

Commercial Solutions Division

3M™ Knifeless™ Tape

Finish Line

Perf Line

Bridge Line

Design Line

Tri Line

Precision Line

PPF Line

Product Description

3M™ Knifeless™ Tapes are filament tapes designed to cut films cleanly without risk of damaging substrates.

Product Line		
Finish Line		<ul style="list-style-type: none">• Colour: Semi-transparent green.• Cuts most vinyl wrap films, e.g. 3M™ Wrap Film Series 1080 and 3M™ Wrap Film Series 1380.• Turns easily in any direction to follow contours and curves.• For single or multiple vinyl layer applications.• For covered or hidden film edges.
Perf Line		<ul style="list-style-type: none">• Colour: Semi-transparent green.• Use to cut laminated perforated window films (e.g. 3M™ Scotchcal™ Perforated Window Graphic Film 8173) and create a uniform relief cut along rubber molding before applying edge-sealing tape.
Bridge Line		<ul style="list-style-type: none">• Colour: Semi-transparent green.• Used to achieve clean and uniform cuts in wide gaps between doors, fenders and rubber moldings.• For single or multiple vinyl layer applications.• Suitable for e.g. 3M™ Wrap Film Series 1080 and 3M™ Wrap Film Series 1380.
Design Line		<ul style="list-style-type: none">• Colour: Semi-transparent green.• Create striping, accents and designs instead of using a knife or plotter.• Stretches slightly and turns easily in any direction.• Tape can be torn by hand for faster application.• For single layer vinyl applications.• Suitable for e.g. 3M™ Wrap Film Series 1080 and 3M™ Wrap Film Series 1380.

Tri Line	<ul style="list-style-type: none"> • Colour: Semi-transparent green. • Create pinstripes, gaps and butt seams instead of using a knife or plotter. • Create different widths using 6 mm and 9 mm. • Stretches slightly and turns easily in any direction. • Tape can be torn by hand for faster application. • For single layer vinyl applications (2 layers for butt seams). • Suitable for e.g. 3M™ Wrap Film Series 1080 and 3M™ Wrap Film Series 1380.
Precision Line	<ul style="list-style-type: none"> • Colour: Semi-transparent blue. • Sharp metal filament cuts reflective, metallic, chrome, dry erase and 3M™ DI-NOC™ films, plus all other vinyl and non-vinyl films. • Turns easily in any direction to follow contours and curves. • For single or multiple layer applications. • “Sandwich” design (embedded filament).
PPF Line	<ul style="list-style-type: none"> • Colour: Clear. • Sharp metal filament cuts paint protection films and vinyl window films. • Combining the cover tape and the cutting tape makes film more rigid, ensuring razor-sharp edges. • Conforms around contours and curves. • For single or multiple layer applications. • “Sandwich” design (embedded filament). • Use for films applied by wet installation (Paint Protection Films).

Product Characteristics

These are indicative values for unprocessed products.
Contact your 3M representative for a custom specification.

Physical & Application	Adhesive type	acrylic
	Application Temperature	+16°C to +25°C
	The values above are the results of illustrative lab test measurements and shall not be considered as commitment from 3M.	
Storage	Shelf life	Use within 12 months from the date of manufacture on the sealed original box.
	Storage conditions	+4°C to +30°C, out of sunlight, original container in clean and dry area
The shelf life as defined above remains an indicative and maximum data, subject to many external and non-controllable factors. It may never be interpreted as warranty.		
Flammability	Flammability standards are different from country to country. Ask your local 3M contact for details, please.	

Limitations of End Uses

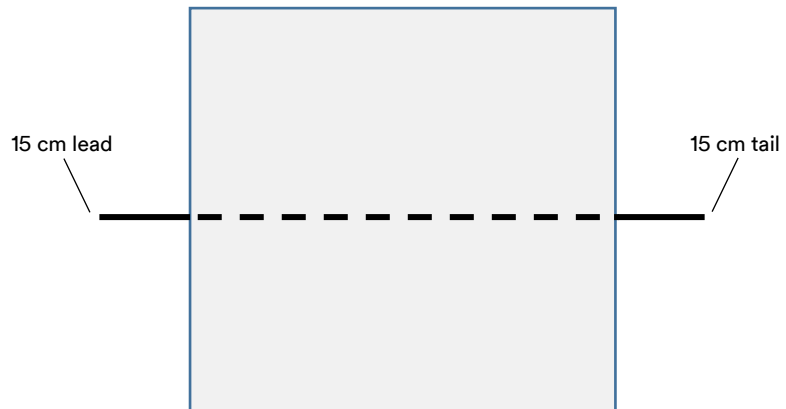
3M specifically does not recommend or warrant the following uses, but please contact us to discuss your needs to recommend other products.

