# PERFECTION IN REFLECTION

YSL⊜M-Lite™ Reflective Sheeting Application Manual











# **CONTENTS**

1.	STORAGE	3
2.	APPLICATION	4 - 5
3.	SUBSTRATE PREPARATION	6
4.	CONVERTING	6
5.	CUTTING METHODS	7





# 1) STORAGE

## A. Storage of Material

All Reflective Materials should be consumed within one year from the date of purchase. All guarantees and warranties, shall become invalid on materials stored prior to application for periods in excess of one year. All Reflective Materials should be stored in a cool, dry area preferably at 15°-25°C and 40%-60% RH.

## B. Sheet

Store sheets flat and allow them to condition 24 hours prior to converting. The stacking method is face-to-back contact, with slip sheeting between each face-toback contact. The paper liner can be used as slip sheeting by placing the siliconized side next to the sheeting. Place a sheet of plywood, or aluminum on top of each stack.

## C. Roll

Store rolls horizontally in the shipping carton or through the core. Do not lay the roll on a hard surface or reflectivity will be affected.

## D. Finished Signs

Allow finished signs to set 24 hours in the shop before installation. All guarantees and warranties shall become invalid in respects to improper handling and storage of finished signs.

It is not recommended to package finished signs in plastic wrapping which may trap moisture and may result in damaging the reflective properties.

All finished signs should be stored indoor and avoid at outdoor of getting wet prior to installation. When stacking signs, it is recommended to stack one sign against the next with a separator between each sign.

**DO NOT** lay flat and should be placed vertically.

**DO NOT** ship flat signs unsupported in open containers.

**DO NOT** store flat signs outside as the surface may attack with moisture in damaging all reflectivity.







## **APPLICATION**

## A. Roller Laminating

Manual Squeeze Roll Applicators are driven by a hand crank and can be run by one or more operators. They are intended for the individual application of signs.

Before applying the Reflective Sheeting, the surface of the substrate must be totally free of any contamination. Application must be made at room temperature at 20°-30°C. All materials must be acclimatised before processing.

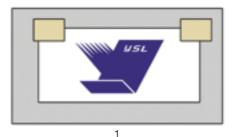
- **1.** Raise the top roller to create a gap larger than the thickness of the substrate.
- **2.** Place the substrate between the opened laminating rollers.
- 3. Slowly lower the top roller until it evenly touches the substrate from edge to edge. Continue to lower the roller one-half turn to obtain adequate pressure.
- 4. With the sheeting face down, peel back one to two inches of the release liner, folding it to expose the adhesive.
- 5. Turn the sheeting over and carefully align the sign face with the substrate. Press the exposed adhesive side down slowly onto the substrate. Work from the center towards the outer edges.
- 6. Feed the adhered section into the squeeze roller up to the folded portion of the release liner.
- 7. Drape the remaining sheeting over the top roll and peel back the remaining portion of the release liner, while feeding in the remainder of the sign blank.
- 8. Trim all excess material downward at an angle with a sharp blade. Make sure not to chip or damage the sheeting.

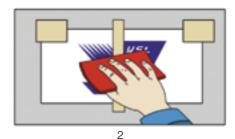


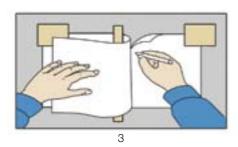


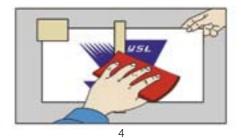
## **APPLICATION** continued

# **B.** Hand Laminating









- 1. Apply pieces of masking tape to the sheeting as shown Picture 1. This will help facilitate positioning on the substrate.
- 2. Apply a strip of tape as a hinge in the center of the sheeting. Overlap each edge (as Picture 2)
- **3.** Fold one-half of the sheeting back on the hinge, then cut through the backing paper and remove. (as Picture 3)
- 4. Without touching the adhesive, apply this portion of the sheeting to the substrate, using a squeegee. Use overlapping strokes and work from the hinge to the edge. (as Picture 4)
- 5. Remove the center hinge tape and repeat Steps 1 through 4 on the other half of the sheeting.





Unit 4, Tricketts Lane, Nantwich, Cheshire CW5 6PZ T: + 44 (0)1270 650826 F: + 44 (0) 560 3438746

## 3. SUBSTRATE PREPARATION

Before applying the Reflective Sheeting, the surface of the material must be totally free of any contamination, dust, residue, loose scale and, in particular, traces of oil, grease or wax. Sign blanks should be handled by the edges using clean cotton.

