45 oz. /inch	60 oz. /inch
Sintra®	60 oz. /inch	65 oz. /inch
Diebond ®	75 oz. /inch	85 oz. /inch
Acrylic	80 oz. /inch	85 oz. /inch
Glass	70 oz. /inch	85 oz. /inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May-14

Form 108-01 (1/99)



ULTRA MATTE BO REMOVABLE X PRODUCT CODE: 3-9913

PRODUCT DESCRIPTION

Flexible vinyl that is printable with various digital equipment utilizing ink jet technology. Excellent for use in point of purchase displays, trade show displays, window graphics, bus and fleet graphics.

APPLICATIONS

- Point of purchase displays
- Trade show displays
- Window graphics
- Bus and fleet graphics

FEATURES AND BENEFITS

- High opacity removable solvent gray adhesive
- Licensed Air Flow Release Liner™ for reduced wrinkling and air bubbles

TECHNICAL DATA

Face Material	3.0-mil flexible vinyl
Color and Finish	White matte
Adhesive	27, gray removable solvent
Liner	90# Air-Flow polycoated bleached layflat

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	25 oz.	32 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May-14

Form 108-01 (1/99)

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EASY WINDOW X PRODUCT CODE: 4-0110

PRODUCT DESCRIPTION

This 3.5 mil gloss clear vinyl is compatible with a variety of printing methods such as solvent, eco-solvent, and UV ink jet technologies. Excellent for use in point of purchase displays, trade show displays, and window graphics.

APPLICATIONS

- Point of purchase displays
- Trade show displays
- Window graphics

FEATURES AND BENEFITS

- Compatible with a variety of printing methods
- Licensed Air Flow Release Liner™ with smaller channels for easier and faster graphic applications
- Solvent acrylic removable adhesive

TECHNICAL DATA

Face Material	3.5-mil flexible vinyl
Color and Finish	Clear gloss
Adhesive	27, solvent acrylic removable adhesive
Liner	90XS Licensed Air Flow Release Liner™

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	30 oz.	40 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	2 years	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
June-12 Form 108-01 (1/99)



WINDOWCAL III OPAQUE PRODUCT CODE: 4-0175

PRODUCT DESCRIPTION

6.0-mil gloss white opaque film with white-pigmented adhesive designed for use as 2-way window graphics (when used with 3-7104), cover-up labels, decals or other applications requiring an ultimate opaque stock. Can be used with reversed printed 3-7104 (gloss clear vinyl with solvent removable adhesive) to produce Ritrama's WindowCal III™: excellent economical media used for interior and exterior 2-way window advertisements.

This white film is metallized on one side and coated with a white-pigmented adhesive to achieve ultimate opacity.

APPLICATIONS

- Multiple color two-way window graphics
- Interior and exterior windows

FEATURES AND BENEFITS

- Used for interior or exterior windows.
- Compatible with various printing methods including solvent, eco-sol and latex inkjet.
- Available at 54" and 60" wide.
- Can be plotter cut to edge of graphics with no lifting. "Print-to-edge" approved.
- Ritrama recommends at least 24 hours of cure time before laminating and cutting.
- Ultimate opacity with white on both sides of film

TECHNICAL DATA

Face Material	6.0-mil ultimate opaque film
Color and Finish	Gloss white, backside metallized
Adhesive	81W pigment white permanent solvent
Liner	72#

TYPICAL CHARACTERISTICS

Target Adhesion Values (PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	<u>15 min.</u> 2.6 lbs./inch	<u>24 hr.</u> 3.2 lbs./inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Life	Up to one year	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May-14

Form 108-01(1/99)



ULTIMATE WALL ACTION PRODUCT CODE: 4-0201

PRODUCT DESCRIPTION

This is a 5.0-mil gloss white semi rigid film featuring a removable solvent adhesive that is designed for applications on a smooth painted dry wall. Print-to-edge technology.