- outdoor applications or prolonged periods of sunlight as tape may become difficult to remove
- Important Notice**
- 3M Commercial Solutions products are not tested against automotive manufacturer specifications!
 - Handle any Knifeless Tape with care. DO NOT wrap around fingers or hand during the trimming operation or during the start of the trimming operation. Dispose of filament immediately after use.

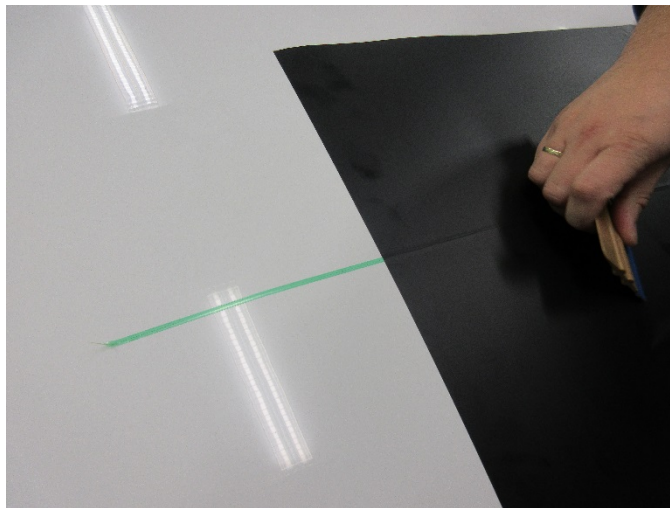
Instruction for Use

Knifeless Tape

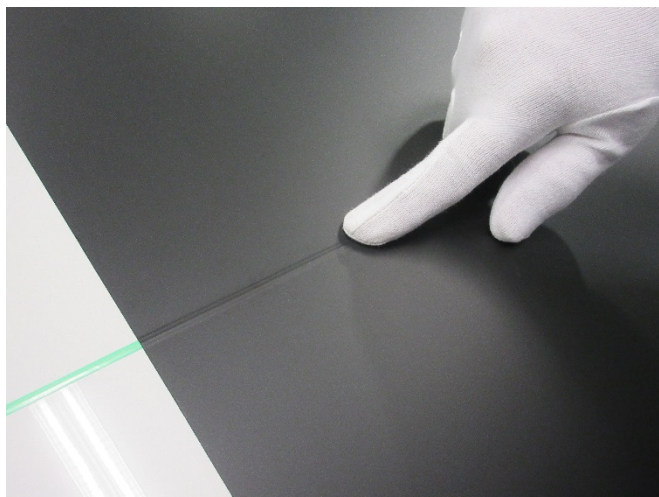
Finish Line
Perf Line
Bridge Line
Design Line
Tri Line



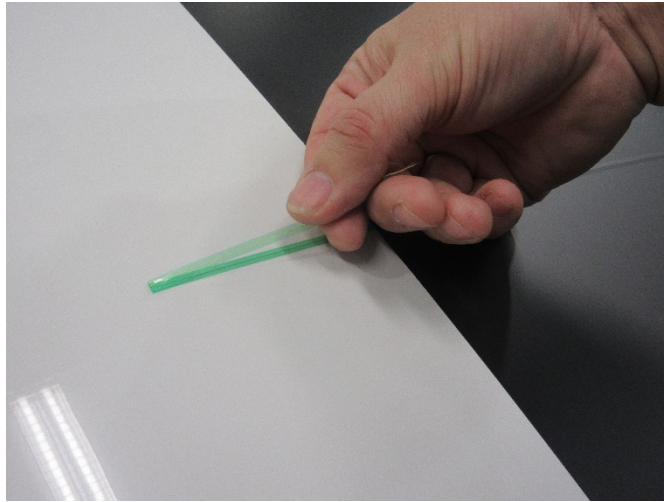
Begin with 15 cm of tape (before and after) where the graphic will be cut and lay down Knifeless Tape. Apply the film with pressure over the Knifeless Tape, leaving the lead and tail tape visible.



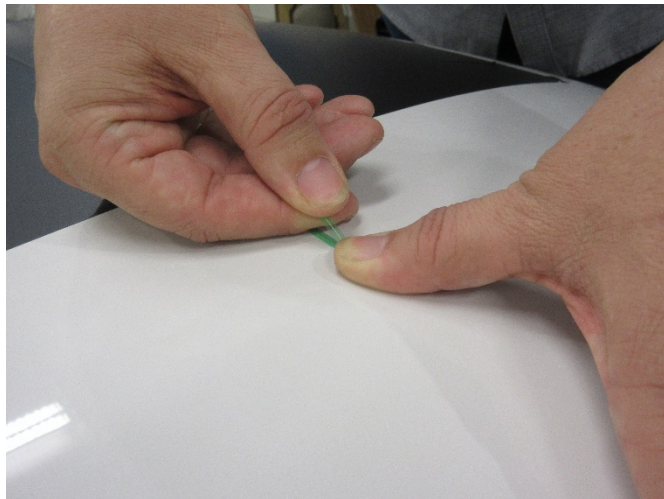
To remove air bubbles, press the film onto the Knifeless Tape again with your finger.