To check the cleanliness of the substrate, below two tests are recommended:

**Tape Test** Press onto the surface a 5cm length of transparent self-adhesive tape. After several seconds, lift it off quickly at a right angle and inspect for evidence of transferred material or indications of a contaminated surface for metal substrates.

Water-Break Test Minute traces of grease, oil or wax can be detected by pouring clean water onto the surface. On a clean surface, water tends to hold a uniform film. On a contaminated surface, the water beads up into many small droplets.

## **Solvent Wiping**

Immediately prior to the application of the sheeting, it may be necessary to remove any greasy fingerprints or residue by solvent wiping the surface of the substrate:

- 1. Saturate a clean cloth with an alcohol based solvent, mineral spirits, or a similar commercial solvent. Be sure the solvent is absolutely clean. Continual use from the same solvent container can result in contamination
- 2. Wipe the surface thoroughly, including areas near the edges where handling occurs.
- 3. With a dry, clean, lint-free cloth wipe the surface clean before the solvent evaporates.

## 4. CONVERTING

### A. Links

There are three major top film materials to be used on all YSL Reflective Material. It is recommended to check with ink supplier to select the proper ink system. Consult the Viz Reflective office department in case of any questions.

#### B. Mesh

150-200 screen mesh is commonly used.





Unit 4, Tricketts Lane, Nantwich, Cheshire CW5 6PZ T: + 44 (0)1270 650826 F: + 44 (0) 560 3438746

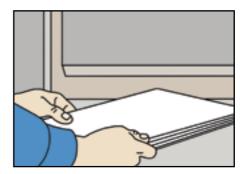


## 5. CUTTING METHODS

## A. Guillotine Cutting

Guillotine cutting is best suited for cutting a large volume of straight edged sheets. The type and condition of the cutter will determine the tolerances, accuracy, and quality of the cut.

To clean adhesive build-up from the blade, use a cloth dampened with toluene or acetone.



## **B. Roll Cutters**

When rolls are larger than the desired width, they can be cut down to smaller widths using a roll slitter machine. A slitter machine equipped with a shear type blade works the best. Accuracy and quality of the cut is determined best by the type of machine used. Contact the machine manufacturer for further information.

## C. Computer Cutting

Determining the correct amount of weight or pressure to place on your knife depends on several factors, which only you can determine. A general rule of thumb is that more is not necessarily better. The lightest weight or the least amount of pressure that will cut through the face-stock and adhesive is the best to use. Generally for good release of the cut image from the material a slight scoring of the release liner is acceptable. If too much weight or pressure is used it may cut the liner, fracturing the silicone release coating and exposing uncoated paper to the adhesive. This may inhibit the graphic releasing from the liner with the pre-mask as well as damaging the reflectivity of the sheeting. Always make a test cut prior to cutting the desired legend.

#### D. Weeding

Since the 'open side' of most letters is on the right side, it is recommended that the matrix be weeded using a rocking motion from right to left.

When weeding large letters/graphics (larger than 5 in. or 13 cm height), there may be a large, hard-to-handle matrix area. It helps to cut the matrix into sections, before weeding.

If you are making your own hole punched material, it is important to strip away 3/8" - 1/2" of material on each edge of the roll after the holes are punched prior to use on your computer cutting equipment.



Unit 4, Tricketts Lane, Nantwich, Cheshire CW5 6PZ T: + 44 (0)1270 650826 F: + 44 (0) 560 3438746







# streets ahead







**Viz Reflectives** 

#### PARTNERS IN REFLECTIVES

#### The Yeshili Group

#### Zhejiang Fangyuan Yeshili Reflective Material Co Ltd. No 292 Donghai Street,

Economic Development Zone, Taizhou City 318000, Zhejiang, China T: 86 576 88209742

F: 86 576 88205396 E: ysl@chinaysl.com

#### Taizhou Fangyuan Reflective Material Co., Ltd. West 3 Road, Chengguan, Xianju, Zhejiang, China

T: 86 576 87726971 F: 86 576 87726972 E: yuki@yslreflectives.com

#### Viz Reflectives

Unit 4 , Tricketts Lane, Nantwich, Cheshire CW5 6PZ

T:+44(0)1270650826 F:+44(0)5603438746 E:info@viz-group.com

# **The Viz Group**

Viz Europe s.r.l. via A. Berlese,1 24124 Bergamo, Italy

T. +39 035 36 25 10 F. +39 035 36 25 04

E: vizeuropa@vizeuropa.com