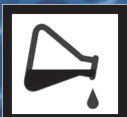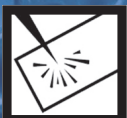# BROTHER TAPE TECHNOLOGY

HG*e* TAPE **TZ*e* TAPE** **HS*e* TUBE**

- Abrasion Resistant
- Chemical Resistant
- UV Resistant
- Dielectric Strength
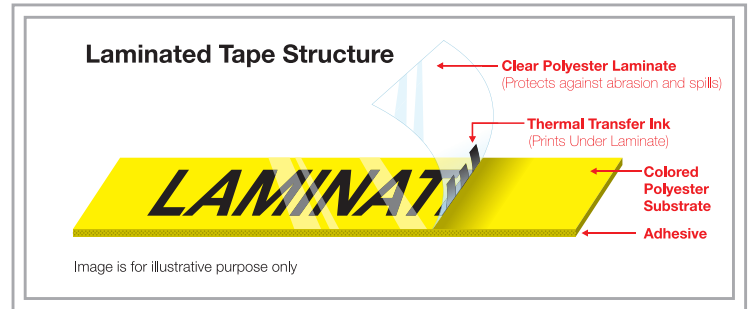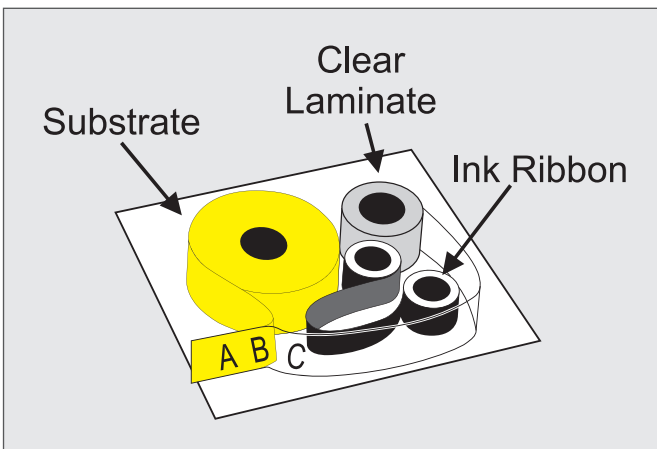
BROTHER™ TAPE TECHNOLOGY

Everything to make laminated labels is preloaded

To help make printing laminated labels on-demand reliable and trouble free, Brother™ preloads all consumables needed into a drop-in cartridge design.

This means that when you print a laminated label, everything needed to produce that laminated label is already resident within the cartridge. So the printed label that emerges is already laminated; there's no additional process necessary to produce the finished label. You can simply peel off the backing and apply the label to virtually any surface, immediately.

Each cartridge contains:

- **A supply roll of colored polyester face stock with an acrylic adhesive coated on both sides (with silicon liner on bottom side)**

- **Supply and take up rolls for a colored ink ribbon designed to transfer to the polyester lamination**

- **A supply roll of matte finish or glossy clear polyester lamination**

Laminated Tape Structure

→ **Clear Polyester Laminate**
(Protects against abrasion and spills)

→ **Thermal Transfer Ink**
(Prints Under Laminate)

LAMINAT

→ **Colored Polyester Substrate**

→ **Adhesive**

Image is for illustrative purpose only

Substrate   **Clear Laminate**   **Ink Ribbon**

A B C

How your laminated label is printed – content is printed under the lamination

The print head transfers the ink to the underside of the lamination, and then a pressure roller combines the "printed" lamination to the face stock, and "pushes" the laminated label to the cutting position where the label is then cut to your desirable length.

The laminated labels are produced from a continuous "tape" available in 6 standard widths (36mm, 24mm, 18mm, 12mm, 9mm and 6mm) and in the following adhesive types:

- **Standard Adhesive –** Designed with a medium adhesive coating for general purpose applications with a smooth and flat surface

- **Extra-Strength Adhesive –** Designed with a soft adhesive coating to increase surface area contact on plastics or textured surfaces

- **Flexible ID –** Designed with a hard adhesive coating to apply adhesive to adhesive (flag label) or adhesive to laminate (wrap around) for labeling cables and wires – the tape to take if you can only carry one

- **Tamper-Evident –** Designed with a special face stock that breaks apart if the laminated label is disturbed or removed

STANDARD & EXTRA STRENGTH ADHESIVE

STANDARD ADHESIVE

EXTRA STRENGTH ADHESIVE

SMOOTH SURFACE

TEXTURED SURFACE

TEXTURED SURFACE

Tape durability test results

Brother™ used an independent laboratory in Japan to conduct durability testing on all Brother™ laminated labels. These tests include measuring the performance for abrasion, fading, hot and cold temperatures, exposure to chemicals and moisture.