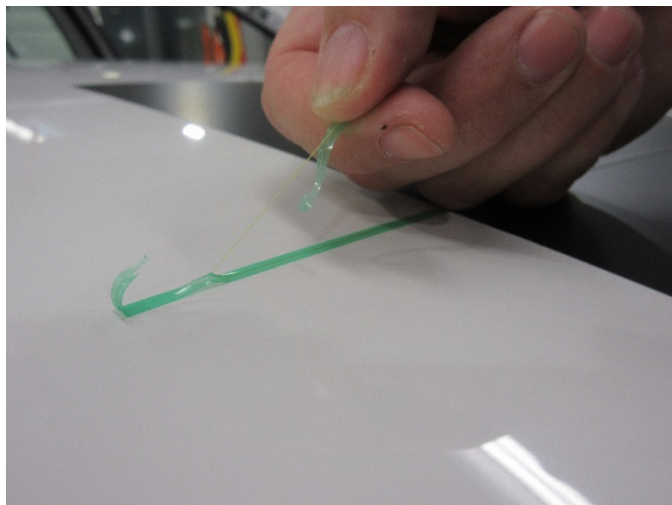
Fold the start of the tape back over itself approximately 8 cm.

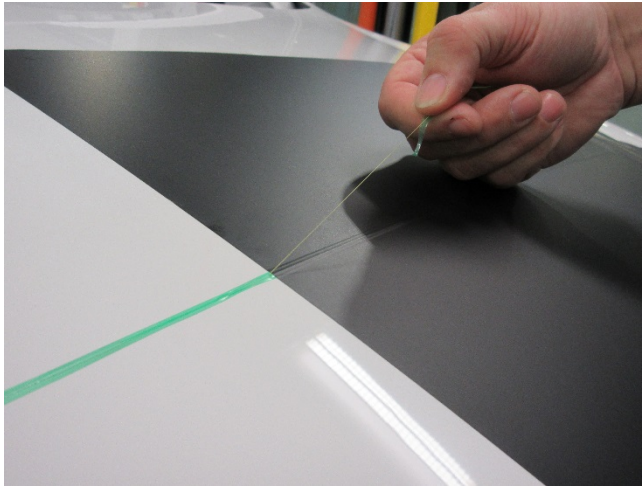


Press thumb firmly on folded edge, covering at least 1 cm tape. Firmly grasp the end of the tape with your thumb and index finger. Start with your two thumbs 1 cm apart. Bring thumbs together and give the tape a quick snap, breaking the carrier tape and exposing the filament (line).

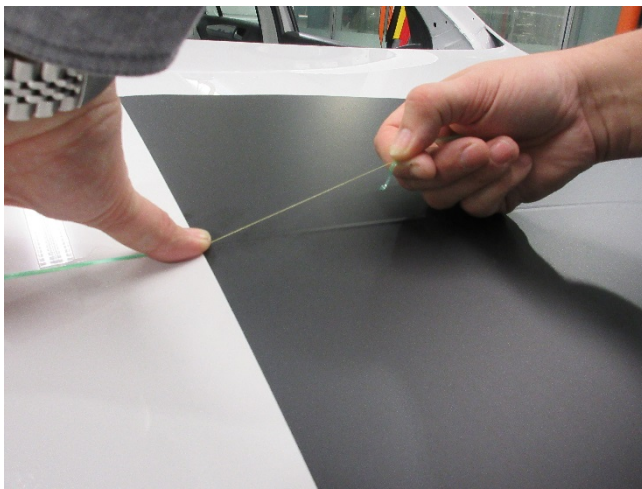


Pull the line back and not upward, stopping before the edge of the graphic.