APPLICATIONS

- Wall graphics
- Point of purchase displays
- Trade show displays
- Window graphics

FEATURES AND BENEFITS

- Removable solvent adhesive – Ritrama recommends removing graphic at a 180° from the wall, not 90°, to help reduce the chance of any adhesive transfer or wall damage**
- Compatible with a variety of printing methods including solvent, eco-solvent, latex and UV ink jet
- Print-to-edge technology
- Removable for up to two years under normal interior conditions
- Ritrama recommends at least 24 hours of cure time before cutting

TECHNICAL DATA

Face Material	5.0-mil semi-rigid film
Color and Finish	White Gloss
Adhesive	27, removable solvent
Liner	72# digital liner

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	16 oz.	24 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability of printed film	Up to 1 year	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

**Removing wall graphics can cause damage to walls due to a variety of uncontrolled variables. Ritrama, Inc. does not warrant damage to interior wall surfaces caused by the removal of wall graphics even if a removable adhesive is used.

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May-14

Form 108-01 (1/99)

**MATTE BO ACRYLIC X**
PRODUCT CODE: 4-0236**PRODUCT DESCRIPTION**

A premium 5-year outdoor durable matte white film ideal for slightly curved surface applications. Excellent for use in medium-term promotional, point of purchase, trade show displays, outdoor signage and banners.

APPLICATIONS

- Point of purchase displays
- Trade show displays
- Outdoor signage
- Banners

FEATURES AND BENEFITS

- Licensed Air Flow Release Liner™ for reduced wrinkling and air bubbles.
- Ideal for slightly curved surface applications.
- High opacity permanent gray adhesive.

TECHNICAL DATA

Face Material	3.0-mil flexible vinyl
Color and Finish	White Matte
Adhesive	40G, permanent acrylic, pigmented gray
Liner	90# patterned Licensed Air Flow Release Liner™

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	42 oz.	57 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor durability	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May-14

Form 108-01 (1/99)

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CLEAR CLING

PRODUCT CODE: 4-0260

PRODUCT DESCRIPTION

This is a 2.0-mil clear polyester film print treated for use with UV and conventional inks designed with a unique polymer technology that allows the film to cling to glass and other smooth substrates. The result is a very soft peel from glass that mimics static cling performance.

APPLICATIONS

- Window graphics
- Point of purchase displays
- Protective film

FEATURES AND BENEFITS

- Mimics static cling without the environmental and processing concerns. This product meets the current standards of the Consumer Product Safety Improvement Act (CPSIA)
- Compatible with a wide variety of printing technologies
- Can be applied by the wet application method for improved aesthetics

TECHNICAL DATA

Face Material	2.0-mil polyester print treated
Color and Finish	Gloss clear
Liner	90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Target Cling Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on glass)	<1 oz/in	<1 oz/in
Minimum Application Temperature	32°F	
Service Temperature Range	-40°F to +225°F	
Shelf Life (@ 73°F, 50% RH)	2 years	
Outdoor Durability of film	2 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
June-12 Form 108-01 (1/99)

**PRODUCT CODE: 4-0261**
MAGIC CLING**PRODUCT DESCRIPTION**

This is a 2.0-mil gloss clear topcoated polypropylene film designed with a unique polymer technology that allows the film to cling to glass and other smooth substrates. The result is a very soft peel from glass that mimics static cling performance.

APPLICATIONS

- Window graphics
- Point of purchase displays
- Protective film

FEATURES AND BENEFITS

- Mimics static cling without the environmental and processing concerns. This product meets the current standards of the Consumer Product Safety Improvement Act (CPSIA)
- Compatible with a wide variety of printing technologies
- Can be applied by the wet application method for improved aesthetics

TECHNICAL DATA

Face Material	2.0-mil topcoated polypropylene
Color and Finish	Gloss clear
Liner	90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Target Cling Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on glass)	<1 oz/in	<1 oz/in
Minimum Application Temperature	32°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	2 years	
Outdoor Durability of film	less than 6 months	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
June-12 Form 108-01 (1/99)



CRYSTAL CLING

PRODUCT CODE: 4-0264

PRODUCT DESCRIPTION

This is a 2.0-mil clear polyester film print treated for use with UV inks designed with a unique polymer technology that allows the film to cling to glass and other smooth substrates. The result is a very soft peel from glass that mimics static cling performance.