Abrasion Resistance
After 50 round-trip passes with a 1kg weighted sand eraser, Brother™ laminated tapes only came up slightly scratched with the characters underneath completely unaffected.

Chemicals and Water
Having bathed Brother™ laminated tapes in a variety of materials for two hours, they still managed to remain affixed to their surfaces with little damage. Even chemical spills, with a quick wiping, result in minimal damage.

Laminated Tape Adhesive Strength
Brother™ laminated tapes will adhere to almost any surface including: stainless steel, glass, PVC, acrylic, polypropylene, and polyester-coated wood. The tapes stand up to hot, cold, and humid conditions, and even adhere better when heated. Smooth, rough, flat or rounded surfaces are no problem for Brother™ laminated tapes.

Fade Resistance
Brother™ laminated tapes were attached to coated metal plates, and placed in a fade-inducing chamber at 83 degrees C for 100 hours to simulate a year in a sunny environment. Then they were placed in a chamber at 63 degrees C for 400 hours to simulate a year in, not only heat and light, but water as well. Only yellow tapes showed significant signs of fading while the others showed little sign of fading to the eye.

Dielectric Strength
In tests performed by Brother™, white P-touch® tapes with black characters began to lose their electric resistance at an applied voltage of 8kv, and lost their resistance entirely at 11kv. Most other color variations will have the same resistance.

UL recognized tapes

Brother™ has been given license to use this UL mark on the Brother™ tapes that have been tested and certified to become a UL recognized component under the UL-969 standard, Marking and Labeling Systems (ISBN 1-55989-895-X) categories PGJI2 and PGJI8. There are four categories under this standard:

1. **Marking and Labeling System Materials (PGGU2, PGGU8)** – Individual label components (i.e. label stocks, laminating adhesives and overlaminates)

2. **Marking and Labeling Systems (PGDQ2, PGDQ8)** – Finished systems that are supplied to end-product manufacturers that typically employ PGGU2 materials

3. **Printing Materials (PGJI2, PGJI8)** – Pre-printed or unprinted systems that have been evaluated for additional printing by end-product manufacturers using thermal transfer or laser printing techniques

4. **Limited Use Marking and Labeling Systems (PGIS2)** – Labels used in Cabinet and Box (UL50) applications and cord tags (flag type labels)

The suffix "2" indicates the recognition is established in accordance with UL requirements and the suffix "8" is with CSA requirements.

All material components that are used to print a label, including the printing process must be tested. UL also checks for quality control back to the material components supplier.

In simple terms, Brother™ defined the performance properties of specific tapes by part number, and UL certifies (tests) these tapes meet these properties and the results are published on the UL Website. An engineer or designer will then search for labels with properties that meet their specifications. The following Brother™ tapes are UL recognized:

• **Standard Adhesive HGe Tapes**
• **Extra-Strength Adhesive TZe and HGe Tapes**
• **Flexible ID TZe Tapes**
• **Tamper-Evident TZe Tapes**

To see the listings, visit the UL Website at www.ul.com and search the Online Certifications Directory for "MH21016" under the UL File Number.

Brother is the only manufacturer to offer a preloaded hassle-free laminated label in a drop-in cartridge design for a durable and professional quality label. The cassettes come in a variety of sizes, colors and adhesives to meet numerous applications and environments.

Choose the Right Label Tape for Your Job

	Cables / Wires	Faceplates	Patch Panels (Smooth Surface)	Patch Panels (Textured Surface)
Flexible ID	✓	✓	✓	
Standard Adhesive		✓	✓	
Extra-Strength Adhesive		✓	✓	✓
Tamper Evident		✓	✓	

HGe TAPE — HGe tape is designed for commercial and industrial applications. It prints laminated labels much faster than any current P-touch label printer and with a higher resolution up to 360x720 dpi.

Extra-Strength Adhesive - Designed to use on plastics, textured and hard to stick surfaces

	6mm (.23 in)	9mm (.35 in)	12mm (.47 in)	18mm (.7 in)	24mm (.94 in)	36mm (1.4 in)
BLACK ON WHITE	HGeS2115pk	HGeS2215pk	HGeS2315pk	HGeS2415pk	HGeS2515pk	HGeS2615pk
BLACK ON YELLOW		HGeS6215pk	HGeS6315pk	HGeS6415pk	HGeS6515pk	HGeS6615pk
BLACK ON MATTE SILVER				HGeS9415pk	HGeS9515pk	HGeS9615pk
BLACK ON CLEAR		HGeS1215pk	HGeS1315pk	HGeS1415pk	HGeS1515pk	