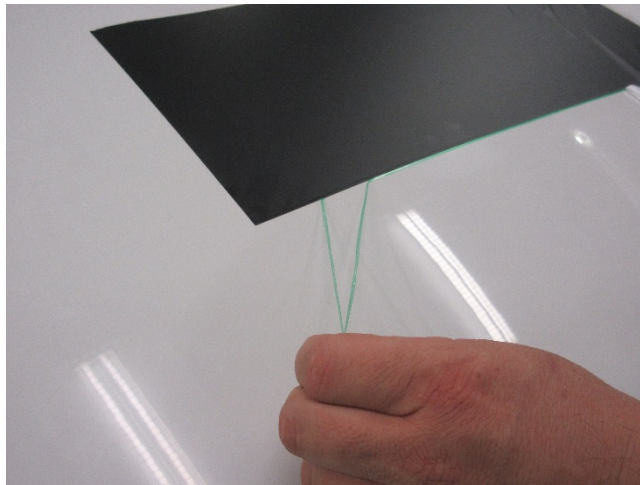
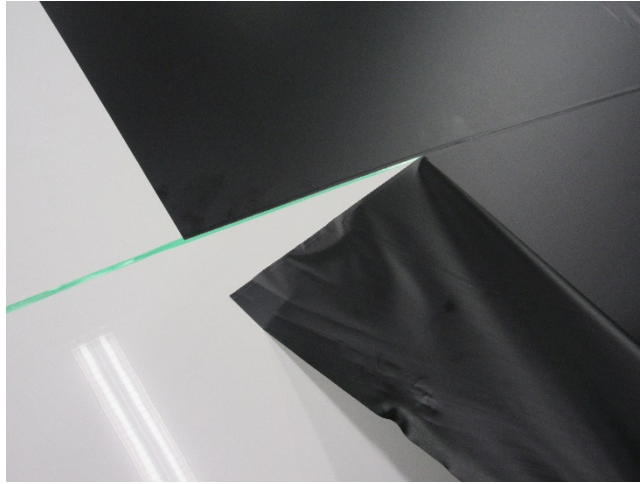




Fold the filament over the graphic. Press your thumb over both the filament and the graphic edge. Gently tug the filament to start cutting into the graphic, continuing to pull the line back and not upward.



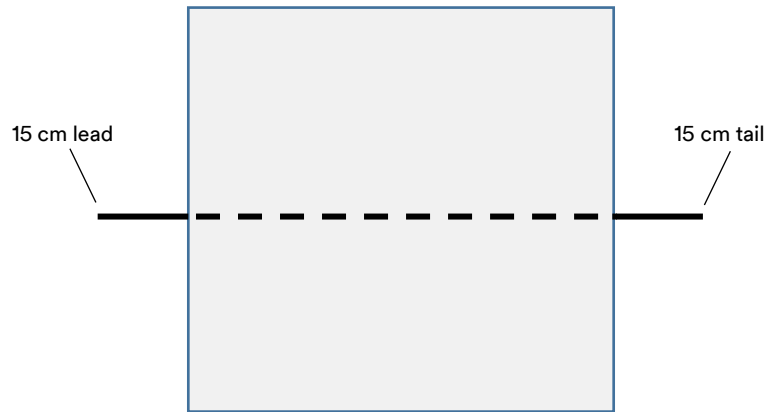
After cutting is finished, remove the excess film and the carrier tape from under the film. Please note that after cutting the carrier tape has split in two tapes. Both tapes need to be removed completely without residuals.



Heat the edges of the film and reapply the film edges with firm pressure.

Important notice If multiple Knifeless Tapes are used mark the order of application and start cutting in the reverse order the Knifeless Tapes were applied (cut first with last Knifeless Tape applied).

Knifeless Tape Precision Line

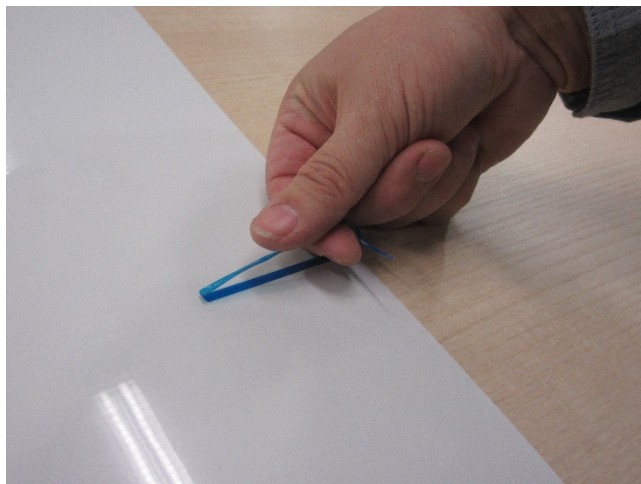


Begin with 15 cm of tape (before and after) where the graphic will be cut and lay down Knifeless Tape. Apply the film with pressure over the Knifeless Tape, leaving the lead and tail tape visible.