APPLICATIONS

- Window graphics
- Point of purchase displays
- Protective film

FEATURES AND BENEFITS

- Mimics static cling without the environmental and processing concerns. This product meets the current standards of the Consumer Product Safety Improvement Act (CPSIA)
- Compatible with a wide variety of printing technologies.
- Can be applied by the wet application method for improved aesthetics

TECHNICAL DATA

Face Material	2.0-mil polyester print treated
Color and Finish	Gloss clear
Liner	3.0-mil polyester traction back

TYPICAL CHARACTERISTICS

Target Cling Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on glass)	<1 oz/in	<1 oz/in
Minimum Application Temperature	32°F	
Service Temperature Range	-40°F to +225°F	
Shelf Life (@ 73°F, 50% RH)	2 years	
Outdoor Durability of film	2 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May-14

Form 108-01 (1/99)



WHITE MAGIC CLING PRODUCT CODE: 4-0289

PRODUCT DESCRIPTION

This is a 2.0-mil gloss white topcoated polypropylene film designed with a unique polymer technology that allows the film to cling to glass and other smooth substrates. The result is a very soft peel from glass that mimics static cling performance.

APPLICATIONS

- Window graphics
- Point of purchase displays
- Protective film

FEATURES AND BENEFITS

- Mimics static cling without the environmental and processing concerns. This product meets the current standards of the Consumer Product Safety Improvement Act (CPSIA)
- Compatible with a wide variety of printing technologies
- Can be applied by the wet application method for improved aesthetics

TECHNICAL DATA

Face Material	2.0-mil topcoated polypropylene
Color and Finish	Gloss white
Liner	90# polycoated bleached layflat

TYPICAL CHARACTERISTICS

Target Cling Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on glass)	<1 oz/in	<1 oz/in
Minimum Application Temperature	32°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	2 years	
Outdoor Durability of film	less than 6 months	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
June-12 Form 108-01 (1/99)

**ULTIMATE BRICK ACTION**
PRODUCT CODE: 4-0290**PRODUCT DESCRIPTION**

Gloss white flexible vinyl with removable gray-pigmented solvent adhesive with Licensed Air Flow Release Liner™ for easier, faster graphics installation on painted brick.

APPLICATIONS

- Painted brick
- Irregular wall surfaces

FEATURES AND BENEFITS

- Licensed Air Flow Release Liner™ for reduced wrinkling and air bubbles
- 7 year outdoor durable gloss white flexible vinyl
- Solvent gray removable adhesive

TECHNICAL DATA

Face Material	2.4-mil flexible vinyl
Color and Finish	White gloss
Adhesive	27G, Removable gray-pigmented solvent
Liner	90# patterned Licensed Air Flow Release Liner™

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	1.5 lbs.	2.5 lbs.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability (ASTM G53)	7 years	

Ritrama recommends the use of heat to help adhere film to recessed areas of the wall. Please test the anchorage of the paint before application.

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
May-14 Form 108-01 (1/99)



EASY WINDOW WET OUT PRODUCT CODE: 4-0359

PRODUCT DESCRIPTION

This 3.5 mil gloss clear vinyl with solvent removable adhesive is compatible with a variety of printing methods such as solvent, eco-solvent, and UV ink jet technologies. The ultra smooth 90# liner delivers excellent wet out clarity. Excellent for use in point of purchase displays, trade show displays, and window graphics.

APPLICATIONS

- Window graphics
- Point of purchase displays
- Trade show displays

FEATURES AND BENEFITS

- Compatible with a variety of printing methods
- Solvent removable adhesive
- Can be wet applied

TECHNICAL DATA

Face Material	3.5-mil flexible vinyl
Color and Finish	Clear gloss
Adhesive	27, solvent removable adhesive
Liner	90# smooth for clarity

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	30 oz.	40 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
May-14 Form 108-01 (1/99)



CLASSIC MATTE HIGH BOND X PRODUCT CODE: 4-0398

PRODUCT DESCRIPTION

A 3-year outdoor durable matte white vinyl media with permanent High Bond Gray adhesive for mounting to boards and other hard to adhere to substrates. Excellent for use on Acrylic, Diebond®, Sintra®, Gatorplast™, Gatorfoam®, Steel and painted dry wall for medium-term promotional, point of purchase, trade show displays, outdoor signage and banners.

