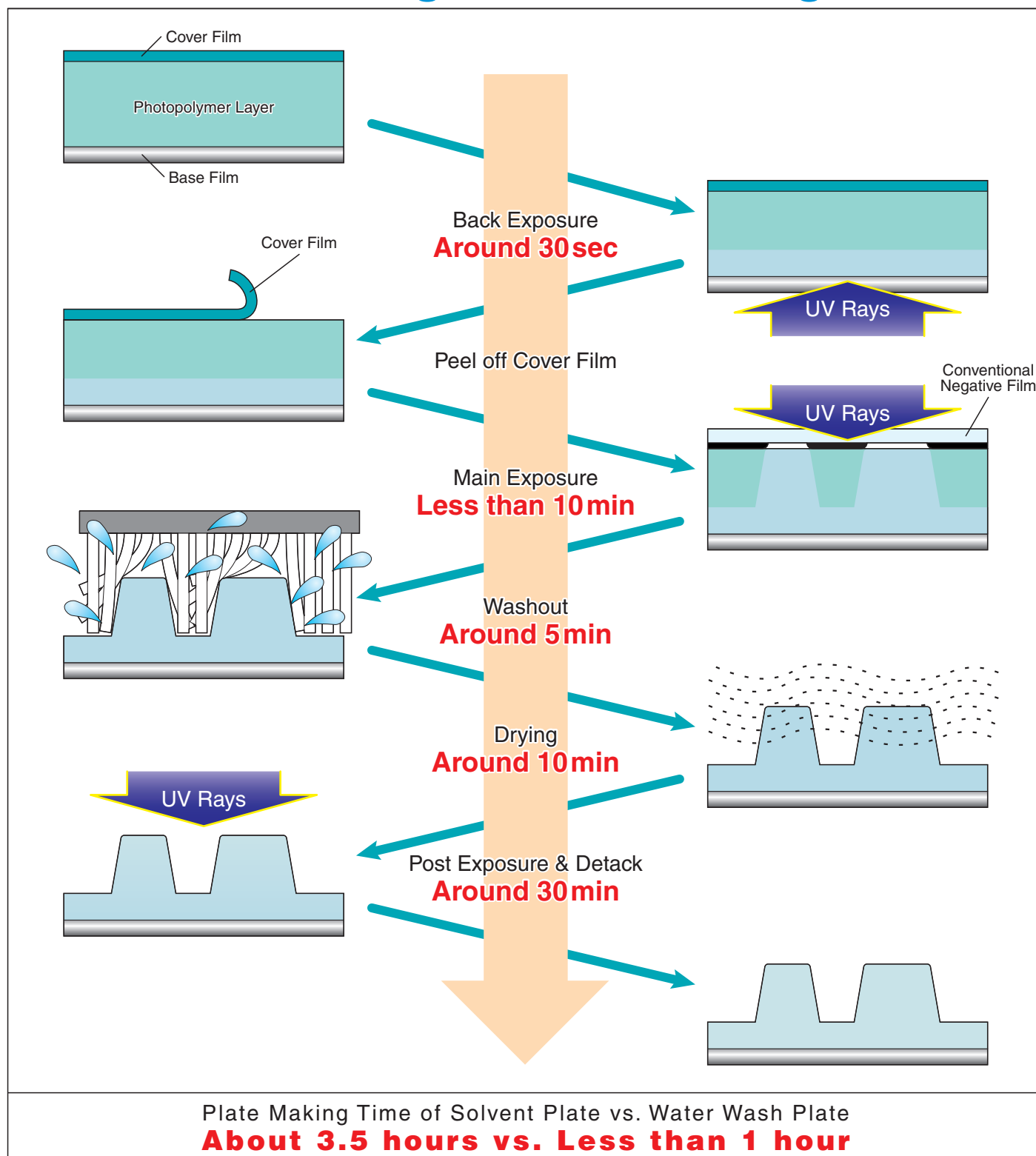


Flexo Plate Making Process (Analog)



TORAY REFLEX

TORAY Water Washable Flexo Plate

'INNOVATIVE' flexographic plate-making designed for environmental-friendly production.

Toray Industries, Inc.

TORAY Innovation by Chemistry

Contact:

Toray Industries, Inc.
 Graphic Systems Department

8-1, Mihama 1-chome, Urayasu, Chiba 279-8555 JAPAN
 TEL: +81 (0) 47-350-6045 FAX: +81 (0) 47-350-6071

You can contact us from following website.
<http://www.waterless-print.com/en/contact/index.html>

Distributor:

TF0805011N

~ New Era for Water Washable Flexo Plate ~

TOREFLEX®

Advantages

1. Solvent-free Plate-making

TOREFLEX can be processed with tap water.
No need for solvent reclamation system. VOC emission will be eliminated.

2. Excellent Image Reproduction

TOREFLEX can meet the ever growing demand especially for reproduction of fine lines and halftone images.

3. Quick Plate-making

TOREFLEX can be processed with minimum time and with minimum care.
It contributes to efficient and comfortable plate-making for everyone.

4. Long & High Quality Print Run

You will have minimal dot gain and consistency in long printing run.

5. Excellent Ink Transfer

Excellent ink transfer can be achieved through high wettability on the plate surface.

6. Clean after Processing

No "tacking" in the washout water. Keeps your plates and equipments cleaner after processing.