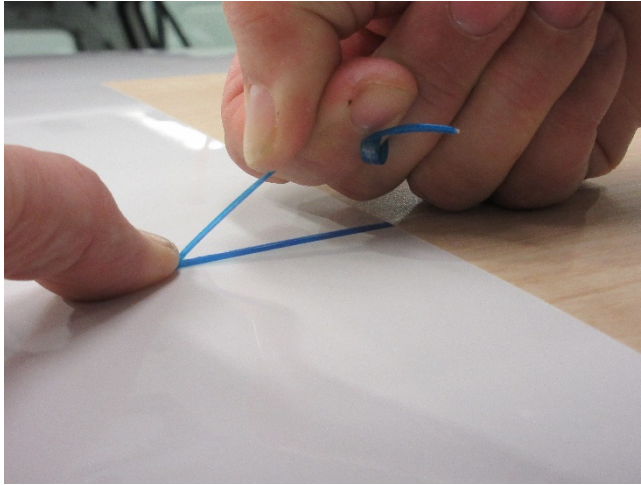
To remove air bubbles, press the film onto the Knifeless Tape again with your finger.



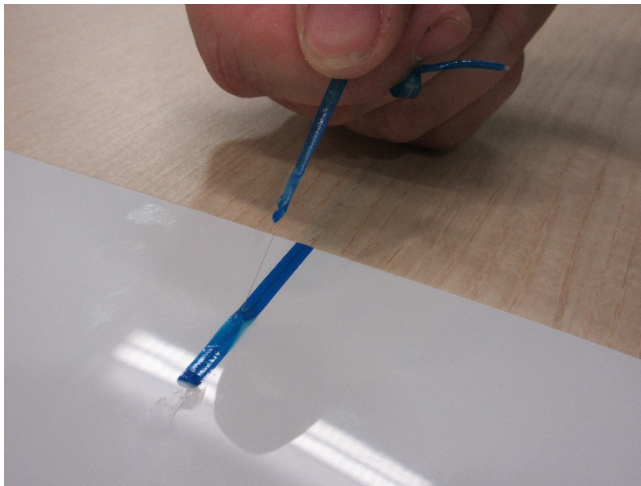
Fold the start of the tape back over itself approximately 8 cm.



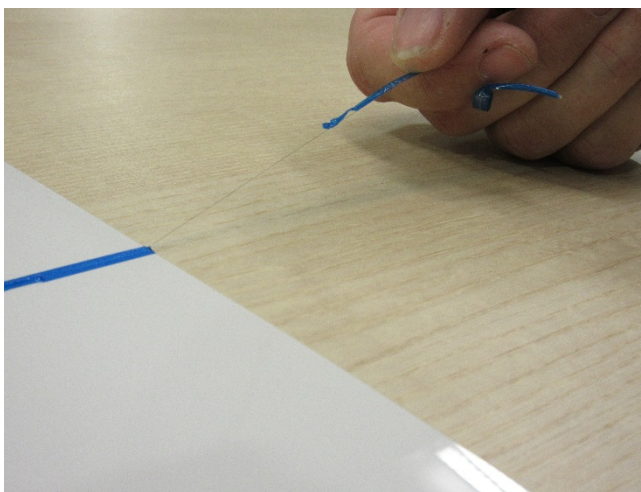
Press thumb firmly on folded edge, covering at least 1 cm tape.

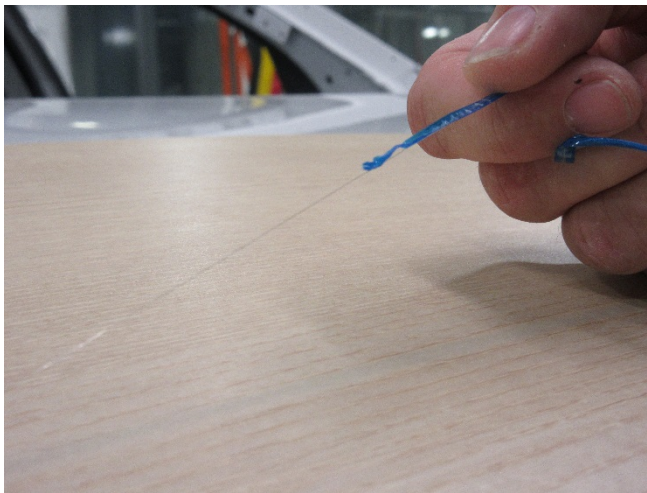
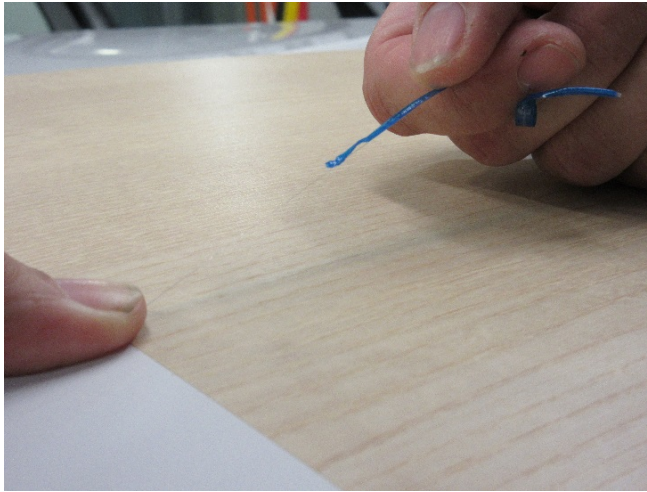


Firmly grasp the end of the tape with your thumb and index finger positioning your two thumbs close together to start the filament. Gently pull the line to tear the carrier tape and expose the filament. Pull the line back and not upward, stopping before the edge of the graphic.