APPLICATIONS

- Point of purchase displays
- Trade show displays
- Hard to adhere to substrates
- Permanent wall graphics
- Print and cut graphics

FEATURES AND BENEFITS

- 3-year outdoor durable white vinyl
- High Bond Gray adhesive
- Licensed Air Flow Release Liner™ for reduced wrinkling and air bubbles

TECHNICAL DATA

Face Material	3.2-mil flexible vinyl
Color and Finish	White matte
Adhesive	Permanent acrylic High Bond Gray
Liner	90# Licensed Air Flow Release Liner™

TYPICAL CHARACTERISTICS

Target Adhesion Values (PSTC-1, 180° peel @ 12"/min., 73°F, on:)	<u>15 min.</u>	<u>24 hr.</u>
Stainless Steel	60 oz. /inch	80 oz. /inch
Polyethylene	45 oz. /inch	60 oz. /inch
Polypropylene	50 oz. /inch	65 oz. /inch
Gatorplast™	60 oz. /inch	75 oz. /inch
Gatorfoam®	45 oz. /inch	60 oz. /inch
Sintra®	60 oz. /inch	65 oz. /inch
Diebond®	75 oz. /inch	85 oz. /inch
Acrylic	80 oz. /inch	85 oz. /inch
Glass	70 oz. /inch	85 oz. /inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May - 14

Form 108-01 (1/99)

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Guatemala-Costa Rica - Colombia

RI X PRINT



ULTIMATE LUSTER WALL X PRODUCT CODE: 4-0399

PRODUCT DESCRIPTION

The film is a luster white flexible cast vinyl with gray repositionable adhesive on the backside and our Licensed Air Flow Release Liner™ for easier, faster graphics installation. The premium high performance, flexible cast vinyl is ideal for application to painted surfaces for that “paint-on” look. The media is solvent, eco-sol, latex and UV ink jet printable.

APPLICATIONS

- Interior Wall Graphics
- Window Graphics
- Painted brick, use heat an rollers to work in

FEATURES AND BENEFITS

- ASTM E-84 Class A Flammability Rating
- Licensed Air Flow Release Liner™ for reduced wrinkling and air bubbles
- Solvent repositionable semi-permanent adhesive
- Phthalate free

TECHNICAL DATA

Film Caliper	2-mil.
Adhesive	560, repositionable semi-permanent solvent adhesive
Release Liner	90# patterned Licensed Air Flow Release Liner™
Processability	Steele rule, thermal and rotary die-cutting & computerized sign making
Outdoor Durability of Film	7 years vertical exposure in a temperate climate
Minimum substrate application temperature	55° F
Service temperature range (Peak values)	-50°F to +225°F

TYPICAL CHARACTERISTICS

Adhesion Values	<u>20 min.</u>	<u>24hrs.</u>
(Stainless steel substrate 180° peel @ 10"/min, 73° F)	24 oz./in.	30 oz./in.
Shelf Life (@ 73° F, 50% R.H.)	2 Years	
Elongation	120%	
60° Gloss	80 minimum	
Dimensional Stability(48 Hrs. @ 150° F)	0.01 in	

CHEMICAL RESISTANCE

Distilled Water (24 Hrs.)	No Effect
SAE 20 Motor Oil (1 Hr.)	No Effect
Gasoline (30 Min.)	No Effect
10% HCL (10 Min.)	No Effect
10% NH4OH (10 Min.)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
Apr-13 Form 108-01 (1/99)



MATTE WRAP BOX PRODUCT CODE: 4-0403

PRODUCT DESCRIPTION

Matte white flexible vehicle wrap vinyl with repositionable gray-pigmented adhesive with Licensed Air Flow Release Liner™ for easier, faster graphics installation.