Standard Adhesive - Designed to use for most general purposes

HGe Extra-Standard Adhesive Tapes	6mm (.23 in)	9mm (.35 in)	12mm (.47 in)	18mm (.7 in)	24mm (.94 in)	36mm (1.4 in)
BLACK ON WHITE		HGeS2215pk	HGeS2315pk	HGeS2415pk	HGeS2515pk	
BLACK ON YELLOW				HGeS6415pk	HGeS6515pk	

TZe TAPE — Laminated and durable like HGe tapes, TZe tape is designed for most indoor and outdoor applications. It comes in a variety of extra colors and sizes from 3.5 mm to 36mm.

Flexible ID Tapes - Designed for wrapping around cables and adhesive-to-adhesive flag labels

Tze Flexible ID Tapes	6mm (.23 in)	9mm (.35 in)	12mm (.47 in)	18mm (.7 in)	24mm (.94 in)	36mm (1.4 in)
BLACK ON WHITE		TZeFX221	TZeFX231	TZeFX241	TZeFX251	TZeFX261
BLACK ON YELLOW			TZeFX631		TZeFX651	
BLACK ON RED					TZeFX451	
BLACK ON BLUE					TZeFX551	
BLACK ON GREEN					TZeFX751	

Extra-Strength Adhesive Tapes - Designed for plastics and textured surfaces

	6mm (.23 in)	9mm (.35 in)	12mm (.47 in)	18mm (.7 in)	24mm (.94 in)	36mm (1.4 in)
BLACK ON WHITE	TZeS211	TZeS221	TZeS231	TZeS241	TZES251	TZeS261
BLACK ON YELLOW		TZeS621	TZeS631	TZeS641	TZeS651	TZeS661
BLACK ON CLEAR		TZeS121	TZeS131	TZeS141	TZeS151	
WHITE ON CLEAR			TZeS135			
BLACK ON MATTE SILVER				TZeS941	TZeS951	TZeS961

Standard Adhesive Tapes - Designed for plastics and textured surfaces and comes in a variety of colors

	6mm (.23 in)	9mm (.35 in)	12mm (.47 in)	18mm (.7 in)	24mm (.94 in)	36mm (1.4 in)
BLACK ON WHITE	TZe211	TZe221	TZe231	TZe241	TZE251	TZe261
BLACK ON CLEAR	TZe111	TZe121	TZe131	TZe141	TZE151	TZe161
BLACK ON MATTE SILVER		TZeM921				
BLACK ON RED		TZe421		TZe441	TZe451	
BLACK ON YELLOW			TZe631	TZe641	TZe651	TZe661
BLACK ON GREEN				TZe741		
BLACK ON BLUE				TZe541		
BLACK ON ORANGE				TZeB41	TZeB51	TZeB61
WHITE ON BLACK	TZe315	TZe325	TZe335	TZe345	TZE355	
WHITE ON CLEAR			TZe135	TZe145		
WHITE ON BLUE		TZe525		TZe545	TZe555	TZe565
WHITE ON GREEN		TZe725				TZe765
WHITE ON RED						TZe465
RED ON WHITE			TZe232	TZe242	TZe252	
BLUE ON WHITE				TZe243		
GOLD ON BLACK			TZe334	TZe344	TZe354	

HSe TUBE — HSe tube* is a printable heat shrink tubing designed to be used with the PT-E300, PT-E500, PT-E550W, PT-E550CM, and PT-P750WVP

WIDTH	5.8mm (.23 in)8	.8mm (.34in)	11.7mm (.48in)	17.7mm (.69in)	23.6mm (.92in)
RECOMMEND OUTER DIAMETER	1.7-3.2mm (.07-.13 in)2	.6-5.1mm (.10-.20 in)3	.6-7.0mm (.14-.28in)	5.4-10.6mm (.21-.42 in)7	.3-14.3mm (.29-.56 in)
BLACK ON WHITE	HSe211	HSe221	HSe231	HSe241	HSe251

1A-C01

*Warning, product contains a chemical known to the State of California to cause cancer.

Tamper Evident Tapes - Designed to reveal a security pattern when the label is removed or disturbed

	18mm (.7 in)
BLACK ON WHITE	TZeSE4

Super Narrow, Non Laminated Tape - Designed to label narrow spaces

	8M Long (26.2 inch)
BLACK ON WHITE	TZeN201

cULus

HGe Standard and Extra-Strength Adhesive and TZe Flexible ID, Extra-Adhesive and Tamper Evident Tapes have been tested and certified to become a UL recognized component under the UL-969 standard marking and labeling system.