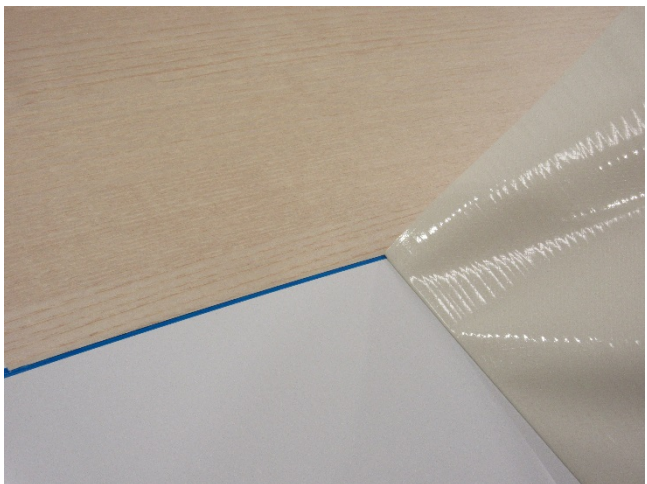


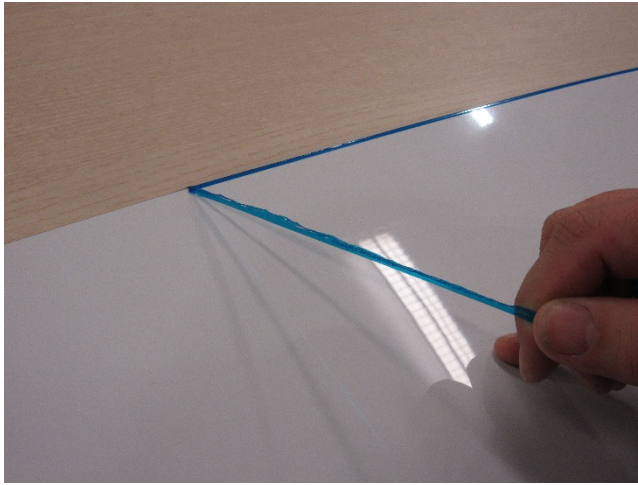
Fold the filament over the graphic. Press your thumb over both the filament and the graphic edge. Gently tug the filament to start cutting into the graphic, continuing to pull the line back and not upward.





After cutting is finished, remove the excess film and the carrier tape from under the film. Assure that the carrier tape is completely removed without residuals.



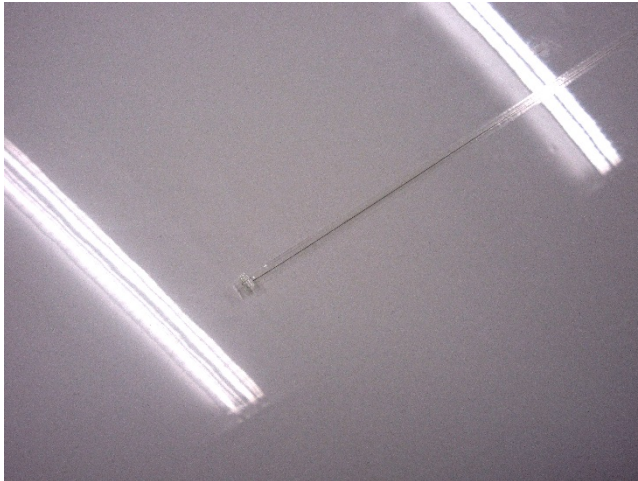


Heat the edges of the film and reapply the film edges with firm pressure.

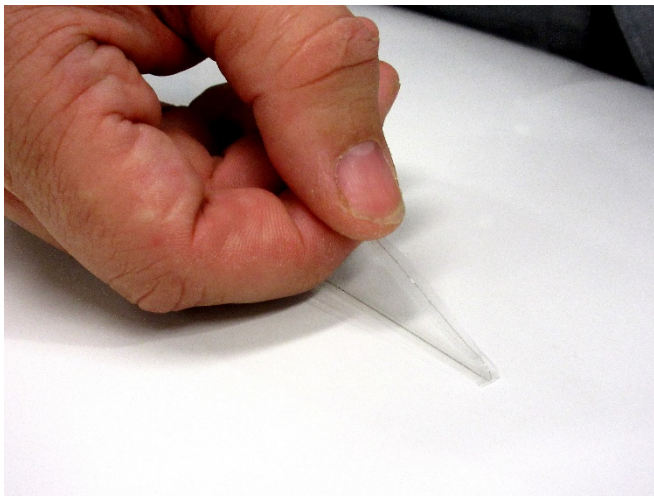
Important notice If multiple Knifeless Tapes are used mark the order of application and start cutting in the reverse order the Knifeless Tapes were applied (cut first with last Knifeless Tape applied).