APPLICATIONS

- Vehicle wraps
- Bus graphics
- Fleet graphics

FEATURES AND BENEFITS

- Licensed Air Flow Release Liner™ for reduced wrinkling and air bubbles
- 7 year outdoor durable matte white flexible vinyl
- Clean removing solvent gray removable solvent

TECHNICAL DATA

Face Material	2.4-mil flexible vinyl
Color and Finish	White matte
Adhesive	27, gray pigmented removable acrylic
Liner	90# patterned Licensed Air Flow Release Liner™

TYPICAL CHARACTERISTICS

Target Adhesion Values (PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	<u>15 min.</u> 1.5 lbs.	<u>24 hr.</u> 2.5 lbs.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	2 years	
Outdoor Durability (ASTM G53)	7 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

Oct-11

Form 108-01 (1/99)



ULTIMATE MATTE WALL ACTION PRODUCT CODE: 4-0406

PRODUCT DESCRIPTION

This 5-mil matte white semi-rigid film features a removable solvent adhesive that is designed for applications on smooth painted dry walls. Print-to-edge technology.

APPLICATIONS

- Wall graphics
- Point of purchase displays
- Trade show displays
- Window graphics

FEATURES AND BENEFITS

- Removable solvent adhesive – Ritrama recommends removing graphic at a 180° from the wall, not 90°, to help reduce the chance of any adhesive transfer or wall damage**
- Compatible with a variety of printing methods including solvent, eco-solvent, latex and UV ink jet
- Print-to-edge technology
- Removable for up to two years under normal interior conditions
- Ritrama recommends at least 24 hours of cure time before cutting

TECHNICAL DATA

Face Material	5.0-mil semi-rigid film
Color and Finish	White Matte
Adhesive	27, removable solvent
Liner	72# digital liner

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	16 oz.	24 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability of printed film	Up to 1 year	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

**Removing wall graphics can cause damage to walls due to a variety of uncontrolled variables. Ritrama, Inc. does not warrant damage to interior wall surfaces caused by the removal of wall graphics even if a removable adhesive is used.

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

May-14

Form 108-01 (1/99)

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ECONOMY VUE PRODUCT CODE: 4-0422

PRODUCT DESCRIPTION

Matte white vinyl laminated onto black vinyl and perforated (this version has 30% open area) in order to print on one side and to see through the other side.

The semi-permanent acrylic adhesive is repositionable and easy to remove after application.

Printing methods: solvent, eco-sol and latex screen printing, offset and large format digital print (solvent, eco-sol and latex).

APPLICATIONS

- Outdoor and transit advertising:
- Point of purchase displays
- Novelty products
- Window glazing (buses, trams fleet in general)

FEATURES AND BENEFITS

- Compatible with variety of printing methods. Not UV Ink Jet printable.
- Acrylic adhesive is repositionable and easy to remove after application.

TECHNICAL DATA

Face Material	6.0-mil flexible vinyl
Color and Finish	Black/white gloss
Adhesive	ASP30, Semi-permanent solvent
Liner	Solid paper

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	40 oz.	50 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability (ASTM G53)	2 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

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Feb-14 Form 108-01 (1/99)



ULTRA CLEAR REMOVABLE X

PRODUCT CODE: 4-0430

PRODUCT DESCRIPTION

This gloss clear vinyl comes with Air Flow Release Liner for easier and faster installation and is compatible with a variety of printing methods such as solvent, eco-solvent, latex and UV ink jet technologies. Excellent for use in point of purchase displays, trade show displays, and window graphics.

APPLICATIONS

- Window graphics
- Trade show displays
- Point of purchase displays

FEATURES AND BENEFITS

- Compatible with a variety of printing methods
- Licensed Air Flow Release Liner™ for easier and faster graphic installations
- Solvent removable adhesive

TECHNICAL DATA

Face Material	2.4-mil flexible vinyl
Color and Finish	Clear gloss
Adhesive	27, solvent removable adhesive
Liner	90# Licensed Air Flow Release Liner™

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	30 oz.	40 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
Jan-13 Form 108-01 (1/99)



ULTRA CLEAR REMOVABLE PRODUCT CODE: 4-0431

PRODUCT DESCRIPTION

This 2.4mil gloss clear vinyl with solvent removable adhesive is compatible with a variety of printing methods such as solvent, eco-solvent, and UV ink jet technologies. The ultra smooth 90# liner delivers excellent wet out clarity. Excellent for use in point of purchase displays, trade show displays, and window graphics.

