

3M Knifeless Tape Information Sheet

For Internal Use Only.

3M™ Knifeless Product Cheat Sheet -

In general, all these products work the same – they cut vinyl. There is not one general purpose tape...within reason.

Simply put:

Tape	Thinner Vinyl – 3M 1080	Thicker Vinyl	Laminates	Composite Vinyl – sparkles, metallic components	Reflective, chrome, Tint	Exposed edges	Wrapping, hidden cuts	Curved Designs and tighter corners
Finish Line	X	XX	XX	X			XX	
Design Line	XX					XX		XX
Bridge Line		X	X	X			X	
Perf Line		X	X	X			X	
Tri Line	X					X		XX
Precision Line	X	X	X	XX	XX	XX	X	
PPF Line*								

*Designed Specifically for Paint Protection Film
 XX – the intended use of the product

Classic Series –

These were the flagship products. All three have a Kevlar filament on green tape. Kevlar will cut all thicknesses of vinyl wrapping film. If you are dealing with a commercial wrap, you are most likely dealing with this product. None of the Classic products can handle any stretching – the filament cannot stretch, so any stretching will pull the filament off the tape – this is the number one error in using this product, number one complaint by installers in thinking that the product is faulty.

Finish Line – 3.5mm tape

- This is the top selling tape
- **Best** positioned for the shop that is doing **commercial wraps**.
- Must be cut with a blade – cannot safely break by hand.
- Anywhere there is a **hidden cut**, no matter the thickness, use this product.
- It will not break with use, will cut through **multiple layers**.
- Use on all laminated vinyl and products thicker than 3M 1080.
- Use when cutting through multiple layers of film (see Design Line and Tri Line for the exception)
- Use with high metal flake content if the cut is of desired quality or hidden – otherwise **Precision Line**.
- Try not to use when there is an exposed edge unless thickness of material dictates (if vinyl is thick but requires sharp edge then go to Precision Line)
- **Butt joints** of thicker materials, where Tri Line will break.

Bridge Line – 12.7mm tape

- Main function is to **traverse a gap**.
- Tape is typically anchored to either side of a gap such as between doors, door and fender, fender and hood, trunk and rear quarter panel etc.
- Filament is positioned in the middle of the gap, enabling the installer to safely and efficiently cut the vinyl and ensure that they have enough vinyl to wrap around on either side of the gap.
- Secondary use of this product is when attempting to attach tape to a **surface that does not readily allow the tape to stick** – ie. Rubber and plastic.
- If you are looking to cut along a plastic or rubber piece that parallels paint or another surface that the tape does stick to, the width of the tape allows the installer to anchor onto the paint while cutting along the rubber or plastic.

Classic Series Cont. -

Perf Line – 6.4mm tape.

- Primary focus is to cut **Perforate Window Film**.
- 3M suggests a 3mm to 7mm gap from the edge of the window to the vinyl to eliminate the need for edge sealing on full coverage windows. (Though 3M does recommend edge tape for best overall performance – this will require a 6mm gap.) Perf Line will give a 3.2mm gap if applied along the edge of the glass.
- Secondary use – **small gaps** as seen in more European Automobiles.

Designer Series –

These were developed with the 3M 1080 vinyl in mind. Installers were not happy with the quality of the cut that they were getting from Finish Line. Kevlar is braided so the cut is inherently rough(er). Design Line and TriLine (6mm and 9mm) use a Polyester Monofilament as the cutting filament. This has its negatives and positives. These tapes can be broken by hand making them more efficient to use but also increasing the potential that the filament may break in use. The cut is as sharp and smooth as blade can do***(Dependant in part on the vinyl been cut). The Designer products can handle limited stretching in making corners happen – emphasize tension and not stretch.

Design Line – 3.5mm tape

- #2 product in terms of sales
- Designed for 3M 1080 and like products – color change applications
- Easiest product to make turns.
- Very efficient once learned as no need to use a blade to cut the tape and filament.
- Should be tested on all Carbon Fiber type vinyl prior to installation of vinyl, even with the thinner versions, as the cut may not be to the quality desired.
- Used when the installer anticipates having an exposed edge on the vinyl as seen in making custom designs, partial wraps, color change /commercial combination wraps.
- Can cut through two layers of 3M 1080 for making a butt seem.
- Can cut through 3M 180Cv3 with over-laminate but must test it first.

Designer Series Cont. -

Tri Line – 6mm and 9mm

- Designed to make pin stripes – 6 and 9mm options.
- Making gaps vinyl – 6 and 9mm options.
- Designed for single layer and 2 layer 3M 1080 and like products.
- Butt joints using thinner vinyl film.⁷
- Great for making racing stripes and rally stripes with ease

Premium Series –

These two products have been developed with a metal filament sandwiched between two tapes. This filament is ultra-sharp and very breakable. It cannot be stretch at all. It is imperative that installer using this product watch the various videos available for both use of the product and starting the product, as starting is very different than the original products.

Precision Line – 4mm blue tape

- Same product design as PPF Line (filament sandwiched between two tapes), only narrower and does not need the second tape.
- Can cut everything.
- Sharpest cut, designed for Chrome, Reflective, Tint, Perf, but can be used on any vinyl film at this time including those with Metallic.
- Starting this tape is different than the other tapes and requires teaching.
 - Starting the Premium Series: <https://youtu.be/w38nnh52IiA>
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Premium Series Cont. -

PPF Line – 5mm clear tape

- Designed with the Wet Application in mind.
- Allows for bulk installs of Paint Protection Film.
- Uses a Patented two tape system to get the highest quality cut.
- Currently partial hoods and fender installations make up approximately 80% of all PPF Installations – this product does great here.
- This product will require learning by installers and trainers alike to see what the potential truly is. The original thought was that you would never use the tape when installing on a bumper but already that has been done.
- As with Precision Line, starting this tape is different than the other tapes and requires teaching.
- It is important to let the distributor know that they should not be selling this product without informing the installer that they need to watch the video introduction on the product – without watching the video, failure is almost guaranteed. I will send you a link to a video that we are currently using but will be changing out for a 3M specific version.
- Using the PPF Line: <https://www.youtube.com/watch?v=Po3hcpyWs0w>

Why 2 tapes???? – the first tape is the cutting tape- put down on a clean dry surface. Next the PPF is installed wet - once installed, the PPF directly over top of the cutting tape is dried and the second tape is applied. This second tape makes the PPF more rigid minimizing the motion of the PPF during the cutting process, allowing for a sharp, clean cut. Without the tape, failure happens 80% of the time and cut quality is never as good.

If you have questions on any of this, or your distributors are asking questions that are not easily answered here, please refer to me – I am here for you and your sales people for anything Knifeless. More often than not, a product complaint is going to be user error. Feel free to send all concerns and complaints my way as we can usually solve the problem with some education of the installer.

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