Knifeless Tape PPF Line

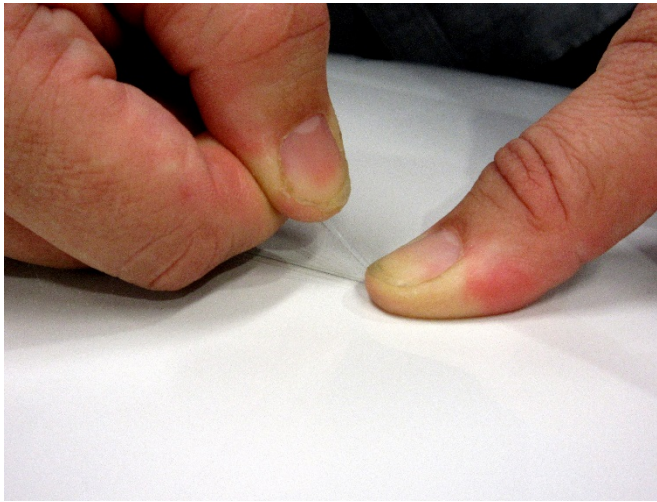
Begin with 15 cm of tape (before and after) where the film will be cut and lay down Knifeless Tape. Apply tape everywhere film will be cut.



Start all lines (both lead and tails), by folding the start of the tape back over itself approximately 8 cm.



Press thumb firmly on folded edge, covering at least 1 cm of tape.



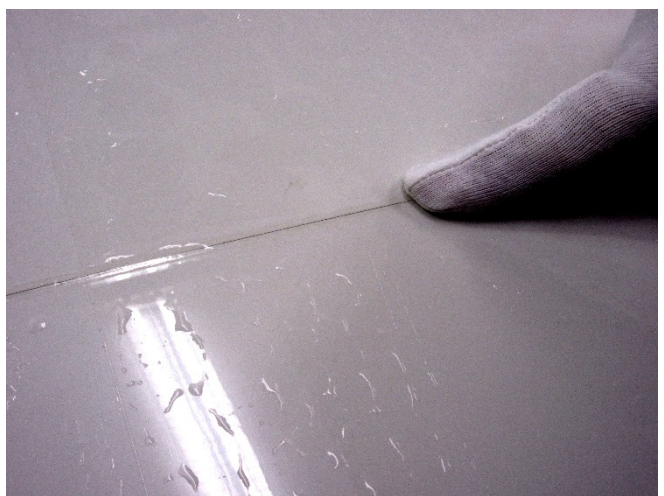
Firmly grasp the end of the tape with your thumb and index finger, positioning your two thumbs close together to start the filament. Gently pull the line to tear the carrier tape and expose the filament. Pull the filament back and not upward. Tack end of filament to vehicle until ready to cut film.



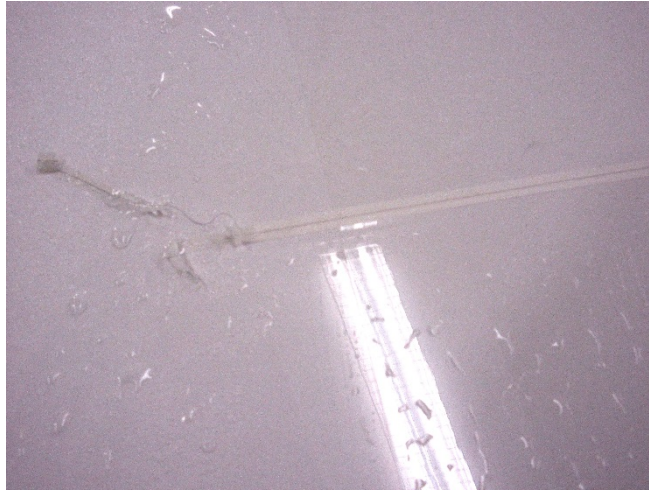
Apply the film with firm pressure over the tape, leaving the lead and tail tape visible, according to wet application instructions.



To remove air bubbles, press the film onto the Knifeless Tape again with your finger.