APPLICATIONS

- Window graphics
- Point of purchase displays
- Trade show displays

FEATURES AND BENEFITS

- Compatible with a variety of printing methods
- Solvent removable adhesive
- Can be wet applied

TECHNICAL DATA

Face Material	2.4-mil flexible vinyl
Color and Finish	Clear Gloss
Adhesive	27, solvent removable adhesive
Liner	90# smooth for clarity

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	30 oz.	40 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	2 years	
Outdoor Durability	5 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.

March-12

Form 108-01 (1/99)



CRYSTAL CLING 4 PRODUCT CODE: 4-0513

PRODUCT DESCRIPTION

This optically clear 4.0-mil polyester film is print treated for use with UV and conventional inks designed with a unique polymer technology that allows the film to cling to glass and other smooth substrates. The result is a very soft peel from glass that mimics static cling performance.

APPLICATIONS

- Window graphics
- Point of purchase display cases
- Protective film

FEATURES AND BENEFITS

- Mimics static cling without the environmental and processing concerns. This product meets the current standards of the Consumer Product Safety Improvement Act (CPSIA)
- UV ink jet compatible .
- Can be applied by the wet application method for improved aesthetics

TECHNICAL DATA

Face Material	4.0-mil polyester print treated
Color and Finish	Clear Gloss
Liner	3.0-mil polyester traction back

TYPICAL CHARACTERISTICS

Target Cling Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on glass)	<1 oz/in	<1 oz/in
Minimum Application Temperature	32°F	
Service Temperature Range	-40°F to +225°F	
Shelf Life (@ 73°F, 50% RH)	2 years	
Outdoor Durability of film	2 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect

The above information is based on research believed to be reliable, but does not constitute a warranty. All material should be tested by the purchaser to determine suitability of the product for their purposes.
Apr-13 Form 108-01 (1/99)



ECONOVUE® 60/40

PRODUCT CODE: 4-0514

PRODUCT DESCRIPTION

Matte white vinyl laminated onto black vinyl and perforated (this version has 40% open area -1.6-mm holes) in order to print on one side and to see through the other side.

The clear removable acrylic adhesive is repositionable and easy to remove after application. Econovue with the clear PET liner is compatible with UV-cure, solvent and eco-sol inks.

APPLICATIONS

- Point of purchase
- Retail and commercial graphics for short-term use

FEATURES AND BENEFITS

- Compatible with variety of printing methods. Including UV Ink Jet.
- Clear removable acrylic adhesive is repositionable and easy to remove after application.

TECHNICAL DATA

Face Material	6.0-mil flexible vinyl
Color and Finish	Black/white matte
Adhesive	Clear removable solvent
Liner	Clear PET liner

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	40 oz.	50 oz.
Minimum Application Temperature	40°F	
Service Temperature Range	0°F to +140°F	
Shelf Life (@ 73°F, 50% RH)	6-months when stored at 70°F and 50% relative humidity	
Outdoor Durability (ASTM G53)	1 year; 3-months for clean removal.	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

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Feb-14

Form 108-01 (1/99)



CLASSIC BRIGHT MATTE BO LOGO

PRODUCT CODE: 4-0556

PRODUCT DESCRIPTION

A 3-year outdoor durable matte bright white vinyl media with permanent High Bond Gray adhesive for mounting to boards and other hard to adhere to substrates. Excellent for use on Acrylic, Diebond®, Sintra®, Gatorplast™, Gatorfoam®, Steel and painted dry wall for medium-term promotional, point of purchase, trade show displays, outdoor signage and banners.