Structure

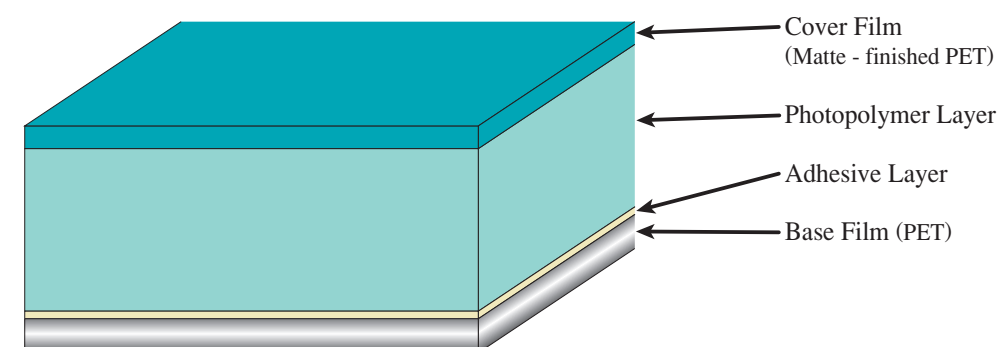


Plate Type

Main Application	Plate Type
Label, Folding carton, Paper bag, Envelope, Varnish	RQk
Label, Varnish	MRQk & HRQk
Label and Tag, Flexible Packaging	OP & OPM

Line-up

Plate Type	RQk	MRQk	HRQk	OP	OPM
Main Application	Label, Folding carton, Paper bag, Envelope, Varnish	Label, Varnish	Label, Varnish	Label and Tag, Flexible Packaging	Label and Tag, Flexible Packaging
Features	Excellent ink transfer	Excellent ink transfer and minimal dot gain	Minimal dot gain	Solvent ink compatibility	
Hardness (Shore A)	52 - 57	62 - 67	68 - 73	52 - 57	62 - 67
Plate Color	Green	Green	Green	Red	Red
Ink/Solvent Compatibility					
Water	Excellent	Excellent	Excellent	Good	Good
UV	Good	Good	Good	Excellent	Excellent
Solvent	Not available	Not available	Not available	Excellent ※3	Excellent ※3
Thickness ※1	1.14 / 1.70 mm (0.045" / 0.067")	1.14 mm (0.045")	1.70 mm (0.045")	1.14 / 1.70 mm (0.045" / 0.067")	1.14 / 1.70 mm (0.045" / 0.067")
Size ※1	610x762 / 762x1016 mm (24" x30"/30" x40")	610x762 / 762x1016 mm (24" x30"/30" x40")	610x762 / 762x1016 mm (24" x30"/30" x40")	610x762 / 762x1016 mm (24" x30"/30" x40")	610x762 / 762x1016 mm (24" x30"/30" x40")
Reproduction Capability					
Image Halftone	2 - 95% 150lpi	2 - 95% 150lpi	2 - 95% 150lpi	2 - 95% 150lpi	2 - 95% 150lpi
Isolated Dot					
1.14 mm (0.045")	0.150 mm (0.006")	0.150 mm (0.006")	-	0.200 mm (0.008")	0.200 mm (0.008")
1.70 mm (0.067")	0.200 mm (0.008")	-	0.200 mm (0.008")	0.250 mm (0.01")	0.250 mm (0.01")
Fine Line					
1.14 mm (0.045")	0.020 mm (0.0008")	0.020 mm (0.0008")	-	0.030 mm (0.0012")	0.030 mm (0.0012")
1.70 mm (0.067")	0.030 mm (0.0012")	-	0.030 mm (0.0012")	0.040 mm (0.0016")	0.040 mm (0.0016")
Plate-making Condition ※2					
Back Exposure					
1.14 mm (0.045")	15 - 30sec	12 - 25sec	-	17 - 35sec	17 - 35sec
1.70 mm (0.067")	50 - 100sec	-	45 - 90sec	65 - 30sec	65 - 130sec
Main Exposure	5 - 10min	5 - 10min	5 - 10min	7 - 14min	5 - 10min
Washout	5 - 10min	5 - 10min	5 - 10min	4.5 - 9.5min	4.5 - 9.5min
Drying	10 - 15min	10 - 15min	10 - 15min	10 - 15min	10 - 15min
Detack (UVC)	5 - 15min	5 - 15min	5 - 15min	5 - 15min	5 - 15min
Post Exposure	5 - 10min	5 - 10min	5 - 10min	7 - 14min	5 - 10min

Remarks

- ※1 Please contact your local TOREFLEX distributor concerning availability of size and thickness not mentioned above.
For your information, the maximum size available is 860×1220mm (33 7/8"×48").
- ※2 Please note that the plate-making conditions above are for reference only.
- ※3 Please contact your local TOREFLEX distributor concerning solvent ink compatibility.
- ※ When processing, it is strongly recommendable that you add some detergent to washout water.

Storage condition

	Temperature	Humidity	Remarks
Unprocessed plate	Below 25 °C or 77 °F	Below 70 % RH	When storing the remaining plates, please seal the inner bag with adhesive tape to keep sufficient storage condition.
Processed plate	Cool and dark place	50 - 70 % RH	Before storing used plates, wipe off the ink completely from the plate surface using ink cleaner or alcohol such as ethylalcohol.