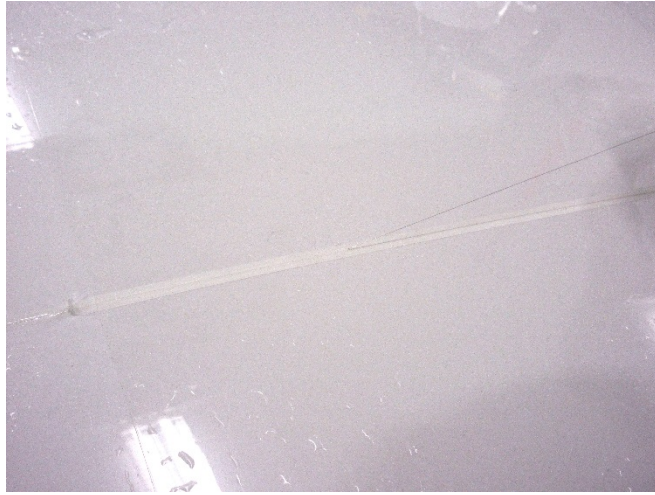
Take the cover tape and apply it over film and Knifeless Tape. Press the cover tape again firmly with your fingers.



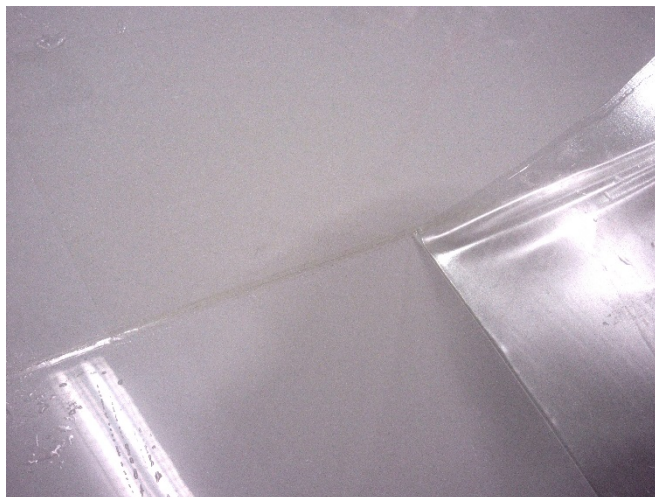
Take the filament and pull it back and not upward, stopping before the edge of the cover tape. Fold the filament over the cover tape and film. Press your thumb over both the filament and the cover tape and film.



Tug the filament to start cutting into the film and the cover tape, continuing to pull the line back and not upward.



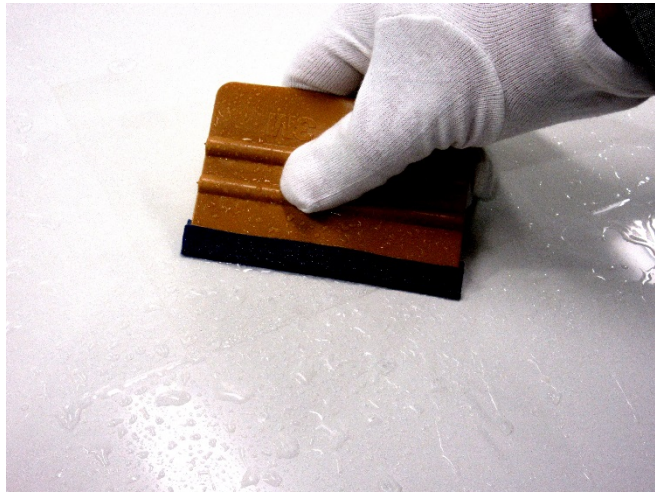
After cutting remove first the cover tape and the film excess.



Then remove the carrier tape from under the film while wetting the substrate under the film. Assure that the carrier tape is completely removed without residuals.



Apply the film edge to the substrate and re-press the film edge with pressure.



Important notice If multiple Knifeless Tapes are used mark the order of application and start cutting in the reverse order the Knifeless Tapes were applied (cut first with last Knifeless Tape applied).

Remarks

This bulletin provides technical information only.

Important Notice

All questions of warranty and liability relating to this product are governed by the terms and conditions of the sale, subject, where applicable, to the prevailing law.

Before using, the user must determine the suitability of the product for its required or intended use, and the user assumes all risk and liability whatsoever in connection therewith.

As outdoor graphics age, natural weathering occurs causing a gradual reduction in gloss, slight color changes, some lifting of the graphic at the edges or around rivets, and ultimately a minor amount of cracking.

These changes are not evidence of product failure and are not covered by a 3M warranty.

Additional Information

Visit the web site www.3mgraphics.com/eu for getting:

- more details about 3M™ MCS™ Warranty and 3M™ Performance Guarantee
- additional instruction bulletins
- a complete product overview about materials 3M is offering.

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