APPLICATIONS

- Point of purchase displays
- Trade show displays
- Hard to adhere to substrates
- Permanent wall graphics
- Print and cut graphics

FEATURES AND BENEFITS

- 3-year outdoor durable matte bright white vinyl
- High Bond Gray adhesive
- Solvent, eco-sol, latex and UV Ink Jet Printable

TECHNICAL DATA

Face Material	3.0-mil vinyl
Color and Finish	Bright white matte
Adhesive	Permanent acrylic High Bond Gray
Liner	72# polycoated bleached kraft with Ritrama logo

TYPICAL CHARACTERISTICS

Target Adhesion Values (PSTC-1, 180° peel @ 12"/min., 73°F, on:)	<u>15 min.</u>	<u>24 hr.</u>
Stainless Steel	60 oz. /inch	80 oz. /inch
Polyethylene	45 oz. /inch	60 oz. /inch
Polypropylene	50 oz. /inch	65 oz. /inch
Gatorplast™	60 oz. /inch	75 oz. /inch
Gatorfoam®	45 oz. /inch	60 oz. /inch
Sintra®	60 oz. /inch	65 oz. /inch
Diebond ®	75 oz. /inch	85 oz. /inch
Acrylic	80 oz. /inch	85 oz. /inch
Glass	70 oz. /inch	85 oz. /inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

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Dec -12

Form 108-01 (1/99)



CLASSIC BRIGHT GLOSS BO LOGO

PRODUCT CODE: 4-0557

PRODUCT DESCRIPTION

A 3-year outdoor durable high gloss bright white vinyl media with permanent High Bond Gray adhesive for mounting to boards and other hard to adhere to substrates. Excellent for use on Acrylic, Diebond®, Sintra®, Gatorplast™, Gatorfoam®, Steel and painted dry wall for medium-term promotional, point of purchase, trade show displays, outdoor signage and banners.

APPLICATIONS

- Point of purchase displays
- Trade show displays
- Hard to adhere to substrates
- Permanent wall graphics
- Print and cut graphics

FEATURES AND BENEFITS

- 3-year outdoor durable gloss bright white vinyl
- High Bond Gray adhesive
- Solvent, eco-sol, latex and UV Ink Jet Printable

TECHNICAL DATA

Face Material	3.0-mil vinyl
Color and Finish	Bright white high gloss
Adhesive	Permanent acrylic High Bond Gray
Liner	72# polycoated bleached kraft with Ritrama logo

TYPICAL CHARACTERISTICS

Target Adhesion Values (PSTC-1, 180° peel @ 12"/min., 73°F, on:)	<u>15 min.</u>	<u>24 hr.</u>
Stainless Steel	60 oz. /inch	80 oz. /inch
Polyethylene	45 oz. /inch	60 oz. /inch
Polypropylene	50 oz. /inch	65 oz. /inch
Gatorplast™	60 oz. /inch	75 oz. /inch
Gatorfoam®	45 oz. /inch	60 oz. /inch
Sintra®	60 oz. /inch	65 oz. /inch
Diebond ®	75 oz. /inch	85 oz. /inch
Acrylic	80 oz. /inch	85 oz. /inch
Glass	70 oz. /inch	85 oz. /inch
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	3 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

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Dec-12

Form 108-01 (1/99)

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SUPER VUE®
PRODUCT CODE: 4-0623

PRODUCT DESCRIPTION

8.0-mil matte white exterior-mount vinyl is an intermediate film punched for removable see-through graphics for windows, glass doors, and similar applications.

APPLICATIONS

- Window graphics
- Glass door graphics
- Promotional graphics

FEATURES AND BENEFITS

- 2-mil hole diameter
- 50 / 50 Perf pattern

TECHNICAL DATA

Face Material	8.0-mil flexible vinyl
Color and Finish	Matte white one side; black on the adhesive side
Adhesive	Removable solvent
Liner	Clear polyester

TYPICAL CHARACTERISTICS

Target Adhesion Values	<u>15 min.</u>	<u>24 hr.</u>
(PSTC-1, 180° peel @ 12"/min., 73°F, on Stainless Steel)	15 oz.	20 oz.
Minimum Application Temperature	50°F	
Service Temperature Range	-40°F to +180°F	
Shelf Life (@ 73°F, 50% RH)	1 year	
Outdoor Durability	2 years	

CHEMICAL RESISTANCE

Distilled Water (24 hr)	No Effect
Detergent (24 hr)	No Effect
10% HCl (10 min)	No Effect
10% Ammonium Hydroxide (10 min)	No Effect
Anti-Freeze (24 hr)	No Effect
SAE 20 Motor Oil (24 hr)	No Effect
Gasoline (1 hr)	No Effect

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Feb-14 Form 108-01 (1/99)